

**DEPARTMENT OF SURGERY**

**ANNUAL REPORT**

**July 1, 2000 - June 30, 2001**

**University of Toronto**

# DEPARTMENT OF SURGERY ANNUAL REPORT

July 1, 2000 - June 30, 2001

R.S. McLaughlin Professor and Chair - Dr. J.H. Wedge  
Professor and Associate Chair - Dr. B.R. Taylor

## Surgeons-in-Chief

Dr. J.H. Wedge – The Hospital for Sick Children  
Dr. Z. Cohen - Mount Sinai Hospital  
Dr. D. Jones - St. Joseph's Health Centre  
Dr. E. Poulin - St. Michael's Hospital  
Dr. B. Goldman - Sunnybrook and Women's College  
Health Sciences Centre  
Dr. I.J. Harrington - Toronto East General Hospital  
Dr. B.R. Taylor - James Wallace McCutcheon Professor  
and Chair – University Health Network

## University Division Chairs

Dr. S. Fremes - Cardiac Surgery (Acting)  
Dr. Z. Cohen - General Surgery  
Dr. J. Rutka - Leslie Dan Professor and  
Chair of Neurosurgery  
Dr. J. Waddell - A.J. Latner Professor and  
Chair of Orthopaedic Surgery  
Dr. P. Neligan – Wharton Chair in Reconstructive Plastic Surgery  
Dr. S. Keshavjee - Thoracic Surgery (Acting)  
– July 1, 2000 – December 31, 2000  
Dr. R.J. Ginsberg – Thoracic Surgery  
– January 1, 2001 – June 30, 2001  
Dr. M.A.S. Jewett - Urology  
Dr. K.W. Johnston - R. Fraser Elliott Chair in Vascular Surgery  
Dr. M. Wiley – Anatomy  
Dr. L. Wilson-Pauwels - Biomedical Communications

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## **REPORT FROM THE CHAIR**

*Dr. John H. Wedge, R.S. McLaughlin Professor and Chair*

### **INTRODUCTION**

The last decade of the 20<sup>th</sup> century was a period of downsizing and contraction in a number of areas of health care and education. Medical school enrolment was reduced, cuts were made to the numbers of our postgraduate trainees and hospitals were merged with bed closures and budget cuts. Fortunately, this now appears to be finally turning around. Medical school enrolment has increased with the prospect of corresponding increases in postgraduate trainees. Government has provided increased funding for our teaching hospitals sector. The transformation of the Canada Medical Research Council to the Canadian Institutes of Health Research has been accompanied by a welcome increase in funding. Federal and provincial infrastructure programs to support health research are making a significant impact on facilities for research. All of these changes are welcome, but will they be sustained?

Our research funding now exceeds \$18 million, which represents more than double the amount we attracted 10 years ago. We have had two of our scientists appointed to the new Canada Research Chairs, Drs. Karen Davis and Ben Alman. We now have twenty-four endowed Chairs either established being completed or pledged. This is a remarkable increase from the four Chairs that we had in this department only a decade ago. We have forty residents enrolled in our Surgical-Scientist Program. These surgical leaders of the future have attracted numerous external fellowship awards and prizes from national and international specialty associations to which they have presented their research funding. There is little doubt that those in our Surgical-Scientist program contribute very significantly to the overall research productivity of this department.

Two new specialty Division Heads were appointed this year. Dr. Sender Herschorn has been appointed to replace Dr. Michael Jewett who has served with distinction as Chair of the Division of Urology for ten years. Dr. Robert Ginsberg is the new Chair of the Division of Thoracic Surgery. Dr. Linda Wilson-Pauwels has been re-appointed for another term as Chair of the Division of Biomedical Communications and Dr. Michael Wiley as Chair of the Division of Anatomy. The incorporation of Anatomy as a division of this department has proven very successful. Substantial collaboration is

occurring and the presence of this division is already having an impact on a number of our teaching programs, especially the Surgical Skills Centre at the Mount Sinai Hospital. Unfortunately, Dr. Carol Hutchison the first Director of the Surgical Skills Centre left to join her husband in the United States. However, she has been replaced by another superb educator, Dr. Helen MacRae. The Surgical Skills Centre continues to expand especially with continuing education courses, necessitating the addition of two new staff members.

#### **Visitors to the Department**

Professor David I. Rowley, University of Dundee, Dundee, Scotland was the Kergin Lecturer on February 9, 2001. His topic was "Costing and planning an elective surgical service in a public health care system: Evidence and outcomes".

Janice Pasioka, M.D., F.R.C.S.(C), Clinical Professor, Regional Head, Division of General Surgery, University of Calgary, Foothills Hospital was the John Palmer Lecturer on March 2, 2001. Her topic was "A seven-year journey of developing, validating and reporting a disease-specific surgical outcome tool for hyper-parathyroidism".

Dr. Timothy Eberlein, Spencer T. and Ann W. Olin Distinguished Professor, Director, The Alvin J. Siteman Cancer Center, Bixby Professor and Chair, Department of Surgery, Washington University School of Medicine, Surgeon-in-Chief, Barnes-Jewish Hospital, was the Gordon Murray Lecturer and the Gallie-Bateman Judge on May 11, 2001. His topic was "Surgery in the new millennium".

#### **Departmental and External Awards and Honours**

Dr. Benjamin Alman, 2001 George Armstrong-Peters Prize and Awarded a Canada Research Chair; Dr. Terry Axelrod, Peters-Boyd Academy Award for best undergraduate teacher for clinical clerks; Dr. Mark Bernstein, 2001 E. Bruce Tovee, Dr. Tim Daniels, Appointed Associate Editor, Journal, Foot and Ankle International; Dr. Karen Davis, Awarded a Canada Research Chair; Dr. Michael Fehlings, Cervical Spine Research Society Award; Dr. Christopher Feindel, Ross Fleming Teaching Award, the University Health Network; Dr. Peter Ferguson, 2001 D.R. Wilson Award; Dr. Jeffrey Fialkov, W.K. Lindsay Award for recognition of significant contributions to plastic surgery residents' research; Dr. Robert Filler, Elected President of the Canadian Society of Telehealth; Dr. Joel Fish, PAIRO Excellence in Clinical

Teaching Award; Dr. Arnis Freiberg, 2001 Outstanding Teacher Award, the Association for Surgical Education/Association of Program Directors in Surgery; Dr. Steven Gallinger, Premier's Research Excellence Award; Dr. Bernard Goldman, Dr. Marvin Tile Distinguished Service Award; Dr. Hamilton Hall, Henry Farfan Award North American Spine Society; Dr. Douglas Hedden, PAIRO Trust Fund's Travel Award for Clinical Educators; Dr. Sender Herschorn, Division of Urology Award for Best Resident Teacher and Peters-Boyd Academy Clinical Teaching Award and A.W. Bruce Undergraduate Teaching Award, Division of Urology; Dr. Ronald Kodama, W.T. Aitkins Award for Individual Teaching Performance and A.W. Bruce Undergraduate Teaching Award, Division of Urology and Postgraduate Teaching Award, Division of Urology; Dr. Leila Lax, Biomedical Communications Teaching Award; Dr. Ren-Ke Li, Premier's Research Excellence Award; Dr. Thomas Lindsay, President of the Peripheral Vascular Surgery Society; Dr. Gergely Lukacs, Premier's Research Excellence Award; Dr. David Mazierski, Biomedical Communications Teaching Award; Dr. David McCready, College of Family Physicians of Canada 2000 Janssen-Ortho English Literary Award; Dr. Michael McKee, American British Canadian Traveling Fellowship 2001; Dr. Rajiv Midha, Premier's Research Excellence Award; Dr. Richard Reznick, James IV Traveling Fellowship to Great Britain; Dr. Theodore Ross, 2001 E. Bruce Tovee, Undergraduate Teaching Award; Dr. Lorne Rotstein, University of Toronto, Surgical Skills Centre, Distinguished Educator Award; Dr. James Rutka, 2001 Lister Prize and Chair of the Joint Section on Tumors of the American Association of Neurosurgery and Canadian Neurosurgery; Dr. Robert Salter, Paul Harris Medal from the Rotary Foundation of Rotary International; Dr. Hugh Scully, Appointment to Board of Directors of the World Medical Association and to the Canadian Motorsport Hall of Fame; Dr. Ian Taylor, Harvey Whittaker Memorial Teaching Award; Dr. Kamal Thapar, 2001 Bernard Langer, Surgical-Scientist Award;

Dr. John Trachtenberg, Elected President of the Canadian Association of University Urologists; Dr. Herbert von Schroeder, Robert Salter Award Canadian Orthopaedic Foundation; Dr. Thomas Waddell, Elsie Winifred Crann Memorial Trust Award in Medical Research; Dr. Richard Weisel, Research Achievement Award Canadian

Cardiovascular Society; Dr. Douglas Wooster, Elected President of the Canadian Society for Vascular Surgery; Dr. Jim Wright, Arthur H. Huene Memorial Award, POSNA; Dr. Ronald Zuker, Elected Vice-President, American Society for Reconstructive Surgery.

### **Reviews, Searches and Appointments**

Dr. Gail Darling was appointed Program Director for the Division of Thoracic Surgery. Dr. Robert Ginsberg was appointed Chair of the Division of Thoracic Surgery.

Dr. Ab Guha was appointed Co-Director of the Arthur and Sonia Labatt Brain Tumor Research Centre.

Dr. Lorne Rotstein was appointed Program Director for the Division of General Surgery. Dr. Ori Rotstein was appointed Director of the Institute of Medical Science, University of Toronto. Dr. William Tucker was re-appointed Director of Undergraduate Education in the Department of Surgery.

Dr. Glen Van Arsdell was appointed Head of the Division of Cardiac Surgery, The Hospital for Sick Children

.

Dr. Linda Wilson-Pauwels was re-appointed Chair of the Division of Biomedical Communications.

### **Promotions**

Congratulations to the following members of the Department of Surgery whose academic contributions to the Department and to the University were recognized by promotions July 1, 2000. Dr. Benjamin Alman, Dr. Thomas Lindsay, Dr. Rajiv Midha, Dr. Mingyao Liu, Dr. David Mazierski were promoted to Associate Professor. Dr. Earl Bogoch, Dr. Steve Gallinger, Dr. Laurence Klotz, Dr. Brian Maki, Dr. Linda Wilson-Pauwels, Dr. Michael Fehlings, Dr. Sender Herschorn, Dr. John Marshall, Dr. James Wright were promoted to Full Professor.

### **New Faculty Appointments**



Dr. Paul Bernick, General Surgery, Toronto East General Hospital, Dr. Alan Dackiw, General Surgery, University Health Network, Dr. Massey Beveridge, Plastic Surgery, Sunnybrook and Women's College Health Sciences Centre, Dr. Peter Chu, General Surgery, Sunnybrook and Women's College Health Sciences Centre, Dr. Cassim Degani, General Surgery, St. Joseph's Health Centre, Dr. Robert Ginsberg, Thoracic Surgery, University Health Network, Dr. Philip Haigh, General Surgery, University Health Network, Dr. Leila Kasrai, Plastic Surgery, University Health Network, Dr. Stephen Lewis, Orthopaedic Surgery, University Health Network, Dr. Philip Porter, Neurosurgery, University Health Network, Dr. Kamal Thapar, Neurosurgery, University Health Network, Dr. David Urbach, General Surgery, University Health Network, Dr. Algis Valiulis, General Surgery.

## **UNDERGRADUATE EDUCATION**

*Dr. William Tucker – Director*

The academic year 2000-2001 was another eventful one for undergraduate education in the Department of Surgery.

In January 2001, Dr. J.G. DesCoteaux from the Department of Surgery of the University of Calgary carried out an external review of undergraduate surgical education. Dr. DesCoteaux shared with us a number of insights based on his extensive experience as Assistant Dean, Undergraduate Medical Education at the University of Calgary. Dr. DesCoteaux was favorably impressed with the extensive evaluation and documentation of teaching performance by surgical faculty and residents. He recognized the importance of this objective documentation in providing credibility for the recognition of teaching activity for purposes of academic promotion, and to facilitate remediation and improvement in undergraduate teaching. Dr. DesCoteaux recognized the problems of recruitment, retention, and reward for undergraduate teaching, and indicated that similar problems were evident in his medical school and in other centres that he had visited across the country. In fact, during this academic year, Professor Pat Whiteside and Associate Dean, Murray Urowitz, co-chaired a task force to address difficulties associated with recruitment and retention of undergraduate teachers known as the Task Force on Recruitment of Clinical Teachers in Medicine.

At the suggestion of the Undergraduate Education Committee, the Department of Surgery nominated Dr. Arnis Freiberg for an Association for Surgical Education Outstanding Teacher Award. We were all delighted that Dr. Freiberg was appropriately recognized as the recipient of this award, which was presented at the Association for Surgical Education Annual Meeting in the spring of 2001. Dr. Freiberg has been a committed and innovative contributor to the undergraduate, postgraduate and continuing education endeavors of the Department of Surgery for many years. His outstanding contributions have been recognized by a number of teaching awards during his long career at the University of Toronto. The Association for Surgical Education Outstanding Teacher Award was, indeed, a fitting tribute to Dr. Freiberg for his long-standing commitment and numerous contributions to surgical education.

The recipient of the Bruce Tovee Award for Undergraduate Teaching in 2001 was Dr. Ed Ross. Dr. Ross has been an outstanding teacher and has also made a major administrative contribution to undergraduate education in our Department as the Clerkship Co-ordinator for Surgery since the implementation of the new curriculum in 1994. Dr. Ross has received consistently high teaching effectiveness scores for his clerkship teaching and P.B.L. teaching over the years.

This year's D.R. Wilson Award for teaching by a surgical resident went to Dr. Peter Ferguson, a PGY5 in orthopaedic surgery. Dr. Ferguson has sustained high teaching effectiveness scores and frequently received special commendation in Stan Hamstra's clerkship debriefing reports. The D.R. Wilson Award recognizes the high value that our Department places on the contribution of residents to the day-to-day mentoring and teaching of our students, particularly during the clerkship years.

At the end of this academic year, Dr. Helen MacRae stepped down as the Co-ordinator of the fourth year Department of Surgery O.S.C.E. examination. Dr. MacRae will be replacing Dr. Carol Hutchison as the Director of the University of Toronto Surgical Skills Centre at the Mount Sinai Hospital and we wish her every success in that challenging endeavor.

Over the past academic year, Dr. John Murnaghan conducted two Resident as Teacher Days to prepare PGY2 and PGY3 surgical residents for their involvement in undergraduate teaching. These sessions were well evaluated by both the residents and undergraduate students who attended them.

For the coming academic year, Drs. Ted Ross and Stan Hamstra plan to have the Phase I Surgical Clerkship Syllabus available on a web site. This should improve the usefulness of the syllabus to our students and encourage regular updating and editing to ensure that the materials are current. This will undoubtedly be the first of many initiatives to improve surgical education through the use of the Internet.

I would like to thank all of the faculty and residents who support our undergraduate teaching effort, and particularly recognize the contributions made by the members of the Undergraduate Education Committee of the Department of Surgery.

## **POSTGRADUATE EDUCATION**

*Dr. John Bohnen - Director*

In the past year, the University of Toronto's Department of Surgery residents, faculty members and administrative staff had an eventful and successful year in postgraduate education.

All of our CaRMS positions were filled for July 2000. In 2000-2001 we had 231 trainees in our eleven programs (Cardiac Surgery, General Surgery, Neurosurgery, Orthopaedic Surgery, Plastic Surgery, Thoracic Surgery, Urology and Vascular Surgery residencies; and Colorectal Surgery, Paediatric General Surgery and Surgical Oncology fellowship programs). Thirty-two residents received research training within the Surgical-Scientist Program, led by Dr. Ori Rotstein.

Our residents fared well in The Royal College of Physicians and Surgeons of Canada (RCPSC) exams. Thirty-five of thirty-five residents who sat the Principles of Surgery (POS) examination passed (100%), as did 47 of 48 candidates who attempted their fellowship examinations for specialty certification (98%). Congratulations to our trainees on their hard won success!

During April 2001 The Royal College of Physicians and Surgeons of Canada's accreditation review team spent an entire week reviewing the University of Toronto's residency programs for the purpose of accreditation, critical review and improvement. This culminated a seven-year cycle. In the intervening years, each program has been subject to continuous monitoring through an internal review process. Our faculty did exceedingly well overall, and the Department of Surgery was no exception. Ten of our eleven programs were granted full approval, and one received provisional approval with a mandated internal review. Thanks to all of the residents who participated openly and enthusiastically in the process, and congratulations to the surgical program directors, surgical division chairs, Postgraduate Associate Dean Urowitz and Chairman Wedge on their huge efforts in postgraduate education and the accreditation process.

There have been several changes in training program leadership. Thanks to outgoing Acting Program Director, Dr. Shaf Keshavjee, for his contributions to the Thoracic Surgery training program. Dr. Gail Darling has taken over as new Program Director for Thoracic Surgery while Dr. Lorne Rotstein is now the sole Program Director of the General Surgery program. The Cardiac Surgery, Urology, Orthopaedic Surgery, Neurosurgery, Plastic Surgery, Pediatric General Surgery, Vascular Surgery and the General Surgical Oncology programs continue to thrive under the leadership of Drs. Charles Peniston, Ron Kodama, Doug Hedden, Chris Wallace, Ron Levine, Jack Langer, Wayne Johnston and Carol Swallow, respectively.

The divisional program directors chair their respective residency program committees, which include elected resident representatives. Each division sponsors numerous educational events, including a half-day per week away from clinical duties. Overall direction at the departmental level comes from the Postgraduate Education Committee. The Core Surgery Committee oversees the Core Surgery Program, which trains first and second year residents in all aspects of surgical theory and practice. Dr. Stan Hamstra, Director of the Office of Surgical Education, co-ordinates the trainees' evaluations of teaching programs and faculty members. Each surgeon receives a "teaching effectiveness score" based on residents' feedback.

The Department of Surgery sponsors a number of educational offerings that round off the residents' clinical exposure. Dr. Martin McKneally leads the Principles of Surgery lecture series, which provides core surgery residents with the scientific knowledge they need for clinical practice and success in the Principles of Surgery exam. Dr. Jameel Ali re-introduced a Principles of Surgery practice exam this year, for which the residents themselves are helping to build a bank of questions. In special sessions twice annually, the core surgery residents provide feedback to Dr. Hamstra and myself about issues such as workload. On July 10 the core surgery residents attended a half-day program, "The Surgeon in Society", on topics of professional interest such as information management and surgical error. The many other events include orientation day for incoming PG1s in July; a career night for senior year medical students interested in surgery; a senior residents' day led by Dr. Martin McKneally; a resident teachers workshop led by Dr. John Murnaghan; and Advanced Trauma Life Support training led by Dr. Jameel Ali.

The Surgical Skills Centre, under the new leadership of Dr. Helen MacRae, trains core surgery residents in basic operating room skills and theory in a controlled setting, under the supervision of master teachers of surgical technique. Besides teaching core residents basic skills, the Surgical Skills Centre is used to provide advanced skills training for surgical divisions and the Departments of Otolaryngology and Obstetrics and Gynaecology.

In the past year, numerous faculty members and residents were granted awards by hospitals, surgical divisions and the Department of Surgery for excellence in postgraduate teaching. Among them, Dr. Mark Bernstein won the 2000-2001 Tovee Postgraduate Award for sustained, outstanding contributions to postgraduate training. Dr. Peter Ferguson won the D.R. Wilson Award for outstanding teaching of medical students by a surgical resident.

This year the new Professional Association of Interns and Residents of Ontario contract states that residents should take call no more than one night in three from home and one in four in hospital. Program directors, surgical staff and residents themselves have worked hard to enforce the regulations.

Once again, I have had the strong support of Chairman Wedge's profound commitment to postgraduate education, and outstanding administrative support from Tess Weber, Miriam Rotman and Jean DeFazio. We look forward to another great year in 2000-2001!

## **RESEARCH**

*Dr. Ori D. Rotstein - Director*

The Department of Surgery research activities thrived over the last year. Twelve new residents entered the Surgical-Scientist Program in July, giving the Program more than thirty surgical residents involved in full-time research. The research achievements by these young individuals are recognized locally, nationally and internationally, as evidenced by their excellent publications and their competitiveness for grants and awards. Over 80% of our Surgical-Scientist Program was successful in receiving full or partial salary support from external granting agencies. If all of them were mentioned, it would fill pages, but in summary, they are proof-positive of the quality of science being carried out within the Department. Some noteworthy achievements were: At the Institute of Medical Science Research Day, Sevan Hopyan was awarded the J.C. Laidlaw Prize for excellence in research and Robert Gryfe was the recipient of the Siminovitch-Salter Award for the best scholarly achievements of a Ph.D. graduate. George Oreopoulos was awarded the 2000 Canadian Society of Clinical Investigation/Medical Research Council of Canada Resident Research Award for excellence in resident research, the Pharmacia and Upjohn Annual Assembly Award, and the Physicians and Surgeons Incorporated Foundation Resident Research Award. Michael Taylor was awarded First Prize and Nicolas Phan, Second Prize, of the 2001 Thomas P. Morley Neurosurgical Resident Prize. Dr. Phan also received a Canadian Institutes of Health Research Fellowship. Others receiving Canadian Institutes of Health Research Fellowships include Steven Casha, Anand Ghanekar, Kinga Powers, and Paul Fedak. Rachel Khadaroo received First Prize of the University of Toronto Trauma Research Day 2001 Residents/Graduate Students Oral Presentation and Research Competition. Among other awards, Robin Boushey received the Banting and Best Diabetes Centre Travel Award and the Miriam Neveren Memorial Award. Steven Casha was awarded the K.G. McKenzie Award in Basic Neurosurgical Research and the Neurotrauma Foundation Fellowship Award. Kyle Wanzel received the Henrietta Banting Research Fellowship. This year's Bernard Langer Surgical-Scientist Award recipient, given to the most outstanding graduate of the Surgical-Scientist Program, was Kamal Thapar. Finally, the Johnson and Johnson Medical Products Surgical-Scientist Fellowship Program's second year of commitment allowed us to support four of our Surgical-Scientist Program members. These were Alexis Armour, Neelesh Jain, Eddie Matsumoto, and Jennifer Sarjeant.

Gallie Day this year included the annual Gallie-Bateman Competition. Eleven excellent resident papers were presented. Dr. Timothy Eberlein, Bixby Professor and Chair of the Department of Surgery, Washington University School of Medicine, was this year's Gallie-Bateman Judge and Gordon Murray Lecturer. First prize was awarded to Michael Borger, with Robin Boushey and Eddie Matsumoto tied as runners-up for the Gallie-Bateman Resident Research Competition. Dr. Matsumoto also received the Second Annual Wyeth-Ayerst Canada Incorporated Award for excellent research in the fields of medical education and clinical epidemiology. Dr. Eberlein's Gordon Murray Lecture highlighted how advances in science and technology, at the turn of the millennium, will drastically alter the way we practise surgery and care for our patients. After the Gallie-Bateman Competition a faculty symposium addressed how molecular medicine will impact on surgical practise. Drs. Benjamin Alman, Steven Gallinger, James Rutka and John Tsihlias each made a presentation highlighting their research work and addressing the bench-to-bedside potential of their work.

The George Armstrong-Peters Prize for best young investigator in the Department was awarded to Dr. Benjamin Alman for his continuing productivity in orthopaedic research, while the Lister Prize for the best Senior Investigator was awarded to Dr. James Rutka, citing his work on human brain tumor research.

Special kudos were directed to several individuals in the Department for outstanding accomplishments: Benjamin Alman and Karen Davis were awarded Canada Research Chairs. Terrence Yau and Lori Burrows received the Connaught New Staff Matching Award. Lori Burrows, Jeffrey Fialkov, Cindi Morshead and Andrew Smith also received the Dean's Fund Competition for New Staff Award. The list of accomplishments is endless and increases substantially every year.

The focus of this year's Research Committee was to continue work on the Mentoring Program and the non-clinician scientists' roles in the Department of Surgery. John Marshall, Carol Swallow, Lori Burrows, Benjamin Alman and Val Cabral have initiated a re-tooling of the existing Mentoring Program by seeking the views of faculty members on the senior faculty's impact as mentors to junior colleagues. Enlisting the support of senior colleagues with recognized mentorship skills and educators with a more formal knowledge of the mentorship role has been an important component of the Mentoring Program guidelines. Karen Davis has diligently drafted the contents of the



Manual for Non-clinician Scientists, which will be part of a package to new scientists in the Department of Surgery. Finally, we thank Ms. Val Cabral for her skilful administrative co-ordination of all aspects of the Departmental research activities.

In summary, this has been an excellent year for research in the Department of Surgery. We should continue to take great pride in the breadth and depth of our research accomplishments, while remaining cognizant of the importance of future research innovation as a means of providing excellence in patient care.

**DIVISION OF CARDIAC SURGERY**

*Dr. Stephen Fremes, Acting Chair*

One of the major events, which occurred in the 2000-2001 academic year, was the opening of a new adult non-academic cardiac surgical unit at Trillium Health Centre. Dr. Gopal Bhatnagar, a very skilled surgeon from Sunnybrook and Women's College Health Sciences Centre was selected as the head of the new unit. The other members of the Trillium division are Dr. Charles Cutrara, also from Sunnybrook and Women's College Health Sciences Centre, and Dr. Shafqat Ahmed, who was a fellow at St. Michael's. Each of the University of Toronto adult cardiac surgical hospitals helped in the training of the nurses, anaesthetists, and technologists of the new centre. As well, there was a lot of movement of other health care members such as cardiologists, anaesthetists, intensivists, nurses, perfusionists and technologists from the existing centres to the new centre, which left each of the existing centres with critical shortages of highly skilled personnel. Another result was an increase in the complexity and acuity of the cardiac surgical cases at the existing centres. This change will likely have implications for resident training in the future.

Dr. Peniston continued as the Program Director of Cardiac Surgery. Under the direction of Dr. Peniston, the Division received full 6-year approval from the Royal College. Dr. David Latter has assumed the leadership of the wet lab component for the residents since the departure of Dr. Bhatnagar, and has performed very admirably. Five senior residents (Gideon Cohen, Michael Borger, Stacey O'Blenes, Andrew Campbell, Tony Azakie) took the Royal College examinations in Cardiac Surgery, and all five passed. Four of our residents were research fellows this past year (1 post-doc, 1 Ph.D., 1 M.Sc. transferring to Ph.D., and 1 M.Sc.), 3 of which were funded by peer-reviewed scholarships. Two of the residents, Gideon Cohen and Michael Borger, received a Ph.D. this year for work completed during their research fellowships.

The Division continues to make a major impact at national and international meetings. As an example, this past year Dr. Fremes was invited to give one of the plenary sessions at the American Heart Association. Dr. Christakis presented the primary results of separate peer-reviewed, clinical trials at the Society of Thoracic Surgery and the American Association of Thoracic Surgeons.

**New Recruits**

Dr. Vivek Rao has joined the University Health Network, Toronto General Division as a staff surgeon having spent the past year at Columbia University as a clinical fellow. Dr. Rao's research interest is in the future of LVADs and he will initiate the LVAD Program in Toronto this year.

**Faculty Achievements****Dr. Richard Weisel**

- 2000 Canadian Cardiovascular Congress Research Achievement Award.
- Canadian Institutes of Health Research two-year operating grant.

**Dr. Hugh Scully**

- Inducted into the Canadian Motorsport Hall of Fame.
- Elected to the Council of the World Medical Association.

**Dr. Christopher Feindel**

- Ross Fleming Surgical Educator Award for 2001 for excellence in surgical teaching at the University Health Network.
- A Master's Degree in Healthcare Management from Harvard University.

**Dr. Terry Yau**

- Canadian Institutes of Health Research two-year operating grant.

**Dr. Charles Peniston**

- Chair Examiner of the Royal College of Physicians and Surgeons of Canada.

**Dr. David Latter**

- Chair Examiner of the Royal College of Physicians and Surgeons of Canada.

**Dr. Daniel Bonneau**

- Board Member and Examiner of the Royal College of Physicians and Surgeons of Canada.

**Dr. Bernard Goldman**

- A Tribute Dinner in his honour was held by the Ben Gurion University and attended by 700 guests.

**Dr. Lee Errett**

- Honorary Professor, Shandong University, Jinan, Shandong Province, China

**Resident Awards****Dr. Subodh Verma**

- Pfizer Research Prize
- Student Presentation Award, Canadian Cardiovascular Congress
- Pharmacological Society of Canada Young Investigator Award

**Dr. Michael Borger**

- Bigelow Book Prize, University of Toronto Heart and Stroke/Richard Lewar Centre of Excellence
- Chisholm Memorial Fellowship, Postgraduate Medical Education University of Toronto
- Gallie-Bateman Resident Research Prize, University of Toronto, Department of Surgery
- Honourable mention, J.C. Laidlaw Competition

**Dr. Vivek Rao**

- Canadian Research Award for Specialty Residents

**Visiting Professorships**

Residents, fellows and staff surgeons benefited from well-organized Visiting Professorships during the past year. The following scholars were Visiting Professors: Dr. Steven Bolling from the University of Michigan; Dr. Ralph Damiano from Washington University School of Medicine; Professor Kenneth M. Taylor from the Imperial College School of Medicine Hammersmith Hospital; Sir Peter J. Morris from the Nuffield Department of Surgery, University of Oxford and Dr. D. Craig Miller from the Stanford University School of Medicine.

## **DIVISION OF GENERAL SURGERY**

*Dr. Zane Cohen, Chair*

The Royal College accreditation process and the PAIRO agreement have been major influences on this past academic year. The official Royal College accreditation took place in April 2001. The General Surgical Program, the Colorectal Residency Program, the Pediatric Surgical Program and the Surgical Oncology Program successfully completed the Royal College accreditation review. This process took a significant amount of time and commitment from the majority of our membership within these programs. I take this opportunity to thank all of those who have made the process successful. In particular, I wish to thank Dr. Lorne Rotstein and Dr. Marcus Burnstein, Co-Program Directors in General Surgery for their unflagging commitment to this external survey.

A number of new initiatives have been undertaken during this past academic year. The first is the palm pilot project, by which all of the general surgical residents have been given organizers to help with internal communication, rotation specific objectives and accurate logging of cases. An initial analysis of this pilot program is currently underway.

The resident selection process and the general surgical rotations have also been modified. Our own general surgical residents participated in the selection process and are participating in the assignment of rotations. I believe this to be a significant advance in bringing together the residents and the staff into a more collegial and trusting environment.

The move of General Surgery from the Wellesley Hospital has now been completed and has been incorporated into the St. Michael's campus. This has made for an extremely strong Division of General Surgery at the St. Michael's Hospital. The Sunnybrook and Women's College Health Sciences Centre, although now one general surgical division, continues to have general surgical divisions and rotations at both sites. It is anticipated that it will still be two to three years before these divisions are fully incorporated.

### **Postgraduate Training**

All of our final year general surgical residents were successful in completing the general surgical training program in the year 2000-

2001. They are: Drs. Steven Borenstein, Lawrence Ebisuzaki, Dennis Filips, Ala Groof, Robert Gryfe, Monther Kabani, Matthew Kilmurry, Geeta Lal, Ian McGilvray, Stephan Mostowy, Jeffrey Pasenau, Ian Phillips, Michael Reedijk, Sandro Rizoli, Paul Sullivan, Les Walc and Alice Wei.

The residents engaged in full-time research in the Surgical-Scientist Program during the 2000-2001 academic year were: Dr. Mary-Anne Aarts (Supervisor: J. Marshall/R. McLeod); Dr. Tracey Asano (Supervisor: R. McLeod); Dr. Sean Cleary (Supervisor: S. Gallinger); Andrew Dueck (Supervisor: R. McLeod); Dr. Anand Ghanekar (Supervisor: G. Levy/D. Grant); Dr. Rebecca Gladdy (Supervisor: J. Danska); Dr. Lawrence Green (Supervisor: D. Kucey); Dr. Neelesh Jain (Supervisor: K.W. Johnston); Dr. Erin Kennedy (Supervisor: R. McLeod); Dr. Kouros Moozar Latifpour (Supervisor: S. Gallinger); Giuseppe (Joe) Papia (Supervisor: O. Rotstein); Dr. Kinga Powers (Supervisor: O. Rotstein); and Dr. Mylene Ward (Supervisor: H. MacRae).

The general surgical residents within the Surgical-Scientist Program have contributed greatly to the attainment of research scholarships and other important prizes for their work.

Dr. Lorne Rotstein officially became the Program Director in General Surgery in May of 2001, immediately following the Royal College accreditation process. The Division is indebted to Dr. Peter Chu and Dr. Lloyd Smith for co-ordinating the PGY-1 and 2, and the PGY-3, 4 and 5 seminars.

### **Promotions**

Effective July 1, 2000, Dr. Steve Gallinger and Dr. John Marshall were promoted to the rank of Full Professor.

### **New Faculty**

In 2000-2001 Dr. Paul Bernick joined the Toronto East General Hospital. Dr. Peter Chu joined the Sunnybrook and Women's College Health Sciences Centre. Dr. Stan Feinberg joined the St. Joseph's Health Centre but subsequently decided to return to the North York General Hospital. Dr. Philip Haigh joined the University Health Network with a cross-appointment at the Mount Sinai Hospital and Dr. Alan Dackiw joined the University Health Network with a cross -

appointment at the Mount Sinai Hospital commencing January 1, 2001. Dr. David Urbach joined the University Health Network.

### **Honours and Awards**

During this past academic year, Dr. Bernard Langer became the President of the Royal College of Physicians and Surgeons of Canada. Dr. Eric Poulin continues as President of the Canadian Association of General Surgeons until September 2001. Dr. David McCready continues as the President of the Canadian Society of Surgical Oncology and he also became the Director of the Breast Site Group at the Princess Margaret Hospital of the University Health Network. Dr. Doug Wooster became the President of the Canadian Society for Vascular Surgery. Dr. Helen MacRae became the Director of the Surgical Skills Centre. Dr. Richard Reznick was awarded the 2001 James IV Travelling Fellowship for Canada. Dr. Lorne Rotstein was awarded the Distinguished Educator Award. Dr. Ori Rotstein became the Director of the Institute of Medical Science, University of Toronto. Dr. Andy Smith became the Acting Director of the Sunnybrook and Women's College Health Sciences Centre and the Toronto-Sunnybrook Regional Cancer Centre. Dr. Ted Ross was awarded the Tovee Award for Undergraduate Education.

There were numerous grants achieved by our faculty from the Canadian Institutes of Health Research, the Physician Services Incorporated Foundation, the National Cancer Institute of Canada, the National Institutes of Health, the National Sciences and Engineering Research Council, the Crohn's and Colitis Foundation of Canada, the Crohn's and Colitis Foundation of America, as well as many others. The total value of all grants received by our faculty during the academic year as principle investigators was \$ 2,660,538.00.

Our surgical residents, particularly those in the Surgical-Scientist Program, were also extremely successful in their grant capture, as well as overall in their academic productivity. Dr. Tracy Asano was awarded the Lunenfeld Foundation Award. Dr. Robin Boushey was a runner-up for the Gallie-Bateman Research Prize. He was also honored by a Postgraduate Medical Education Award, an Institute of Medical Science Merit Award and a Physicians Services Incorporated Foundation Resident Research Award. Dr. Anand Ghanekar was awarded a Canadian Institutes of Health Research Fellowship and received honorable mention for the Gallie-Bateman Research Prize. Dr. Rob Gryfe was awarded a Physicians Services Incorporated

Foundation Resident Research Award, the Siminovitch-Salter Award and an Institute of Medical Sciences Award. Dr. Rebecca Gladdy was awarded an Institute of Medical Sciences Merit Award, a Postgraduate Medical Education Award and a Canadian Institutes Health Records Fellowship. Dr. Erin Kennedy received honorable mention for the Gallie-Bateman Research Prize; She also received a Health Research Fellowship and an Institute of Medical Sciences Merit Award. Dr. Rachel Kahdaroo was awarded First Prize in the Oral Presentation and Research Competition, a University of Toronto Trauma Research Day Award and an Alberta Heritage Foundation Fellowship, as well as an Institute of Medical Sciences Merit Award. Dr. George Oreopolous was awarded a Canadian Society of Clinical Investigators/Medical Research Council of Canada Award for Excellence in Resident Research and a Physicians Services Incorporated Resident Research Award. Dr. Kinga Powers was awarded the CIDS Fellowship and was awarded an Institute of Medical Science Merit Award. Dr. Michael Reedijk was awarded the Canadian Association of General Surgeons Merck-Frost Teaching Award. Dr. James Cyriac and Dr. Michael Ko were co-winners of an award for laparoscopic skills in the Competition of PGY-1's at the Surgical Skills Centre.

### **Special Events**

The Annual Assembly of General Surgeons took place in May. This event was once again organized by Dr. Steve Gallinger and is certainly a highlight as an academic day for our Division of General Surgery. Dr. Paul Redmond from Cork, Ireland was the Bruce Tovee Lecturer and did an outstanding job in assessing the presentations and making the awards for Best Papers to Drs. Sean Cleary, Rachel Kahdaroo and Rebecca Gladdy.

The 41<sup>st</sup> Annual Update Course for General Surgeons was held at the end of April. This was a two-and-a-half day session devoted to a variety of topics: Surgical oncology, laparoscopic surgery and critical care. Guest lecturers for the update course were Dr. Mitch Fink from the University of Pittsburgh and Dr. Jim Fleshman from Washington University in St. Louis. There were a record number of registrants this year. The Course also featured a touch-pad interactive session and live telesurgery of a laparoscopic colon resection and a sentinel node biopsy.

Dr. David McCready organized a postgraduate course in breast surgery and the first minimally invasive surgical postgraduate course was held



in the fall at the St. Michael's Hospital. This was under the direction of Dr. Eric Poulin and Dr. Joe Mamazza. The course featured didactic teaching, as well as live telesurgery from two of the operating rooms. The registration for this initial course was excellent and plans are being made for a second course during the fall of 2001.

**DIVISION OF NEUROSURGERY***Dr. James T. Rutka, Dan Family Chair*

The Division of Neurosurgery underwent a formal program review by the Royal College of Physicians and Surgeons of Canada and received full approval.

**Residents Achievements**

All five resident candidates passed the Royal College examinations and received their F.R.C.S.C.: Drs. Lily Angelov, Eric Massicotte, Mahmoud Rashidi, Pat McDonald, and Abdulla Shamisa.

Several residents received externally funded fellowships and awards during the year: Dr. Lily Angelov – Education Grant for Neurosurgery, Science and Management Symposium; Dr. Steven Casha – Ontario Neurotrauma Foundation Fellowship Award; Dr. Moji Hodaie – Postdoctoral Fellowship Award, Savoy Foundation; Dr. Michael Taylor – Finlayson Award, Canadian Association of Neuropathologists; Dr. Steven Casha – Fellowship Award, Canadian Institutes of Health Research; Dr. Nicholas Phan – Post-doctoral Fellowship Award, Canadian Institutes of Health Research; Dr. Michael Taylor – Research Fellowship Award, Neurosurgery Research and Education Foundation, American Association of Neurological Surgery and the American Brain Tumor Association; Michael Taylor – Canadian Institute of Health Research Post-doctoral Fellowship Award; Dr. Eve Tsai – Joint Winner of the Women in Neurosurgery Resident Scholarship Award and a Post-doctoral Fellowship, Canadian Institutes of Health Research. Dr. Michael Taylor received the Chisholm Memorial Fellowship and Dr. Elizabeth Arbuthnot the Dyson Fellowship, Faculty of Medicine. Dr. Eve Tsai received the Starr Medal, the James E. Hannah M. Inglee Memorial Research Fund Award, and the Edward Christie Fellowship in Medicine, University of Toronto. Both Dr. Eve Tsai and Dr. Michael Taylor received a Postgraduate Award, University of Toronto.

Dr. Sheila Singh won this year's Horsey Prize for best clinical research in the Division of Neurosurgery and Dr. Moji Hodaie won Second Prize. The Morley Prize winners for best basic science research were Dr. Michael Taylor – First Prize and Dr. Nicolas Phan – Second Prize. Dr. Julian Spears received the Hudson Resident Teaching Award. Dr. Howard Ginsberg was the first recipient of the Warren Ho Memorial Scholarship.

Dr. Howard Ginsberg successfully defended his Ph.D. in the Institute of Biomedical Engineering.

Dr. Warren C. Ho (resident) died on Thursday, August 10<sup>th</sup>, 2000.

#### **Faculty Achievements - Awards**

Dr. Mark Bernstein won a Tovee Award for Postgraduate Teaching from the Department of Surgery, University of Toronto; Dr. James Drake won the Hudson Teaching Award; Dr. Michael Fehlings won two Ontario Neurotrauma Foundation Grant Awards, a Physicians Services Incorporated Foundation Research Award, a Canadian Institutes of Health Research Grant, a Cervical Spine Research Society Award, a Health Research Personnel Development Program Career Scientist Award, a Premier's Research Excellence Award, he was co-applicant on a Spinal Cord Research Foundation Award, co-applicant on a Canadian Institutes of Health Research/Canadian Neurotrauma Research Program grant; Dr. Michael Fehlings and Dr. Andrei Krassioukov were co-applicants on a one-year grant from the Christopher Reeve Paralysis Foundation/Cervical Spine Research Society; Dr. Andrei Krassioukov won a Connaught New Staff Matching Award; Dr. Raj Rampersaud and Dr. Michael Fehlings won the American Association of Neurological Surgeons/Canadian Neurological Surgeons 2001 Sanford Larson Award; Dr. Jim Rutka won the Lister Award from the Department of Surgery, University of Toronto, was co-applicant on a Canadian Foundation for Innovation Grant Award and co-investigator on a grant from the National Cancer Institute of Canada; Dr. Kamal Thapar won the Bernard Langer Surgical-Scientist Award from the Department of Surgery, University of Toronto and Dr. Michael Tymianski and Dr. Ron Tasker were co-applicants on a grant from the Canadian Stroke Networks.

#### **New Funded Initiatives**

- Establishment of the Ron Tasker Chair in Stereotactic and Functional Neurosurgery
- Establishment of the Robert Campeau Family Foundation/Charles Tator Chair in Brain and Spinal Cord Research

**University of Toronto Neurosurgery Lectureships**

The Botterell Lecturer – Dr. Ronald Tasker of the University of Toronto; The Keith Lecturer – Dr. David Piepgras of the Mayo Clinic; The Hendrick Lecturer – Dr. Doug Cochrane, University of British Columbia.

The number of publications by neurosurgery faculty and residents equalled 75 and there were 59 Visiting Professorships by the faculty.

**Promotions**

Effective July 1, 2000, Dr. Michael Fehlings was promoted to Full Professor.

**Appointments**

Dr. Ab Guha has been appointed Co-Director of the Arthur and Sonia Labatt Brain Tumor Research Centre. Dr. Fred Gentili was elected member of the Nominating Committee for the North American Skull Base Society. Dr. Andres Lozano has been appointed to the Scientific Advisory Board of the Michael J. Fox Foundation for Parkinson's Research, Dr. Andres Lozano has been elected Secretary-Elect of the Movement Disorder Society: He is the first non-neurologist to hold senior office in this international society. Dr. Jim Rutka has been elected to Chair the Joint Section on Tumors of the American Association of Neurological Surgeons and Canadian Neurological Surgeons. He has also been appointed a member of the Scientific Program Committee of the American Academy of Neurological Surgery, and has been elected a member of the Neurosurgery Research and Education Foundation Executive Council

**Hosted Functions**

- 2001 Marshall Professorship – Dr. Lawrence F. Marshall, University of California, San Diego.
- American Association of Neurological Surgeons Annual Meeting.

**DIVISION OF ORTHOPAEDIC SURGERY**

*Dr. James P. Waddell, A.J. Latner Professor and Chair*

Many changes occurred in the Division of Orthopaedic Surgery over the past twelve months. The amalgamation of orthopaedic surgical services between the Wellesley Hospital and the St. Michael's Hospital occurred uneventfully and now all orthopaedic care, teaching and research for the St. Michael's Hospital occur at the Bond Street site. This has resulted in a much larger orthopaedic presence within the Bond Street site with improved opportunities, particularly for undergraduate and postgraduate teaching.

Two new staff appointments have been made in the Division over the past year. Dr. Steven Lewis joined the staff of the University Health Network working primarily in the Spine Program at the Toronto Western Hospital.

Dr. Carol Hutchison left the Division of Orthopaedic Surgery in February of 2001. Carol played a very significant role in the educational activities of the Division of Orthopaedic Surgery and the Department of Surgery and she will be greatly missed.

The Division has had a number of outstanding visitors in the past year. Dr. Robert Bourne from London, Ontario was the Kennedy Visiting Professor and did an outstanding job over the three days he visited our Division. Dr. Graham King, also from London, Ontario, was our Visiting Research Professor and contributed greatly to the growing interest amongst the residents and faculty at this University in biomechanics research.

Dr. Henrik Malchau, Head of the Swedish Hip Registry, visited and spent considerable time with the Arthroplasty Interest Group and the faculty as a whole explaining the workings of that registry. This is of particular interest to us at this time as the Division anticipates playing a very significant role in the Canadian Hip Registry, which has just been formed.

In addition, the Austrian, Swiss, German Traveling Fellows visited in March and the Canadian, French, Belgian, Swiss Traveling Fellows visited in May. Both groups of traveling fellows contributed of their considerable experience and knowledge to residents and faculty.

Members of the faculty and residents were recognized for excellence in orthopaedic surgery over the past year. Dr. Joel Lobo received the T.R. Sullivan Award for Excellence in Basic Science Research at the Orthopaedic Research Day for his paper on “The effect of canal fill biomechanical properties, soft tissue, and cortical perfusion of segmental tibial fractures treated with reamed statically locked intramedullary nails”. The Hospital for Sick Children Pediatric Award was given to Dr. Kellie Leitch for the best pediatric paper presented at Kennedy Day for her paper on elective foot surgery in children with muscular dystrophy. The Sanofi-Synthelabo Resident Research Awards were presented jointly to Dr. Paul Grosso for his paper on calcaneal fractures and Dr. John Lau for his paper on total knee replacement surgery. These awards were selected by Dr. Robert Bourne as the Kennedy Visiting Professor. The R.I. Harris Postgraduate Award for the outstanding orthopaedic resident over the course of their training was presented to Dr. Peter Ferguson. This award is determined by a faculty-wide vote. Dr. Ferguson also was awarded the D.R. Wilson Award as the outstanding resident teacher by the Department of Surgery.

Dr. Seven Hopyan had three outstanding accomplishments in his final year in the Surgical-Scientist Program. He won the Laidlaw Prize from the Institute of Medical Science for the best science project presented at their scientific day this year. He received the New Investigator Recognition Award from the Orthopaedic Research Society, one of eight awarded to a total of 312 applicants, and finally, he won the American Academy of Pediatrics Award for the best presentation by a resident or fellow at their annual meeting.

Faculty recognition included Dr. Terry Axelrod being awarded the Peters-Boyd Academy Award for the best undergraduate teacher for the clinical clerks in this Academy for the past year. Dr. Michael McKee was selected as an ABC Traveling Fellow, one of two Canadians so honoured every second year for academic excellence.

Dr. Robin Richards stepped down after eleven years as Chief of Orthopaedic Surgery at St. Michael’s Hospital and was succeeded by Dr. Emil Schemitsch.

The Division of Orthopaedic Surgery was accredited by the Royal College at the time of their review in April 2001. The internal review of the Division had revealed a number of problems, which were very vigorously and fairly addressed by Dr. Douglas Hedden, the new

Program Director. The entire Division owes Dr. Hedden their thanks for the time he has taken to address issues relating to resident training in our Program and we are all delighted with the outcome of the review.

**DIVISION OF PLASTIC SURGERY**

*Dr. Peter Neligan – Wharton Chair in Reconstructive Plastic Surgery*

Research within the Division had a successful year, both at resident and faculty levels. Drs. Rob Shenker and Alexis Armour both completed a Master's Program in the Surgical-Scientist Program and returned to the clinical stream in July. Both will defend their thesis in the fall. Dr. Kyle Wanzel continues in the Surgical-Scientist Program. Kyle is pursuing a Master's Degree in Education. Dr. Cory Goldberg entered the Surgical-Scientist Program in July under the supervision of Dr. Jeff Fialkov.

**Awards**

Several awards were won, both by residents and staff, this year. Dr. Rob Shenker won the Award for Best Paper at The Hospital for Sick Children Research Presentations. He also won the Best Research Paper Award at the Canadian Society of Plastic Surgeons' meeting in Jasper, Alberta. Dr. Marc Dupere won the Best Clinical Paper Award at the Canadian Plastic Surgery meeting. Dr. Sean Rice won the Sopman Humanitarian Award, which was presented at a reception at the home of Michael and Judy Sopman. Dr. Jeff Fialkov was the winner of the W.K. Lindsay Research Supervisor Award that was presented at the annual divisional dinner. The faculty won several teaching awards. The Arnis Freiberg Teaching Award was presented to Dr. Joel Fish. Dr. Fish was also the winner of the PAIRO Excellence in Teaching Award. This was Dr. Fish's second time to win this prestigious award. Dr. Arnis Freiberg was awarded the Outstanding Teacher of the Year Award by the Association of Surgical Education. This award recognized outstanding achievement in surgical teaching from all over North America.

**Training Program**

Three residents graduated from the Program this year: Drs. Peter Bray, Linda Dvali and Marc Dupere. All were successful in their Royal College examinations.



**Special Honors**

Dr. Ron Zuker was elected Vice-President of the American Society for Reconstructive Microsurgery. Dr. John Semple was elected President of the Canadian Society of Plastic Surgeons. Dr. Walter Peters was elected to membership of the American Association of Plastic Surgeons.

**New Appointments**

Dr. Leila Kasrai was appointed to St. Joseph's Health Centre. Dr. Kasrai has a clinical interest in pediatric plastic surgery and specifically in ear reconstruction. In collaboration with Dr. David Fisher at The Hospital for Sick Children, a Microtia Reconstruction Program is being assembled.

**Academic Events**

The 2001 Hoyle Campbell Visiting Professor was Dr. Mary McGrath from Loyola University in Chicago, Illinois. This took place at the Sutton Place Hotel, March 29 and 30. The annual University of Toronto Aesthetic Symposium was held in April with a very large attendance and excellent reviews.

A breast symposium was held for the first time this year and is to become an annual event. An international workshop on obstetrical brachial plexus palsy was hosted by Dr. Howard Clarke at The Hospital for Sick Children. It attracted 44 registrants from Europe and North America.

The annual Upper Extremity Update was held in collaboration with the Division of Orthopaedic Surgery at the St. Michael's Hospital.

**DIVISION OF THORACIC SURGERY**

*Dr. Robert J. Ginsberg, Chair*

On January 1, 2001, Dr. Robert Ginsberg assumed the Chair of Thoracic Surgery. Dr. Shaf Keshavjee continued in his role as Acting Chair until December 31, 2000.

**Clinical Accomplishments**

The Division continues to provide a full breadth of thoracic surgical services. The End-Stage Lung Disease Program has been extremely active. A record number of double lung transplants were performed this past academic year (50+). The Thoracic Oncology Program continues to develop, providing services as a tertiary care referral centre for most of Ontario.

**Teaching and Research**

The University of Toronto continues to be the largest and most comprehensive training program in the country for general thoracic surgery. Dr. Gail Darling, having completed her third year as Course Director of the Arts and Science of Clinical Medicine Course has now assumed the Directorship of this Program.

The thoracic surgical research laboratories continue to enlarge under the direction of Drs. Keshavjee, Liu, Johnston and Waddell providing a stimulating research environment for ex-trainees investigating areas of end-stage lung disease and thoracic oncology.

The Service has developed a broad-based interest in minimally invasive surgery exploring this approach in the management of both benign and malignant thoracic conditions. There has been an increasing interest in managing esophageal disease. Dr. Darling is co-ordinating this effort.

**Retirement and Recruitment**

It is with great sadness that we bid adieu to Dr. Donald Jones who has announced his intention to move to an academic position in New Jersey. We wish him well. Sadly, over the past eighteen months, three eminent thoracic surgeons (Todd, Winton, Jones) have left Toronto. There is active recruitment occurring to replenish the supply of general thoracic surgeons at the University of Toronto.

**Achievements**

A highly successful Thoracic Surgical Refresher Course (28<sup>th</sup> Annual!) was held this past June.

**General Description**

The University of Toronto Thoracic Surgical Division consists at present of seven thoracic surgeons in two University affiliated hospitals – five surgeons at the Toronto General Hospital and two at the St. Joseph's Health Centre. In other hospitals, a lot of cases were carried out by thoracic-trained general surgeons. In both centres, the whole spectrum of general thoracic surgery was encompassed other than transplantation (the Toronto General Hospital). There is increasing development of minimally invasive approaches to general thoracic surgery, especially in the management of esophageal disease. There is an extremely large multi-disciplinary oncology program at the two major oncology centres (the Princess Margaret Hospital and the Toronto-Sunnybrook Regional Cancer Centre). This program is involved with many internationally recognized experts in this field.

**Education**

The Division of Thoracic Surgery participates in undergraduate education at the University Health Network site. Thoracic surgical education in the other hospitals is carried out by those practitioners who include thoracic surgery as part of their expertise.

The thoracic surgical service is the premier training program in Canada. It continues to graduate two thoracic surgeons per year from the residency-training program and an additional 1-2 special Fellow per year. Because of problems with workload, which now have been addressed, the last Royal College Review requested an internal re-assessment in eighteen months' time.

**Research**

Overall research activity has been significant. Many of the members of this Division have been principal investigators of national and international trials. Most clinical research has been devoted to these international trials. The University of Toronto has been a major participant both in expertise and patient accrual. The Thoracic Research Laboratory is situated at the Toronto General Hospital and is

extremely well funded. Currently two Fellows are being trained in this laboratory, which devotes most of its energy to lung transplantation investigations.

#### **Appointments over the Last Ten Years**

Unfortunately, the Division has suffered markedly by the loss of eight outstanding thoracic surgeons, mainly to foreign recruitment. During this period of time, there have been three Chairmen appointed: One Chair being lost to early retirement and another to foreign recruitment. This has been very unsettling for the Division members.

With two retirements expected within the next four years, there is an active effort towards recruitment at both sites. It is anticipated that there will be at least two new recruits (one already negotiated) at the University Health Network site and a further one to two recruits at the St. Joseph's Health Centre site. As well, there is a desperate need for development of a thoracic surgical service at the Sunnybrook and Women's College Health Sciences Centre, the site of a very large cancer centre.

#### **Summary**

The Thoracic Surgery Division is in a re-building mode. Despite this, it remains the strongest centre for Thoracic Surgery in Canada and continues to be internationally recognized for its expertise in oncology, airway surgery and lung transplantation. There is a desperate need to attract thoracic surgeons to the University of Toronto and even a greater need to keep them here.

**DIVISION OF UROLOGY***Dr. Michael Jewett, Chair***Faculty Appointments, Promotions, Honors and Changes**

This year the Division faculty consisted of nineteen geographic full-time surgeons, one senior surgeon and one Ph.D. scientist. The hospital re-structuring which started ten years ago was completed enabling the faculty to be geographic on three sites: the Sunnybrook and Women's College Health Sciences Centre, the St. Michael's Hospital, and the hospitals in and around University Avenue (the University Health Network, the Mount Sinai Hospital and The Hospital for Sick Children. The Wellesley Hospital site closed. This has permitted more focused programmatic activities on each site in terms of research and education. The faculty continued their global activities and leadership was provided in international clinical trials and various national and international urological organizations.

Dr. Lori Burrows continues as Director of the Centre for Infection and Biomaterials Research at the Toronto General Hospital, which now houses eleven members, including a Surgical-Scientist resident.

Dr. Lesley Carr officially moved her office to the Sunnybrook campus of the Sunnybrook and Women's College Health Sciences Centre, where she continues to direct the Urology Program for the residents. She led the creation of and was appointed Medical Director of the Women's Pelvic Health Centre, which received close to \$700K for program development from the Sunnybrook and Women's College Health Sciences Centre's innovation fund.

Dr. Neil Fleshner continued his leadership in studies of prevention of prostatic cancer.

Dr. Magdy Hassouna received a grant from the Canadian Institutes of Health Research for a one-year study of the role of vanilloid receptors in the bladder following spinal cord injury.

Dr. Sender Herschorn was promoted to Full Professor. He was appointed Chair of the University Division of Urology and will begin a five-year term on July 1, 2001. He will continue as the departmental Director of Continuing Professional Development (formerly known as Continuing Medical Education). He was awarded the Urology Division Postgraduate Faculty Teaching Award and the A.W. Bruce Undergraduate Teaching Award in the Division.

Dr. John Honey continued as Director of the Uroliathisis and Lithotripsy Program at the University and the Head of this program at the St. Michael's Hospital. He was awarded a Kidney Foundation of Canada grant to study laparoscopic donor nephrectomy, which was pioneered at the St. Michael's Hospital.

Dr. Keith Jarvi continued to lead the Andrology Program, with peer-reviewed funding, and supervises a fellow, a post-doctoral student, and a Surgical-Scientist resident.

Dr. Michael Jewett completed his second term as Chair of the Division of Urology at the end of this academic year, but will continue as Head of the Division of Urology at the University Health Network for the near future.

Dr. Tony Khoury continues as Head of Pediatric Urology at The Hospital for Sick Children.

Dr. Laurence Klotz was promoted to Full Professor. He completed his term as Chair of the Canadian Uro-oncology Group (CUOG)/National Cancer Institute of Canada Clinical Trials Group GU Site Committee, but continues as Chair of the Global GU Group, Head of the GU at the Toronto-Sunnybrook Regional Cancer Centre, and Editor-in-Chief of the Canadian Journal of Urology. He formed a new organization, the Canadian Urology Research Consortium, to expedite clinical research in urology in Canada.

Dr. Ronald Kodama was awarded the prestigious Faculty of Medicine Aitkin's Teaching Award and the A.W. Bruce Undergraduate Teaching Award in the Division.

Dr. Gordon McLorie served as President of the Canadian Urological Association and hosted the annual meeting in Toronto.

Dr. Sid Radomski won the Surgical Skills Centre Teaching Award as the best surgical teacher. He conducts the very popular hands-on part of the Urology Program and is developing the Minimally Invasive Surgery Program at the University Health Network.

Dr. Robert Stewart moved his lab and practice to the St. Michael's Hospital in July, where he continued with his vascular biology research.

Dr. John Trachtenberg continued as Director of the Prostate Centre at the Princess Margaret Hospital and serves as President of the Canadian Academy of Urological Surgeons.

#### **Academic Events and Divisional Awards**

Our Charles J. Robson Visiting Professor this year was Dr. Paul Lange, Chair of the Department of Urology at the University of Washington.

Research Day '01 was held in conjunction with the Robson Visiting Professorship. The awards for best presentations were: Resident First Prize Basic Research – Dr. Antonio Finelli (Identification of genes up-regulated in *pseudomonas aeruginosa* biofilms) supervised by Dr. Lori Burrows; Honorable Mention – Dr. Antonio Finelli (Development of a rat model of chronic *pseudomonas aeruginosa* peritonitis for evaluation of colonization-resistant peritoneal dialysis catheters) supervised by Dr. Lori Burrows; Resident First Prize Clinical Research – Dr. Sergio Giancola (Prognostic significance of bilateral positive needle-core biopsies in clinical stage T2a prostate cancer) supervised by Dr. John Tsihlias; Honorable Mention – Dr. Ethan Grober (Correlation of needle biopsy primary and secondary Gleason pattern with clinico-pathological factors in Gleason 7 tumors) supervised by Dr. John Tsihlias; Honorable Mention – Dr. Ben Chew (Vasoepididymostomy and vasovastomy are associated with retention of sperm cytoplasmic droplets) supervised by Dr. Armand Zini; Fellow First Prize Basic Research – Dr. Daniel Herz (Altered extra cellular matrix (ECM) stimulation of bladder smooth muscle cell (BSMC) growth in-vitro is regulated by map kinase) supervised by Dr. Darius Bagli; Honorable Mention – Dr. Ricardo Rendon (Radio frequency(RF) ablation techniques for renal cell carcinoma (RCC) require further development) supervised by Dr. Michael Jewett; Fellow First Prize Clinical Research – Dr. Kenneth Pace (Assessing post-operative recovery: Reliability, responsiveness and validity testing of the post-operative recovery scale (PRS) supervised by Dr. John Honey; Honorable Mention – Dr. Daniel

Herz (Efficacy of endoscopic subureteral macrorplastique injection for the treatment of vesicoureteral reflux in children: Analysis for high-grade neonatal hydronephrosis: Prospective management protocol) supervised by Dr. Gordon McLorie.

The annual graduation ceremony (TURP 2001) took place at the Hart House in June. The faculty was introduced to the new PGY 1's and the graduates. The achievements of faculty and residents were also recognized, as well as acknowledgement of retirees and new faculty members. Our guests were Robin Roger and Dr. Michele Flax, two well-known Toronto psychologists, who addressed the issues of Freud and Urology.

Dr. Frank Papanikolaou was awarded the Struthers Scholarship for his studies in stone disease.

### **Postgraduate Education**

Dr. Ronald Kodama continued as Program Director with Dr. Lesley Carr organizing the Urology Program. Graduates of the program in 2001 were Drs. Rob Nam, Ali BinMafooz and Kristina Garrels. All were awarded their fellowships from the Royal College of Physicians and Surgeons of Canada.

There were a total of 18 residents in the Program. In addition, there were 11 fellows in clinical and research positions.

The Sixth Urology Fair for resident selection, which is a national event, was held in January in Toronto with all programs sending interview teams and all of the Canadian fourth year students interested in urology attending.

Drs. Eddie Matsumoto (supervisor Dr. Stan Hamstra) and Tony Finelli (supervisor Dr. Lori Burrows) successfully completed the Surgical-Scientist Program and were awarded their Master's degree. Dr. Matsumoto was Runner-Up in the Gallie-Bateman Research Prize Presentations, was awarded the Wyeth-Ayerst Canada Award in Medical Education and Clinical Epidemiology, First Prize Essay of the Northeastern American Urological Association Meeting and Third Prize Essay of the American Urological Association. Dr. Finelli was awarded First Place in the Allan Wu Poster Competition of the Institute for Medical Science Research Day, First Place in the Infectious



Disease/Microbiology Research Day and Honorable Mention in the Department of Surgery, Gallie-Bateman Research Prize Presentations.

Dr. Ricardo Rendon, a fellow with Dr. Michael Jewett, was awarded the Astra Zencca-CUOG Research Award for this year.

Dr. Marc Anthony Fischer, a fellow with Dr. Keith Jarvi, was the recipient of a combined Canadian Institutes of Health Research/Kidney Foundation of Canada Research Fellowship for investigation of CFTR gene mutations and male infertility.

The University of Toronto Urooncology Fellowship Program was initiated with salary support from two fellows per year. This program will be run at the Sunnybrook and Women's College Health Sciences Centre and the Princess Margaret Hospital/University Health Network and is the first of its kind in Canada.

Many presentations were made by residents at national and international meetings.

#### **Continuing Professional Development**

The Urology Update was held in November under the able direction of Dr. Sender Herschorn, Director of Continuing Medical Education in the Division of Urology and co-direction of the committee chaired by Dr. Laurie Klotz. Once again, it proved extremely successful.

The Conference in Prostate Cancer was held again at Whistler under the direction of Dr. John Trachtenberg.

**DIVISION OF VASCULAR SURGERY**

*Dr. K.Wayne Johnston - R. Fraser Elliott Chair in Vascular Surgery*

**Honours**

Dr. Barry Rubin is the Wylie Scholar in Academic Vascular Surgery. Dr. Wayne Johnston continues as Editor-in-Chief of the Journal of Vascular Surgery and the R. Fraser Elliott Chair in Vascular Surgery. Dr. Tom Lindsay was promoted to the rank of Associate Professor, effective July 1, 2000, and is the President of the Peripheral Vascular Surgery Society. Dr. Douglas Wooster is President of the Canadian Society for Vascular Surgery.

**Research**

Dr. Tom Lindsay has a Physicians Services Incorporated Foundation grant to continue his studies of the mechanism of remote organ injury following repair of ruptured aortic aneurysms. Dr. Darryl Kucey, with Dr. Tu, is funded by a grant from the Canadian Heart and Stroke Foundation to evaluate carotid endarterectomy in the community. He is supervising two clinician scientists. With a grant from the Canadian Heart and Stroke Foundation, Dr. Barry Rubin continues his study of factors influencing human neutrophil function. He obtained new grant support from Physicians Services Incorporated Foundation. Dr. Wayne Johnston has a five-year Canadian Institutes of Health Research grant to support his basic research programs in collaboration with Professors Richard Cobbold and Matadial Ojha (Biomedical Engineering) in Doppler ultrasound and hemodynamics studies. Dr. Peter Kalman is a co-investigator on a Heart and Stroke Foundation grant investigating the efficacy of home exercise training in the management of patients with arterial occlusive disease.

**Education**

Dr. Tom Lindsay received an award for individual teaching from the Wightman-Berris Academy and organized and taught a major course at the Institute for Medical Sciences on the "Physiological basis of disease: Research issues in clinical medicine. Dr. Alan Lossing's core lectures in vascular surgery continue to be very highly evaluated. Dr. Darryl Kucey supervised two Master's students from the Surgical-Scientist Program. Dr. Douglas Wooster chairs a group that has developed the next version of the Vascular Self-evaluation Program (a Continuing Medical Education program for vascular surgeons),

developed guidelines for a self-assessment program for the maintenance of certification initiative for the Royal College of Physicians and Surgeons of Canada, and is Section Editor for Continuing Medical Education for the American Association of Vascular Surgery web site. Dr. Wooster co-organized a vascular imaging program. Dr. David Szalay is Director of Medical Education at St. Joseph's Health Science Centre, conducts weekly resident education seminars, and organized a symposium on vascular diseases for family physicians. Dr. Peter Kalman had invitations to present at the Mayo Clinic Symposium, the Montefiore Symposium, the VI Pan American Congress, the Pennsylvania Hospital Symposium and the American College of Surgeons meeting. He also organized a very successful vascular meeting. Dr. Wayne Johnston gave the following named lectures Kempczinski, Linton and Iype, had invitations to lecture at the University of West Virginia, the Albert Einstein College of Medicine, the Uniformed Services University of Health Sciences, the Northwestern University and Cornell University and was the distinguished lecturer at the 25<sup>th</sup> Anniversary Meeting of the Southern Association for Vascular Surgery.

**Administration**

Dr. Wayne Tanner is Chair of the Specialists Coalition.

**New Programs**

Dr. Tom Lindsay started a program for endovascular repair of abdominal aortic aneurysm at the Toronto General Hospital.

**DIVISION OF ANATOMY***Dr. Michael Wiley – Chair*

The past year saw an increased demand for the educational resources of the Division as a result of increased undergraduate enrolment and a growing interest in undergraduate and postgraduate anatomy electives and anatomy-based CPD courses. The Division continues to explore the applications of electronic multimedia to support anatomy teaching as a means to meet this growing demand.

Drs. Patricia Stewart and Mike Wiley are collaborating with Dr. Linda Wilson-Pauwels, Nick Woolridge, Jodie Jenkinson, Dr. Stan Hamstra and Dr. David McCready in the development of an online CPD credit course in sentinel node biopsy and breast cancer surgery. Dr. Patricia Stewart published her interactive neuroanatomy CD atlas “Functional Neuroanatomy” and has obtained funding from the Provost’s Information Technology Development Fund to assess the educational value of this electronic-based approach to neuroanatomy instruction. Dr. Bernie Liebgott has also obtained funding from the Information Technology Development Fund to create an interactive, computer-assisted learning module on the anatomy of the skull. This program will be developed in two versions: One suitable for students in dentistry and speech therapy, the other for postgraduate students in otolaryngology and oral surgery.

Dr. Bernie Liebgott, Patricia Stewart and Mike Wiley each contributed presentations to the Symposium for Teaching Morphological Sciences in the Digital Age, sponsored by the Canadian Association of Anatomy, Neuroanatomy and Cell Biology.

In keeping with the Division’s goal to be a leading centre in the development of e-based approaches to anatomy education, the Division will host the Fifteenth Annual Slice of Life/Computers in Medical Education workshop in June 2002. The “Slice of Life” Workshop brings together developers of medical and health-related educational multi-media and represents an opportunity to showcase the expertise of the Divisions of Anatomy and Biomedical Communications in this rapidly evolving approach to medical education. Dr. Patricia Stewart will chair the Local Host Centre Committee.

Professor Anne Agur has taken on the Directorship of the Program for Advice and Support for Students (P.A.S.S.). Dr. Patricia Stewart has become Co-course Director for the Brain and Behaviour block with

Marika Hohol. With the retirement of Professor David Cormack, Dr. Mike Wiley has taken over responsibility for histology teaching in the Structure and Function and Metabolism and Nutrition blocks.

**Honours and Awards**

Professor Anne Agur received a Ph.D. degree at the Spring Convocation and is now extending her thesis research on computer modeling of muscle and joint architecture in healthy and diseased states.

Dr. Ian Taylor received the E. Mary Hollington Award for teaching with distinction in the pre-clinical part of the curriculum as well as the Harry Whittaker Memorial Teaching Award.

**DIVISION OF BIOMEDICAL COMMUNICATIONS**

*Dr. Linda Wilson-Pauwels, Chair*

This year the Bell University Laboratories awarded the Division of Biomedical Communications a project grant for “Media-based health communication: Exploring the power of visual media to promote understanding.” Linda Wilson-Pauwels and Nick Woolridge are the principal investigators of the grant and the following faculty members are co-applicants, Drs. Mike Wiley and Patricia Stewart (Anatomy), Drs. Stan Hamstra and David McCready (Surgery) and Monica Schraefel (Computer Science). The biomedical communicators coined the name the “*Interpretive Visualization (IVIS) Group*” and we have established a lab for research in visual communication in the Biomedical Communications Division. We are very encouraged by the fact that we are conducting applied research in our own domain: Visual communications.

This year the first students entered our new Combined 3-D Animation Program with Sheridan College. To date the results are outstanding. Both students have produced animatics, as well as 3-D medical animations, using Alias’s Maya software. Masters’ topics include visualizing calcium-mediated excito-toxicity in ischemic brain damage and T-cell motility through post-capillary venules in the medulla of a lymph node.

The Master of Science in Biomedical Communications (M.Sc.B.M.C.) Program is now in its sixth year. As a result, we prepared a self-study and were externally reviewed by the Ontario Council on Graduate Studies. For two days, the Directors of two accredited programs, The Johns Hopkins Art as Applied to Medicine Program and the University of Michigan’s Medical and Biological Illustration Program, visited our facility and met with members of the University. Their report was both positive and informative.

Our goal for next year is to continue to attract grant funding for applied research in visual communication.

**SURGICAL ALUMNI ASSOCIATION**

*Dr. Charles H. Tator, President*

This year we continued to maintain our strong commitment to the Surgical-Scientist Program and contributed almost \$100,000, which represents the approximate total amount of the annual donations from our generous alumni. We receive the majority of our donations from alumni who are current faculty members, but also a considerable number of donations from those who practice elsewhere in Canada and in other countries. We have spent considerable effort to update our mailing lists so that we can be sure to reach all alumni through our semi-annual newsletters, and requests for donations. The offices of the Division Chairs remain the most reliable sites for maintaining accurate and up-to-date alumni mailing lists, especially for those living in other countries. We have established that all donations from the United States of America are also eligible for income-tax relief, and hopefully the same is true for alumni in many other countries. Our goal this year is to collect \$150,000 in donations to ensure that all residents who want additional training in education or research, or both, can have the opportunity.

We have made several changes to the membership of the Surgical Alumni Association Committee. We said goodbye and thank you to several members who served for many years, and welcomed several new members from the University of Toronto faculty and from elsewhere. The list of current committee members can be seen in each Alumni Newsletter. A very informative planning meeting was held in March and we plan to hold an annual meeting of this type.

With respect to the Newsletter, we have asked the Division Chairs to collect more information from their respective alumni for inclusion in the "What's Happening" section. If any alumni have a favorite story or picture he/she would like to share, please send it along to the Editor, Dr. Robin Humphreys, who continues to do a stellar job.

This year we instituted a new form of giving. If you would like to honor one of your colleagues who may have done something special, then make a donation to the Surgical Alumni Association in that person's honor, and we will acknowledge it in a special section of the Newsletter.

**SURGICAL ONCOLOGY***Dr. Robert S. Bell, Chair**Departmental Surgical Oncology Committee*

The past twelve months was a time of growth and productivity for the Surgical Oncology Program at the University of Toronto. Recruits included Drs. Philip Haigh and Alan Dackiw at the University Avenue site. These recruits will join Drs. Lorne Rotstein and David McCready in a very strong Breast/Endocrine Oncology Program. Dr. Carol Swallow continues to lead the Fellowship Program, which received very favorable reviews in the recent Royal College review.

As the academic year comes to an end, there is considerable activity at both sites. Search committees have selected new leaders for surgical oncology at Princess Margaret Hospital and at the Toronto-Sunnybrook Regional Cancer Centre. One of our surgical partners has virtually concluded an alternative payment plan for cancer surgery. Programmatic management at both sites has focused the role of surgical oncology in resource utilization and program delivery.

Drs. David McCready and Andy Smith are to be commended for their persistence in extending cancer centre standards of comprehensive care to the community. Through Continuing Education programs and by the regular TORSO rounds for general surgeons, these two surgeons have raised the standard of care for patients in our geographic area.

University of Toronto surgeons, led by Dr. David McCready, were instrumental in an analysis of surgical waiting times across Ontario Cancer Centres. This study points to the prolonged waits for treatment that some of our patients encounter and addresses the necessity for continued investment in surgical oncology training and infrastructure.



## **CONTINUING PROFESSIONAL DEVELOPMENT**

*Dr. Sender Herschorn, Director*

Last year was a very active one in continuing education for the members of the Department of Surgery, as continuing professional development (CPD) assumes a position of increasing importance in our careers.

The members of the Department set about complying with the Guidelines of the Royal College of Physicians and Surgeons of Canada for accreditation of their own continuing professional development activities. The guidelines require tracking all of the continuing professional development activities for each year. Fellows are required to earn 400 credits during five-years of active practice by participating in educational activities of their choice. The first five-year cycle extends from January 1, 2001 until December 31, 2005. The initial deadline for registering was pushed back from January 1, 2001 to January 1, 2002. Members are required to submit continuing professional development hours from both the year 2000 and the year 2001 by that date. Details of the program can be obtained from the following website: <http://rcpsc.medical.org/english.maintenance/>. In January of each year, a stratified, random sample of three percent of fellows who have completed continuing professional development activities in the previous year will be required to validate their self-reports of participation in continuing professional development activities.

The Department of Surgery has been extremely active in providing continuing professional development events. Data was captured from the Faculty of Medicine Continuing Education database. Various divisions and individual surgeons also held other events during the year. Overall there were more than 21 courses with an enrolment of 2,484 participants. A total of 255 accredited hours were delivered. There were also additional collaborative events and courses between surgical divisions and other departments, which were designed for surgeons. The activities were primarily in lecture format but rounds, small group learning workshops with hands-on sessions, and preceptorships for surgeons from various parts of Ontario were also held.

Consistent performance and innovation has been the hallmark of activity. Each division has been committed to continuing education and a number of events have been particularly notable. The Division of

The Division of General Surgery held its 41<sup>st</sup> Annual Update. The Division of Urology held the 8<sup>th</sup> Annual Urology Update, which was the largest continuing education event in Canada. The Division of Vascular Surgery has developed an accredited self-evaluation program and a vascular imaging program. The Division of General Surgery and the Division of Biomedical Communications are developing a web-based self-directed program in sentinel node biopsy in breast cancer with a grant from Bell University Labs. The recently established Office of International Surgery held its first continuing education course focused on surgical problems in developing countries.

Acknowledgement of contributions and support for innovation and education are done through the Faculty Continuing Education Department. The Colin Woolf Awards are given annually, one for excellence in course co-ordination, one for excellence in teaching at continuing education events, and one for long-term contribution to continuing education activities. Members of the Department who have won the award include Dr. Sender Herschorn (1998), Dr. Bryce Taylor (1999) for long-term commitment, and Dr. Andres Lozano (1999) for course co-ordination.

The David Fear Fellowship (up to \$3,000 for the year) is also available to members of the Department to promote scholarship and professional development in continuing education by support of participation in educational courses, site visits to other university continuing education departments, participation in professional continuing education meetings, or other activities such as developing an educational grant or innovative continuing education program. The Fred Fallis Award (up to \$500) is available annually for an individual or group that has demonstrated innovation and excellence in the design and delivery of distance education. Other continuing education research and development awards are also available through the Faculty Continuing Education Office (<http://www.cme.utoronto.ca/research/internal.html>).

There has been an increasing emphasis on continuing education and involvement by members of the Department. Members are encouraged to participate actively in course design and delivery of continuing education and record their activity on their curriculum vitae/teaching dossier updates. In addition to the satisfaction derived from maintaining and improving standards of practice amongst our colleagues, excellence in continuing education activity can also have a positive impact on the annual performance review and in academic promotion.

**THE HOSPITAL FOR SICK CHILDREN****Dr. John H. Wedge, R.S. McLaughlin Professor – Surgeon-in-Chief****HEADS OF DIVISIONS****Dr. W.G. Williams – Cardiac Surgery****Dr. J. Langer – General Surgery****Dr. R. Humphreys – Neurosurgery****Dr. W. Cole – Orthopaedic Surgery****Dr. R. Zuker – Plastic Surgery****Dr. A. Khoury – Urology**

The most notable achievement for the Department of Surgery at The Hospital for Sick Children this year was the successful re-negotiation of our Alternative Funding Plan for clinical service, research and teaching. The new plan will enhance our research and teaching initiatives and create a number of much needed new positions to fulfil our academic mission. The Hospital for Sick Children Foundation has matched the Ministry of Health and Long-Term Care increase in the base funding for the plan to support the research and teaching component of our faculty members' responsibilities.

Research funding and productivity continues to escalate at an impressive rate. Dr. Benjamin Alman has received a Canada Research Chair. The presence of surgeon-scientists and investigators in our research institute continues to increase at an impressive rate.

Dr. Glen Van Arsdell has been appointed Head of the Division of Cardiac Surgery effective this July to replace Dr. Williams who has made such a substantial contribution to the care of children with cardiac defects over many years. Dr. Van Arsdell has ambitious plans for both the organization of clinical care and the development of clinical research in the Division.

As can be seen from this year's report, academic productivity has made another quantum leap, both in external research funding and peer-reviewed publications. Residents in the Surgical-Scientist Program, based at The Hospital for Sick Children, have again won numerous awards for their presentations at national and international meetings.

**DIVISION OF CARDIAC SURGERY**

**Dr. E.H. Blackstone – Associate Professor**  
**Dr. J.G. Cols - Associate Professor**  
**Dr. G.S. Van Arsdell - Associate Professor**  
**Dr. W.G. Williams – Professor (*Division Head*)**  
**Dr. C. Witness - Associate Professor**

**PUBLICATIONS**

**Abdullah MN, Van Arsdell GS, Horn Berger LK, Adatia I:** Pre-coronary stenosis after stage 1 palliation for hypoplastic left heart syndrome. *Annals of Thoracic Surgery*: December 2000: 70: pp 1247-1249.

**Arrazaghi AA, Butany JW, Williams WG, Wigle ED, Rakowski H:** Myectomy for hypertrophic obstructive cardiomyopathy after failed alcohol septal ablation: Clinicopathological correlations. *Canadian Journal of Cardiology*: February 2001: 17: pp 197-202.

**Athanasuleas CL, Stanley AWH Jr, Bubkberg GD, Dor V, DiDonato M, Blackstone EH, RESTORE Group:** Surgical anterior ventricular endocardial restoration (SAVER) in the dilated remodeled ventricle after anterior myocardial infarction. *Journal of the American College of Cardiology*: April 2001: 37: pp 1199-1209.

**Azaki A, McCrindle BW, Benson LN, Van Arsdell GS, Russell JL, Coles JG, Nykanen D, Freedom RM, Williams WG:** Total cavopulmonary connections in children with a previous Norwood procedure. *Annals of Thoracic Surgery*: May 2001: 71: pp 1541-1546.

**Caldarone CA, McCrindle BW, Van Arsdell GS, Coles JG, Webb G, Freedom RM, Williams WG:** Independent factors associated with longevity of prosthetic valves and valve conduits. *Journal of Thoracic and Cardiovascular Surgery*: December 2000: 120: pp 1022-1030.

**Dellgren G, Koirala B, Sakopoulos A, Botta A, Joseph J, Benson L, McCrindle B, Dipchand A, Cardella C, Lee K-J, West L, Poirier N, Van Arsdell GS, Williams WG, Coles JG:** Pediatric heart transplantation: Improving results in high risk patients. *Journal of Thoracic and Cardiovascular Surgery*: April 2001: 121: pp 782-791.

**Diaz LA, Brunken RC, Blackstone EH, Snader CE, Lauer MS:** Independent contribution of myocardial perfusion defects to exercise capacity and heart rate recovery for prediction of all-cause mortality in patients with known or suspected coronary heart disease. *Journal of the American College of Cardiology*: May 2001: 37: pp 1558-1564.

**Dresing TJ, Blackstone EH, Pashkow FJ, Snader CE, Marwick TH, Lauer MS:** Usefulness of impaired chronotropic response to exercise as a predictor of mortality, independent of the severity of coronary artery disease. *American Journal of Cardiology*: September 2000: 86: pp 602-609.

**Foody JM, Cole CR, Blackstone EH, Lauer MS:** A propensity analysis of cigarette smoking and mortality with consideration of alcohol. *American Journal of Cardiology*: March 2001: 87: pp 706-711.

**Franco-Cereceda A, McCarthy PM, Blackstone EH, Hoercher KJ, White JA, Young JB, Starling RC:** Partial left ventriculectomy for dilated cardiomyopathy: Is this an alternative to transplantation? *Journal of Thoracic and Cardiovascular Surgery*: May 2001: 121: pp 879-893.

**Gatzoulis MA, Elliott JT, Guru V, Siu SC, Warsi MA, Webb GD, Williams WG, Liu P, McLaughlin PR:** Right and left ventricular systolic function late after repair of tetralogy of Fallot. *American Journal of Cardiology*: December 2000: 86: pp 1352-1357.

**Gillinov AM, Diaz R, Blackstone EH, Pettersson GB, Sabik JF, Lytle BW, Cosgrove DM III:** Double valve endocarditis. *Annals of Thoracic Surgery*: June 2001: 71: pp 1874-1879.

**Gillinov AM, Lytle BW, Hoang V, Cosgrove DM, Banbury MK, McCarthy PM, Sabik JF, Pettersson GB, Smedira NG, Blackstone EH:** The atherosclerotic aorta at aortic valve replacement: Surgical strategies and results. *Journal of Thoracic and Cardiovascular Surgery*: October 2000: 120: pp 957-965.

**Gilljam T, McCrindle BW, Smallhorn JF, Williams WG, Freedom RM:** Outcomes of left atrial isomerism over a twenty-eight year period at a single institution. *Journal of the American College of Cardiology*: September 2000: 36: pp 908-916.

**Hesse B, Diaz LA, Snader CE, Blackstone EH, Lauer MS:**

Complete bundle branch block as an independent predictor of all-cause mortality in 7,073 patients referred for nuclear exercise testing. *American Journal of Medicine*: March 2001; 110: pp 253-259.

**Iyer SKT, Van Arsdell GS, Dicke FP, McCrindle BW, Coles JG, Williams WG:** Are bilateral superior vena cavae a risk factor for single ventricle palliation? *Annals of Thoracic Surgery*: December 2000; 70: pp 711-716

**Kaplon RJ, Cosgrove DM, Gillinov AM, Lytle BW, Blackstone EH, Smedira NG:** Cardiac valve replacement in patients on dialysis: Influence of prosthesis on survival. *Annals of Thoracic Surgery*: August 2000; 70: pp 438-441.

**Kostic SV, Rice TW, Baker ME, DeCamp MM, Murthy SC, Rybicki LA, Blackstone EH, Richter JE:** Timed barium esophagogram: A simple physiologic assessment for achalasia. *Journal of Thoracic and Cardiovascular Surgery*: November 2000; 120: pp 935-946.

**Lim CH, Rice TW, Blackstone EH:** Extended resections in stage T4 NSCLC: Pro. In: *Controversies in Lung Cancer* (Movas B, Langer CJ, Goldberg M, eds). Marcel Dekker Incorporated, New York: 2001: pp 257-272.

**Lin SS, Lauer MS, Asher CR, Cosgrove DM, Blackstone E, Thomas JD, Garcia MJ:** Prediction of coronary artery disease in patients undergoing operations for mitral valve degeneration. *Journal of Cardiovascular Surgery*: May 2001; 121: pp 894-901.

**Lofland GK, McCrindle BW, Williams WG, Blackstone EH, Tchervenkov CI, Sittiwangkul R, Jonas RA:** Critical aortic stenosis in the neonate: A multi-institutional study of management, outcomes and risk factors. *Journal of Thoracic and Cardiovascular Surgery*: March 2001; 121: pp 10-27.

**Nishime EO, Cole CR, Blackstone EH, Pashkow FJ, Lauer MS:** Heart rate recovery and treadmill exercise score as predictors of mortality in patients referred for exercise ECG. *Journal of the American Medical Association*: September 2000; 284: pp 1392-1398.

**Ogiwara M, Coles JG, Lucien J, Kadokura M, Asano H, Shimada M, Kyo S:** Fluorescence scanner assay for detecting distribution of carbohydrates on porcine endothelial cell. *Transplantation Proceedings*: August 2000: 32: pp 981-982.

**Peragallo RA, Ali MJ, Omran AS, Williams WG:** An unusual finding in a patient with hypertrophic cardiomyopathy. *Journal of Cardiovascular and Vascular Anesthesia*: June 2001: 15: pp 396-397.

**Peterson JG, Topol EJ, Roe MT, Sapp SK, Lincoff AM, Deckers JW, Blackstone EH, Harrington RA, Califf RM, Lauer MS:** Prognostic importance of concomitant heparin with eptifibatid in acute coronary syndromes: PURSUIT investigators: Platelet glycoprotein IIb/IIIa in unstable receptor suppression using integrilin therapy. *American Journal of Cardiology*: March 2001: 87: pp 532-536.

**Poirier NC, Williams WG, Van Arsdell GS, Coles JG, Smallhorn JF, Omran A, Freedom RM:** A novel repair for patients with atrioventricular septal defects requiring re-operation for left atrioventricular valve regurgitation. *European Journal of Cardiothoracic Surgery*: December 2000: 18: pp 54-61.

**Rao V, Van Arsdell GS, David TE, Azaki A, Williams WG:** Aortic valve repair for adult congenital heart disease: A twenty-two year experience. *Circulation*: November 2000: 102: pp III40-III44.

**Rice TW, Blackstone EH, Adelstein DJ, Zuccaro G Jr, Vargo JJ, Goldblum JR, Rybicki LA, Murthy SC, DeCamp MM:** N1 esophageal carcinoma: The importance of staging and down staging. *Journal of Thoracic and Cardiovascular Surgery*: March 2001: 121: pp 454-464.

**Scott R, Blackstone EH, McCarthy PM, Lytle BW, Loop FD, White J, Cosgrove DM:** Isolated bypass grafting of the left internal thoracic artery to the left anterior descending coronary artery: Late consequences of incomplete revascularization. *Journal of Thoracic and Cardiovascular Surgery*: July 2000: 120: pp 173-184.

**Smedira NG, Blackstone EH:** Post-cardiotomy mechanical support: Risk factors and outcomes. *Annals of Thoracic Surgery*: January 2001: 71: pp S60-S66.

**Starling RC, McCarthy PM, Buda T, Wong J, Goormastic M, Smedira NG, Thomas JD, Blackstone EH, Young JB:** Results of partial left ventriculectomy for dilated cardiomyopathy: Hemodynamic, clinical and echocardiographic observations. *Journal of the American College of Cardiology*: December 2000; 36: pp 2098-2103.

**Srivastava R, Blackstone EH, Lauer MS:** Association of smoking with abnormal exercise heart rate responses and long-term prognosis in a healthy, population-based cohort. *American Journal of Medicine*: July 2000; 109: pp 20-26.

**Van Arsdell GS, Maharaj GS, Tom J, Rao VK, Coles JG, Freedom RM, Williams WG, McCrindle BW:** What is the optimal age for repair of tetralogy of Fallot? *Circulation*: November 2000; 102(III): pp 123-129.

**Van Arsdell GS, McCrindle BW, Einarson KD, Lee KJ, Oag E, Caldarone CA, Williams WG:** Interventions associated with minimal Fontan mortality. *Annals of Thoracic Surgery*: August 2000; 70: pp 568-574.

**Wallen WJ, Cserti C, Belanger MP, Wittnich C:** Gender differences in myocardial adaptation to after-load in normotensive and hypertensive rats. *Hypertension*: November 2000; 36: pp 774-779.

**Watzka SB, Lucien J, Shimada M, Edwards V, Yeager H, Hannigan G, Coles JG:** Selection of viable cardiomyocytes for cell transplantation using three-dimensional tissue culture. *Transplantation*: November 2000; 70: pp 1310-1317.

**West LJ, Phil D, Pollock-Barziv SM, Dipchand AI, Lee KJ, Cardella CJ, Benson LN, Rebeyka IM, Coles JG:** ABO-Incompatible heart transplantation in infants. *New England Journal of Medicine*: March 2001; 344(11): pp 793-800.

**Williams WG, Harris L, Downer E, Van Arsdell GS, McLaughlin PR, Webb GD:** Re-operation late after repair of tetralogy of Fallot: Indication, timing and outcome. In: *The Adult With Tetralogy of Fallot* (Gatzoulis MA, Murphy DJ, eds). Futura Publishing Company, New York: 2001: pp 81-91.



**Wittnich C, Torrance SM, Carlyle CE:** Effects of hyperoxia on neonatal myocardial energy status and response to global ischemia. *Annals of Thoracic Surgery*: November 2000: 70: pp 2125-2131.

**Yu EHC, Omran AS, Wigle D, Williams WG, Siu SC, Rakowski H:** Mitral regurgitation in hypertrophic obstructive cardiomyopathy: Relationship to obstruction and relief with myectomy. *Journal of the American College of Cardiology*: December 2000: 36: pp 2219-2225.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Blackstone EH:** Baylor University Medical Center, Dallas, Texas, October 2000. Does a small aortic prosthesis reduce survival?

**Blackstone EH:** International Heart School, Bergamo, Italy, January 2001. CPC of a scientific paper.

**Blackstone EH:** American Association for Thoracic Surgery, San Diego, California, May 2001. Breaking down barriers: Helpful breakthrough statistical methods you need to understand better.

**Blackstone EH:** Management Course in Cardiothoracic Surgery, University Hospital, Umea, Sweden, June 2001. Medical quality: Use of computers.

**Coles JG:** Society of Thoracic Surgeons, New Orleans, Louisiana, January 2001. Aggressive pulmonary venous obstructive disease: Lung transplant versus surgical repair.

**Coles JG:** Indian Association of Cardiovascular -Thoracic Surgeons, Calcutta, India, February 2001. Current status of neonatal surgical results at The Hospital for Sick Children.

**Van Arsdell G:** Asian Society for Cardiovascular Surgery, Nagoya, Japan, March 2001. (1) Late outcomes in Mustard and tetralogy of fallot, (2) Lessons learned in Fontan.

**Williams WG:** Royal Brompton Advanced Symposium in Adult Congenital Heart Disease and Cardiac Surgery, London, United Kingdom, February 2001. (1) Fontan versus non-Fontan palliation for single ventricle in the adult, (2) Pulmonary valve replacement: Why and when?

**Williams WG:** Russian Academy of Medical Sciences International Symposium on Double Outlet Right Ventricle, Moscow, Russia, October 2000. (1) Re-operation in double outlet right ventricle, (2) Surgical options for double outlet right ventricle.

**Williams WG:** International Society for Adult Congenital Cardiac Disease, New Orleans, Louisiana, November 2000. Adults with tetralogy of Fallot.

**Williams WG:** World Congress of Pediatric Cardiology and Cardiac Surgery, Toronto, Ontario, May 2001. Moderator: Hypertrophic cardiomyopathy.

**Williams WG:** American College of Cardiology, Orlando, Florida, March 2001. Re-operations late after repair of tetralogy: Timing and outcome.

**Wittnich C:** Heart and Stroke Foundation of Ontario, Etobicoke, Ontario, April 2001. Does gender and age affect your heart's response to stress?

**Wittnich C:** Heart and Stroke Foundation of Ontario, Toronto, Ontario, December 2000. Sex, maturity and heart disease: A researcher's perspective!

**Wittnich C:** Heart and Stroke Foundation of Ontario, Toronto, Ontario, February 2001. The heart and stroke health show (TV series). Episode: Equal opportunity killer: Women and heart disease.

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Chronically hypoxic newborn hearts response to stress. *Wittnich C: Heart and Stroke Foundation* (\$266,869 1999 - 2002).

Impact of gender on myocardial pathology and responses to ischemia/reperfusion. *Wittnich C: Heart and Stroke Foundation* (\$225,989 1998 - 2001).

Magnetic resonance imaging for ischemic heart disease. *Wright G, Burns P, Coates, G, Downar E, Fort S, Hendler A, Hu B, McKerlie C, Merchant N, Mickleborough L, Wittnich C: Medical Research Council of Canada* (\$350,000 1999 - 2002).

Xenogenic cardiomyocyte transplantation. *Coles JG, Hannigan G: Heart and Stroke Foundation* (\$65,244 2000 - 2002).

#### **DIVISION OF GENERAL SURGERY**

**Dr. S.H. Ein - Associate Professor**  
**Dr. A.H. Fecteau – Assistant Professor**  
**Dr. R.M. Filler – Professor**  
**Dr. J.T. Gerstle - Assistant Professor**  
**Dr. P. Kim – Assistant Professor**  
**Dr. J.C. Langer – Professor (Division Head)**  
**Dr. G.L. Lukacs – Assistant Professor**

#### **PUBLICATIONS**

**Chen LE, Minkes RK, Langer JC:** Pediatric surgery on the internet: Is the truth out there? *Journal of Pediatric Surgery:* 2000 August: 35: pp 1179-1182.

**Corson J, Williamson R:** Allied surgical specialties. In: *Pediatric Surgery* (Ein SH, section ed). Mosby Yearbook Publications, London, 2001.

**Dawson S, Fitzgerald PG, Langer JC, Walton M, Winthrop AL, Lau GYP, Wiernikowski J, Barr RD:** A pre-operative protocol for the prevention of infection in children with tunneled right atrial catheters. *Oncology Reports:* July 2000: 7: pp 1239-1242.

**Dawson S, Fitzgerald PG, Langer JC, Walton M, Winthrop AL, Fecteau A, Atkison P, Grant D:** Early referral is essential to achieve a successful outcome after pediatric small bowel transplantation: A review of the Canadian experience. *Journal of Pediatric Surgery:* October 2000: 36: pp 681-684.

**DeJong AL, MacDonald R, Ein S, Forte V, Turner A:** Corrosive esophagitis in children: A 30-year review. *Pediatric Otorhinolaryngology*: March 2001: pp 203-211.

**Fecteau A, Atkison P, Grant D:** Early referral is essential to achieve a successful outcome after pediatric small bowel transplantation: A review of the Canadian experience. *Journal of Pediatric Surgery*: October 2000: 36(S): pp 681-684.

**Kim J, Kim PCW, Hui C-c:** VACTERL syndrome and Shh signaling. *Clinical Genetics*: May 2001: 59(5): pp 306-315.

**Kim PCW, Mo R, Hui C-c:** Murine models of VACTERL syndrome: Role of sonic hedgehog signaling pathway. *Journal of Pediatric Surgery*: February 2001: 36(2): pp 381-384.

**Kokoska ER, Minkes RK, Silen ML, Langer JC, Tracy TF, Snyder CL, Dillon PA, Weber TR:** The effect of pediatric surgical practice upon the management of children with appendicitis. *Pediatrics*: May 2001: 107: pp 1298-1301.

**Koplewitz BZ, Daneman A, Fields S, Udassin R, Ein SH:** Gastric trichobezoar and subphrenic abscess. *Radiology*: December 2000: 217: pp 739-742.

**Langer JC, Hussain H, Khan A, Minkes RK, Gray D, Siegel M, Ryan G:** Prenatal diagnosis of esophageal atresia using magnetic resonance imaging. *Journal of Pediatric Surgery*: May 2001: 36: pp 804-807.

**Minkes RK, Langer JC:** A prospective study of botulinum toxin for internal anal sphincter hypertonicity in children with Hirschsprung's disease. *Journal of Pediatric Surgery*: December 2000: 35: pp 1733-1736.

**O'Neill JA, Gautam S, Geiger JD, Ein SH, Holder TM, Bloss RS, Krummell TM:** A longitudinal analysis of the pediatric surgeon workforce. *Annals of Surgery*: September 2000: 232(3): pp 442-453.

**Wales PW, Lau W, Kim PCW:** Directed blood donation in pediatric general surgery: Is it worth it? *Journal of Pediatric Surgery*: May 2001: 36(5): pp 722-725.

**Wales PW, Shuckett B, Kim PCW:** Long-term out-come after non-operative management of complete traumatic pancreatic transection in children. *Journal of Pediatric Surgery*: May 2001: 36(5): pp 823-827.

**Walker DH, Langer JC:** Laparoscopic surgery in children with ventriculoperitoneal shunts. *Journal of Pediatric Surgery*: July 2000: 35: pp 1104-1105.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Gerstle JT:** St. Joseph's Healthcare Centre/McMaster University Health Sciences Centre, Hamilton, Ontario, April 2001. Case and video presentations.

**Gerstle JT:** Southlake Regional Health Centre, Newmarket, Ontario, March 2001. Intussusception.

**Gerstle JT:** American Society of Pediatric Hematology/Oncology, Minneapolis, Minnesota, September 2000. Splenectomy and childhood ITP: Risks, benefits and alternatives.

**Langer JC:** International Fetal Medicine and Surgery Society, Nantucket, Massachusetts, September 2000. Prenatal diagnosis of esophageal atresia using sonography and magnetic resonance imaging.

**Langer JC:** Canadian Association of Pediatric Surgeons, Montebello, Quebec, September 2000. Prenatal diagnosis of esophageal atresia using sonography and magnetic resonance imaging.

**Langer JC:** American College of Surgeons, Chicago, Illinois, October 2000. Perineal pull-through.

**Langer JC:** Utah Roundtable on Fetal Surgery, Salt Lake City, Utah, February 2001. Fetal surgery around the world: Only a United States enterprise?

**Langer JC:** Advanced Pediatric Laparoscopic Surgery Centre for Minimal Access Surgery, Hamilton, Ontario, April 2001. Trans-anal pull-through for Hirschsprung's disease.

**Langer JC:** American Pediatric Surgical Association, Orlando, Florida, May 2001. Abdominal wall defects: Surgical considerations.

**Lukacs G:** University of Iowa, Des Moines, Iowa, December 2000. A cell biologist's perspective of cystic fibrosis.

**Lukacs G:** Queen's University, Kingston, Ontario, March 2001. Sorting determinants of CFTR at the ER and the cell surface.

**Lukacs G:** European Cystic Fibrosis Consensus Conference, Lisbon, April 2001. Novel approaches to monitor cell surface delivery of CFTR.

**Lukacs G:** Cystic Fibrosis Conference, Williamsburg, Virginia, June 2001. (1) Endocytosis signals in CFTR. (2) Folding of CFTR in vivo, (3) The role of the C-terminus of CFTR.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

Bone mineral density after pediatric liver transplant. *Ng V, Fecteau A, Hawkel G, MacArthur C: The Hospital for Sick Children Foundation* (\$32,232 2001 - 2003).

Immune effector mechanisms in new concordant cardiac xenotransplant model. *Kim PCW: Heart and Stroke Foundation* (\$162,000 1999-2001).

Inflammatory mediated damage to fetal bowel in gastroschisis: A multi-centre, prospective study. *Allen V, Ryan G, Moore A, Gerstle JT, Kingdom J, Langer JC, Challis J: Physicians Services Incorporated Foundation* (\$97,500 2000 - 2002).

Peer support for adolescents with an ostomy. *Gerstle JT, Nicholas D, Fyvie P, Swan S, Griffiths AM: Physicians Services Incorporated Foundation* (\$2,500 2001 - 2002).

Peer support for adolescents with an ostomy or j-pouch and their parents. *Nicholas D, Gerstle JT, Swan S, Allan T, Griffiths AM: Convatec: Bristol-Myers Squibb Canada, Incorporated* (\$2,000 2001 - 2002).

The hemodynamic effects of carbon dioxide pneumo-peritoneum in infants. *Kim PCW, Langer JC, Wales PW, Smallhorn JF, Bissonnette B: Society of American Gastrointestinal Endoscopic Surgeons* (\$15,000 2001-2002).

Tissue inflammatory mediators in neonatal narcotizing enterocolitis. *Moore A, Gerstle JT, Cutz E: The Hospital for Sick Children Foundation* (\$4,380 1999 - 2001).

#### **DIVISION OF NEUROSURGERY**

**Dr. M. Dennis - Associate Professor**  
**Dr. P.B. Dirks - Assistant Professor**  
**Dr. J.M. Drake - Associate Professor**  
**Dr. R.P. Humphreys – Professor (*Division Head*)**  
**Dr. J.T. Rutka - Professor**

#### **PUBLICATIONS**

**Bayani J, Zielenska M, Marrano P, Ng YK, Taylor MD, Jay V, Rutka JT, Squire JA:** Molecular cytogenetic analysis of medulloblastoma and supratentorial primitive neuroectodermal tumors using conventional banding, comparative genomic hybridization, and spectral karyotyping. *Journal of Neurosurgery*: September 2000: 93: pp 437-448.

**Carlotti CG, Dirks PB, Rutka JT:** Invasion, angiogenesis and proliferation. In: *Textbook of Neurological Surgery* (Batjer H, Loftus C, eds). Lippincott, Williams and Wilkins, Baltimore: 2000.

**Dennis M, Spiegler BJ, Hetherington R:** New survivors for the new millennium: Cognition in adults with childhood brain insults. *Brain and Cognition*: September 2000: 42: pp 102-105.

**Dirks PB, Rutka JT:** Understanding cell cycle regulation: Impact for understanding pathogenesis and treatment of astrocytomas. *Journal of Neuro-Oncology*: February 2001: 51: pp 181.

**Garton HJL, Kestle JRW, Drake JM:** Predicting shunt failure on the basis of clinical symptoms and signs in children. *Journal of Neurosurgery*: February 2001: 94: pp 202-210.

**Ginsberg HJ, Sum AC, Drake JM, Cobbold RSC:** Ventriculo-peritoneal shunt flow dependency on the number of patent holes in a ventricular catheter. *Pediatric Neurosurgery*: June 2000: 33: pp 7-11.

**Gupta N, Rutka JT:** Pituitary tumors in children. In: *Diagnosis and Management of Pituitary Tumors* (Thapar K, Kovacs K, Scheithauer BW, Lloyd RV, Thorner MV, eds). Humana Press, New Jersey: 2000: pp 353.

**Hetherington R, Dennis M, Spiegler BJ:** Perception and estimation of duration in long-term survivors of childhood posterior fossa tumors. *Journal of the International Neuropsychological Society*: September 2000: 6: pp 682-692.

**Hodai M, Musharbash A, Otsubo H, Snead OC, Chitoku S, Ochi A, Holowka S, Hoffman HJ, Rutka JT:** Image-guided, frameless stereotactic sectioning of the corpus callosum in children with intractable epilepsy. *Pediatric Neurosurgery*: 2001 June: 34: pp 286-294.

**Humphreys RP:** Management of arteriovenous malformations. In: *Pediatric Neurosurgery: Surgery of the Developing Nervous System* (McLone DG, et al, eds). W.B. Saunders Company, Philadelphia: 2000: pp 1113-1117.

**Humphreys RP:** Vascular malformations. In: *Operative Techniques in Pediatric Neurosurgery* (Albright AL, Pollack IF, Adelson PD, eds). Thieme Publishers, New York: 2000: pp 229-237.

**Ivanchuk S, Mondal S, Dirks PB, Rutka JT:** The INK4A/ARF Locus: Role in cell cycle control and apoptosis and implications for glioma growth. *Journal of Neuro-Oncology*: February 2001: 51: pp 219-229.

**Jung S, Ackerley C, Rutka JT:** Tracking the invasiveness of human astrocytoma cells in a novel human brain-slice model. *Journal of Neurosurgery*: 2001 January: 94: pp 80-89.



**Kulkarni AV, Drake JM, Lamberti-Pasculli M:** Cerebro-spinal fluid shunt infection: A prospective study of risk factors. *Journal of Neurosurgery*: February 2001: 94: pp 195-201.

**Mainprize TG, Taylor MD, Rutka JT:** Perspectives in pediatric neurosurgery. *Child's Nervous System*: November 2000: 16: pp 808-820.

**Mainprize TG, Taylor MD, Rutka JT, Dirks PB:** Cip/kip cell cycle inhibitors: A neuro-oncological perspective. *Journal of Neuro-Oncology*: February 2001: 51: pp 205-218.

**Murakami M, Dirks PB, Hubbard SL, Rutka JT:** Cytoskeletal-induced alterations in adhesion of HT-1080 fibro sarcoma cells to extra cellular matrix. *International Journal of Oncology*: April 2001: 18: pp 1027-1033.

**Murakami M, Goto S, Yoshikawa M, Goto T, Hamasaki T, Rutka J, Kuratsu J, Oshio Y:** The invasive features of glial and non-central nervous system tumor cells are different on organo-typic brain slices from newborn rats. *International Journal of Oncology*: 2001 January: 18: pp 721-727.

**Ochi A, Otsubo H, Chitoku S, Hunjan A, Sharm R, Rutka JT, Chuang SH, Kamijo K, Yamazaki T, Snead OC:** Dipole localization for identification of neuronal generators in independent neighboring interictal EEG spike foci. *Epilepsia*: 2000 December: 42: pp 483-490.

**Rainov NG, Bernstein M, Rutka JT:** A phase III clinical evaluation of herpes simplex virus type 1 thymidine kinase and ganciclovir gene therapy as an adjuvant to surgical resection and radiation in adults with previously untreated glioblastoma multiforme. *Human Gene Therapy*: November 2000: 11: pp 2389-2401.

**Rutka JT, Akiyama Y, Lee SP, Ivanchuk S, Tsuga A, Hamel PH:** Alterations of the p53 and pRB pathways in human astrocytoma. *Brain Tumor Pathology*: December 2000: 17: pp 65-70.

**Rutka JT, Ivanchuk SM:** Gene therapy for brain tumors. In: *Brain Tumors: An Encyclopedic Approach, Second Edition* (Kaye AH, Laws ER, eds). Churchill Livingstone, New York: 2001: pp 119-133.

**Rutka JT, Taylor M, Mainprize T, Langlois A, Ivanchuk S, Mondal S, Dirks PB:** Molecular biology and neurosurgery for the third millennium. *Neurosurgery*: July 2000: 46: pp 1034-1051.

**Sandberg D, Lamberti-Pasculli M, Drake J, Humphreys R, Rutka J:** Spontaneous intra-parenchymal hemorrhage in full-term neonates. *Neurosurgery*: May 2001: 5: pp 1042-1049.

**Squire JA, Arab S, Marrano P, Bayani J, Karaskova J, Taylor M, Becker L, Rutka J, Zielenska M:** Molecular cytogenetic analysis of glial tumors using spectral karyotyping and comparative genomic hybridization. *Molecular Diagnostics*: June 2001: 2: pp 93-108.

**Taylor MD, Mainprize TG, Rutka JT:** Molecular insight into medulloblastoma and central nervous system primitive neuroectodermal tumor biology from hereditary syndromes: A review. *Neurosurgery*: October 2000: 47(4): pp 888-891.

**Taylor MD, Rutka JT:** Molecular biology of pediatric brain tumors. In: *Pediatric Neurosurgery* (McLone DG, Marlin AE, Scott RM, Steinbok P, Reigel DH, Walker ML, Cheek WR, eds.). W.B. Saunders Company, Philadelphia: 2000: pp 923.

**Taylor MD, Thapar K, Rutka JT:** Neurogenetics and the molecular biology of human brain tumors. In: *Brain Tumors: An Encyclopedic Approach, Second Edition* (Kaye AH, Laws ER, eds). Churchill Livingstone, New York: 2001: pp 71-103.

**Thapar K, Taylor MD, Laws ER, Rutka JT:** Brain edema, increased intracranial pressure and vascular effects of human brain tumors. In: *Brain Tumors: An Encyclopedic Approach, Second Edition* (Kaye AH, Laws ER, eds). Churchill Livingstone, New York: 2001: pp 189-215.

**Tsugu A, Sakai K, Dirks PB, Jung S, Weksberg R, Fei YL, Mondal S, Ivanchuk S, Ackerley C, Hamel PA, Rutka JT:** Expression of p57Kip2 potentially blocks the growth of human astrocytomas and induces cell senescence. *American Journal of Pathology*: September 2000: 157: pp 919-932.

**Tyagi A, Drake J, Midha R, Kestle J:** Axillary nerve injuries in children. *Pediatric Neurosurgery*: October 2000: 32: pp 226-229.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Dirks PB:** Congress of Neurological Surgeons, San Antonio, Texas, September 2000. (1) Diagnosis and management of child abuse, (2) Pediatric spine surgery: Delayed deterioration after myelomeningocele repair.

**Dirks PB:** Visiting Professor, Washington University School of Medicine, St. Louis, Missouri, October 2000. Regulation of proliferation and differentiation of glial tumors.

**Drake JM:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. (1) Cleaning ventricular catheters with ultrasonic cavitation, (2) Third ventriculostomy: Indications, techniques and outcomes.

**Drake JM:** Congress of Neurological Surgeons, San Antonio, Texas, September 2000. (1) Current management of medically refractory spasticity: From rhizotomy to baclofen pump, (2) Managing shunt complications.

**Drake JM:** International Hydrocephalus Workshop, Hellenic Neurosurgical Society, Island of Kos, Greece, May 2001. (1) Patient selection and avoidance of complications in third ventriculostomy, (2) Prospective clinical trials in CSF shunt treatment: Firm foundation for future investigation.

**Drake JM:** Telehealth, Toronto, Ontario, March 2001. Kids with cerebrospinal fluid shunt: Diagnosing problems and early management.

**Humphreys RP:** Royal Australasian College of Surgeons/ Neurosurgical Society of Australasia, Canberra, Australia, May 2001. (1) Controversy in the management of pediatric brain tumors, (2) Lessons learned from 30 years of craniofacial surgery, (3) Management of pediatric cerebral AVMs in this millennium.

**Humphreys RP:** European Society of Pediatric Neurosurgery, Amsterdam, The Netherlands, March 2001. (1) Course: Neonatal and childhood brain abscess, (2) Seminar: Diastematomyelia, sinuses and fosses, (3) Solve-a-case.

**Humphreys RP:** Visiting Professor, University of Miami, Miami, Florida, February 2001. (1) Contemporary issues with spinal dysraphism, (2) Skin signatures of spina bifida, (3) Idiosyncrasies of pediatric arteriovenous malformations.

**Humphreys RP:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. Pediatric brain tumors: Controversies in surgical management.

**Humphreys RP:** Royal Brisbane Hospital, Brisbane, Australia, May 2001. Visiting professor and consultant.

**Humphreys RP:** Royal Melbourne Children's Hospital, Melbourne, Australia, May 2001. Visiting professor.

**Rutka JT:** Congress of Neurological Surgeons, San Antonio, Texas, September 2000. Third ventricular tumors: Open, stereotactic, and endoscopic approaches.

**Rutka JT:** Western Neuroradiological Society, Monterey, California, October 2000. Pediatric seizure surgery.

**Rutka JT:** Royal College of Physicians and Surgeons of Canada Lecturer, Canadian Association of Neuropathologists, Banff, Alberta, October 2000. New insights into the molecular genetics and pathology of human brain tumors.

**Rutka JT:** M.D. Anderson Cancer Center, Houston, Texas, January 2001. Molecular determinants of glioma invasiveness.

**Rutka JT:** American Association of Pediatric Neurosurgeons, Maui, Hawaii, January 2001. (1) Indications and utility of tumor biopsy in pediatric populations, (2) The role of rho in the regulation of astrocytoma motility and invasion.

**Rutka JT:** University of Virginia, Charlottesville, Virginia, March 2001. The role of multiple subpial transections in epilepsy surgery in children.

**Rutka JT:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. (1) The development of a modern algorithm for the management of pineal region masses, (2) Craniopharyngiomas, (3) Cell biology and pathology.

**Rutka JT:** Society of Neurological Surgeons, Cleveland, Ohio, May 2001. The molecular basis of neurosurgical disease.

**Rutka JT:** Canadian Congress of Neurological Sciences, Halifax, Nova Scotia, June 2001. Multiple subpial transections in the surgical candidates using depth electrodes and SEEG.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

A molecular epidemiological case-control study of pediatric brain tumors in Ontario. *McLaughlin J, Rutka JT: National Cancer Institute of Canada* (\$164,700 1997 - 2001).

Cytoskeletal: Matrix interactions regularity astrocytoma tumorigenic. *Rutka J, Becker L: Canadian Institutes of Health Research* (\$300,000 2001 – 2004).

Cytoskeletal: Matrix interactions regulating astrocytoma tumorigenicity. *Rutka JT: Medical Research Council of Canada* (\$300,000 1999 - 2004).

Cytoskeletal-matrix interactions in astrocytomas. *Ivanchuk S, Rutka JT: National Cancer Institute of Canada* (\$63,000 1998 - 2001).

Determination of brain tumor phenotype by oncogene expression in CNS stem cells. *Dirks PB: National Cancer Institute of Canada* (\$245,529 2000 - 2003).

Hedgehog signaling pathways in medulloblastoma. *Taylor MD, Rutka JT: National Cancer Institute of Canada* (\$120,000 1998 - 2001).

Intermediate filament-induced alterations in astrocytoma morphology. *Rutka JT, Dirks PB, Becker LE: Medical Research Council of Canada* (\$72,345 1998 - 2001).

Mathematical model for optimal ventricular catheterization insertion in hydrocephalus. *Tenti G, Sivaloganathan S, Drake JM: The Hospital for Sick Children Foundation* (\$57,075 1999 - 2001).

Mouse imaging centre for Canada. *Henkeiman RM, Rutka JT, Hui C, McKerlie C, Foster FS, Cuticchia J, Rossant J, Rabinovitch M, Backx P, Adamson SL: Canadian Foundation for Innovation/Canadian Institutes of Health Research (\$5,294,947 2000 - 2005).*

Neuro-behavioral outcome of head injury in children. *Levin HS, Dennis M, Barnes MA, Rutka JT, MacGregor D, Schachar R, Blaser S, Inwood S, Purvis K, Hanfling M, McCluggage C, Treadwell-Deering D, Valadka A, McCauley S, Song J, Gill A, Wesson D, Brookshire B, Francis D, Davidson K, Kaufman J, Max J, Lansing A, Logan G, Martin R, Chapman S, Mendelsohn D, Bruce D, McColl R, Kowatch R, Roach E, Ewing-Cobbs L, Fletcher J, Clifton G, Saunders A, Yeakley J: National Institutes of Health/National Institute of Neurological Diseases and Stroke (\$655,223 1998 - 2003).*

p16 regulated alternation of astrocytoma cytoskeletal formation. *Langlois A, Rutka JT: Association de Recherche Contre Cancer France (\$60,000 1999 - 2001).*

Regulation of the cell cycle in developing astrocytes in vivo. *Dirks PB: Dean's Fund (\$10,000 1999 - 2001).*

Regulation of the cell cycle in developing astrocytes in vivo. *Dirks PB: Connaught Foundation (\$30,000 1999 - 2001).*

Role of hedgehog signaling in brain and cartilage neoplasms. *Alman B, Rutka JT, Hui CC: National Cancer Institute of Canada/Terry Fox New Frontiers Initiative (\$570,000 1999 - 2002).*

Shared flow cytometry facility. *Guidos C, Rutka JT, Buchwald M, Chamberlain J, Cohen A, Danska J, Dick J, Grinstein S: Medical Research Council of Canada (\$50,000 1998 - 2002).*

Spina Bifida: Cognitive and neurobiological variability in Dandy Walker and aqueduct stenosis. *Fletcher JM, Dennis M, Barnes MA, Blanton SH, Blaser S, Brandt ME, Buncic JR, Carlson C, Drake JM, Francis DJ, Hannay HJ, Hetherington R, Inwood S, Kramer LA, Landry SH, MacGregor D, Northrup HL, Scherer S, Townsend I: National Institutes of Health/National Institute of Child Health and Human Development (\$152,487 2000 - 2002).*

Treatment of astrocytomas with verotoxin. *Mainprize T, Rutka JT: National Cancer Institute of Canada (\$130,000 1999 - 2002).*

**DIVISION OF ORTHOPAEDIC SURGERY**

**Dr. B.A. Alman - Associate Professor**  
**Dr. W.G. Cole – Professor (Division Head)**  
**Dr. D.M. Hedden - Associate Professor**  
**Dr. A. Howard – Assistant Professor**  
**Dr. M.C. Rang - Professor**  
**Dr. R.B. Salter - Professor**  
**Dr. J.H. Wedge – Professor**  
**Dr. J. Wright - Professor**

**PUBLICATIONS**

**Babyn PS, Wihlborg CE, Tjong JK, Alman BA, Silberberg PJ:** Local complications after limb-salvage surgery for pediatric bone tumors: A pictorial essay. Canadian Association of Radiologists Journal: February 2001: 52(1): pp 35-42.

**Beaton DE, Bombardier C, Katz JN, Wright JG, Wells G, Boers M, Strand V, Shea B, OMERAC MCID Working Group:** Looking for important change-differences in studies of responsiveness. Journal of Rheumatology: February 2001: 28(2): pp 400-405.

**Beaton DE, Katz JN, Fossel AH, Wright JG, Tarasuk V, Bombardier C:** Measuring the whole or the parts? Validity, reliability and responsiveness of the disabilities of the arm, shoulder and hand DASH outcome measure in different regions of the upper extremity. Journal of Hand Therapy: June 2001: 14(2A): pp 128-146.

**Bernard MA, Hall CE, Hogue DA, Cole WG, Scott A, Snuggs MB, Clines GA, Ludecke HJ, Lovett M, Van Winkle WB, Hecht JT:** Diminished levels of the putative tumor suppressor proteins EXT1 and EXT2 in exostosis chondrocytes. Cell Motil Cytoskeleton: February 2001: 48: pp 149-162.

**Bouma P, Cabral WA, Cole WG, Marini JC:** Col5A1 exon 14 splice acceptor mutation causes a functional null allele, haplo-insufficiency of al(V) and abnormal heterotopic interstitial fibrils in EDSII. Journal of Biological Chemistry: January 2001: 10(1074): pp M011742200.

**Burrow SR, Alman BA, Wright JG:** Short stature as a screening test for endocrinopathy in slipped capital femoral epiphysis. *Journal of Bone and Joint Surgery*: March 2001: 83B(2): pp 263-268.

**Cole WG:** Genetics of orthopaedic conditions. In: *Pediatric Orthopaedics, Fifth Edition* (Morrissy RT, Weinstein SL, eds). Lippincott, Williams and Wilkins, Philadelphia: 2001: pp 158-176.

**Feldman DB, Hedden DM, Wright JG:** The use of bone scan to investigate back pain in children and adolescents. *Journal of Neurourology and Urodynamics*: December 2000: 20(6): pp 790-795.

**Gideon AK, Tiller GE, LeMerrer M, Heuertz S, Tranebjaerg L, Chityat D, Robertson S, Glass IA, Savarirayan R, Cole WG, Rimoin DL, Kousseff BG, Ohashi H, Zabel B, Munnich A, Gecz J, Mulley JC:** The molecular basis of X-linked spondylo-epiphyseal dysplasia tarda. *American Journal of Human Genetics*: June 2001: 68: pp 1386-1397.

**Hawker GA, Wright JG, Coyte PC, Williams JI, Harvey B, Glazier R, Wilkins A, Badley A:** Determining the need for hip and knee arthroplasty: The role of clinical severity and patients' preferences. *Medical Care*: March 2001: 39(3): pp 206-216.

**Hudak PL, McKeever P, Wright JG:** The characteristics of patient satisfaction measures. *Spine*: December 2000: 25(24): pp 3167-3177.

**Levesque J, Bogoch ER, Cooney B, Johnston B, Wright JG:** Improving patient satisfaction with time spent in an orthopaedic outpatient clinic. *Canadian Journal of Surgery*: December 2000: 43(6): pp 431-436.

**Levesque J, Wright JG, Coyte PC, Bell RS:** Changing rates of cancer. The hazards of using a single definition. *Journal of Clinical Epidemiology*: March 2001: 54(3): pp 225-231.

**Li C, Nguyen Q, Cole WG, Alman BA:** Potential treatment for clubfeet based on growth factor blockade. *Journal of Pediatric Orthopaedics*: May 2001: 21(3): pp 372-377.

**Margau R, Babyn P, Cole W, Smith C, Lee F:** MR imaging of simple bone cysts: Not so simple. *Pediatric Radiology*: January 2001: 30: pp 551-557.



**Morello R, Zhou G, Dreyer SD, Harvey SJ, Ninomiya Y, Thorner PS, Miner JH, Cole W, Winterpacht A, Zabel B, Oberg KC, Lee B:** Regulation of glomerular basement membrane collagen expression by LMX1B contributes to renal disease in nail patella syndrome. *Nature Genetics*: February 2001: 27: pp 205-208.

**Poon R, Smits R, Li C, Jagmohan-Changur S, Kong M, Cheon S, Yu C, Fodde R, Alman BA:** Cyclo-oxygenase-two (COX-2) modulates proliferation in aggressive fibromatosis (desmoid tumor). *Oncogene*: January 2001: 20(4): pp 451-460.

**Richards DP, Clark P, Howard A:** Multiple spine fractures in an adolescent snowboarder: Case report. *Journal of Trauma*: April 2001: 50(4): pp 730-732.

**Richards DP, Howard A:** Distal clavicle fracture mimicking type IV acromio-clavicular joint in injury in the skeletally immature athlete. *Clinical Journal of Sports Medicine*: April 2001: pp 101-102.

**Stoler JM, Bromley B, Castro MA, Cole WG, Florer J, Wenstrup RJ:** Separation of amniotic membranes after amniocentesis in an individual with the classical form of EDS and haplo-insufficiency for COL5A1 expression. *American Journal of Medical Genetics*: June 2001: pp 174-177.

**Tabrizi P, McIntyre W, Quesnel MB, Howard A:** Limited dorsiflexion predisposes to injuries of the ankle in children. *Journal of Bone and Joint Surgery*: November 2000: 82B: pp 1103-1105.

**Thompson AH, Howard AW, Jin M:** A social problem index for Canada. *Canadian Journal of Psychiatry*: March 2001: 46: pp 45-51.

**Wai E, Owen J, Fehlings D, Wright JG:** Assessing physical disability in children with spina bifida and scoliosis. *Journal of Pediatric Orthopaedics*: December 2000: 20(6): pp 765-770.

**Wilkin DJ, Liberfarb R, Davis J, Levy H, Cole WG, Francomano CA, Cohn DH:** Rapid determination of COL2A1 mutations in individuals with Stickler syndrome: Analysis of potential termination codons. *American Journal of Medical Genetics*: September 2000: pp 141-148.

**Wright JG, Hedden DM:** Pediatric orthopaedics. In: Principles and Practice of Pediatric Anesthesia (Bissonnette B, Jacques B, eds). McGraw Hill Publishers, Philadelphia, 2000.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Alman BA:** Department of Genetics, University of Leuven, Leuven, Belgium, June 2001. A mutant PTHrP receptor in enchondromatosis.

**Alman BA:** Ste-Justine Pediatric Orthopaedic Review Course, Montreal, Quebec, April 2001. Back pain in children: Genetics and developmental biology.

**Alman BA:** Research Institute, Children's National Medical Center, Washington, D.C., December 2000. Developmental pathways in musculoskeletal neoplasia.

**Alman BA:** University of Chicago, Chicago, Illinois, April 2001. (1) Genetics in pediatric orthopaedics, (2) What developmental biology teaches us about orthopaedic surgery.

**Alman BA:** International Workshop on the CCN Family of Genes, Saint Malo, France, October 2000. Molecular genetics.

**Alman BA:** Frederick J. Fischer Memorial Lectureship, University of Michigan, Ann Arbor, Michigan, April 2001. (1) New developments in muscular dystrophy, (2) Pediatric orthopaedics in the post-genomic era.

**Cole WG:** Rainbow Babies and Children's Hospital/University of Cleveland/Case Western Reserve University, Cleveland, Ohio, January 2001. 2001 Rainbow professorship.

**Cole WG:** Australian Orthopaedic Association, Hobart, Australia, October 2000. (1) Presidential guest professor, (2) Presidential guest of the Royal Australasian College of Surgeons Foundation.

**Cole WG:** New Zealand Orthopaedic Association, Bay of Islands, New Zealand, October 2000. (1) Presidential guest professor of the Australian Orthopaedic Association, (2) Presidential guest of the Royal Australasian College of Surgeons Foundation.

**Cole WG:** Presidential Guest Professor, Philippine Orthopaedic Association, Manila, Philippines, December 2000. (1) Common causes of foot pain in children, (2) Osteomyelitis in children: Changing concepts, (3) Pyomyositis and diskitis in children, (4) Osteogenesis imperfecta: Recent advances in diagnosis and management.

**Howard A:** American Academy of Orthopaedic Surgeons, Toronto, Ontario, September 2000. Pediatric upper extremity.

**Howard A:** C.B.C. National News, Toronto, Ontario, February 2001. Booster seats.

**Howard A:** C.B.C. Market Place, Toronto, Ontario, February 2001. Booster seats.

**Salter RB:** Postgraduate Orthopaedic Course, Harbor Springs, Michigan, September 2000. (1) What's new in congenital dislocation of the hip?, (2) What's new in Legg Perthes' disease?, (3) What's new in continuous passive motion?

**Salter RB:** University of Beijing, Beijing, China, April 2001. The biological concept of continuous passive motion from origination to research to clinical applications.

**Salter RB:** University of Kyoto, Kyoto, Japan, April 2001. The biological concept of continuous passive motion from origination to research to clinical applications.

**Salter RB:** University of Shanghai, Shanghai, China, April 2001. The biological concept of continuous passive motion from origination to research to clinical applications.

**Wedge JH:** The Hoke, Hike and Lovel Conference, Children's Healthcare of Atlanta, Atlanta, Georgia, March 2001. Current issues in the pediatric hip.

**Wedge JH:** American Academy of Orthopaedic Surgeons, San Francisco, California, February 2001. Rotational pelvic osteotomies for symptomatic dysplasia and Perthes' in adults: Indications and surgical techniques.

**Wedge JH:** Canadian Orthopaedic Association, London, Ontario, June 2001. The management of DDH from birth to one-year of age.

**Wright JG:** Visiting Professor, Cornell University Hospital for Special Surgery, New York, New York, September 2000: (1) Are we doing too much, too little, or just the right amount?, (2) Shouldn't we be asking patients if they are better?

**Wright JG:** Visiting Professor, American College of Surgeons, Chicago, Illinois, October 2000. Practice guidelines.

**Wright JG:** American Academy of Orthopaedic Surgeons, Rosemont, Illinois, December 2000. Workshop: Design implementation and regulation issues.

**Wright JG:** American Academy of Orthopaedic Surgeons, Washington, D.C., December 2000. Orthopaedic clinical trials: Design implementation and regulation issues.

**Wright JG:** Visiting Professor, Herman Robbins M.D. Lectureship, New York University, New York, New York, December 2000. The (non) fallacy of short-term outcomes analysis in pediatric orthopaedics.

**Wright JG:** American Academy of Orthopaedic Surgeons, San Francisco, California, February 2001. The future of orthopaedic practice: Research and development.

**Wright JG:** Visiting Professor, Dartmouth University, Burlington, Vermont, March 2001. Explanations for area variation and addressing unmet need for orthopaedic procedures.

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A multi-centre, randomized clinical trial comparing intralesional methylprednisolone and bone marrow injections for simple bone cysts. *Wright JG, Alman BA, Cole WG, Hedden DM, Howard AW: Pediatric Orthopaedic Society of North America (\$43,821 2000 - 2001).*

A randomized clinical trial comparing the Moss Miami and Universal spinal instrumentation systems for idiopathic scoliosis. *Wright J, Alman B, Cole W, Hedden D: Medical Research Council of Canada (\$53,080 1998 - 2002).*

A randomized trial of casting and external fixation for pediatric femoral fractures. *Wright JG, Wang E, Coyte PC: Medical Research Council of Canada* (\$314,248 1998-2002).

Analysis of extra cellular matrix molecule mutations in individuals with Ehlers-Danlos syndromes: A cause of premature development of osteoarthritis. *Cole WG, Roughley P: Canadian Arthritis Network/Networks of Centres of Excellence/ Medical Research Council of Canada* (\$160,000 1999 - 2003).

Auto21. *Howard AW, 185 other investigators: Networks of Centres of Excellence* (\$23,000,000 2001 - 2005).

Beta-catenin in aggressive fibromatosis: Molecular pathology and implications for pharmacologic therapy. *Alman BA: National Cancer Institute of Canada* (\$255,600 1998 - 2001).

Canadian children's crash injury research and engineering network site. *Howard A, Wright JG, German A: Ontario Neurotrauma Foundation* (\$2,000 2000 - 2003).

Cost-effectiveness of escalating dose factor VIII prophylaxis in severe hemophilia A. *Feldman B, Blanchette V, Einerson T, Rivard G, Israel S, Robinson S, Oh P, Babyn P, Hedden DM: Canadian Red Cross Society/Bayer Incorporated* (\$120,000 1997 - 2001).

Crash protection for children. *Howard A, Wright JG, Parkin P, Letts RM, MacKay M, German A, Hale I: Ontario Neurotrauma Foundation* (\$231,500 2000 - 2003).

Developmental signaling pathway antagonists in the treatment of brain and cartilage neoplasms. *Alman BA, Hui CC, Rutka J: National Cancer Institute of Canada/ Terry Fox New Frontiers* (\$590,000 1996 - 2002).

Determinants of arthritis disability and joint replacement surgery. *Hawker GA, Wright JG, Coyte PC, Badley EM, Williams JI, Glazier RH, Harvey BJ: Medical Research Council of Canada* (\$394,330 1999-2004).

Development of a new comorbidity index to adjust for those conditions, which, in addition to the primary diagnosis, predict future functional decline. *Wright JG: Canadian Arthritis Network* (\$16,000 1999-2001).

Developmental pathways in musculoskeletal neoplasia. *Bell RS, Alman BA, Andrulis I, Bramwell V, Davis A, Greenberg M, Hill R, Kandel R, Malkin D, Masri B, O'Sullivan B, Turcotte R, Wunder J: Canadian Institutes of Health Research* (\$5,995,000 2001 - 2006).

Do gender differences in personal and social variables help explain gender differences in arthritis disability? *Fortin P, Hawker GA, Gignac M, Wright JG, Badley E, Clarke A, Joseph L: Canadian Arthritis Network* (\$40,000 2001-2002).

Examining the relationship between evidence-based practice and physician and patient opinion. *Wright JG, Coyte PC, Glazier RH, Hawker GA, Kreder HJ, Mahomed NN: Medical Research Council of Canada* (\$212,98 1999-2002).

Examining the relationship between evidence-based practice and physician and patient opinion. *Wright JG, Coyte PC, Glazier RH, Hawker GA, Kreder HJ, Mahomed NN: Arthritis Society* (\$65,000 1999-2002).

Fractures in children with spina bifida: Prevention and improved treatment: *Johnson P, Ross M, Biggar D, Wright JG: Bloorview Children's Hospital Foundation* (\$48,927 2001-2002).

Molecular pathology of cartilage neoplasia: The role of parathyroid hormone-related protein and Indian hedgehog. *Alman BA, Wunder JS: Medical Research Council of Canada* (\$318,000 2000 - 2003).

Molecular pathology of Ehlers-Danlos syndrome and chondrodysplasias. *Cole WG: Medical Research Council of Canada* (\$1,200,270 1999 - 2004).

Molecular pathology of fibrosis: Aggressive fibromatosis as a model system. *Alman BA: Medical Research Council of Canada* (\$22,344 1998 - 2001).

Randomized controlled trial of in-patients versus home-based rehabilitation following primary total hip and knee arthroplasty. *Mahomed NN, Wright JG, Hawker GA: Physicians Services Incorporated Foundation* (\$64,500 1999-2001).

Randomized trial comparing two spinal implant systems for idiopathic scoliosis. *Alman BA, Cole WG, Hedden DM, Wright JG: Depuy and Synthes* (\$150,000 1997 - 2000).

#### **HONOURS RECEIVED**

**Alman BA:** Canadian Research Chair, April 2001.

**Salter RB:** Appointed Honorary Professor, Military Postgraduate Medical Institute of the University of Beijing, April 2001.

**Salter RB:** The Paul Harris Medal, Rotary International, April 2001.

**Wright JG:** Arthur H. Heune Memorial Award, Pediatric Orthopaedic Society of North America, April 2001.

**DIVISION OF PLASTIC SURGERY**

**Dr. H.M. Clarke - Associate Professor**  
**Dr. L.G. Farkas - Associate Professor**  
**Dr. C.R. Forrest - Associate Professor**  
**Dr. W.K. Lindsay - Professor**  
**Dr. C.Y. Pang - Professor**  
**Dr. J.H. Phillips - Assistant Professor**  
**Dr. G.A. Tait – Assistant Professor**  
**Dr. Zuker – Professor (*Division Head*)**

**PUBLICATIONS**

**Al-Sannan N, Forrest CR and Teebi AS:** Trigonmicrocephaly, severe micrognathia, large ears, atrioventricular septal defect, symmetrical cutaneous syndactyly of hands and feet and multiple cafe-au-lait spots: New acrocraniofacial dysostosis syndrome? *American Journal of Medicine*: May 2001: 101: pp 279-282.

**Barden W, Clarke HM, Young NL, McKee N, Regehr G:** Effectiveness of telehealth for teaching specialized hand-assessment techniques to physical therapists. *Academic Medicine*: October 2000: 75(10): pp S43-S46.

**Chow BCL, Blaser S, Clarke HM:** Predictive value of computed tomographic myelography in obstetrical brachial plexus palsy. *Plastic and Reconstructive Surgery*: October 2000: 106(5): pp 971-977.

**Clarke HM, Curtis CG:** Examination and prognosis. In: *Brachial Plexus Injuries* (Gilbert A, ed). Martin Dunitz Publishers, London: 2001: pp 159-172.

**Cohen M, Bahoric A, Clarke HM:** Aerosolization of epidermal cells with fibrin glue for the epithelialization of porcine wounds with unfavorable topography. *Plastic and Reconstructive Surgery*: April 2001: 107(5): pp 1208-1215.

**Dvali LT, Dagum AB, Pang CY, Kerluk LD, Catton P, Pennock P, Mahoney JL:** Tissue expansion and skin flap viability in irradiated pigskin. *Plastic and Reconstructive Surgery*: September 2000: 106: pp 624-629.



**de Chalain T, Clarke HM:** Thermal and chemical injuries. In: *The Growing Hand: Diagnosis and Management of the Upper Extremity in Children* (Gupta A, Kay SPJ, Scheker LR, eds). Mosby Yearbook, St. Louis: 2000: pp 665-692.

**Farkas LG, Forrest CR, Litsas L:** Revision of neoclassical facial canons in young adult Afro-Americans. *Aesthetic Plastic Surgery*: August 2000: 24: pp 179-184.

**Farkas LG, Thompson B, Moss J, Ward R, Phillips J, Katic M:** Anthropometric width of the maxilla in 323 North American adults of European ancestry. *HOMO, Germany*: November 2000: 51(2-3): pp 101-108.

**Forrest CR, Armstrong DC:** Vascular anomalies. In: *Craniofacial Surgery: A Multidisciplinary Approach to Craniofacial Anomalies*. (Lin K, Ogle R, Jane J, eds). W. B. Saunders Company, Philadelphia: 2001: pp 382-397.

**Gur E, Zuker RM:** Complex facial nevi: A surgical algorithm. *Plastic and Reconstructive Surgery*: July 2000: 106: pp 25-35.

**Hopper RA, Forrest CR, Xu H, Zhong A, He W, Rutka J, Neligan P, Pang CY:** Role and mechanism of PKC in ischemic preconditioning of pig skeletal muscle against infarction. *American Journal of Physiology*: August 2000: 279: pp R666-R676.

**Hopper RA, Zhang JR, Fornasier VL, Morava-Protzner A, Protzner KF, Pang CY, Forrest CR:** Effect of isolation of periosteum and dura on the healing of rabbit calvarial inlay bone grafts. *Plastic and Reconstructive Surgery*: February 2001: 107: pp 454-462.

**Iconomou TG, Zuker RM:** Scrotal reconstruction using tissue expanders. *Canadian Journal of Plastic Surgery*: July 2000: 8(4): pp 147-149.

**Kopecky EA, Jacobson S, Hubley P, Palozzi L, Clarke HM, Koren G:** Safety and pharmacokinetics of EMLA in the treatment of post-burn pruritus in pediatric patients: A pilot study. *Journal of Burn Care and Rehabilitation*: May 2001: 22(3): pp 235-242.

**Laxer RM, Clarke HM:** Rheumatic disorders of the hand and wrist in childhood and adolescence. *Hand Clinics*: November 2000: 16(4): pp 659-671.

**Mulliken JB, Burvin R, Farkas LG:** Repair of bilateral complete cleft lip: Intra-operative nasolabial anthropometry. *Plastic and Reconstructive Surgery*: February 2001: 107: pp 307-314.

**Ng EH, Shah VS, Armstrong DC, Clarke HM:** Cavernous lymphangioma. *Journal of Pediatrics*: January 2001: 138(1): pp 146.

**Pang CY, Xu H, Huang N, Forrest CR, Perrault TM, Neligan PC:** Amplification, effect and mechanism of action of endothelin-1 in U46619-induced vasoconstriction in pigskin. *American Journal of Physiology*: March 2001: 280: pp R713-R720.

**Zuker RM, Goldberg C, Manktelow RT:** Facial animation in children with Moebius syndrome using segmental gracilis muscle transplants. *Journal of Plastic and Reconstructive Surgery*: July 2000: 106: pp 1-8.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Clarke HM:** Rotary Children's Centre, Waterloo, Ontario, March 2001. Surgical management of obstetrical brachial plexus palsy.

**Clarke HM:** Rotary Children's Centre, Waterloo, Ontario, May 2001. A surgical perspective on the management of cleft lip and palate.

**Clarke HM:** American Society of Plastic Surgeons, Los Angeles, California, October 2000. Complex reconstruction of the pediatric hand.

**Clarke HM:** Congress of the International Federation of Societies for Surgery of the Hand, Istanbul, Turkey, June 2001. (1) Instructional course: Indications for primary surgery in obstetrical brachial plexus palsy: Examination and prognosis.

**Clarke HM:** Federation of the European Societies for Surgery of the Hand Course on Brachial Plexus Injuries, Istanbul, Turkey, June 2001. Examination and prognosis.

**Forrest CR:** Challenges and advances in craniomaxillofacial trauma and reconstruction: Orbital reconstruction, Redondo Beach, California, October 2000. (1) Anophthalmic orbital deformity, (2) Control of the orbit in multiple suture craniosynostosis, (3) Management of the radiated orbit and orbital vascular malformations.

**Forrest CR:** American Society of Plastic Surgeons, Los Angeles, California, October 2000. Course: Application of minimal access and endoscopic techniques in the management of facial fractures.

**Forrest CR:** Craniofacial Surgery: The New Millennium, New York, New York, March 2001. (1) Failed fixation, (2) Minimal access surgery for facial fractures.

**Zuker RM:** Visiting Professor, University of Witwatersrand, Johannesburg, South Africa, November 2000. (1) Advances in facial paralysis reconstruction with the aid of microsurgery, (2) Microsurgery in children, (3) Pediatric plastic surgery.

**Zuker RM:** William J. Barwick Lecturer, Duke University, Durham, North Carolina, November 2000. (1) Advances in facial paralysis reconstruction with the aid of microsurgery, (2) Soft tissue augmentation in craniofacial microsoma.

**Zuker RM:** International Operation Smile Academic Exchange Symposium, Lanzhou People's Hospital, Lanzhou, China, May 2001. (1) Pediatric microsurgery, (2) Advances in facial paralysis, (3) Reconstruction with microsurgery.

**Zuker RM:** American Society of Reconstructive Microsurgery, San Diego, California, January 2001. (1) Instructional course: Pediatric microsurgery, (2) Visiting fellow symposium: Facial paralysis.

**Zuker RM:** American Society of Plastic Surgeons, Los Angeles, California, October 2000. (1) Instructional course: Complex reconstruction of the pediatric hand, (2) Instructional course: Head and neck microsurgery.

**Zuker RM:** Moebius Syndrome Foundation, Sturbridge, Massachusetts, July 2000. Muscle transplantation for children with Moebius syndrome.

**Zuker RM:** American Academy of Pediatrics, Chicago, Illinois, October 2000. Seminar: Pediatricians and birthmarks.

**Zuker RM:** Visiting Professor, Indiana University, Indianapolis, Indiana, April 2001. Selection of the motor nerve for muscle transplant innervation in facial paralysis.

**Zuker RM:** Visiting Professor and William J. Barwick Lecturer, Duke University, Durham, North Carolina, November 2000. (1) Advances in facial paralysis reconstruction with the aid of microsurgery, (2) Soft tissue augmentation in craniofacial microsomia.

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Autism and Moebius syndrome: A neuropsychological study of visual-spatial attention and facial emotion. *Bryson SE, Roberts W, Zuker RM: Medical Research Council of Canada (\$108,000 1999 - 2001).*

Effect of smokeless tobacco on endothelial functions in human skin. *Pang CY: Smokeless Tobacco Research Council (\$201,000 2000 - 2002).*

Genotype and phenotype of brainstem injury in autism: *Rodier PM, Bryson SE, Figlewicz DA, Gudas LJ, Hyman SL, Stanton ME, Zuker RM: National Institutes of Health/NICDH (\$4,219,189 1999-2003).*

Investigation of histopathophysiology and pharmacologic intervention of radiation-induced craniofacial bone growth retardation. *Neligan PC, Forrest CR, Pang CY: The Hospital for Sick Children Foundation (\$127,025 2000 - 2002).*

Investigation of the mechanism of cyto-protection in the prevention of radiotherapy-induced craniofacial bone growth inhibition. *Forrest CR: Plastic Surgery Education Foundation (\$7,500 2001 - 2002).*

Investigation of the role of mitochondrial disorders in the pathophysiology of cleft palate. *Forrest CR: American Society of Plastic Surgeons/Plastic Surgery Education Foundation (\$7,500 2000 - 2001).*

Mechanism and pharmacologic intervention of radiation-induced craniofacial bone growth retardation. *Forrest CR, Pang CY: Medical Research Council of Canada/University-Industry Program* (\$126,000 2000 - 2002).

Predictors of debridement distress in scald burn injured children. *Young A, Hanson M, Hubley P, Clarke HM: The Hospital for Sick Children* (\$23,985 2000 - 2002).

Radiotherapy-induced craniofacial bone growth retardation: Establishment of a model to investigate the role of radioprotection in the infant rabbit. *Forrest CR: The Hospital for Sick Children* (\$28,500 1999 - 2001).

Radiotherapy-induced craniofacial bone growth retardation: Establishment of a model to investigate the role of radioprotection in the infant rabbit. *Forrest CR: American Society of Plastic Reconstructive Surgery/Plastic Surgery Education Foundation* (\$7,500 1999 - 2000).

Regulation of cutaneous circulation in skin flaps. *Pang CY: Medical Research Council of Canada* (\$367,750 1996 - 2001).

Surface anatomy and proportions of the head and face in Down's Syndrome patients. *Farkas LG, Phillips JH, Katic M: Physicians Services Incorporated Foundation* (\$2,650 1994 - 2000).

Tisseel and epidermal cells autogenic spray transplant. *Bahoric A, Zuker RM: Baxter Healthcare Corporation* (\$44,266 1999 - 2000).

#### **HONOURS RECEIVED**

**Zuker RM:** Physician of the Year - Operation Herbie, December 2000.

**DIVISION OF UROLOGY**

**Dr. D.J. Bagli**, - Assistant Professor  
**Dr. A.E. Khoury** - Associate Professor (*Division Head*)  
**Dr. G.A. McLorie** - Associate Professor  
**Dr. P.A. Merguerian** - Assistant Professor

**PUBLICATIONS**

**Barrieras D, Lapointe S, Reddy PP, Williot P, McLorie GA, Bagli D, Khoury AE, Merguerian PA:** Are post-operative studies justified after extravesical ureteral re-implantation? *Journal of Urology*: September 2000: 164: pp 1064-1066.

**Barrieras D, Reddy PP, McLorie GA, Bagli DJ, Khoury AE, Lilge L, Merguerian PA:** Lessons learned from laser tissue soldering and fibrin glue pyeloplasties in an *in vivo*. *Journal of Urology*: September 2000: 164: pp 1106-1110.

**Capolicchio JP, Aitken KI, Gu JX, Reddy PP, Bagli DJ:** Stretch-induced matrix gene responses in a novel *ex vivo*. *Journal of Urology*: June 2001: 165: pp 2235-2240.

**Capolicchio JP, McLorie GA, Farhat W, Merguerian PA, Bagli DJ, Khoury AE:** A population-based analysis of continence outcomes in bladder exstrophy. *Journal of Urology*: June 2001: 165: pp 2418-2421.

**DiTizio V, Karlgard C, Lilge L, Khoury AE, Mittelman MW, DiCosmo F:** Localized drug delivery using cross-linked gelatin gels containing liposomes: Factors influencing liposome stability and drug release. *Journal of Biomedical Materials Research*: July 2000: 51: pp 96-106.

**Farhat W, Bagli DJ, Capolicchio JP, O'Reilly S, Merguerian PA, Khoury AE, McLorie GA:** Dysfunctional voiding scoring system: Quantitative standardization of dysfunctional voiding symptoms in children. *Journal of Urology*: September 2000: 164: pp 1011-1015.

**Farhat W, McLorie GA:** Urethral syndromes in children. *Urology*: January 2001: 22: pp 17-20.

**Farhat W, McLorie GA, Capolicchio JP, Khoury AE, Bagli DJ, Merguerian PA:** Outcomes of primary valve ablation versus urinary tract diversion in patients with posterior urethral valves. *Urology*: October 2000: 4(156): pp 653-657.

**Farhat W, McLorie GA, Geary D, Capolicchio JP, Bagli DJ, Merguerian PA, Khoury AE:** The natural history of neonatal vesicoureteral reflux associated with ante-natal hydronephrosis. *Journal of Urology*: September 2000: 164: pp 1057-1060.

**Hafez A, Khoury AE:** Crossed ectopic testis: Another factor favoring laparoscopy for the impalpable testis. *British Journal of Urology*: April 2001: 87(4): pp 20-21.

**Hafez AT, Khoury AE:** Renal functional impairment secondary to ureteropelvic junction obstruction: Can pyeloplasty improve kidney function? *Dialogues in Pediatric Urology*: July 2000: 23: pp 5.

**Khoury AE:** Current role of upper tract urodynamic studies in the evaluation of pediatric hydronephrosis. *Dialogues in Pediatric Urology*: May 2001: 24: pp 7.

**McLorie GA, Bagli DJ:** Adrenal tumors in children. In: *Pediatric Urology* (Rink R, ed), W.B. Saunders Company, Philadelphia. 2001: pp 908-916.

**McLorie GA, Joyner BD, Herz D, McCallum J, Bagli DJ, Merguerian PA, Khoury AE:** A prospective randomized clinical trial to evaluate methods of post-operative care in hypospadias. *Journal of Urology*: May 2001: 165: pp 1669-1672.

**Pugach JL, Khoury AE:** Pediatric urology. In: *Surgery* (Ein S, ed). Mosby International, London, 2001: pp 6.

**Reddy PP, Barrieras DJ, Wilson G, Bagli DJ, McLorie GA, Khoury AE:** Regeneration of functional bladder substitutes using large segment acellular matrix allografts in a porcine model: Long-term results. *Journal of Urology*: September 2000: 164: pp 936-941.

**Savani RC, Bagli DJ, Harrison RE, Turley EA:** The role of hyaluronan-receptor interactions in wound repair. In: *Scarless Wound Healing* (Garg H, Longaker MT, eds). Marcel Dekker Incorporated, New York: 2000: pp 115-142.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Bagli DJ:** International Bladder Symposium, Washington, D.C., March 2001. Extra cellular matrix responses and the role of stretch in bladder function.

**Khoury AE:** Brazilian Congress of Pediatric Urology, Porto Alegre, Brazil, October 2000. (1) Course: Hypospadias: Theoretical, (2) Course: Hypospadias: Practical, (3) Bladder exstrophy in one-stage, (4) Hypospadias innovations, (5) Round-table: Laparoscopy surgery on pediatric surgery, (6) Advances in pediatric urology, (7) Urinary incontinence surgery, (8) Intersex, (9) Round table: Current concepts and management of reflux (vesico-ureteral).

**Khoury AE:** Societe Internationale d'Urologie, Singapore, Malaysia, November 2000. (1) Chair and course director, (2) A population-based analysis of continence outcomes in bladder exstrophy: The fate of the failed bladder neck reconstruction, (3) Tubularized incised plate hypospadias repair: Evaluation of intermediate term outcome, (4) The dysfunctional voiding symptom score: Quantitative standardization and follow-up of voiding behavior in children, (5) Is a dressing really required after hypospadias surgery?, (6) Results of a prospective randomized clinical trial.

**Khoury AE:** Southlake Regional Health Centre, Newmarket, Ontario, February 2001. Management of urinary tract infections.

**Khoury AE:** Asian Congress of Pediatric Nephrology, Singapore, Malaysia, November 2000. (1) Urology in the neonates and infants, (2) The management of posterior urethral valves in infants, (3) Ureteroceles in the newborn, (4) Exstrophy of the bladder.

**McLorie GA:** French Urology Association, Paris, France, October 2000. Pediatric genitourinary reconstruction.

**McLorie GA:** University of Calgary, Calgary, Alberta, April 2001. Reflux: Is surgical intervention necessary to prevent scarring?

**McLorie GA:** Society of Pediatric Urology, Los Angeles, California, April 2001. Ante-natal hydronephrosis.



**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A prospective randomized open label study to compare ciprofloxacin (intravenous sequential IV-Oral versus IV cefotaxime with or without IV gentamicin or oral TMP/SMX in the therapy of older infants, children and adolescents with complicated urinary tract infections or pyelonephritis. *Khoury AE, Herz D: Bayer Incorporated. (\$80,000 2000).*

Development of peritoneal dialysis catheters that resist colonization following simultaneous catheter exchange. *Khoury AE, Burrows L: The Hospital for Sick Children Research Foundation (\$13,213 2000 - 2001).*

Evaluation of a colonization resistant peritoneal dialysis catheter material in an animal model of peritonitis. *Khoury AE, Burrows L, DiCosmo F: Kidney Foundation of Canada (\$49,923 2000 - 2001).*

Intravesical electromotive drug administration (EMDA): Acute and chronic risk assessment in an experimental study. *Khoury AE, Hafez A: Haemotronics Incorporated: (\$18,000 2000).*

Novel cell signaling peptides for treatment of scarring in bladder. *Woodhouse K, Bagli DJ, Khoury AE: Materials and Manufacturing Ontario (\$398,833 2000 - 2002).*

Objectifying the management of urinary voiding dysfunction in children. *Bagli DJ, Farhat W: RESTRACOM/The Hospital for Sick Children (\$35,000 1999 - 2001).*

Stretch and the role of RHAMM in urinary bladder fibrosis. *Bagli DJ: Physicians Services Incorporated Foundation (\$109,000 2000).*

Use of tolterodine in treatment of neuropathic over-active bladders in children. *Khoury AE, Farhat W: Pharmacia-Upjohn Canada (\$63,700 2000).*

**MOUNT SINAI HOSPITAL****Dr. Z. Cohen – Surgeon-in-Chief****HEADS OF DIVISIONS****Dr. R.S. McLeod – General Surgery****Dr. A.E. Gross – Orthopaedic Surgery****Dr. M. Buckspan/Dr. K. Jarvi - Urology**

The subspecialty programs within the Division of General Surgery in the Department of Surgery at Mount Sinai Hospital are the following: Colorectal disease including I.B.D. and surgical oncology, with particular reference to hepatobiliary surgery, colorectal cancer, endocrine oncology, and breast disease. The main foci within the Orthopaedic Division are reconstructive surgery and surgical oncology (sarcoma). Within the Division of Urology the major focus is the infertility program.

**Division of General Surgery**

The Division of General Surgery at the Mount Sinai Hospital has eight full members: Drs. Zane Cohen, Jean Couture, Steve Gallinger, Helen MacRae, Robin McLeod, Irv Rosen, Saul Sidlofsky and Carol Swallow. Dr. Irv Koven is an associate member of the Division. During this past year, there were several new members of the Division who were cross-appointed between the Division of General Surgery at the University Health Network and the Mount Sinai Hospital. These included Drs. David McCready, Phil Haigh, Alan Dackiw, Lorne Rotstein and David Urbach.

During the academic year 2000-2001, there has been integration of the Divisions of General Surgery at the University Health Network and the Mount Sinai Hospital. There are now integrated breast and head and neck programs with surgeons performing clinical work including surgery at both sites. There is a commitment to recruit jointly to both divisions and to continue attempts at merging both divisions.

In the past year, the Dr. Earl D. Myers Lectureship was inaugurated. The first Earl D. Myers Lectureship took place in November of 2000.

The guest lecturer was Mr. Bill Heald from Basingstoke, England. As well, the Division of General Surgery has welcomed several visitors to the hospital including Professor Rune Sjudahl from Lingopin, Sweden, the Southern Surgical Society of Clinical Surgeons, who held their annual scientific meeting at the Mount Sinai Hospital in May 2001. Members of the Department of Surgery throughout the University took part in this event.

Some of the highlights of the academic year were the following:

### **Education**

Dr. Helen MacRae was appointed Director of the Surgical Skills Laboratory. Dr. Carol Swallow continues as the Program Director of the Surgical Oncology Fellowship Training Program.

### **Program**

Dr. Robin McLeod initiated Evidence Based Reviews in Surgery, where a critical appraisal journal club curriculum was developed and distributed to all sixteen general surgical programs in Canada. This was done under the auspices of the Canadian Association of General Surgeons. Dr. Robin McLeod is the committee chair.

Dr. Steve Gallinger was the primary thesis supervisor for three students who completed their M.Sc. (Dr. Christine Ribic) and Ph.D. (Dr. Joseph Wen and Dr. Rob Gryfe). Dr. Jennifer MacMillan successfully completed her M.Sc under the supervision of Dr. Carol Swallow. Dr. Robin McLeod supervised Dr. Erin Kennedy as she successfully completed her Ph.D.

### **Research**

Dr. Helen MacRae received three grants: One grant from the Physicians Services Incorporated Foundation (with co-investigator Dr. Robin McLeod) to assess the teaching of critical appraisal skills to community surgeons; a second grant from the Association of Canadian Medical Colleges/Medical Research Council of Canada to perform a needs assessment of surgeons; and a third from CESERT to perform a self-assessment of surgical residents.

Dr. Robin McLeod received two grants, from the Crohn's and Colitis Foundation of America and the Canadian Institutes of Health Research,

for a multi-centre trial to assess surgical technique in Crohn's disease patients.

Dr. Steve Gallinger continues to head the Familial Gastrointestinal Cancer Registry and has received two National Cancer Institute of Canada grants, as well as a recent Premier's Excellence Award. Dr. Gallinger is also a part of a program grant (headed by John McLaughlin) from the Canadian Institutes of Health Research to study the genetic epidemiology of cancer, and another one from the National Cancer Institute of Canada to assess microsatellite instability in individuals with colorectal cancer.

Dr. Carol Swallow received a two-year grant from the Physicians Services Incorporated Foundation entitled "Modulation of immunosuppression and hepatic fibrogenesis by fetuin, an endogenous TGF-beta 2 antagonist."

### **Administration**

Dr. Zane Cohen continued to be Chair of the University of Toronto Division of General Surgery. In addition, he was re-appointed for a third term as Chief of Surgery at the Mount Sinai Hospital.

Dr. Steve Gallinger was named head of the Section of Hepatobiliary and Pancreatic Surgical Oncology at the University Health Network and the Mount Sinai Hospital.

### **Honors**

Dr. Steve Gallinger received the Israel Cancer Research Foundation Scientific Award.

Dr. Robin McLeod gave the BJS Lecture at the annual meeting of the Association of Coloproctology of Great Britain and Ireland. Dr. Robin McLeod was also the external examiner in surgery at the University of Hong Kong.

Dr. Carol Swallow received an American College of Surgeons' Faculty Research Fellowship. She also organized the Royal College accreditation for surgical oncology. The program was approved with high praise.

Dr. Tony MacLean, one of the colorectal fellows, won the Canadian Association for General Surgeons Research Award for Clinical Sciences and Dr. Erin Kennedy, a Surgical-Scientist Program resident, was awarded a Medical Research Council of Canada fellowship.

Dr. Helen MacRae received an Association for Surgical Education grant to assess laparoscopic skills.

### **Division of Urology**

The research program within the Division of Urology has been very productive. There is ongoing grant support from the National Institutes of Health for projects looking at the role of genetics in male infertility, and infection in the male reproductive tract. Additional basic science work is focused on DNA alterations in sperm and sperm maturation.

Surgical trainees doing research work within the Division have focused on basic science projects studying the use of molecular biology techniques to detect infection in male infertility and the role of cystic fibrosis in male infertility. Two summer students were involved in award winning projects through the Infection and Biomaterials Research Laboratory of the Division. The presence of the members of the Division of Urology has been strong internationally, as evidenced by numerous invitations to international meetings.

In addition, the Division of Urology at the Mount Sinai Hospital organized the First Annual University of Toronto Andrology Symposium.

### **Division of Orthopaedic Surgery**

Dr. Jay Wunder was awarded the Rubinoff/Gross Chair in Orthopaedic Oncology and Dr. Allan E. Gross was awarded the Bernard Ghert Chair in Lower Extremity Reconstruction.

In the past academic year three courses related to revision arthroplasty of the hip were run at the Mount Sinai Hospital. This is a one-day course, which consists of a live TV demonstration of a hip revision, followed by a hands-on workshop in the Surgical Skills Lab at the Mount Sinai Hospital. This course attracted surgeons from North America and Europe and it is planned that four more courses will be held in this upcoming academic year.

Dr. Stuart Goodman, who is the Chair of Orthopaedics at the Stanford University in California, is taking a one-year sabbatical within the Orthopaedic Division at the Mount Sinai Hospital commencing August 1, 2001. He will gain expertise in revision arthroplasty of the hip.

There have been peer-reviewed grants awarded to the members of the Division of Orthopaedic Surgery at the Mount Sinai Hospital to include Dr. Allan E. Gross, Dr. Jay Wunder, Dr. Robert Bell and Dr. Erin Boynton. Grants have been obtained from the Arthritis Society, the Physicians Services Incorporated Foundation, the Canadian Institutes of Health Research, the Canadian Orthopaedic Foundation and numerous other non-peer reviewed grants.

The Orthopaedic Division is extremely strong clinically and academically. The strengths in surgical oncology and reconstructive surgery will be maintained and individuals recruited to bolster these programs of excellence.

**DIVISION OF GENERAL SURGERY**

**Dr. Z. Cohen - Professor**  
**Dr. J. Couture - Assistant Professor**  
**Dr. S. Gallinger - Professor**  
**Dr. M.R. Goldberg - Associate Professor**  
**Dr. I.H. Koven - Associate Professor**  
**Dr. H.M. MacRae - Assistant Professor**  
**Dr. R.S. McLeod - Professor (Division Head)**  
**Dr. I.B. Rosen - Professor**  
**Dr. S. Sidlofsky - Assistant Professor**  
**Dr. C.J. Swallow - Assistant Professor**

**PUBLICATIONS**

**Cheung CC, Ezzat S, Freeman JL, Rosen IB, Asa SL:** Immunohistochemical diagnosis of papillary thyroid carcinoma. *Modern Pathology*: April 2001: 14(4): pp 338-342.

**Cohen Z, McLeod RS:** Inflammatory bowel disease. In: Shackleford's Surgery of the Alimentary Tract, Volume IV, Fifth Edition (Pemberton JH, ed). 2000.

**Cotterchio M, McKeown-Eyssen G, Sutherland H, Buchan G, Aaronson M, Easson AM, Macey J, Holowaty E, Gallinger S:** Ontario Familial Colon Cancer Registry: Methods and first-year response rates. *Chronic Disease in Canada*: August 2000: 21: pp 81-86.

**Harness JK, van Heerden JA, Lennquist S, Rosen IB:** The future of thyroid surgery and training surgeons to meet expectations of 2000 and beyond. *World Journal of Surgery*: August 2000: 24(8): pp 976-982.

**Hemming AW, Gallinger S, Greig PD, Cattral MS, Langer B, Taylor BR, Verjee Z, Geisbrecht E, Nakamachi Y, Furuya KN:** The Hippurate ratio as an indicator of functional hepatic reserve for resection of hepatocellular carcinoma in cirrhotic patients. *Journal of Gastrointestinal Surgery*: May 2001: 5: pp 316-321.

**Hemming AW, Gallinger S:** Liver. In: *Surgery: Scientific Basis and Current Practice*. Springer-Verlag Incorporated: 2001: pp 231-236.

**McLeod RS:** Improving the long-term outcome of surgery: The future. In: Falk Symposium 111 IBD at the End of its First Century (Rogler G, Rutgeerts P, Sartor RB, Scholmerich J, eds). Kluwer Academic Publishers, The Netherlands 2000: pp 216-225.

**McLeod RS:** Comparison of quality of life in patients undergoing abdomino-perineal resection or anterior resection for rectal cancer. *Annals of Surgery*: February 2001: 233: pp 157-158.

**McLeod RS, Geerts W, Sniderman K, Greenwood C, Gregoire R, Taylor B, Silverman R, Atkinson K, Burnstein M, Marshall J, Burul C, Anderson D, Ross T, Wilson S, Barton P:** Subcutaneous heparin versus low-molecular weight heparin as thromboprophylaxis in patients undergoing colorectal surgery: Results of the Canadian colorectal DVT prophylaxis trial: A randomized double-blind trial. *Annals of Surgery*: March 2001: 233: pp 438-444.

**Naigamwalla D, Chia MC, Tran TT, Medline A, Hay K, Gallinger SG, Bruce WR:** Polyethylene glycol 8000 and colon carcinogenesis: Inhibition in the F344 rate, promotion in the Min mouse. *Cancer Research*: December 2000: 60: pp 6856-6858.

**Nguyen H, Hay J, Mazzulli T, Gallinger S, Sandhu J, Teng Y, Hozumi N:** Efficient generation of respiratory syncytial virus (RSV)-neutralizing human MoAbs via human peripheral blood lymphocyte (hu-PBL)-SCID mice and scFv phage display libraries. *Clinical and Experimental Immunology*: October 2000: 122: pp 85-93.

**O'Neill JA, Gautam S, Geiger JD, Ein SH, Holder TM, Bloss RS, Krummell TM:** A longitudinal analysis of the pediatric surgeon workforce. *Annals of Surgery*: September 2000: 232(3): pp 442-453.

**Richard CS, Gregoire R, Plewes EA, Silverman R, Burul C, Reznick R, Ross T, Burnstein M, O'Connor BI, Mukraj D, McLeod RS:** Internal sphincterotomy is superior to topical nitroglycerin in the treatment of chronic anal fissure: Results of a randomized controlled trial by the Canadian Colorectal Surgical Trials Group. *Diseases of the Colon and Rectum*: August 2000: 8: pp 1048-1057.

**Rosen IB:** The Canadian medical presence in China: Missionaries and their remarkable legacy. *Annals of the Royal College of Physicians and Surgeons of Canada*: August 2000: 33(5): pp 310-315.



**Rosen IB:** Hyperparathyroidism: A surgeon "discovers" a disease. *Annals of the Royal College of Physicians and Surgeons of Canada*: April 2001: 34(3): pp 160-163.

**Rosen IB, Bayley TA:** Diseases of the thyroid. In: *Chiropractic Care of the Older Patient* (Gleberzon BJ, ed). Butterworth-Heinemann Publishers, London 2001: pp 279-285.

**Sasaki T, Irie-Sasaki J, Horie Y, Bachmaier K, Fata JE, Li M, Suzuki A, Bouchard D, Ho A, Redston M, Gallinger S, Khokha R, Mak TW, Hawkins PT, Stephens L, Scherer SW, Tsao M, Penninger JM:** Colorectal carcinomas in mice lacking the catalytic sub unit of PI(3)Kgamma. *Nature*: August 2000: 406: pp 897-902.

**Silverberg MC, Clelland C, Murphy JE, Steinhart AH, McLeod RS, Greenberg GR, Cohen Z, Siminovitch KA:** Carrier rate of APC I1307K is not increased in inflammatory bowel disease patients of Ashkenazi Jewish origin. *Human Genetics*: March 2001: 108: pp 205-210.

**Song J, Medline A, Mason JB, Gallinger S, Kim Y-I:** Effects of dietary folate on intestinal tumorigenesis in the apcMin mouse. *Cancer Research*: October 2000: 60: pp 5434-5440.

**Soravia C, Berk T, Cohen Z:** Genetic molecular testing and surgical decision-making in hereditary colorectal cancer. *International Journal of Colorectal Disease*: November 2000: 15: pp 363-369.

**Szalay D, MacRae H, Regher G, Reznick R:** Using operative outcome to assess technical skill. *American Journal of Surgery* September 2000: 180(3): pp 234-237.

**Thompson-Fawcett MW, Marcus VA, Redston M, Cohen Z, McLeod RS:** Adenomatous polyps develop commonly in the ileal pouch of patients with familial adenomatous polyposis. *Diseases of the Colon and Rectum*: March 2001: 44: pp 347-353.

**Thompson-Fawcett MW, Richard CS, O'Connor BI, Cohen Z, McLeod RS:** Quality of life is excellent after a pelvic pouch for colitis-associated neoplasia. *Diseases of the Colon and Rectum*: September 2000: 43: pp 1497-1502.

**Thompson-Fawcett MW, Marcus V, Redston M, Cohen Z, McLeod RS:** Risk of dysplasia in long-term ileal pouches or pouches with chronic pouchitis. In: Falk Symposium 111 IBD at the End of its First Century (Rogler G, Rutgeerts P, Sartor RB, Scholmerich J, eds). Kluwer Academic Publishers, The Netherlands 2000: pp 214-215.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Cohen Z:** American College of Surgeons, Chicago, Illinois, October 2000. (1) Moderator: Inflammatory bowel disease symposium, (2) The place of the Kock pouch in the year 2000, (3) Invited guest moderator: Video session.

**Gallinger S:** Ontario Association of General Surgeons, Hamilton, Ontario, November 2000. Genes and colorectal cancer: What the practising surgeon needs to know.

**Gallinger S:** Jackson Laboratory, Bar Harbor, Maine, October 2000. Inhibition of intestinal neoplasia in genetic mouse models with Cox inhibitors.

**Gallinger S:** Southern Society of Clinical Surgeons, Toronto, Ontario, May 2001. Molecular genetics of colorectal cancer.

**Gallinger S:** Montreal Conference on Colon Cancer, Montreal, Quebec, March 2001. Novel local treatments for colorectal cancer liver metastases.

**MacRae H:** Surgical Educators Course, University of Calgary, Calgary, Alberta, October 2000. Exploiting teaching opportunities in the operating room.

**MacRae H:** Association of Program Directors for Colon and Rectal Surgery, Chicago, Illinois, May 2001. Evaluation of the surgical residency

**McLeod RS:** Bushell Lecturer, Australian Gastroenterology Week, Hobart, Australia, October 2000. (1) Quality of life following colectomy anal fissure: Prevention of post-operative Crohn's disease, (2) Screening for colorectal cancer, (3) Epidemiology of colorectal cancer surgical management of refractory distal ulcerative colitis.

**McLeod RS:** American College of Surgery, Chicago, Illinois, October 2000. (1) What is evidence-based surgery?, (2) Surveillance in patients with ulcerative colitis assessing outcome in inflammatory bowel disease.

**McLeod RS:** American College of Surgeons, Chicago, Illinois, November 2000. Clinical trials course: Setting the research question.

**McLeod RS:** Catania Medical Conference, Catania, Sicily, March 2001. Management of ulcerative colitis.

**McLeod RS:** American Gastroenterology Association, Digestive Disease Week, Atlanta, Georgia, May 2001. Cons of post-operative maintenance therapy in Crohn's Disease.

**McLeod RS:** University of Hong Kong, Hong Kong, May 2001. Management of anal fissure assessing outcome in surgery.

**McLeod RS:** Digestive Diseases Week, Society for Surgery of the Alimentary Tract Post-Graduate Course, Atlanta, Georgia, May 2001. (1) Surgery for Crohn's Colitis, (2) What is evidence-based medicine?

**McLeod RS:** Australian Gastroenterology Week, Hobart, Australia, October 2000. (1) Bushell Lecture: Quality of life following colectomy anal fissure: Prevention of post-operative Crohn's disease, (2) Screening for colorectal cancer, (3) Epidemiology of colorectal cancer, (4) Surgical management of refractory distal ulcerative colitis.

**Rosen IB:** Canadian Diabetic Association/Canadian Society for Endocrinology and Metabolism, Halifax, Nova Scotia, October 2000. Surgical management of suspicious non-papillary thyroid nodule by FNA: Near-total or total thyroidectomy.

**Swallow CJ:** American College of Surgeons Scholarships Committee, Chicago, Illinois, October 2000. Significance of monocyte-derived matrix-degrading metalloproteinases in progression of colorectal cancer: Final report.

**Swallow CJ:** Southern Society of Clinical Surgeons, Toronto, Ontario, May 2001. Multi-disciplinary approach to resectable retroperitoneal sarcomas.

**Swallow CJ:** C.O.M.E.T., Muskoka, Ontario, June 2001. Update on the management of gastric cancer.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

A multi-centre randomized controlled trial to compare stapled functional end-to-end anastomosis with sutured end-to-end anastomosis following resection for primary or recurrent ileocolonic Crohn's Disease. *McLeod RS, Wolff BG, Ross S, Reznick R, Phang T, Buie D, Silverman R, Plewes A, Taylor B, Richard C, Belliveau P, Gregoire R, MacDonald H, Vasilevsky C, Schoetz D, Strong S, Fleshman J: Crohn's and Colitis Foundation of America* (\$276,000 2000 - 2003).

A multi-centre, randomized, parallel group, placebo-controlled, double-blind study with in-house blinding to determine the effect of 156 weeks of treatment with MK-0966 on the recurrence of neoplastic polyps of the large bowel in patients with a history of colorectal adenomas. *McLeod RS (University of Toronto Site Investigator): Merck Frosst Canada and Company* (\$100,000 2000 - 2001).

Are advanced laparoscopic skills for senior surgical residents learned in a short training course and transferred to operations? *Deepak D, MacRae H, Friedlich M, Mamazza J, Schlachta C, Reznick R, Regehr G: Association for Surgical Education* (\$24,821 2000).

Developing the critical appraisal skills of surgeons. *MacRae HM, McLeod R, Regehr G: Physicians Services Incorporated Foundation* (\$30,800 2001 - 2002).

Evaluation of the surgical residency: Further studies of COX-2 inhibitors in mouse models of intestinal neoplasia. *Gallinger S: Merck Frosst* (\$50,000 2001).

Gender differences in pain and analgesic response to kappa and mu opioids after surgery. *Katz J, Gagliese L, Snijdelaar D, Stewart D, MacRae H, Taddio A, Sandler AN: Medical Research Council of Canada* (\$92,052 2000 - 2003).

Genetic basis of hyperparathyroidism-jaw tumor syndrome. *Hobbs MR, Rosen IB, Jackson CE: National Institutes of Health* (\$484,085 1999 - 2002).

Genetic pre-disposition to colorectal cancer caused by weakly penetrant APC alleles. *Gallinger S, Redston M, Knight J: National Cancer Institute of Canada* (\$400,000 2000 - 2003).

Genetics of pancreatic adenocarcinoma. *Gallinger S, Redston M, Narod S, Ozcelik H, Brunet J-S: National Cancer Institute of Canada* (\$448,000 1999 - 2002).

How accurate is self-assessment of technical skills, and does self-assessment improve by evaluating peers' performance? *MacRae HM, Ward M, Evans J, Schlachta C, Mamazza J, Reznick R, Regehr G: Association for Surgical Education* (\$34,059 2001 - 2002).

Modulation of immunosuppression and hepatic fibrogenesis by fetuin, an endogenous TGF-beta 1 antagonist. *Swallow CJ: Physicians Services Incorporated Foundation* (\$120,000 2000 - 2002).

Needs assessment: Concordance of perceived and objectively assessed learning needs. *Ward M, MacRae HM, Reznick R, Byrne PN: Canadian Institutes of Health Research/Association of Canadian Medical Colleges* (\$18,094 2001 - 2002).

Ontario registry for studies of familial colon cancer. *Gallinger S, Hollowaty E: National Institutes of Health* (\$3,200,000 1997 - 2001).

Randomized controlled trial to compare stapled functional end-to-end anastomosis with sutured end-to-end anastomosis following resection for primary or recurrent ileocolic Crohn's Disease. *McLeod RS, Wolff BG, Ross S, Reznick R, Phang T, Buie D, Silverman R, Plewes A, Taylor B, Richard C, Belliveau P, Gregoire R, MacDonald H, Vasilevsky C, Wolff B, Schoetz D, Strong S, Fleshman J: Ethicon Endosuture Incorporated* (\$30,000 2000 - 2001).

Tumor microsatellite instability as a molecular prognostic marker in colorectal cancer. *Gallinger S: Premier's Research Excellence Award* (\$100,000 2000 - 2005).

## HONOURS RECEIVED

**Gallinger S:** Israel Cancer Research Fund Scientific Award, April 2001.

**Gallinger S:** Lloyd S.D. Fogler Award, October 2000.

**Gallinger S:** Premier's Research Excellence Award, July 2000.

#### **DIVISION OF ORTHOPAEDIC SURGERY**

**Dr. R.S. Bell - Professor**  
**Dr. E.L. Boynton - Assistant Professor**  
**Dr. A.E. Gross – Professor (*Division Head*)**  
**Dr. C.R. Hutchison - Assistant Professor**  
**Dr. F. Langer - Associate Professor**  
**Dr. D. MacIntosh - Associate Professor**  
**Dr. J.S. Sandhu – Assistant Professor**  
**Dr. E.A. Silverstein - Assistant Professor**  
**Dr. J.S. Wunder - Assistant Professor**

#### **PUBLICATIONS**

**Aubin P, Simpson D, Wunder JS, White L:** Musculoskeletal images, Acetabular tuberculous osteomyelitis. Canadian Journal of Surgery: June 2001: 44: pp 167-168.

**Blackley HR, Davis AM, Hutchison CR, Gross AE:** Proximal femoral allografts for reconstruction of bone stock in revision arthroplasty of the hip: A nine to fifteen-year follow-up. Journal of Bone and Joint Surgery: March 2001: 83A(3): pp 346-354.

**Boynton EL, Rae S, Sandhu J, Labow RS, Santerre JP:** The effect of polyethylene particle surface chemistry on human monocyte-macrophage function in vitro. Journal of Biomedical Materials Research: August 2000: 52(2): pp 239-245.

**Clatworthy MG, Ballance J, Brick GW, Chandler HP, Gross AE:** The use of structural allograft for uncontained defects in revision total knee arthroplasty: A minimum five-year review. Journal of Bone and Joint Surgery: March 2001: 83A(3): pp 404 - 411.

**Fuchs B, Davis AM, Wunder JS, Bell RS, Masri BA, Isler M, Turcotte R, Rock MG:** Sciatic nerve resection in the thigh: A functional evaluation. *Clinical Orthopaedics*: January 2000: 382: pp 34-41.

**Gerrand CH, Griffin AM, Bell RS:** Musculoskeletal images: Migration of the patellar component causing popliteal artery occlusion. *Canadian Journal of Surgery*: August 2000: 43 (4): pp 252-253.

**Gross AE:** Fresh osteochondral allografts for post-traumatic knee defects. In: *Techniques in Knee Surgery* (Harner CD, Vince KG, Fu FH, Greis PE, eds). Lippincott Williams and Wilkins, Philadelphia: 2000: pp 193-201.

**Gross AE, Wong P, Saleh KJ:** The revision acetabulum: Dealing with bone loss, grafts and cages: Managing massive bone loss. *Orthopaedics*: September 2000: 23(9): pp 973-974.

**Jaroszynski G, Woodgate I, Saleh K, Gross AE:** Total hip replacement for the dislocated hip. *Journal of Bone and Joint Surgery*: February 2001: 83A(2): pp 272-282.

**Jaroszynski G, Woodgate IG, Saleh KJ, Gross AE:** Total hip replacement for the dislocated hip. *American Association of Orthopaedic Surgery Instructional Course Lectures*: February 2001: 50: pp 307-316.

**Jong R, Davis AM, Mendes MG, Wunder JS, Bell RS, Kandel RA:** Proliferative activity (Ki-67 expression) and outcome in high-grade osteosarcoma: A study of 27 cases. *Sarcoma*: July 2000: 2000(4): pp 47-55.

**Lee AW, Santerre JP, Boynton EL:** Influence of oxidation process on the chemistry of ultra high molecular weight polyethylene (UHMWPE): Particulates and the implications towards cell/particle interactions. *Biomaterials*: August 2000: 21(8): pp 851-861.

**Levesque J, Bell RS, Coyte PC, Wright JG:** Changing rates of cancer: The hazards of using a single definition. *Journal of Clinical Epidemiology*: March 2000: 54 (3): pp 225-231.

**Lewis SJ, Wunder JS, Couture J, Davis AM, Catton CN, Kandel RA, Kotwall C, O'Sullivan B, Bell RS:** Soft tissue sarcomas involving the pelvis. *Journal of Surgical Oncology*: May 2001: 77 (1): pp 8-14.

**Mousses S, Gokgoz N, Wunder JS, Ozcelik H, Bull S, Bell RS, Andrulis IL:** p53 missense but not truncation mutations are associated with low levels of p21 (CIP1/WAF1)mRNA expression in primary human sarcomas. *British Journal of Cancer*: June 2001: 84(12): pp 1635-1639.

**Pearce DH, White LM, Bell RS:** Musculoskeletal images: Bilateral insufficiency fracture of the femoral neck. *Canadian Journal of Surgery*: February 2001: 44 (1): pp 11-12.

**Robinson P, White LM, Lax M, Salonen D, Bell RS:** Quadrilateral space syndrome caused by glenoid labral cyst. *American Journal of Roentengology*: October 2000: 175(4): pp 1103-1105.

**Saleh KJ, Holtzman J, Gafni A, Saleh L, Jaroszynski G, Wong P, Woodgate I, Davis A, Gross AE:** Development, test reliability and validation of a classification for revision hip arthroplasty. *Journal of Orthopaedic Research*: January 2001: 19(1): pp 50-56.

**Saleh KJ, Jaroszynski G, Woodgate I, Saleh L, Gross AE:** Revision total hip arthroplasty with the use of structural acetabular allograft and reconstruction ring. *Journal of Arthroplasty*: December 2000: 15(8): pp 951-958.

**Trammell RA, Johnson CB, Barker JR, Bell RS, Allan DG:** Multi-drug resistance-1 gene expression does not increase during tumor progression in the MGH-OGS murine osteosarcoma tumor model. *Journal of Bone and Joint Surgery*: September 2000: 18(3): pp 449-455.

**Wunder JS, Bull SB, Aneliunas V, Lee PD, Davis AM, Beauchamp CP, Conrad EU, Grimer RJ, Healey JH, Rock MJ, Bell RS, Andrulis IL:** MDR1 gene expression and outcome in osteosarcoma: A prospective, multi-centre study. *Journal of Clinical Orthopaedics*: July 2000: 18(14): pp 2685-2694.



**Wunder JS, Leitch K, Griffin AM, Davis AM, Bell RS:** Comparison of two methods of reconstruction of primary malignant tumors at the knee: A sequential cohort study. *Journal of Surgical Oncology*: June 2001: 77(2): pp 89-99.

**Xing S, Rae S, Santerre JP, Labow RS, Boynton EL:** The role of the macrophage in total joint replacement failure. *Canadian Journal of Surgery*: August 2000: 43(3): pp 173-179.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Bell RS:** Brown University School of Medicine/Rhode Island Hospital, Providence, Rhode Island, April 2001. (1) Defining molecular targets for sarcoma therapy, (2) Radiation/surgery for soft tissue sarcoma.

**Bell RS:** Philippines Orthopaedic Association, Manila, Philippines, December 2000. (1) Orthopaedic oncology in the new millennium: Global trends and future perspectives, (2) Current trends in the context of multi-disciplinary care, (3) The radiologic evaluation of bone tumors: Principles and pitfalls.

**Boynton EL:** Hospital General de Agudos "Carlos G. Durand", Buenos Aires, November 2000. The role of the macrophage in total joint replacement.

**Gross AE:** Total Hip and Shoulder Replacement Conference, Nashville, Tennessee, April 2001. (1) Dealing with protrusion in total hip replacement, (2) Bone grafting: Classification and indication, (3) Femoral allograft reconstruction.

**Gross AE:** Japanese Orthopaedic Association, Chiba, Japan, April 2001. (1) Revision arthroplasty of the hip with restoration of bone stock, (2) The difficult primary hip, (3) The use of fresh osteochondral allografts for post-traumatic joint defects.

**Gross AE:** Jornada de Revision Sobre Artroplastia Total de Cadera (Zimmer), Gijon, Spain, March 2001. (1) Revision arthroplasty of the acetabulum with restoration of bone stock, (2) Revision arthroplasty of the femur: Classification and surgical options.

**Gross AE:** Hip Forum 2001, Belgium, June 2001. Difficult acetabular and femoral revisions.

**Gross AE:** Hip Millennium Forum, Lisbon, Portugal, July 2000. (1) Observations on the difficult primary THR, (2) Total hip replacement in a young active adult: What, when, how, (3) Revision of acetabulum with restoration of bone stock, (4) Proximal femoral allografts for reconstruction of bone stock in revision arthroplasty of the hip, (5) Use of ZMR femoral components in complex revision THR, (6) Revision THR pre-operative planning, difficult cases discussion.

**Gross AE:** What's New in Orthopaedics, Harbor Springs, Michigan, September 2000. (1) Restoration of bone stock and revision arthroplasty of the hip, (2) Use of fresh osteochondral allografts for post-traumatic knee defects.

**Gross AE:** Revision Total Hip Arthroplasty: Femoral Revision and Peri-operative Management, Berlin, Germany, December 2000. (1) Restoration of bone stock in femoral revision, (2) Cortical struts in femoral revision, (3) Reconstruction of the original rotational centre using acetabular bulk allografts.

**Gross AE:** Washington University, St. Louis, Missouri, September 2000. (1) Revision arthroplasty of the hip with restoration of bone stock, (2) The use of fresh osteochondral allografts for post-traumatic knee defects.

**Gross AE:** University Zurich-Irchel, Zurich, Switzerland, October 2000. (1) Revision knee arthroplasty: Bone substitution in TKR, (2) Revision hip arthroplasty: Large fragment allografts.

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Application of micro-array analysis of gene expression to soft tissue sarcoma. *Wunder JS, Kandel R, Woodgett J: Princess Margaret Hospital Foundation (\$67,920 1999 - 2000).*

Determinants and outcomes of revision total knee arthroplasty. *Myerthall S, Mahomed N, Gross AE, Davey JR, Koo JM: Canadian Orthopaedic Foundation (\$10,000 1999 - 2000).*

Evaluating the effectiveness of a two-year curriculum in a surgical skills centre: The future of surgical training? *Anastakis D, Brown M, Hutchison CR, Murnaghan JJ, Reznick R, Ali J: Physicians Services Incorporated Foundation* (\$82,000 1998 - 2000).

Inter-disciplinary health research team (IHRT) in musculoskeletal neoplasia. *Bell RS, Alman B, Andrulis IL, Bramwell V, Davis AM, Greenberg M, Hill R, Kandel RA, Malkin D, Masri B, O'Sullivan B, Turcotte R, Wunder JS: Canadian Institutes of Health Research* (\$6,136,475 2001 - 2005).

Investigations of the biological importance of molecular alterations in sarcoma. *Wunder JS, Andrulis I, Bell RS: National Cancer Institute of Canada* (\$44,129 1999 - 2000).

Macrophage: Silicone interactions in vitro inflammation versus immunity. *Boynnton EL: Dow Corning* (\$76,000 1998 - 2001).

Macrophages and the role of PE chemistry in total joint replacement failure. *Boynnton EL: Arthritis Society* (\$45,000 1999 - 2003).

Molecular pathology of cartilage neoplasia: The role of parathyroid hormone-related protein and Indian hedgehog. *Wunder JS, Alman BA: Medical Research Council of Canada* (\$103,774 2000 - 2003).

Predictors of outcome following revision total hip arthroplasty. *Gross AE, Davis AM, Agnidis Z, Badley E, Dreder H, Gollis J, Saleh K, Schemitsch E, Szalai JP, Hutchison CR: Arthritis Society* (\$66,100 1999 - 2001).

Revision total joint replacement: Why do primaries fail? *Davis A, Kreder HJ, Schemitsch EH, Mahomed NN, Gollish JD, Gross AE: Canadian Orthopaedic Foundation* (\$10,000 2000 - 2001).

The effect of small intestinal sub mucosa on wound healing in a rat deep excisional wound model. *Kandel RA, Bell RS: Cook Biotech Incorporated* (\$145,000 2000 - 2001).

The Hu-SCID mouse: An experimental model for the development and testing of candidate TB vaccines. *Sandhu JS, Gorczynski R: Natural Sciences and Engineering Research Council* (\$80,883 1997 - 2000).

The role of the macrophage in polyethylene mediated total joint replacement failure. *Boynton EL: Arthritis Society* (\$80,377 1999 - 2003).

#### **HONOURS RECEIVED**

**Wunder JS:** Corrine Farrell Award, International Skeletal Society for MR, September 2000.

#### **DIVISION OF PLASTIC SURGERY**

**Dr. N.H. McKee - Professor**

#### **PUBLICATIONS**

**Ananthanarayan C, Castro C, McKee N, Sakotic G:** Compartment syndrome following intravenous regional anesthesia. *Canadian Journal of Anesthesia*: November 2000: 47(11): pp 1094-1098.

**Barden WS, Clarke HM, Young NL, McKee NH, Regehr G:** Effectiveness of telehealth for teaching hand assessment techniques to physical therapists. *Academic Medicine*: September 2000: 75(10): pp S43-S46.

**Smith HK, Maxwell L, Rodgers CD, McKee NH, Plyley MJ:** Exercise-enhanced satellite cell proliferation and new myonuclear accretion in skeletal muscle. *Journal of Applied Physiology*: April 2001: 90(4): pp 1407-1414.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**McKee NH:** Plastic Surgery Research Council, Milwaukee, Wisconsin, June 2001. (1) Resisting the dark side: Overcoming academic burnout, (2) Panel discussion.

**McKee NH:** American Society for Peripheral Nerve, San Diego, California, January 2001. Course co-ordinator: Strategies to augment muscle recovery following peripheral nerve injury.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Muscle architecture in children with spastic displexia and Duchenne's muscular dystrophy. *McKee NH, Agur AM, Biggar D, Fiume E: Kids Action* (\$27,201 2000 - 2001).

Muscle architecture in children with spastic displexia and Duchenne's muscular dystrophy. *McKee NH, Agur AM, Biggar D, Fiume E: The Hospital for Sick Children Foundation* (\$26,412 2000 - 2001).

**DIVISION OF UROLOGY**

**Dr. M.B. Buckspan - Associate Professor**  
**Dr. K. Jarvi - Associate Professor (*Division Head*)**  
**Dr. P.G. Klotz - Associate Professor**  
**Dr. A. Zini - Assistant Professor**

**PUBLICATIONS**

**Papanikolaou F, Chow V, Jarvi K, Fong B, Ho M, Zini A:** Effect of adult microsurgical varicocelectomy on testicular volume. *Urology*: July 2000: 56: pp 136-139.

**Chow V, Jarvi K, Buckspan M, Barry-Longley T, Zini A:** Intranasal GnRH\* therapy in men with idiopathic infertility. *Fertility Sterility*: September 2000: 74: pp 605-606.

**Mak V, Jarvi K, Freeman M, Hechter S, Buckspan M, Zini A:** Smoking is associated with retention of cytoplasm by human spermatozoa. *Urology*: September 2000: 56: pp 463-466.

**Zini A, Defreitas G, Freeman M, Hechter S, Jarvi K:** Varicocele is associated with the abnormal retention of cytoplasm by human spermatozoa. *Fertility Sterility*: September 2000: 74: pp 461-464.

**Zini A, Nam RK, Mak V, Phang D, Jarvi K:** Influence of initial semen quality on the integrity of human sperm DNA following semen processing. *Fertility Sterility*: October 2000: 74: pp 824-827.

**Zini A, Finelli A, Phang D, Jarvi K:** Influence of semen processing technique on human sperm DNA integrity. *Urology*: December 2000: 56: pp 1081-1084.

**Zini A, Bielecki R, Phang D, Zenzes MT:** Correlations between two markers of sperm DNA integrity, DNA denaturation and DNA fragmentation, in fertile and infertile men. *Fertility Sterility*: April 2001: 75: pp 674-777.

**Kamal KM, Jarvi K, Zini A:** Microsurgical varicocelectomy in the era of art: Influence of initial semen quality on pregnancy rates. *Fertility Sterility*: May 2001: 75: pp 1013-1016.

#### INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

**Jarvi K:** Canadian Fertility and Andrology Society, St. Johns, Newfoundland, September 2000. Genetics of male infertility.

#### RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

A microbiological and epidemiological study on prostatitis. *Nickel C, Jarvi K, Mittelman M: National Institutes of Health* (\$238,000 1998 - 2003).

A randomized, double-blind placebo-controlled multi-centre, fixed-dose, parallel group, three-month comparison study to investigate the efficacy and safety of the phosphodiesterase type V inhibitor BAY 38-9456 in males with erectile dysfunction following radical prostatectomy. *Jarvi K, Zini A, Bucksman M, Jewett MAS, Trachtenberg J: Bayer Incorporated* (\$45,190 2000 – 2001).

Molecular basis of the CF phenotype and its modification. *Lap-Chee T, Durie P, Jarvi K, Swezey N, Rommens J, Bear C, Tullis E, Corey M, Rozmahel R: National Institutes of Health (\$652,035 199-2004).*

**ST. JOSEPH'S HEALTH CENTRE**

**Dr. D. Jones – Surgeon-in-Chief**

**HEADS OF DIVISIONS**

**Dr. T. Harmantas – General Surgery**

**Dr. M. Kliman – Orthopaedic Surgery**

**Dr. R. Levine – Plastic Surgery**

**Dr. E. Spratt – Thoracic Surgery**

**Dr. A. Marcuzzi - Urology**

Dr. E. Spratt completed his term as Chief of Staff this year and Dr. A. Harmantas was appointed Chief of Staff effective April 1, 2001. Dr. Harmantas is also Head of the Division of General Surgery and Chair of the Medical Advisory Committee.

Dr. D.P. Jones finished his six-year term as Surgeon-in-Chief, Department of Surgery and Medical Director, Surgical Program. A search committee has been formed.

Dr. S. Feinberg, a colorectal surgeon, joined the Division of General Surgery in September 2000 and was appointed Director of Medical Education. He left the St. Joseph's Health Centre on April 1, 2001 to return to North York General Hospital.

During 2000-2001, Dr. D. Wooster served as Secretary of the Medical Staff Association at the St. Joseph's Health Centre and Dr. C. Compeau was Treasurer. In June 2001, Dr. Wooster became Vice-President of the Medical Staff Association and Dr. Compeau became Secretary.

Dr. D. Wooster was elected President of the Canadian Society for Vascular Surgery for a one-year term starting September 2000. In 2001, Dr. Wooster became Continuing Medical Education Section Editor for the vascular website of the American Association for Vascular Surgery.



Dr. R. Hart, who specializes in hepatopancreaticobiliary surgery, joined the Division of General Surgery on March 1, 2001. His office is located in the Sunnyside Wing at the St. Joseph's Health Centre.

Dr. D. Szalay was appointed Director of Medical Education at the St. Joseph's Health Centre effective April 1, 2001.

Dr. G. McDonald retired on October 31, 2000, after serving as an orthopaedic surgeon at the St. Joseph's Health Centre for 44 years. He joined our staff in 1956 and was Head of the Division of Orthopaedic Surgery from 1983 to 1992.

Dr. R. Levine continues as Program Director of the Division of Plastic Surgery, University of Toronto.

After receiving a Master's in Public Health degree from Harvard School of Public Health in 2000, Dr. L. Kasrai joined the Division of Plastic Surgery at the St. Joseph's Health Centre in July 2000. She has a special interest in pediatric plastic surgery.

#### **DIVISION OF GENERAL SURGERY**

**Dr. M. Baida – Assistant Professor**  
**Dr. S. Feinberg - Lecturer**  
**Dr. T. Harmantas – Assistant Professor (*Division Head*)**  
**Dr. R. Hart - Lecturer**  
**Dr. D. Lindsay - Lecturer**  
**Dr. R. Louch - Lecturer**  
**Dr. D. Szalay - Lecturer**  
**Dr. D. Wooster – Associate Professor**

#### **PUBLICATIONS**

**Hart RS, Williamson RCN:** Non-operative management of complex blunt hepatic injuries. In: *Surgery* (Corson JD, Williamson RCN, eds). Mosby Yearbook, London, 2000: pp 2.15.4.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Wooster DL:** Thompson Regional Hospital, Red Deer, Alberta, September 2000. Carotid imaging.

**Wooster DL:** Ontario Association of General Surgeons, Hamilton, Ontario, November 2000. Maintenance of certification program.

**Wooster DL:** University of Montreal, Montreal, Quebec, November 2000. (1) Canadian carotid duplex survey, (2) Perspectives on CPD.

**DIVISION OF ORTHOPAEDIC SURGERY**

**Dr. M. Kliman – Lecturer (*Division Head*)**

**Dr. G. McDonald - Lecturer**

**Dr. M. Roscoe - Lecturer**

**Dr. G. Vincent - Lecturer**

**Dr. M. Wood - Lecturer**

**DIVISION OF PLASTIC SURGERY**

**Dr. R. Knowlton - Lecturer**

**Dr. J.C. Fielding - Lecturer**

**Dr. L. Kasrai – Assistant Professor**

**Dr. R. Levine – Associate Professor (*Division Head*)**

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Kasrai L:** McCausland Hospital, Terrace Bay, Ontario, May 2001. Common hand injuries: Management by emergency physicians.

**DIVISION OF THORACIC SURGERY**

**Dr. C. Compeau - Lecturer**  
**Dr. D. Jones – Associate Professor**  
**Dr. E.H. Spratt – Associate Professor**

**DIVISION OF UROLOGY**

**Dr. A. Marcuzzi – Lecturer (*Division Head*)**  
**Dr. V. Bojanowski -**  
**Dr. U. Jain - Lecturer**  
**Dr. A. McLean - Lecturer**  
**Dr. J. H. Wait - Lecturer**

**ST. MICHAEL'S HOSPITAL****Dr. E. Poulin – Surgeon-in-Chief****HEADS OF DIVISIONS****Dr. L. Errett – Cardiac Surgery****Dr. M. Burnstein – General Surgery****Dr. R. Moulton – Neurosurgery****Dr. E. Schemitsch – Orthopaedic Surgery****Dr. J. Mahoney – Plastic Surgery****Dr. J. Honey – Urology****Dr. M. Ameli – Vascular Surgery**

It was April 6, 1998 when the Programs and Services of The Wellesley-Central Hospital were formally transferred to the St. Michael's Hospital in accordance with the Ontario Health Services Restructuring Commission's direction. On July 18, 2001 the current and former staff of the The Wellesley-Central Hospital and the St. Michael's Hospital commemorated the official closing of The Wellesley-Central Hospital on the front lawn of the site. This celebration honoured the end of an era and an important part of Toronto's history.

As part of this process, over twenty major renovation projects are still underway at the Bond Street site at the St. Michael's Hospital. More importantly, an additional four new floors to the Victoria Wing are almost completed. Two state-of-the-art minimally invasive surgery operating theatres should be ready for Labour Day 2001 and the construction of five new operating rooms for a separate ambulatory surgery service has commenced.

One of the most significant events has been the selection of Dr. Arthur Slutsky as Vice-President of Research at the St. Michael's Hospital. After a long external review process, the St. Michael's Hospital has elected to focus its area of research in Inner City Health, Critical Care and Clinical Epidemiology: All of which are aligned with the directions of the Institute and strategic plan of the hospital. This

reaffirms the hospital's commitment to research as an organizational priority.

Some of Department's personal accomplishments this year at the St. Michael's Hospital included: Dr. John Bohnen was cross-appointed to the Department of Health Administration at the University of Toronto. Dr. Robin Richards is President of the Canadian Orthopaedic Research Society and Secretary of the Canadian Orthopaedic Association. At the end of this academic year, he was also selected to become Surgeon-in-Chief at the Sunnybrook and Women's College Health Sciences Centre. Dr. Tim Daniels has been appointed as Associate Editor of the Journal of Foot and Ankle International. Dr. Lee Errett, Division of Cardiac Surgery, was named Honorary Professor, Shandong Jinan University, Province of China.

The addition of The Wellesley-Central Hospital clinical programs to the St. Michael's Hospital programs has already had a very positive affect on the academic productivity of the members of the Department of Surgery. The future is bright for the St. Michael's Hospital: The recent alignment of research priorities with the programmatic structure of the hospital bodes well for the future. The St. Michael's Hospital has great plans for its academic future and not withstanding the usual political and fiscal crises in health care, the members of the Department of Surgery are looking forward to these developments.

#### **DIVISION OF CARDIAC SURGERY**

**Dr. D. Bonneau - Associate Professor**  
**Dr. D. Courtman – Assistant Professor**  
**Dr. L.E. Errett - Assistant Professor (*Division Head*)**  
**Dr. Y. LeClerc - Assistant Professor**  
**Dr. J.K.Y. Yao - Assistant Professor**

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Errett LE:** Shandong Provincial Qianfoshan Hospital, Shangdong, China, April 2001. (1) Beating heart surgery, (2) Cardiac angiogenesis.

**Errett LE:** Young Surgeon's Meeting, Huatulco, Mexico, February 2001. (1) Beating heart surgery, (2) Cardiac angiogenesis.

**Errett LE:** Regina Cardiac Society, Regina, Saskatchewan, September 2000. (1) Beating heart surgery: Is it complete?, (2) Socio-economic status is a risk factor in cardiac surgery even in a universal comprehensive health care system.

**Errett LE:** Queen's University Caribbean Cruise, Caribbean, February 2001. (1) Gene therapy and coronary artery disease, (2) Panel: Patient care in Canada and the United States.

**Errett LE:** Stikeman Visiting Professor, Montreal General Hospital, Montreal, Quebec, June 2001. Lessons learned in beating heart surgery: A review of 500 cases.

**Errett LE:** Samsung Medical Centre, Seoul, Korea, October 2000. New advances in mechanical valves.

**Errett LE:** Catholic Medical Centre, Seoul, Korea, October 2000. (1) New advances in mechanical valves, (2) Lessons learned in beating heart surgery, (3) Gene therapy in CABG.

**Errett LE:** National Heart Centre, Singapore, Malaysia, October 2000. (1) New advances in mechanical valves, (2) Topics learned in beating heart surgery, (3) Gene therapy in CABG, (4) The role of bioglue in cardiac surgery.

**Errett LE:** International Society of Cardio-thoracic Surgeons, Vancouver, British Columbia, August 2000. (1) Socioeconomic status is a risk factor in cardiac surgery even in a universal comprehensive healthcare system, (2) Staphylococcus aureus nasal carriage is a factor in sternal infection that can be treated.

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

An observational, prospective evaluation of the St. Jude Medical Regent heart valve. *Errett L, Bonneau D, Latter D: St. Jude Medical Incorporated* (\$150,000 1998 - 2001).

Arterial anastomotic remodeling. *Courtman D, Petrusek P: Heart and Stroke Foundation* (\$136,000 2000 - 2002).

Comparison of patient controlled sedation using either Remifentanyl or Propofol-Remifentanyl for lithotripsy. *Joo H, Errett L, Bonneau D, Latter D, Salasidis G, Leclerc Y: St. Michael's Hospital* (\$5,000 2001 - 2002).

Effect of Vasocare™ on regression of atherosclerosis: Phase II: The development of LDL receptor knock-out mouse and Watanabe heritable hyperlipidemic rabbit models for the investigation of a novel immune modulating therapy. *Courtman D: Vasogen Incorporated* (\$205,678 1999 - 2001).

Eutrophic vascular remodeling. *Courtman D, Stewart D: Heart and Stroke Foundation* (\$132,610 1999 - 2001).

Gene therapy: To assess the efficacy and safety of C1-1023 delivered through minimally invasive surgery versus maximum medical treatment in patients with severe angina, advanced coronary artery disease, and no options for revascularization. *Stewart D, Errett L, Latter D: Parke-Davis Pharmaceutical* (\$350,000 1999 - 2002).

Improving outcome in patients with severe ventricular dysfunction that undergo CABG's with complete nutritional supplement: Myovive. *Errett L, Jeejeebhoy F, Barr A, Freeman M, Hutchison S, Mazer D: Parke-Davis Pharmaceutical* (\$100,000 1999 - 2000).

Ischemia management with accupril post-bypass graft via inhibition of converting enzyme (IMAGINE): An evaluation of the effect of 12 to approximately 24 months' treatment with quinapril 40 mg QD post-CABG surgery on ischemic events. *Moe G, Latter D, Fitchett D, Errett L: Parke-Davis Pharmaceutical Research* (\$200,000 2000 - 2002).

Molecular epidemiology of aneurysm. *Lossing A, Errett L: Cellex-C* (\$1,000,000 1999 - 2002).

Octopus beating heart: The effects of cardiopulmonary bypass versus beating heart. *Errett L, Bonneau D, Latter D, Salasidis G, Leclerc Y: Medtronic Canada* (\$68,000 2001 - 2002).

The evaluation of tritium-coated sutures in vascular anastomotic remodeling. *Courtman D, Petrasek P: Atlanta Vascular Specialists* (\$9,472 2000).

The role of vasocare therapy in atherosclerotic progression and regression. *Courtman D, Errett L: Vasogen Incorporated* (\$150,000 1999 - 2000).

#### **DIVISION OF GENERAL SURGERY**

**Dr. J. Ali - Professor**  
**Dr. J.M.A. Bohnen - Associate Professor**  
**Dr. M.J. Burnstein - Associate Professor (Division Head)**  
**Dr. D. Currie - Associate Professor**  
**Dr. J. Koo - Associate Professor**  
**Dr. T.S. Lau - Lecturer**  
**Dr. L.J. Mahoney - Associate Professor**  
**Dr. J. Mamazza - Assistant Professor**  
**Dr. R.A. Mustard - Assistant Professor**  
**Dr. E.C. Poulin - Professor**  
**Dr. C.M. Schlacta - Lecturer**

#### **PUBLICATIONS**

**Ali J, Gana TJ, Howard M:** Trauma manikin assessment of management skills of surgical residents after advanced trauma life support. *Journal of Surgical Research*: September 2000: 93: pp 197-200.

**Battaglia DM, Fournasier VL, Mamazza J:** Gallstone in abdominal wall: A complication of laparoscopic cholecystectomy. *Surgical Laparoscopy, Endoscopy and Percutaneous Techniques*: November 2000: 11(1): pp 50-52.

**Bohnen JMA:** Antibiotics in hernia surgery. In: *Abdominal Wall Hernias: Principles and Management* (Bendavid R, eds). Springer-Verlag, New York: 2001: pp 203-209.



**Bohnen JMA:** Antibiotics in surgery: Evidence of anecdote? In: Evidence-based Surgery (Holzheimer RG, Fingerhut A, eds). Springer-Verlag, New York: 2001: pp 123-129.

**Bohnen JMA:** Peritonitis and intra-abdominal abscess. Current Treatment Options in Infectious Diseases: July 2000: 2: pp 307-315.

**Caddeau M, Schlachta CM, Poulin, EC, Seshadri P, Mamazza J:** Laparoscopic excision of retro-peritoneal tumors: Technique and review of the laparoscopic experience. Surgical Laparoscopy and Endoscopy: April 2001: 11: pp 144-147.

**Denstman F, Lowry A, Vernava A, Burnstein M, Fazio V, Glennon E, Hicks T, Hyman N, Kerner B, Kilkenny J, Moore R, Oliver G, Peters W, Ross T, Savoca P, Senatore P, Simmang C, Wong D:** Practice parameters for the prevention of venous thromboembolism. Diseases of the Colon and Rectum: August 2000: 43(8): pp 1037-1047.

**Hackam DJ, Ali J, Jastaniah S:** Effects of other intra-abdominal injuries on the diagnosis, management and outcome of small bowel trauma. Journal of Trauma: October 2000: 49(4): pp 606-610.

**McLeod RS, Geerts WH, Sniderman KW, Greenwood CM, Gregoire RC, Taylor BM, Silverman RE, Atkinson KW, Burnstein MJ, Marshall JC, Burul CJ, Anderson DR, Ross T, Wilson SR, Barton PM:** Randomized, double-blind comparison of subcutaneous heparin and low molecular weight heparin as thromboprophylaxis in patients undergoing colorectal surgery: Results of the Canadian colorectal DVT prophylaxis trial. Annals of Surgery: March 2001: 3: pp 438-444.

**Poulin EC, Mamazza J, Schlachta CM, Gregoire R, Seshadri PA:** Septic complications of elective laparoscopic colorectal resection. Surgical Endoscopy: February 2001: 15: pp 203-208.

**Poulin EC, Mamazza J, Schlachta CM, Seshadri PA:** Achalasia developing years after open surgery for reflux disease: Case reports, laparoscopic treatment and review of achalasia syndromes following antireflux surgery. Journal of Gastrointestinal Surgery: November 2000: 4: pp 626-631.

**Richard CS, Gregoire R, Plewes EA, Silverman R, Burul C, Buie D, Reznick R, Ross T, Burnstein M, O'Connor BI, Mukraj D, McLeod RS:** Internal sphincterotomy is superior to topical nitroglycerin in the treatment of chronic anal fissure: Results of a randomized controlled trial by the Canadian colorectal surgical trials group. *Diseases of the Colon and Rectum*: August 2000: 43(8): pp 1048-1058.

**Schlachta CM, Mamazza J, Seshadri PA, Cadeddu M, Poulin EC:** Defining a learning curve for laparoscopic colorectal resections. *Diseases of the Colon and Rectum*: February 2001: 44: pp 217-222.

**Schlachta CM, Mamazza J, Seshadri PA, Cadeddu M, Poulin EC:** Predicting conversions to open surgery in laparoscopic colorectal resections: A simple clinical model. *Surgical Endoscopy*: December 2000: 14: pp 1114-1117.

**Schlachta CM, Poulin EC, Mamazza J:** Peptic strictures of the esophagus. In: *Surgical Treatment: Evidence-based and Problem Oriented* (Holzeimer RG, Mannick JA, eds). Zuckschwerdt Verlag, New York: 2001: pp 34-38.

**Seshadri PA, Poulin EC, Schlachta CM, Cadeddu MO, Mamazza J:** Does a laparoscopic approach to total abdominal colectomy and procto-colectomy offer advantages? *Surgical Endoscopy*: May 2001: pp 22-26.

**Seshadri PA, Poulin EC, Mamazza J, Schlachta CM:** Needlescopic splenic decapsulation of an epithelial cyst. *Canadian Journal of Surgery*: August 2000: 43: pp 303-305.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Ali J:** Kingston University, Kingston, Jamaica, January 2001. Advanced trauma life support provider course.

**Ali J:** University of West Indies, Trinidad and Tobago, January 2001. Advanced trauma life support provider course.

**Bohnen JMA:** American College of Surgeons, Chicago, Illinois, October 2000. (1) Infection control in the operating room: Patient factors, (2) Prevention of surgical site infections: Antibiotic prophylaxis in clean cases.

**Bohnen JMA:** Surgical Infection Society, Snowbird, Utah, May 2001. Surgical Infection Society guidelines: Critique for anti-microbial agents in abdominal infections.

**Burnstein MJ:** American Society of Colon and Rectal Surgeons, San Diego, California, June 2001. Moderator: Poster session.

**Poulin EC:** Surgical Society of Newfoundland and Labrador, Cornerbrook, Newfoundland, March 2001. Controversies in the laparoscopic treatment of colorectal cancer.

**Poulin EC:** World Congress of High-Tech Medicine, Hanover, Germany, October 2000. Laparoscopic splenectomy for hematologic malignancy.

**Poulin EC:** Canadian Association of General Surgeons, Edmonton, Alberta, September 2000. Local recurrence after laparoscopic mesorectal resection for rectal adeno carcinoma.

**Poulin EC:** Royal College of Physicians and Surgeons of Canada/Society of Newfoundland and Labrador, Cornerbrook, Newfoundland, March 2001. Minimally invasive surgery: Past, present and future.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

A randomized, phase III clinical trial to compare sentinel node resection to conventional axillary dissection in clinically node-negative breast cancer patients. *Koo J, Mahoney L, Haq R, Murray D, Greyson D, McRitchie D, Ali J: National Surgical Adjuvant Breast Project (\$100,000 1999 - 2002).*

Evaluating the effectiveness of a two-year curriculum in a surgical centre: The future of surgical training. *Anastakis DJ, Brown M, Ali J, Hamstra S, Hutchison C, Murnaghan J, Regeher G, Reznick R: Physicians Services Incorporated Foundation (\$8,255,564 1998 - 2000).*

Laparoscopic versus open donor nephrectomy: A prospective cohort study of donor and graft outcomes. *Pace K, Mamazza J, Schlachta C, Stewart R, Honey J, Saltzman J: Kidney Foundation of Canada (\$93,958 2001 - 2003).*

Study of tamoxifen and raloxifene for the prevention of breast cancer: The STAR trial. *Koo J, Mahoney L, Haq R: National Surgical Adjuvant Breast Project/National Cancer Institute (\$600,000 1999 - 2004).*

#### **HONOURS RECEIVED**

**Poulin EC:** Appointed Honorary Member, Surgical Society of Newfoundland and Labrador. March 2001.

#### **DIVISION OF NEUROSURGERY**

**Dr. M.D. Cusimano - Associate Professor**  
**Dr. R.J. Moulton - Associate Professor (*Division Head*)**  
**Dr. P.J. Muller - Professor**  
**Dr. R.G. Perrin - Associate Professor**  
**Dr. H.S. Smyth - Assistant Professor**  
**Dr. W.S. Tucker - Associate Professor**

#### **PUBLICATIONS**

**Evans AJ, Fayaz I, Cusimano MD, Laperriere N, Bilbao JM:** Combined pleomorphic xanthoastrocytoma-ganglioglioma of the cerebellum. *Archives of Pathology and Laboratory Medicine:* November 2000: 124(11): pp 1707-1709.

**Gilbart M, Cusimano MD, Regehr G:** Evaluating surgical resident selection procedures. *American Journal of Surgery*: March 2001: 131(3): pp 221-225.

**Rothman AI; Cusimano MD:** A comparison of physician examiners', standardized patients', and communication experts' ratings of international medical graduates' English proficiency. *Academic Medicine*: December 2000: 75(12): pp 1206-1211.

**Rothman A; Cusimano MD:** Assessment of English proficiency in international medical graduates by physician examiners and standardized patients. *Medical Education*: June 2001: 35: pp 1-5.

**Southgate L, Hays RB, Norcini J, Mulholland H, Ayers B, Wooliscroft J, Cusimano M, Nikkarinen T, McAvoy P, Ainsworth M, Haist S, Campbell M:** Setting performance standards for medical practice. *Medical Education*: May 2001: 35(5): pp 474.

**Teng CJ, Bhalerao S, Lee Z, Farber J, Morris H, Foran T, Tucker W:** Case study: The use of bupropion in the treatment of restlessness after a traumatic brain injury. *Brain Injury*: April 2001: 15(5): pp 463-467.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Cusimano MD:** Canadian Brain Injury Coalition, Vancouver, British Columbia, November 2000. An evaluation of the effectiveness of an injury prevention initiative.

**Cusimano MD:** Expo 2000, Hanover, Germany, July 2000. *Medicine meets the millennium: Neurosurgery in Canada*.

**Cusimano MD:** People to People Neurosurgery Ambassador Program, Harare, Zimbabwe, October 2000. *Neurosurgery of cerebral tumors*.

**Cusimano MD:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. (1) Surgical approaches to the lateral skull base, (2) The assessment of knowledge regarding injury prevention in grade one students.

**Cusimano MD:** Association of Neurological Surgeons, Toronto, Ontario, April 2001. Sustained effectiveness of the Think First for Kids Program.

**Cusimano MD:** Joint Conference on the Prevention of Injury and Impaired Driving, Toronto, Ontario, February 2001. The think first for kids evaluation study: How injury prevention initiatives effectively coordinate health and education resources.

**Muller PJ:** European Optical Society, Amsterdam, The Netherlands, July 2000. (1) Clinical trials of photodynamic therapy of malignant brain tumors, (2) Intra-operative neurosurgical fluorescence imaging and spectroscopy.

**Muller PJ:** Barrow Neurological Institute, Phoenix, Arizona, May 2001. Photodynamic therapy and detection of brain tumors.

**Muller PJ:** DUSA PDT Brain Tumor Study Group, New York, New York, April 2001. Photodynamic therapy of brain tumors: A clinical review.

**Muller PJ:** American Cancer Treatment Center, Tulsa, Oklahoma, March 2001. Photodynamic therapy of brain tumors: Practice and clinical results.

**Perrin RG:** International Clinic of Neurological Surgery, New Delhi, India, October 2000. Cervical cordotomy.

**Perrin RG:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. Management of primary and metastatic vertebral column neoplasms.

**Perrin RG:** National Neuroscience Centre, Calcutta, India, October 2000. (1) Management of spinal metastasis, (2) Metastatic lesions of the cervical spine, (3) Neurosurgical management of pain and spasticity.

**Perrin RG:** Hospital des Spec. Rabats-Instituts, Rabat, Morocco, February 2001. (1) Stroke: An overview, (2) Stroke studies: An analysis of stroke treatment options, (3) Carotid endarterectomy: Techniques and complications.

**Perrin RG:** Indo-Canadian Continuing Medical Education, Agra, India, October 2000. Surgical management of degenerative spinal disease.

**Tucker WS:** Heart and Stroke Clinical Update, Toronto, Ontario, December 2000. Sentinel headaches and management of cerebral aneurysm.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

A feasibility study for a neurotrauma surveillance database in Ontario. *Tator C, Cusimano M, Verrier M, Walker J, Williams J, McLellan B: Ontario Neurotrauma Foundation (\$71,600 1999 - 2000).*

An analysis and dissemination of current neurotrauma incidence and causal data in Ontario. *Walker J, Williams J, Chipman M, Cusimano M, McLellan B, Simson H, Tator C, Verrier M: Ontario Neurotrauma Foundation (\$49,665 1999 - 2000).*

Cerebral auto-regulation in severe head injury. *Moulton RJ: Ontario Neurotrauma Initiative (\$25,000 1998 - 2000).*

How effective is an injury prevention program at lessening injuries in children?: Phase 1 of a case-control study. *Cusimano M, Chipman M, Kalnins I, Freedman B, McRae A: St. Michael's Hospital Foundation (\$9,630 2000 - 2002).*

Photodynamic therapy: Basic and clinical science studies and prospective clinical trials in the use of photodynamic therapy (PDT) for the treatment of malignant brain tumors. *Muller PJ, Hetzel F, Chopp M, Hitchcock M, Patterson M, Singh G, Wilson B: National Institutes of Health (\$6,641,179 1997 - 2003).*

Smart hockey brain and spinal cord injury program. *Tator C, Cusimano MD, Amendola A, Burke C: JOFA Sports (\$100,000 2001).*

Specification of the visual-spatial abilities relevant to surgical training. *Hamstra, S, Anastakis D, Cusimano M, Caminiti M, Matsumoto E: Physicians Services Incorporated Foundation (\$23,200 2000 - 2001).*

Stress reaction of the neurosurgical patient: Protein catabolism and cerebral salt wasting in the neurosurgical care unit. *Singh S, Cusimano MD, Halperin M: Physicians Services Incorporated Foundation* (\$13,000 1999 - 2001).

The development and validation of an assessment of communicative competence in physicians. *Cusimano MD, Rothman A, Bilan S, Cuttress L, Keystone J: Medical Research Council of Canada* (\$19,300 1997 - 2001).

#### **DIVISION OF ORTHOPAEDIC SURGERY**

**Dr. E.R. Bogoch - Professor**  
**Dr. T.R. Daniels - Assistant Professor**  
**Dr. D.E. Hastings - Professor**  
**Dr. R.J. McBroom - Assistant Professor**  
**Dr. M.D. McKee - Assistant Professor**  
**Dr. R.R. Richards - Professor**  
**Dr. E.H. Schemitsch - Associate Professor (*Division Head*)**  
**Dr. J.P. Waddell - Professor**

#### **PUBLICATIONS**

**Bhandari M, Guyatt G, Swiontkowski M, Schemitsch EH:**

Treatment of open fractures of the tibial shaft. *Journal of Bone and Joint Surgery: January 2001: 83B(1): pp 62-68.*

**Byrick R, Korley RE, Schemitsch EH, McKee MD:** Prolonged coma after unreamed, locked nailing of femoral shaft fracture.

*Anesthesiology: January 2001: 94: pp 163-165.*

**Daniels TR:** Treatment of diabetic foot ulcers. *Nature Medicine Canada: August 2000: 3(3): pp 134-139.*

**El Maraghy AW, Nousianen M, Richards RR, Schemitsch EH:**

The influence of number of cortices on the stiffness of plate fixation in constructs diaphyseal fractures. *Journal of Orthopaedic Trauma: April 2001: 15: pp 186-191.*



**Hall J, Schemitsch EH, McKee MD:** Use of a hinged external fixator for elbow instability following severe distal humeral fracture. *Journal of Orthopaedic Trauma*: July 2000: 14(6): pp 442-445.

**Hall JA, McKee MD:** Total elbow arthroplasty for intra-articular fractures of the distal humerus. *Techniques in Orthopaedics*: November 2000: 15(2): pp 120-127.

**Hupel TM, Schemitsch EH, Aksenov SA, Waddell JP:** Blood flow changes to the proximal femur during total hip arthroplasty. *Canadian Journal of Surgery*: July 2000: 43(5): pp 359-364.

**Hupel TM, Weinberg JA, Aksenov SA, Schemitsch EH:** The effect of unreamed, limited reamed and standard reamed intra-medullary nailing on cortical bone porosity and new bone formation. *Journal of Orthopaedic Trauma*: January 2001: 15(1): pp 18-27.

**Jain R, Podworny N, Schemitsch EH:** *In vivo* assessment of second generation implantable laser Doppler flowmetry fibers for bone blood flow determination. *International Journal of Surgical Investigation*: July 2000: 2(2): pp 89-98.

**Jain R, Schemitsch EH, Waddell JP:** Cementless acetabular revision arthroplasty. *Canadian Journal of Surgery*: August 2000: 43(4): pp 269-274.

**Jain R, Schemitsch EH, Waddell JP:** Functional outcome after acetabular revision with roof reinforcement rings. *Canadian Journal of Surgery*: August 2000: 43(4): pp 276-282.

**Lau JTC, Daniels TD:** Outcomes following cheilectomy and interpositional arthroplasty in hallux rigidus. *Foot and Ankle International*: June 2001: 22(6): pp 123-125.

**Levesque J, Bogoch ER, Cooney B, Johnston B, Wright J:** Improving patient satisfaction with clinic time in an orthopaedic out-patient clinic. *Canadian Journal of Surgery*: December 2000: 143(6): pp 431-436.

**Lucas GL, Buhr BR, DeHaven KE, Engber WD, Greene WB, Johnson TR, Koval KJ, Lieberman JR, Osland JD, Pinzur MS, Tosi LL, Waddell JP:** General orthopaedics. In: *Essentials of Musculoskeletal Care, Second Edition* (Greene WB, DeHaven KE, Johnson TR, Lieberman JR, Lucas GL, Pfeffer GB, Snider RK, Wirth MA, eds). American Academy of Orthopaedic Surgeons, Rosemount: 2001: pp 3-102.

**Mahomed NN, Koo M, Levesque J, Lan S, Bogoch E:** Determinants and outcomes of in-patient versus home-based rehabilitation following elective hip and knee surgery. *Journal of Rheumatology*: July 2000: 27(7): pp 1753-1758.

**McKee MD, Waddell JP, Kudo PA, Schemitsch EH, Richards RR:** Osteonecrosis of the femoral head in men following short course cortico steroid therapy. *Canadian Medical Association Journal*: January 2001: 164(2): pp 205-206.

**McKee MD, Wilson TL, Winston L, Schemitsch EH, Richards RR:** Functional outcome following surgical treatment of intra-articular distal humeral fractures through a posterior approach. *Journal of Bone and Joint Surgery*: December 2000: 82A(12): pp 1701-1707.

**McKee MD, Yoo D:** The effect of surgery for rotator cuff disease on general health status. *Journal of Bone and Joint Surgery*: July 2000: 82A: pp 970-979.

**Moran EL, Fornasier VL, Bogoch ER:** Pamidronate prevents bone loss associated with carrageenan arthritis by reducing resorptive activity but not recruitment of osteoclasts. *Journal of Orthopaedic Research*: November 2000: 18(6): pp 873-881.

**Pysklywec MW, Moran EL, Bogoch ER:** Changes in cross-sectional geometry of the femoral metaphysics associated with inflammatory arthritis (EIA) are prevented by a bisphosphonate (zoledronate). *Journal of Orthopaedic Research*: September 2000: 18(5): pp 734-738.

**Schemitsch EH:** Evidence-based orthopaedics commentary: Retrograde reamed femoral nailing was no better than ante grade nailing. *Journal of Bone and Joint Surgery*: December 2000: 82A(12): pp 1808.

**Stiegelmar R, McKee MD, Waddell JP, Schemitsch EH:** Outcome of foot injuries in multiply injured patients. *Orthopaedic Clinics of North America Foot and Ankle Trauma*: January 2001: 32(1): pp 193-204.

**Stone NC, Daniels TR:** Midfoot and hindfoot arthrodesis in diabetic charcot arthropathy. *Canadian Journal of Surgery*: December 2000: 43(6): pp 449-455.

**Syed KA, Bogoch ER:** Integrated care pathways in hip fracture management: Demonstrated benefits are few. *Journal of Rheumatology*: July 2000: 27(9): pp 2071-2073.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Bogoch ER:** Regional Osteoporosis Board Meeting, Toronto, Ontario, March 2001. Orthopaedic perspective.

**Bogoch ER:** Association d'orthopedie, Montreal, Quebec, November 2000. (1) Anomalies osseuses dans l'arthrite rhumatoide: Signification dans le traitement chirurgical des pathologies du membre inferieur, (2) Les principes de traitement de l'arthrite rhumatoide du membre superieur.

**Bogoch ER:** Toronto Hand Interest Group, Toronto, Ontario, March 2001. Deformities of the fingers in rheumatoid arthritis.

**Bogoch ER:** Ontario Orthopaedic Association, Toronto, Ontario, November 2000. (1) Diagnosis and management of osteoporosis in orthopaedic practice, (2) Reconstruction of the hip and knee in juvenile rheumatoid arthritis.

**Bogoch ER:** Combined Meeting of the Orthopaedic Research Societies of the United States, Canada, Europe, Japan, Rhodes, Greece, June 2001. Osteoporosis.

**Bogoch ER:** Peterborough Rheumatology Update, Peterborough, Ontario, May 2001. Osteoporosis.

**Bogoch ER:** Proctor and Gamble, Toronto, Ontario, March 2001. Proctor and Gamble presentation.

**Daniels TR:** Foot and Ankle Symposium, Edmonton, Alberta, October 2000. (1) Evolution of the foot, (2) Talar fractures, (3) Ankle and subtalar instability, (4) Adolescent hallux valgus deformity.

**Daniels TR:** University of Saskatchewan, Saskatoon, Saskatchewan, August 2000. (1) Midfoot trauma, (2) Surgical management of Charcot arthropathy.

**Daniels TR:** American Academy of Orthopaedic Surgeons, Toronto, Ontario, September 2000. Lateral ankle stabilization.

**Daniels TR:** Canadian Orthopaedic Association, London, Ontario, June 2001. Course: Ankle arthrodesis versus ankle arthroplasty.

**Daniels TR:** Family Medicine Forum 2000, Ottawa, Ontario, October 2000. (1) Lower limb and foot care, (2) Common foot disorders: Conservative management.

**Daniels TR:** AO/ASIF Nursing Continuing Education, Toronto, Ontario, June 2001. (1) Co-Chair of basic course, (2) Internal fixation of foot and ankle fractures, (3) Review of mystery exercises.

**McKee MD:** American Academy of Orthopaedic Surgeons, Toronto, Ontario, September 2000. (1) Case presentations and discussion, (2) Fracture management in head injured patients, (3) Humeral shaft fracture, (4) Lab instructor, hands-on skills lab: Fracture of the calcaneus (5) Lab leader, hands-on skills lab: Fracture of the distal humerus.

**McKee MD:** Ontario Orthopaedic Association, Toronto, Ontario, November 2000. (1) Comminuted fractures of the distal humerus in the elderly, (2) Re-defining success in the treatment of clavicular fractures, (3) The surgeon's role in the treatment of proximal humeral fractures in the elderly.

**McKee MD:** Upper Extremity Update, Vail, Colorado, January 2001. (1) Coronoid fractures, (2) Debate: Cast treatment is best for scaphoid fractures, (3) Distal biceps rupture: One incision or two?, (4) Injuries of the acromio-clavicular joint.

**McKee MD:** Lower Extremity Trauma Update 2001, Whistler, British Columbia, February 2001. (1) Course chair, (2) Case discussion, (3) The role of bone graft substitutes.

**McKee MD:** Upper Extremity Trauma Update 2001, Whistler, British Columbia, February 2001. (1) Course chair, (2) Case discussions, (3) Elbow fracture dislocations, (4) Supracondylar fractures in the elderly: The role of TEA.

**McKee MD:** AO Principles of Fracture Management and Advanced Controversies in Fracture Care, Toronto, Ontario, November 2000. (1) Current status of re-combinant substitutes, (2) Failed upper diaphyseal fractures, (3) Fireside chat: Difficult upper extremity fractures, (4) Fracture dislocation of the elbow.

**McKee MD:** Orthopaedic Trauma Association Trauma Management Course, Calgary Alberta, July 2000. (1) Distal radial plating: Lab exercise, (2) Distal radius fractures, (3) Elbow fracture dislocation, (4) Group discussion leader: Upper extremity, (5) Hybrid fixation, (6) Tibial plateau lab exercise.

**McKee MD:** American Academy of Orthopaedic Surgeons, San Francisco, California, March 2001. Instructional course: Stable fixation for fractures of the upper extremity.

**McKee MD:** Workplace Safety and Insurance Board, Toronto, Ontario, January 2001. Lateral epicondylitis.

**McKee MD:** OP-1 Conference, Whistler, British Columbia, March 2001. The role of OP-1 in trauma: A randomized clinical trial in open tibial fractures.

**McKee MD:** Orthopaedic Trauma Association, San Antonio, Texas, October 2000. Upper extremity case presentations.

**Richards RR:** Jefferson Medical College/Hand Rehabilitation Foundation, Philadelphia, Pennsylvania, March 2001. (1) Measuring elbow outcomes, (2) Demonstrator: Elbow arthroscopy laboratory, (3) Moderator: Elbow pain in workers .

**Richards RR:** Brown University, Providence, Rhode Island, May 2001. An up-date on outcome assessment in the upper extremity.

**Richards RR:** Canadian Orthopaedic Association, Ottawa, Ontario, October 2000. Course: Treatment of avascular necrosis.

**Richards RR:** Alpha Club, Los Cabos, Mexico, February 2001. (1) Glenoid replacement in shoulder arthroplasty, (2) Treatment of proximal pole scaphoid non-unions by antegrade Herbert screw fixation and intercalary iliac crest bone grafting.

**Richards RR:** American Academy of Orthopaedic Surgeons, San Francisco, California, March 2001. Course: Traumatic injuries to the forearm and their adverse sequelae.

**Richards RR:** American Academy of Orthopaedic Surgeons, Toronto, Ontario, September 2000. (1) Techniques in shoulder surgery, (2) Clavicle fracture and nonunion, (3) Lab: a) Open rotator cuff and instability repairs, b) Total shoulder arthroplasty, (4) Is Glenoid replacement necessary?, (5) Shoulder trauma panel discussion: Arthroplasty.

**Richards RR:** Medico-Legal Society of Toronto, Toronto, Ontario, February 2001. Video surveillance in medico-legal cases.

**Schemitsch EH:** Orthopaedic Symposium: Emerging Trends, Whistler, British Columbia., February 2001. (1) Retrograde nailing, (2) Techniques of reaming the tibial shaft: Unreamed, reamed, minimally reamed.

**Schemitsch EH:** International Society for Fracture Repair, University of Tromso, Tromso, Norway, August 2000. (1) Blood flow in reamed and unreamed locked intra-medullary nailing, (2) Reamer design: Is it important?

**Schemitsch EH:** Orthopaedic Trauma Association Update Course, Calgary, Alberta, July 2000. Forearm fractures.

**Schemitsch EH:** Orthopaedic Trauma Association, San Antonio, Texas, October 2000. (1) Session moderator, (2) Paper discussant, (3) Symposium: Indirect reduction techniques.

**Schemitsch EH:** International Society for Fracture Repair, Hong Kong, September 2000. Association for the rational treatment of fractures.

**Schemitsch EH:** University of Montreal, Montreal, Quebec, November 2000. Visiting professor.

**Schemitsch EH:** University of Rochester, Rochester, New York, December 2000. Visiting professor.

**Waddell JP:** Arthritis Society Advocacy Train-the-Trainer Workshop, Toronto, Ontario, January 2001. (1) Orthopaedic care for arthritis patients, (2) The role of the bone and joint decade, (3) Advocacy: Orthopaedic surgery/bone and joint decade.

**Waddell JP:** Asian Association for Dynamic Osteosynthesis, Hong Kong, China, September 2000. Advances in prevention program education and training in orthopaedic trauma.

**Waddell JP:** Siriraj Hospital, Bangkok, Thailand, March 2001. (1) An advance course in revision hip arthroplasty, (2) Revision total hip replacement: Pitfalls and planning.

**Waddell JP:** International Society for Fracture Repair, Hong Kong, China, September 2000. Chair: ARTOF session.

**Waddell JP:** American Academy of Orthopaedic Surgeons, San Francisco, California, March 2001. (1) Course: The challenge of total hip replacement after pelvic osteotomy, (2) Course: Total hip replacement after inter-trochanteric osteotomy, (3) Chair: International surgeons' panel.

**Waddell JP:** Canadian Orthopaedic Association, London, Ontario, June 2001. Course: Trauma.

**Waddell JP:** Orthopaedic Trauma Association, Calgary, Alberta, July 2000. (1) Pelvic resuscitation: Case presentations and panel discussion, (2) Subtrochanteric fractures, (3) Supracondylar fractures: Surgical treatment.

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A multi-centre prospective randomized trial of conservative treatment versus plate fixation for displaced fractures of the clavicular shaft.

*McKee MD, Schemitsch EH: Division of Orthopaedic Surgery Research Committee. (\$10,000 2001 - 2002).*

A multi-centre prospective randomized trial of conservative treatment versus operative plate fixation for displaced fractures of the clavicular shaft. *McKee MD, Schemitsch EH: Canadian Orthopaedic Trauma Society/Orthopaedic Trauma Association* (\$30,000 2001 - 2003).

A multi-centre prospective randomized trial of open reduction and internal fixation versus total elbow arthroplasty for severe fractures of the distal humerus in elderly patients. *McKee MD, Schemitsch EH: Canadian Orthopaedic Trauma Society/American Orthopaedic Trauma Association* (\$30,000 2001 - 2003).

A randomized clinical trial comparing an antibiotic impregnated bone substitute to standard therapy in the treatment of chronic osteomyelitis. *McKee MD, Waddell JP, Schemitsch EH, Wild LM: Wright Medical Incorporated.* (\$60,000 2000).

A randomized trial comparing total elbow arthroplasty to open reduction, internal fixation for displaced intra-articular distal humeral fractures in the elderly. *McKee MD, Schemitsch EH, Kreder HJ: Zimmer Canada Incorporated* (\$20,000 2000 - 2002).

A randomized trial of internal fixation versus arthroplasty for displaced distal humeral fractures. *McKee MD, Schemitsch EH: Zimmer Canada Incorporated* (\$20,000 2000).

A randomized, prospective clinical trial of arthroplasty versus internal fixation for comminuted fractures of the distal humerus in elderly patients. *McKee MD: Canadian Orthopaedic Trauma Society/ Zimmer Canada Incorporated* (\$20,000 2001 - 2003).

A randomized, prospective clinical trial of arthroplasty versus internal fixation for comminuted fractures of the distal humerus in elderly patients. *McKee M: Canadian Orthopaedic Trauma Society/American Orthopaedic Trauma Association* (\$30,000 2001 - 2003).

A randomized, prospective clinical trial of operative versus conservative treatment for displaced mid-shaft fractures of the clavicle. *McKee MD: Canadian Orthopaedic Trauma Society/American Orthopaedic Trauma Association* (\$30,000 2001 - 2003).

An investigation of Osteoset T for the management of osteomyelitis in long bones. *Schemitsch EH, McKee MD: Wright Medical* (\$60,000 1999 - 2001).



An investigation of the effect of intra-medullary nail design on blood flow and strength of union in a tibia fracture model. *Schemitsch EH: St. Michael's Hospital Research Foundation* (\$10,000 1999 - 2000).

An investigation of the influence of fat embolism and hypotension on pulmonary pathophysiology. *Schemitsch EH, Richards RR: Orthopaedic Trauma Association* (\$90,000 1999 - 2000).

Assessment of biological reconstruction methods in repair of the devascularized canine tibia. *Schemitsch EH: Canadian Orthopaedic Foundation* (\$15,000 1999 - 2000).

Development of a trauma registry. *Schemitsch EH, McKee MD, Waddell JP: Smith and Nephew Richards*. (\$40,000 1997 - 2000).

Humeral shaft fractures: What are we doing and is it working? *Kreder HJ, McKee MD: Institute of Clinical and Evaluative Sciences* (\$10,000 2000 - 2002).

Identification of fragility fracture patients in two fracture clinics of the St. Michael's Hospital. *Bogoch ER, Josse R, Murray T: Merck Frosst Canada Incorporated* (\$50,000 1999 - 2000).

Immuno-assays and imaging for the analysis of synthesis and degradation of cartilage in vitro and in vivo. *Poole AR, Bogoch E, Cruz T, Fitzcharles MA, Hartmann N, Keystone, Laverty S, Menard H, Mort J, St-Pierre Y: Canadian Arthritis Network* (\$27,000 1999 - 2003).

Neuflex randomized clinical trial. *Bogoch ER: DePuy Canada* (\$60,000 1999 - 2001).

New quantitative imaging techniques for arthritis. *Foster S, Bogoch E, Buschmann M, Kirkley A, Holdsworth D, Poole AR, Webber C: Canadian Arthritis Network* (\$27,000 1999 - 2003).

Osteoclastic resorption in inflammatory arthritis: Mechanisms and pharmacological regulation. *Dixon J, Bogoch E, de Brum-Fernandes A, Heersche J, Sims S: Canadian Arthritis Network* (\$27,000 1998 - 2003).

Pilot study for a randomized controlled trial of standardized arthroscopic debridement protocol (SADP) versus total knee arthroplasty (TKA) for advanced knee osteoarthritis. *Mahomed N, Schemitsch EH, University of Toronto, Arthroplasty Committee: Division of Orthopaedic Surgery Research Committee. (\$10,000 2001 - 2002).*

Predictors of outcome following revision total hip arthroplasty. *Davis A, Gross AE, Agnidis Z, Badley E, Hutchinson C, Kreder H, Saleh K, Schemitsch EH, Szalai JP: Arthritis Society (\$64,783 1998 - 2001).*

Randomized trial of reamed versus non-reamed nails in tibial fractures. *Bhandari M, Guyatt G, Swiontkowski MF, Schemitsch EH: Orthopaedic Trauma Association (\$30,000 1999 - 2001).*

Randomized trial of reamed versus non-reamed nails in tibial fractures. *Guyatt G, Bhandari M, Walter S, Leighton R, Kreder H, Schemitsch EH, O'Brien B: Medical Research Council of Canada (\$90,988 2000).*

The effect of pulsatile irrigation on cortical bone blood flow and fracture healing: A canine study using laser Doppler flowmetry. *Schemitsch EH, Bhandari M: Division of Orthopaedic Surgery Research Committee (\$10,000 2001 - 2002).*

#### **HONOURS RECEIVED**

**McKee MD:** Best Poster, Orthopaedic Trauma Association, San Antonio, Texas, October 2000.

**McKee MD:** ABC Traveling Fellowship April-May 2001.

**McKee MD:** Best Poster, International Society for Fracture Repair, Hong Kong 2000 - September 2000.

**Schemitsch EH:** Best Paper Finalist, International Society for Fracture Repair, Hong Kong, September 2000.

**Schemitsch EH:** Best Poster, International Society for Fracture Repair, Hong Kong, September 2000.

**Schemitsch EH:** Best Poster, Orthopaedic Trauma Association, October 2000.

**Waddell JP:** Outstanding Achievement Award, University of Alberta, September 2000.

**DIVISION OF PLASTIC SURGERY**

**Dr. L.G. Douglas - Assistant Professor**  
**Dr. J.L. Mahoney - Associate Professor (*Division Head*)**  
**Dr. W.J. Peters - Professor of Surgery**

**PUBLICATIONS**

**Dvali LT, Dagum AB, Pang CY, Kerluke L, Catton P, Penock P, Mahoney JL:** Effect of radiation of skin expansion and skin flap viability in pigs: September 2000: 106(3): pp 624-629.

**Furst IM, Austin P, Pharoah M, Mahoney JL:** The use of computed tomography to define zygomatic complex position. *Journal of the American Association of Oral and Maxillofacial Surgeons*: January 2001: 59: pp 647-654.

**Lugowski SJ, Smith DC, Bonek H, Lugowski J, Peters W, Semple J:** Analysis of silicon in human tissues with special reference to silicone gel breast implants. *Journal of Trace Elements in Medicine and Biology*: August 2000: 14: pp 31-42.

**Peters WJ:** Halogen lamp burn to the penis: Case report. *Canadian Journal of Plastic Surgery*: December 2000: 8: pp 227-228.

**Peters WJ, Chiu B, Smith DC, Fornasier V, Lugowski SJ:** Silicone gel implant capsules and *Chlamydia* antigens. *Plastic and Reconstructive Surgery*: September 2000: 106: pp 225-226.

**Peters WJ, Smith DC, Lugowski SJ, Pritzker KPH, Holmyard D:** Calcification properties of saline-filled breast implants. *Plastic and Reconstructive Surgery*: February 2001: 107: pp 356-363.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Mahoney JL:** Ross Memorial Hospital, Lindsay, Ontario, October 2000. Soft tissue infections and fistulae.

**Mahoney JL:** Workplace Safety and Insurance Board, Toronto, Ontario, May 2001. The management of common hand fracture and dislocations.

**Mahoney JL:** K.C.I., Cobourg, Ontario, May 2001. V.A.C. therapy.

**Mahoney JL:** K.C.I., Stratford, Ontario, December 2000. Wound management: A surgical approach.

**Mahoney JL:** Ross Memorial Hospital, Peterborough, Ontario, November 2000. Wound management: A surgical approach.

**Peters WJ:** Canadian Society of Plastic Surgeons, Jasper, Alberta, June 2001. (1) Panel chair, (2) Calcification properties of saline-filled breast implants, (3) Failure of saline-filled breast implants: Presentation and prevalence.

**Peters WJ:** Canadian Society of Aesthetic Plastic Surgery, Montreal, Quebec, September 2000. Late complications after breast augmentation with silicone gel breast implants.

**Peters WJ:** Visiting Professor, University of Manitoba, Winnipeg, Manitoba, November 2000. (1) Problem cases in aesthetic plastic surgery, (2) Problems with breast implants, (3) Capsular calcification after silicone gel and saline-filled breast implants, (4) Late unilateral breast enlargement after silicone gel breast implants, (5) To explant or not: Considerations, (6) Complications after breast augmentation with silicone gel breast implants.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A cohort study of cancer, auto-immune disorders and other health outcomes in cosmetic breast implant patients. *Halowaty EJ, Baines CJ, Keystone EC, Peters WJ: Health Canada (\$1,010,000 1995 - 2001).*

Further studies on silicone-gel filled breast implants. *Smith DC, Boynton E, Fornasier V, Lugowski S, Peters WJ, Semple JL: Dow Corning Corporation* (\$256,000 1999 - 2002).

Microbiological studies related to silicone gel filled breast implants. *Smith DC, Burrows L, Boynton E, Esterby S, Khoury T, Fornasier V, Lugowski S, Peters WJ, Semple JL: Dow Corning Corporation* (\$124,000 2000 - 2004).

The influence of augmentation mammoplasty on lactation. *Peters WJ, Halowaty EJ, Maclean H, Ashbury F, Darlington G: Plastic Surgery Educational Foundation/American Society of Plastic and Reconstructive Surgery* (\$120,000 1998 - 2001).

#### **HONOURS RECEIVED**

**Peters WJ:** Elected to American Association of Plastic Surgeons, June 2001.

#### **DIVISION OF UROLOGY**

**Dr. R.J.D. Honey - Assistant Professor (*Division Head*)**

**Dr. A.G. Keresteci - Associate Professor**

**Dr. R.J. Stewart - Assistant Professor**

#### **PUBLICATIONS**

**Denstedt JD, Wollin TA, Sofer M, Nott L, Weir MJ, Honey RJ:** A prospective randomized controlled trial comparing non-stented versus stented ureteroscopic lithotripsy. *Journal of Urology*: May 2001: 165(5): pp 1419-1422.

**Honey RJ:** Report for the Ontario Ministry of Health and Long-Term Care: The treatment of kidney stones and ureteric stones: July 2000.

**Honey RJ, Weir MJ, Tariq N:** Electrode performance beyond the manufacturer's recommended life-span using the Dornier MFL 5000 Lithotripter. *Journal of Endourology*: April 2001: 15(3): pp 243-246.

**Pace KT, Weir MJ, Honey RJ, Tariq N:** Low success rate of subsequent shock wave lithotripsy for ureteral stones after failed initial treatment. *Journal of Urology*: December 2000: 164(6): pp 1905-1907.

**Pierratos A, Dharamsi N, Carr LK, Ibanez D, Jewett MAS, Honey RJ:** Higher urinary potassium is associated with stone growth following shock wave lithotripsy. *Journal of Urology*: November 2000: 164(5): pp 1486-1489.

**Weir MJ, Tariq N, Honey RJ:** Shock wave frequency affects fragmentation in a kidney stone model. *Journal of Endourology*: September 2000: 14(7): pp 547-550.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Honey RJD:** ROCK Society, Albany, New York, October 2000. Supra-costal percutaneous endorenal surgery.

#### **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Laparoscopic donor nephrectomy. *Pace K, Honey RJ: Northeastern Section of the American Urological Association* (\$14,000 1999 - 2001).

Laparoscopic versus open donor nephrectomy: A prospective cohort study of donor and graft outcomes. *Honey RJ, Pace KT, Stewart RS, Mamazza J, Poulin E, Schlachta C, Zaltzman J, McFarlane P, Prasad R: Kidney Foundation of Canada* (\$93,975 2001 - 2003).

Lithotripsy stone database development. *Honey RJ: St. Michael's Hospital Research Foundation* (\$8,800 2000 - 2001).

Open partial nephrectomy in a porcine model using the Holmium and Neodymium:Yag laser. *Honey J, Incze P: Coherent - AMT Incorporated* (\$15,000 1998 - 2001).

**SUNNYBROOK AND WOMEN'S COLLEGE  
HEALTH SCIENCES CENTRE**

**Dr. Bernard Goldman - Surgeon-in-Chief**

**HEADS OF DIVISIONS**

**Dr. S.E. Fremes – Cardiac Surgery**

**Dr. S. Hanna – General Surgery  
(Sunnybrook Campus)**

**Dr. T. Ross – General Surgery  
(Women's College Campus)**

**Dr. M. Schwartz – Neurosurgery**

**Dr. J. Cameron – Orthopaedic Surgery  
(Orthopaedic and Arthritic Campus)**

**Dr. T. Axelrod – Orthopaedic Surgery  
(Sunnybrook Campus)**

**Dr. J. Semple – Plastic Surgery**

**Dr. L. Klotz – Urology**

**Dr. R. Maggisano – Vascular Surgery**

**Introduction**

The Department of Surgery of the Sunnybrook and Women's College Health Sciences Centre is now fully integrated across its three campuses with some surgeons working at two sites, i.e. Orthopaedics, Plastics and Urology. An external review of the Department was conducted by Drs. Lazar Greenfield and Ken Harris prior to the search process for a new Surgeon-in-Chief. Dr. Robin Richards was selected and appointed to commence July 1, 2001. Shortfalls in anesthesia coverage result in cancelled operating lists at both the Sunnybrook and Orthopaedic and Arthritis campuses on occasion. Internal hospital restructuring has resulted in a focus on five clinical service priorities (musculoskeletal, trauma, cardiac, perinatal, gynaecology and cancer) and resources will be gradually re-allocated to serve those priorities. Traditional operating room management is to be re-configured and support services at all three sites. While there have been problems regarding undergraduate education (lack of PBL tutors, missed or re-

booked seminars), postgraduate resident training is considered a valuable experience at the Sunnybrook and Women's College Health Sciences Centre across all services. Re-organization and expansion of critical care as a hospital department, with increased level II capacity, is in progress.

#### **Academic Honors and Teaching Awards**

Dr. Sender Herschorn (Urology) was appointed Director of Continuing Professional Development for the University Department of Surgery and, more recently, appointed as Chair of the University Division of Urology. Dr. Peter Chu was designated as Clinical Clerkship Co-ordinator for the Sunnybrook campus. Dr. Lesley Carr assumed responsibility for maintenance of certification requirements for surgical staff. Drs. Terry Axelrod and Sender Herschorn have together been honored with the Peters-Boyd Academy Teaching Award for Clinical Teaching. Dr. Joel Fish was awarded the P.A.I.R.O. Award for Teaching Excellence for two of the past three years and, as well, was presented with the Arnis Freiberg Award in recognition of outstanding contributions to plastic surgery resident education. The A.W. Harrison Awards for Resident Teaching (selected by the clerks) were awarded to Drs. Melinda Musgrave, Brian Gilbert, Linda Dvali, Jakesh Suri, Ben Chew, Yasser Botros and Stephan Mostowy. Dr. Peeter Poldre received the Dr. Marvin Tile Distinguished Service Award of the Department of Surgery for his contributions to surgical education. Dr. Bernard Goldman received the Dr. Marvin Tile Award for his contributions to the Department of Surgery. Dr. Terry Axelrod assumed the position of Vice-Chair of the Royal College of Physicians and Surgeons of Canada Fellowship Examination Board in Orthopaedic Surgery. Dr. Ron Kodama received the prestigious Faculty Aitkins Award for Undergraduate Education. Dr. Sherif Hanna was appointed Head of Surgical Oncology at the Sunnybrook and Women's College Health Sciences Centre and the Toronto-Sunnybrook Regional Cancer Centre. Drs. Claire Holloway and Lavina Lickley played leading roles in the four-and-a-half million dollar C.F.I. grant for the multi-disciplinary Breast Cancer Research Centre. Dr. Carrie Whyne (Orthopaedics) received significant grants from C.F.I. and the Natural Sciences and Engineering Research Council. Dr. Jeffrey Fialkov (Plastic Surgery) received the Dean's Fund Competition for New Staff Grants Award from the Faculty Research Grants Committee, as well as the W.K. Lindsay Award in recognition of significant contributions to the nurturing of plastic surgery residents' research. Dr. Andrew Smith (General Surgery) has received the Dean's Fund Competition for New



Staff Grants Award and, as well, was Acting Director of Surgical Oncology during the past academic year. Dr. Sender Herschorn (Urology) won the 1999-2000 Division of Urology Award for the Best Resident Teacher, and Dr. Andrew Smith also received the Bio Chem Pharma Award from the Banting Research Foundation, as well as an Operating Grant from the Sunnybrook Trust for Medical Research. Dr. Lesley Carr successfully obtained funding for a Women's Pelvic Health Centre.

### **Cardiac Surgery**

The Division of Cardiac Surgery at the Sunnybrook and Women's College Health Sciences Centre has undergone major changes this past year, primarily due to the opening of a new non-academic cardiac surgical unit in Mississauga in November 2000. The Sunnybrook and Women's College Health Sciences Centre trained the Trillium Health Centre anesthetists, intensive care physicians and operating staff, and members of the Sunnybrook and Women's College Health Sciences Centre cardiac surgical team, including experienced operating room and ward nurses, perfusion technologists, nurse managers and nurse educators, anesthetists and intensivists echocardiography technologists, ward clerks and former secretaries transferred to the Trillium Health Centre. As well, two of the Sunnybrook and Women's College Health Sciences Centre cardiac surgeons, Drs. Gopal Bhatnagar and Charles Cutrara relocated to Mississauga. Dr. Bhatnagar was selected as the new Chief of the unit. We are confident that the experienced former Sunnybrook and Women's College Health Sciences Centre staff will ensure that the Trillium Health Centre matures into an independent cardiac unit very quickly.

It has been an enormous challenge to cope with all of these personnel changes to our cardiac surgical unit. In spite of this (as well as a reduction of one operating room day per week for budgetary reasons), we have been able to maintain our clinical volume. In fact, we completed 1,255 cases in the fiscal year 2000, which is more than any previous year, and approximately 50 more than the fiscal year 1999. This is a great tribute to all of the Sunnybrook and Women's College Health Sciences Centre staff.

The Division is very grateful to Drs. Avdesh Mathur (Sudbury) and David Latter (St. Michael's Hospital) for their contributions to Sunnybrook and Women's College Health Sciences Centre's clinical program. We have also had the pleasure of bringing Dr. Shalom

Silberman, a former fellow, who is currently a practising cardiac surgeon in Jerusalem, to work at the Sunnybrook and Women's College Health Sciences Centre for the month of May.

The Division has been very active in the supervision of graduate students this past year. Dr. Fremes is the primary supervisor of one research fellow from the Toronto program, Dr. Hari Mallidi, who is doing clinical studies on arterial revascularization towards his M.Sc./Ph.D. Dr. Fremes is on the thesis committees of four other students. Two students, Dr. Gideon Cohen and Joan Ivanov R.N. M.Sc., successfully defended their Ph.D. thesis this past year, while the other two students, Dr. Paul Fedak and Dr. Jennifer Sargeant, both from the cardiac program, are in the first year of their graduate work.

The Division has been very successful scholastically this past year. Dr. Christakis has been an invited speaker at a symposium of the American College of Chest Physicians concerning stentless aortic valves. He has presented papers at both the Society of Thoracic Surgeons and the American Association of Thoracic Surgeons meetings concerning left ventricular mass regression following aortic valve replacement and the results of a randomized trial comparing stentless and stented aortic valves, and is invited to present at a plenary session of the American Heart Association in November 2001. As well, the results of the multi-centre insulin cardioplegia trial were presented at the American Association of Thoracic Surgeons. Dr. Fremes was invited to speak at a plenary session of the American Heart Association about the state of the art of coronary surgery in November 2000. His work about the intensive care unit stay and the long-term effects following warm cardioplegia were presented at the Canadian Cardiovascular Society and the American Heart Association. Dr. Fremes was an internal reviewer for the Heart and Stroke Foundation of Canada and an invited reviewer for the Department of Veterans' Affairs.

Sunnybrook and Women's College Health Sciences Centre is one of two sites in Canada for the clinical evaluation of a new device to perform intra-operative angiography using fluorescent dye. Dr. Fremes is a co-applicant of a successful multi-disciplinary health research grant by Jack Tu for evaluation of report card medicine.

Each of the members of the Division has had significant administrative roles this past year. Dr. Goldman is completing his term as Surgeon-in-Chief at the Sunnybrook and Women's College Health Sciences Centre. Dr. Christakis has had multiple hospital responsibilities as

Head of SHUTC. Dr. Fremes was appointed Division Head of Cardiac Surgery at Sunnybrook and Women's College Health Sciences Centre in January 2000. Dr. Fremes has also been Acting Chair of the University Division of Cardiac Surgery since September 2000 as Dr. Weisel is on a medical leave-of-absence. The residency program was reviewed April 2001 and granted full approval. Dr. Fremes has recently been re-appointed Medical Director of the Cardiovascular Intensive Care Unit.

The Division of Cardiac Surgery has gone through some difficult transitions this past year. We are in a process of rebuilding, which will allow the Division to achieve even greater clinical and academic success in the upcoming years.

### **General Surgery**

General Surgery at the Sunnybrook Campus continued its focus on trauma and oncology. In the area of trauma, our Program was strengthened by the recruitment of Dr. Peter Chu on July 1, 2000 and by the appointment of Dr. Fred Brenneman as the Vice-President of the Trauma Program, effective July 1, 2000. Dr. Chu has contributed greatly to undergraduate education and he is the Sunnybrook Clerkship Co-ordinator. Dr. Chu has also been involved with the Office of International Health and spent two months (January and February 2001) in Galmi Hospital in Niger, West Africa. Drs. Hensley Miller and Sherif Hanna continued to support the Trauma Program.

Within oncology there is a continued focus on breast cancer and GI cancers, especially hepatobiliary malignancies and colorectal cancer. Dr. Andrew Smith was appointed Acting Head of Surgical Oncology at Sunnybrook and Women's College Health Sciences Centre and the Toronto-Sunnybrook Regional Cancer Centre on January 1, 2001. Plans are underway to recruit additional surgical oncologists, one in hepatobiliary and GI, and one in breast cancer. At the Canadian Society of Clinical Oncology meeting in April 2001, there was a strong academic input from the Surgical Oncology group at the Sunnybrook and Women's College Health Sciences Centre where one-third of all the papers were presented by our group.

The Surgical Flow Through Unit (level II care) has been successful over the past year in caring for critically ill patients. The Medical Director of this unit is Dr. Sherif Hanna and he is assisted in this task by Drs. Andrew Smith and Hensley Miller.

Dr. Sherif Hanna was an Invited Professor to Nanjing, China to teach modern techniques of liver surgery.

We have also become one of two sites of training for the University of Toronto Fellowship Training Program for general surgical oncology.

The general surgical group at the Women's College Campus continued their excellent work focusing on women's health issues, especially breast cancer. Drs. Lavina Lickley and Claire Holloway published papers and held research grants in breast cancer. Dr. Ted Ross focused on colorectal surgery and sphincter reconstruction for post-partum injury to the rectal sphincter. Dr. George Hiraki received excellent ratings for his undergraduate teaching. On April 1, 2001, the Emergency Department at the Women's College Campus became an Ambulatory Urgent Centre.

### **Neurosurgery**

The Division of Neurosurgery has been active in four out of the five Clinical Priorities Services at the Sunnybrook and Women's College Health Sciences Centre. In the Trauma Clinical Service Priority, nearly 500 surgical procedures were carried out and a number of scientific publications on various aspects of trauma were produced. Dr. Mahmood Fazl co-authored a textbook chapter on cranioplasty in collaboration with the plastic surgeons. Dr. Michael Schwartz was a collaborator on publications regarding the acute management of traumatic brain injury (hypothermia) and aspects of behavior following significant brain injuries. He also made invited presentations to the American College of Surgeons meeting regarding mild head injury and to the Ontario Trial Lawyers Association regarding the sequelae of spinal cord injury.

Dr. David Houlden was successful in securing peer-reviewed funding to evaluate somatosensory evoked potentials in predicting the outcome in comatose patients with brain injuries. Dr. Rajiv Midha was the principal author of a basic science research publication regarding rat nerve allografts for peripheral nerve injury and was successful as the principal investigator in obtaining peer-reviewed funding for research in this area. He and Dr. Schwartz were collaborators with imaging research and were successful in obtaining peer-reviewed funding to study behavioral changes in patients after traumatic brain injury.

In the Musculoskeletal Clinical Service Priority, the Division of

Neurosurgery was clinically active in spinal surgery, with nearly 400 patients operated upon. Dr. Houlden made presentations to the American Association of Neurological Surgeons and the Fifth International Neurotrauma Symposium regarding monitoring of patients undergoing spinal surgery using neurophysiological methods. Dr. Midha was a collaborator on a publication regarding diastematomyelia.

In the Oncology Clinical Service Priority, Neurosurgery was active, undertaking more than 300 operations for cancer. Dr. David Rowed was the co-principal author of a publication on cerebrospinal fluid leaks in acoustic neuroma surgery and Dr. Schwartz had a poster comparing fractionated versus single-dose radiosurgery for vestibular schwannomas at the American Association of Neurological Surgeons annual meeting.

The Division of Neurosurgery was also active in the Cardiac and Vascular Clinical Service Priority with a total of more than 100 cerebrovascular procedures. Dr. Schwartz was a collaborator on a publication regarding the management of unruptured intracranial aneurysms and presented a novel method of MR angiography for radiosurgery planning in the treatment of brain arteriovenous malformations to the Society de Neurochirurgie de langue francaise.

Overall, this has been an active year for the Division of Neurosurgery. We look forward to a bright academic future at the Sunnybrook and Women's College Health Sciences Centre for our Division.

### **Orthopaedic Surgery (Sunnybrook Campus)**

The combined divisions of Orthopaedic Surgery at the Orthopaedic and Arthritic Campus and the Sunnybrook Campus have officially merged into the Orthopaedic and Arthritic Institute, the official title of the Musculoskeletal Program of the Sunnybrook and Women's College Health Sciences Centre. Dr. Terry Axelrod was appointed Head of the Combined Division. Dr. John Cameron remains Vice-President of the Musculoskeletal Program.

As a maturation of the amalgamation process continues, we have moved towards shared elective operating time at both sites, combined teaching and education rounds and research endeavors.

All members of the Sunnybrook Campus served as co-chairs of the

Biannual Toronto AO Principles of Fracture Management and the Advanced Controversies in Fracture Care courses in November. The course, as usual, was an outstanding success.

Dr. David Stephen also co-chaired the Contemporary Concepts of Trauma Care Program in Whistler, British Columbia in May.

Dr. Hans Kreder and colleagues were the recipients of multiple research awards in their endeavors to analyze the outcomes of orthopaedic and trauma surgery.

Dr. Joel Finkelstein has continued to build up the already extensive database in spine trauma significantly, serving as a basis for analysis of treatment rendered. In the Biomechanics Laboratory there is an ongoing evaluation of a dynamic cervical spine plate fixation system and of percutaneous vertebroplasty. Dr. Finkelstein has established the University of Toronto Greater Toronto Area Spine Interest Group, which brings together academic and community orthopaedic surgeons and neurosurgeons with a special interest in spine.

Dr. Joseph Schatzker was the invited guest of the Argentinian Orthopaedic Trauma Association, the Polish Orthopaedic and Trauma Society, the Italian Society of Orthopaedic Surgery and Traumatology, the Finnish Society for Orthopaedics and Traumatology, the Polish Orthopaedic Society and the University of Lviv in the Ukraine. Dr. Schatzker was honored as the First Howard Rosen Memorial Lecturer at the Hospital for Joint Diseases in February. Dr. Schatzker was made an honorary member of the Polish and of the Finnish Orthopaedic and Trauma Associations.

Dr. Marvin Tile continues in his active role as Chair of the Sunnybrook Foundation, now in his final term.

### **Orthopaedic Surgery (Orthopaedic and Arthritic Campus)**

The Orthopaedic and Arthritic Campus is involved in undergraduate and postgraduate training programs. These focus on clinical fellowship training, orthopaedic electives for family practice residents, and continuing education for practicing orthopaedic surgeons. Prior to the amalgamation, there was no formal involvement in the University of Toronto Orthopaedic Residency Training Program. One of the faculty, Dr. John Murnaghan, holds a Master's degree, which focused on priorities in undergraduate orthopaedic education.

Efforts are underway to expand undergraduate teaching activities through participation in the undergraduate curriculum (ASCM teaching and clerkship seminars) and by offering focused electives in the undergraduate calendar. Effective July 2000, orthopaedic residents have the opportunity to undertake the final year elective at the Orthopaedic and Arthritic Campus. The Institute is pursuing the establishment of focused training for orthopaedic residents in arthroscopic surgical techniques. Dr. Hamilton Hall, Head of the University of Toronto Spine Service, is leading the development of an integrated service within the Sunnybrook and Women's College Health Sciences Centre and the University. City-Wide Spine Rounds and integrated orthopaedic surgery/neurosurgery Spine Rounds at the Orthopaedic and Arthritic Campus have been initiated. The Spine Learning Centre continues to offer focused two-day workshops in advanced spinal surgery techniques that combine didactic lectures, case presentations/discussion and cadaveric sessions. The Centre offers four to six courses a year, which are attended by surgeons from throughout North America. To support the Maintenance of Certification Program of the Royal College, the Orthopaedic and Arthritic Campus has established a three to five day mini fellowship in Joint Replacement/Revision Surgery that is consistent with the self-directed learning category. In addition, internal teaching rounds have been reformatted to meet the requirements of the Self-Accreditation Program.

### **Plastic Surgery**

The Division of Plastic Surgery at the Sunnybrook and Women's College Health Sciences Centre has had a very productive year in research, teaching and clinical activities. The Division of Plastic Surgery continues to fully participate in and support trauma, oncology and musculoskeletal programs. The Ross Tilley Burn Centre continues to rise as a leader in treatment of burn care, as well as in research. This year the Ross Tilley Burn Centre had the highest number of abstract submissions to the American Burn Association from a single institution. The Craniofacial Centre is now the largest adult craniofacial centre in Canada. It also has established itself as a significant resource for the entire province of Ontario. Under the direction of Dr. Antonyshyn, both he and Dr. Jeff Fialkov continue with innovative research including imaging technology and tissue engineering.

The Advanced Regenerative Tissue Engineering Centre has been established at the Sunnybrook and Women's College Health Sciences

Centre and the University of Toronto, Department of Chemical Engineering and the Institute of Biomaterials and Biomedical Engineering. Our goal is to become the leading tissue engineering and regeneration research group in North America by providing a unique opportunity to integrate basics applied in clinical research to solve major issues in burns, trauma and soft tissue reconstruction from cancer ablation. Our industrial clinical and principal investigators will develop new materials and therapeutic strategies for use in soft tissue reconstruction and regeneration. New technology will be rapidly introduced into the clinical area as in the hospital focus of transitional medicine. The outcomes will be significantly enhanced patient quality-of-life, development of world class new researchers and the creation of high skill jobs in Ontario through stimulation of technology and development in the private and health care sectors.

We have been successful in securing industry funding and are expecting the results of a pending Ontario Research Development Challenge Fund application in the very near future. The principals in this Centre are Dr. John Semple, Director, Dr. Kim Woodhouse, Associate Director, Dr. Jeff Fialkov, Principal Investigator, Dr. Joel Fish, Principal Investigator, Dr. Rajiv Midha, Principal Investigator.

### **Surgical Oncology**

Within the Gastrointestinal Site Group, we are moving towards a state of having a critical mass of academically oriented surgeons. The last year, significant momentum was gained by creation of a Surgical Oncology Research Group. The effect of this was seen at the recent Canadian Society of Surgical Oncology meeting where five presentations had complete or partial authorship from the Sunnybrook and Women's College Health Sciences Centre investigators. Additionally, the colorectal cancer database continues to flourish and will start to bear fruit. Finally, an extensive effort has been made to expand Continuing Medical Education efforts, which is highlighted by TORSO (Toronto Surgical Oncology Rounds), which is co-ordinated from the Sunnybrook and Women's College Health Sciences Centre. This has been embraced by Cancer Care Ontario as the official "voice of surgical oncology" in this area. Additionally, we are major participants in the training of surgical oncology fellows for the University of Toronto Surgical Oncology Program.



**Trauma (Including the Burn Unit)**

The Trauma Program at the Sunnybrook and Women's College Health Sciences Centre opened twenty-five years ago and continues to be the largest trauma unit in Canada, managing over 900 severely injured patients last year. The Trauma Program serves the greater Toronto area and south central Ontario, but is looked upon by physicians across Ontario, the public, and the Ministry of Health as the leader in trauma care for the province. In fact, many of the most severely injured trauma patients are sent from other geographic regions to the Sunnybrook and Women's College Health Sciences Centre for management of complex pelvic ring and acetabular fractures, craniofacial reconstruction (Division of Plastic Surgery), peripheral nerve injuries, head injuries, spinal fractures, penetrating trauma and aortic disruptions, to name a few. The Trauma Program also provides leadership in trauma care, both nationally and internationally. Educational experiences and research opportunities attract students, residents and fellows.

The Trauma Program is multi-disciplinary and involves members of numerous departments beyond Surgery including Emergency Medicine and Anesthesia, and all divisions within the Department of Surgery. Dr. Peter Chu, a trauma general surgeon, started at the Sunnybrook and Women's College Health Sciences Centre in July 2000. He has an academic interest in undergraduate and postgraduate teaching, as well as international health. Recruitment in orthopaedics and neurosurgery will further enhance the clinical and academic profile of the Trauma Program. The Sunnybrook and Women's College Health Sciences Centre Trauma Program was well represented at the recent joint meeting of the Trauma Association of Canada and the Australasian Trauma Society in Sydney, Australia, held in March 2001. Sunnybrook and Women's College Health Sciences Centre's researchers presented six research papers and gave three invited talks.

The Second Annual Sunnybrook and Women's College Health Sciences Centre Trauma Nursing Conference was held on February 21, 2001. The one-day conference attracted 200 nurses from both the Sunnybrook Trauma Program and from across the province.

The Ross Tilley Burn Centre at the Sunnybrook and Women's College Health Sciences Centre is an important component of the Trauma Program and is the largest burn unit in Canada, responsible for caring for 90% of all major burn injuries in the province of Ontario. The Burn Unit provides acute resuscitation, critical care, and rehabilitative and

reconstructive care to burn patients. Led by Dr. Joel Fish, the clinical care, educational experiences and research productivity is unmatched in this country. The Ross Tilley Burn Centre provides learning opportunities not only for its University of Toronto students, but also for academic centres provincially, nationally and internationally. Dr. Massey Beveridge is a new recruit to the Burn Program. His interests include international health, a new focus at the University of Toronto. The Trauma Program has considerable expertise in the development, implementation, and management of trauma injury prevention programs, and the inclusion of a comprehensive burn injury prevention initiative is in keeping with this focus.

### **Urology**

Members of the Division of Urology continued to demonstrate strong academic productivity. Dr. Laurence Klotz, Division Head, is active in national and international cancer organizations. He is Chair of the Canadian Uro-Oncology Group, the National Cancer Institute of Canada GU Group, and the Global GU Group. He is the Editor-in-Chief of the Canadian Journal of Urology, which was indexed this year by Index Medicus. He is the principle investigator on several national and international trials in prostate cancer. He has a peer-reviewed research grant from the Prostate Cancer Research Foundation of Canada to continue his studies of cell cycle regulation in prostate cancer in the laboratory. This year he founded the Canadian Urology Research Consortium of which he is the Chair. Dr. Lesley Carr has been successful in obtaining funding for a Women's Pelvic Health Centre at the Sunnybrook and Women's College Health Sciences Centre. This novel centre will offer comprehensive, multi-disciplinary and complementary therapy, and have a major research focus. Dr. Neil Fleshner continued his leadership in prostate cancer prevention. He is the principle investigator for an international trial of micronutrients in prostate cancer prevention, and collaborates with Dr. Klotz in the study of the effect of micronutrients on the cell cycle in prostate cancer. He is the recipient of a National Cancer Institute of Canada grant for his prevention studies. Dr. Sender Herschorn is the Director of the annual University of Toronto Urology Update, the largest urology continuing medical education event in Canada each year. He continues his research activity in the areas of urinary incontinence and complex urological reconstruction. In collaboration with Dr. Carr, he has written a chapter on the surgical treatment of stress incontinence for the upcoming edition of Campbell's Urology, the standard textbook of urology. Dr. Ron Kodama continues his major focus in education. He

is Program Director for the University Urology Program and was the recipient this year of the prestigious Faculty Aitkins Award for Undergraduate Education. He represents Toronto on the Royal College Examination Committee, and is the National Co-ordinator for MOCOMP for the Canadian Urological Association.

### **Vascular Surgery**

Vascular Surgery has maintained its strong clinical commitment and has continued to develop its research activity. It now supports two clinical research fellows through the Surgical-Scientist Training Program. Dr. Mohammed Al-Omran and Dr. Lawrence are studying towards Master's degrees in clinical epidemiology. The Carotid Endarterectomy Research Program (in collaboration with Dr. J. Tu at I.C.E.S.) has finished a complete audit of carotid endarterectomy performed over a five-year period in the Province of Ontario. This study, funded by the Heart and Stroke Foundation of Ontario, (6,250 patients) is the largest population-based study ever performed for carotid disease. The Division looks forward to analyzing and publishing the details of this audit. A similar regional cohort study looking at infrainguinal reconstructions is presently underway.

A large population-based study using administrative data has recently been completed and has defined the rates and trends of lower extremity revascularization in Ontario. In addition, we have determined the short-term and long-term outcomes of patients undergoing lower extremity revascularization on a population basis. The Division has recently established a prospective database for vascular procedures at the Sunnybrook and Women's College Health Sciences Centre. Dr. Kucey has been appointed to the national executive of the Canadian Society for Vascular Surgery, and has been appointed as a member of a national panel studying appropriateness criteria for carotid endarterectomy. This two-man Division has been challenged by the time requirements to continue to carry on research, as well as carrying a full clinical load. Recent changes in the strategic direction of the hospital have placed further stresses on the academic and clinical productivity of the Division.

**ORTHOPAEDIC AND ARTHRITIC CAMPUS****DIVISION OF ORTHOPAEDIC SURGERY**

**Dr. H.U. Cameron - Associate Professor**  
**Dr. J.C. Cameron - Assistant Professor**  
**Dr. M.H.G. Ford - Lecturer**  
**Dr. J.D. Gollish - Lecturer**  
**Dr. H. Hall - Professor**  
**Dr. R.M. Holtby - Assistant Professor**  
**Dr. B.W. Malcolm - Assistant Professor**  
**Dr. P.H. Marks - Assistant Professor**  
**Dr. J.J. Murnaghan - Assistant Professor**  
**Dr. C.S. Wright - Assistant Professor**

**PUBLICATIONS**

**Hall H:** How to manage low back pain: Physical therapy or physical training? *Journal of Musculoskeletal Medicine*: April 2001; 18(4): pp 182-189.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Ford M:** Toronto Chapter Orthopaedic Nursing Conference, Toronto, Ontario, October 2000. DVT: Coumadin versus fragmin.

**Ford M:** Thomas Jefferson University, Philadelphia, Pennsylvania, November 2000. The Canadian health care system.

**Ford M:** AO-ASIF Principles of Fracture Management and Advanced Controversies in Fracture Care, Toronto, Ontario, November 2000. Management of metastatic lesions of the spine.

**Hall H:** Brazilian Congress of Orthopaedics and Traumatology, Rio de Janeiro, November 2000. (1) Modern techniques of non-invasive spine care, (2) Chronic pain syndrome, (3) Complications of spine surgery, (4) Flat back syndrome, (5) The surgical treatment of cervical myelopathy, (6) Patient selection for spine surgery.

**Hall H:** The Centre for Neuroscience, Orthopaedics and Spine, South Dakota, November 2000. (1) Reasons not to operate, (2) Chronic neuropathic pain.

**Hall H:** Stryker Spine Interbody Technology Meeting, Hong Kong, China, March 2001. (1) Treatment of the degenerative disc: Non-surgical techniques, (2) Long term follow-up of diapason.

**Hall H:** University of California at San Diego, San Diego, California, July 2000. (1) Who needs light duty?, (2) Best practice model: Spine care.

**Hall H:** Canadian Back Institute, Burnaby, British Columbia, March 2001. (1) Are you really your patient's advocate? , (2) Management of workplace injuries in family practice.

**Hall H:** Health Care Health and Safety Association of Ontario, Toronto Ontario, December 2000. Back injury prevention in health care.

**Hall H:** More to Life/ TVO, Toronto, Ontario, April 2001. Back pain.

**Hall H:** Canadian Back Institute, Kitchener, Ontario, September 2000. Back pain: Assessment and treatment.

**Hall H:** Hong Kong Physiotherapy Association, Hong Kong, China, March 2001. Chronic pain syndrome.

**Hall H:** Dewar Orthopaedic Society, Mont Sainte-Anne, Quebec, February 2001. History of the Dewar Society.

**Hall H:** Canadian Back Institute, Kitchener, Ontario, October 2000. Shoulder complex injuries.

**Hall H:** More to Life/TVO, Toronto, Ontario, October 2000. The back doctor.

**Murnaghan JJ:** AO-ASIF Nursing Continuing Education, Toronto, Ontario, June 2001. Operating room personnel course.

**Murnaghan JJ:** Canadian Orthopaedic Association, London, Ontario, June 2001. Challenges in resident evaluation.

**Murnaghan JJ:** Ontario Association of Amputee Care, Kingston, Ontario, May 2001. Post-operative wound management decision-making following below knee amputation.

#### **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Open versus closed acromioplasty: A randomized controlled study.  
*Holtby R: Hospital Research Fund/Department of Surgery Academic Fund (\$24,000 1996 - 2000).*

Prospective assessment of symptom palliation for patients attending a rapid response radiotherapy program and bone metastasis clinic. *Chow E., Danjoux C. Szumacher E. Wong R, Axelrod T, Finkelstein J, Stephen D: Geoffrey H. Wood Foundation (\$10,000 2000).*

#### **HONOURS RECEIVED**

**Hall H:** Henry Farfan Award, North American Spine Society, October 2000.

## SUNNYBROOK CAMPUS

### DIVISION OF CARDIAC SURGERY

**Dr. G. Bhatnagar - Lecturer**  
**Dr. G.T. Christakis - Associate Professor**  
**Dr. C. Cutrara - Lecturer**  
**Dr. S.E. Fremes - Assistant Professor (*Division Head*)**  
**Dr. B.S. Goldman – Professor**

### PUBLICATIONS

**Cohen G, Tamariz MG, Sever JY, Liaghati N, Guru V, Christakis GT, Bhatnagar G, Cutrara C, Abouzahr L, Goldman BS, Fremes SE:** The radial artery versus the saphenous vein graft in contemporary CABG: A case-matched study. *Annals of Thoracic Surgery*: January 2000: 71: pp 180-186.

**Hynninen M, Borger MA, Rao V, Weisel RD, Christakis GT, Carroll JA, Cheng DCH:** The effect of insulin cardioplegia on atrial fibrillation after high-risk coronary bypass surgery: A double-blinded, randomized controlled trial. *Anesthesia*: December 2000: 92: pp 810-816.

**Fremes SE, Tamariz MG, Abramov D, Christakis GT, Sever JY, Sykora K, Goldman BS, Feindel CMS, Lichtenstein SV:** Late results of the warm heart trial: The Influence of non-fatal cardiac events on late survival. *Circulation*: November 2000: 102(S): pp III339-III345.

**Wong BI, McLean RF, Fremes SE, Deemar KA, Harrington EM, Christakis GT, Goldman BS:** Aprotinin and tranexamic acid for high transfusion risk cardiac surgery. *Annals of Thoracic Surgery*: 2000 March: 69(3): pp 808-816.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Christakis GT:** American College of Chest Physicians, Cancun, Mexico, December 2000. (1) Comparison of stentless versus stented valves in the aortic position, (2) Results of aortic valve sparing operations.

**Christakis GT:** Columbia Presbyterian, New York, New York, April 2001. Stentless versus stented valves.

**Fremes SE:** American Society of Mechanical Engineers, Orlando, Florida, November 2000. Influence of graft/host diameter ratio on the hemodynamics in sequential ITA anastomosis.

**Fremes SE:** American Heart Association, New Orleans, Louisiana, November 2000. Revascularization surgery: New approaches and outcomes.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Angiogenesis trial of vascular endothelial growth factor (VEGF). *Bhatnagar G, Cohen EA: Parke-Davis Pharmaceutical Research (\$35,000 2000 - 2001).*

Canadian cardiovascular outcomes research team. *Tu J, Fremes SE: Canadian Institutes of Health Research (\$5,000,000 2001 - 2005).*

Ischemia management with accupril post-bypass graft via inhibition of converting enzyme (IMAGINE). *Myers M, Fremes SE: Parke-Davis Pharmaceutical Research (\$69,169 1999 - 2001).*

Multi-centre radial artery patency study. *Fremes SE, Cohen E, Naylor CD, Fradet G, Buller C, Able J, Carrera R, Gelfand E, Tymchak W, Menkis A, Almond D, Myers M, Erret L, Watson R, Yau T, Schwartz L, Rubens F, Higginson L, Carrier M, Cote G, Morin J, Doyle D, Gleeton O: Medical Research Council of Canada (\$266,699 1999 - 2001)*

The EXPEDITION trial (Na<sup>+</sup>/H<sup>+</sup> exchange inhibition to prevent events in acute cardiac conditions). *Fremes SE: Aventis Pharmaceuticals, Incorporated (\$100,000 2001 - 2002).*



**DIVISION OF GENERAL SURGERY**

**Dr. F.D. Brenneman - Assistant Professor**  
**Dr. P. Chu – Assistant Professor**  
**Dr. S.S. Hanna – Assistant Professor (Division Head)**  
**Dr. A. Harrison – Professor**  
**Dr. H.A.B. Miller - Associate Professor**  
**Dr. A. Smith – Assistant Professor**  
**Dr. G.A. Taylor - Associate Professor**

**PUBLICATIONS**

**Bui L, Smith AJ, Bercovici M, Szalai JP, Hanna SS:** Minimizing blood loss and transfusion requirements in hepatic resection. *HPB Surgery*: June 2001: 3: pp 1-7.

**Inaba K, Kirkpatrick A, Finkelstein J, Murphy J, Brenneman F, Boulanger B, Girotti M:** Blunt abdominal aortic trauma in association with thoracolumbar spine fractures. *Injury, International Journal Care of the Injured*: March 2001: 32: pp 201-207.

**Redelmeier DA, Naylor CD, Brenneman FD, Sharkey PW, Juurlink DN:** Major trauma in elderly adults receiving lipid-lowering medications. *Journal of Trauma*: March 2001: 50(4): pp 678-683.

**Smith AJ, Whelan P, Cummings BJ, Stern HS:** Management of locally recurrent epidermoid cancer of the anal canal with abdominoperineal resection. *Acta Oncologica* April 2001: 40: pp 34-36.

**Suzman MS, Smith AJ, Brennan MF:** Fascio-peritoneal graft patch repair of the inferior vena cava: A workhorse in search of work? *Journal of the American College of Surgeons* August 2000: 191: pp 218-220.

**Tremblay LN, Rizoli SB, Brenneman FD:** Advances in fluid resuscitation of hemorrhagic shock. *Canadian Journal of Surgery*: June 2001: 44(3): pp 172-179.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Brenneman FD:** Trauma 2001 Conference, Sydney, Australia, March 2001. Damage control surgery.

**Hanna SS:** Kiwanis Club of Toronto North, Toronto, Ontario, December 2000. Lecture on China trip.

**Hanna SS:** Nanjing First Hospital, Nanjing, China, September 2000. (1) Liver resection for metastatic tumors, (2) Management of hepatocellular carcinoma, (3) Techniques of liver surgery, (4) Case presentations: Operative demonstration of pancreatic surgery, (5) Diagnosis and treatment of post-cholecystectomy syndrome, (6) Early diagnosis of biliary and pancreatic cancer.

**Smith AJ:** Surgical Oncology Network Symposium, Toronto, Ontario, October 2000. Surgical management of liver metastases.

**Smith AJ:** Focus on Gastrointestinal Oncology: 2000 Update on Digestive Diseases for Physicians and Surgeons, Toronto, Ontario, November 2000. Surgical management of liver metastases.

**Smith AJ:** Colorectal Cancer Association, Toronto, Ontario, March 2001. Treatment of colorectal cancer in 2001.

**Smith AJ:** Montreal Conference on Colon Cancer, Montreal, Quebec, March 2001. (1) Novel trends in the treatment of colon cancer, (2) Liver metastasis.

**Smith AJ:** Southern Society of Clinical Surgeons, Toronto, Ontario, May 2001. Importance of TME for rectal cancer.

**Smith AJ:** Canadian Institutes of Health Research, Toronto, Ontario, June 2001. Opportunities and strategic directions: Initiatives in colorectal cancer research.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Colorectal cancer database. *Smith AJ, Hanna SS: Pharmacia and Upjohn* (\$60,000 1999 – 2001),

Changes in hemoglobin associated with colorectal cancer treatment. *Smith AJ, Law C: Janssen-Ortho* (\$25,000 1999 – 2000).

Experiences of rectal cancer patients undergoing aggressive multi-modal treatment. *Crooks D, Smith AJ: Canadian Institutes of Health Research* (\$32,000 2001 - 2002).

**DIVISION OF NEUROSURGERY**

**Dr. M. Fazl - Assistant Professor**  
**Dr. D.A. Houlden – Assistant Professor**  
**Dr. R. Midha - Associate Professor**  
**Dr. D.W. Rowed - Associate Professor**  
**Dr. M.L. Schwartz – Professor (*Division Head*)**

**PUBLICATIONS**

**Brennan J, Rowed DW, Nedzelski JM, Chen JM:** Cerebrospinal fluid leak in acoustic neuroma surgery: Influence of tumor size and surgical approach on incidence and response to treatment. *Journal of Neurosurgery*: January 2001: 94: pp 217-223.

**Brennan J, Schwartz ML:** Unruptured intracranial aneurysms: An appraisal of the literature and suggested recommendations for surgery on evidence-based medicine criteria. *Neurosurgery*: December 2000: 47: pp 1359-1372.

**Brennan JW, Midha R, Ang LC, Perez-Ordonez B:** Epithelioid hemanioendothelioma of the spine presenting as cervical myelopathy: A case report. *Neurosurgery*: March 2001: 48: pp 1166-1169.

**Clifton GL, Miller ER, Choi SC, Levin HS, McCauley S, Smith KR, Muizelaar JP, Wagner FC, Marion DW, Luerssen TG, Chestnut RM, Schwartz ML:** Lack of effect of induction of hypothermia after acute brain injury. *New England Journal of Medicine*: February 2001: 344: pp 556-602.

**Foster RD, Antonyshyn OM, Lee C, Holland M, Fazl M:** Cranioplasty: Indications, techniques and results. In: *Operative Neurosurgical Techniques* (Schmidek HH, ed). W.B.Saunders Company, Massachusetts: 2000: pp 29-44.

**Kaminker R, Fabry J, Midha R, Finkelstein JA:** Split cord malformation with diastometamyelia presenting as neurogenic claudication in an adult. *Spine*: September 2000: 25(17): pp 2269-2271.

**Levine B, Dawson D, Boutet I, Schwartz ML, Stuss D:** Assessment of strategic self-regulation in traumatic brain injury: Its relationship to injury severity and psychosocial outcome. *Neuropsychologia*: May 2000: 14: pp 491-500.

**Midha R, Ramakrishna V, Munro CA, Matsuyama T, Gorczynski RM:** Detection of host and donor cells in sex-mismatched rat nerve allografts using RT-PCR for a Y chromosome (H-Y) marker. *Journal of the Peripheral Nervous System*: October 2000: 5: pp 140-146.

**Midha R, Shoichet MS, Dalton P, Xiao C, Munro CA, Noble J, Wong M:** Tissue engineered alternatives to nerve transplantation for repair of peripheral nervous system injuries. *Proceedings, 18th International Congress of the Transplantation Society*: 2001: 33: pp 612-615.

**Stanisz GJ, Midha R, Munro CA, Henkelman RM:** MR properties of rat sciatic nerve following trauma. *Magnetic Resonance in Medicine*: February 2001: 45: pp 415-420.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Fazl M:** INSIGHT Information Company, Toronto, Ontario, June 2001. Effectively managing the acquired brain injury claim.

**Houlden DA:** Eastern Association of Electroencephalographers, New York, New York, March 2001. Intra-operative monitoring using motor evoked potentials.

**Houlden DA:** Charles E. Henry Society, Niagara Falls, New York, September 2000. Motor evoked potentials in the operating room.

**Midha R:** Congress of Neurological Surgeons, San Antonio, Texas, September 2000. (1) Cadaveric course, (2) Exposure and surgery of the peripheral nerves, (3) Supra-clavicular exposure of the brachial plexus, (4) Seminar: Surgical management of brachial plexus pathology, (5) Management of brachial plexus injuries.

**Midha R:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. Classification and evaluation of nerve injury.

**Midha R:** American Association of Neurological Surgeons/Canadian Association of Neurological Surgeons, Phoenix, Arizona, February 2001. (1) Controversies in peripheral nerve disorders, (2) Course director: Management of nerve injuries.

**Midha R:** Bethesda Spine and Peripheral Nerve Workshop, Bethesda, Maryland, June 2001. Principles of nerve regeneration and repair.

**Rowed DW:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. (1) Acoustic Schwannoma: State-of-the-art. (2) Hearing preservation, intra-operative monitoring and cerebrospinal fluid leaks.

**Schwartz ML:** American College of Surgeons, Toronto, Ontario, April 2001. Mild head injury: Diagnostic criteria for discharge.

**Schwartz ML:** Ontario Trial Lawyers Association, Toronto, Ontario, October 2000. The pathology and the sequelae of injury to the spinal cord made easy.

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Comparison of intra-operative MEP and SSEP spinal cord monitoring in spinal injury. *Houlden DA: Ontario Neurotrauma Foundation (\$93,540 1998 - 2000).*

Delivery of therapeutic agents via a novel synthetic graft to augment axonal regeneration. *Midha R, Shoichet MS, Tator CH: Ontario Neurotrauma Foundation* (\$120,000 1999 - 2001).

Lymphatic drainage of the central nervous system: Relevance to pediatric hydrocephalus. *Johnston MG, Midha R, Fleshner MF: Medical Research Council of Canada* (\$482,234 1999 - 2004).

Quantitative magnetic resonance imaging of neural tissue following trauma. *Stanisz GJ, Schwartz ML, Henkelman RM, Midha R: Canadian Institutes of Health Research/Canadian Neurotrauma Research Program* (\$122,642 2000 - 2002).

Serial SSEP studies for predicting outcome in comatose patients with head injuries. *Houlden DA, Midha R, Feinstein A, Schwartz ML: Ontario Neurotrauma Foundation* (\$101,900 2000 - 2001).

#### **DIVISION OF ORTHOPAEDIC SURGERY**

**Dr. T.S. Axelrod - Associate Professor (*Division Head*)**

**Dr. G.R. Fernie - Professor**

**Dr. J.A. Finkelstein - Assistant Professor**

**Dr. P.J. Holliday - Research Associate**

**Dr. G.A. Hunter - Professor**

**Dr. H.J. Kreder - Assistant Professor**

**Dr. S. Lewis – Lecturer**

**Dr. B.E. Maki – Associate Professor**

**Dr. J. Schatzker – Professor**

**Dr. D. Stephen - Assistant Professor**

**Dr. M. Tile - Professor**

**Dr. C. Whyne - Assistant Professor**

#### **PUBLICATIONS**

**Axelrod TS, Boyer MI:** The distal radioulnar joint. In: *Orthopaedic Injuries*, Oxford University Press, Oxford.

**Axelrod TS, Terry S:** Limited open reduction and internal fixation in distal radius fractures. In: *Master Techniques in Orthopaedic Surgery* (Gelberman R, ed). Mosby Yearbook Publishers, Pennsylvania 2001: pp 5.

**Boyer MI, Axelrod TS:** External fixation in the management of distal radius fractures. In: *Master Techniques in Orthopaedic Surgery* (Gelberman R, ed). Mosby Yearbook Publishers, Pennsylvania 2001: pp 6.

**Chow E, Andersson L, Wong R, Vachon M, Hruby G, Franssen E, Fung KW, Harth T, Pach B, Pope J, Connolly R, Schueller T, Stefaniuk K, Szumacher E, Hayter C, Finkelstein J, Danjoux D:** Patients with advanced cancer: A survey of the understanding of their illness and expectations from palliative radiotherapy for symptomatic metastases. *Clinical Oncology*: December 2000: 13: pp 204-208.

**Chow E, Danjoux C, Wong R, Szumacher E, Franssen E, Fung K, Finkelstein J, Andersson L, Connolly R:** Palliation of bone metastases: A survey of patterns of practice among Canadian radiation oncologists. *Journal of Radiotherapy and Oncology*: December 2000: 56: pp 305-314.

**Danjoux C, Szumacher E, Andersson L, Franssen E, Wong R, Chow E, Connolly R, Hayer C, Finkelstein J, Axelrod T, Stephen D, Sixel K, Thomas G, Schueller T, Stefaniuk K:** Palliative radiotherapy at Toronto-Sunnybrook Regional Cancer Centre: The rapid response radiotherapy program. *Current Oncology*: November 2000: 7: pp 52-56.

**Eshkenazi U, Tolessa E, Finkelstein J, Dabby D:** Early retro-profusion of titanium threaded cages in posterior lumbar interbody fusion: A report of two cases. *Spine*: January 2001: 26: pp 1073-1075.

**Fernie GR:** Recent innovations to solve important mobility problems faced by many people and those with disabilities. In: *Mobilidade, Comunicacao e Educacao: Desafios A Acessibilidade* (Quevedo AAF, de Oliveira JR, Mantoan MTE, eds). W.V.A. Editora e, Rio de Janeiro: 2000: pp 11-23.

**Fernie GR, Griggs GT, Holliday PJ, Pacitto M, Wilcox P:** Function and performance of the Rocket multi-directional powered wheelchair. Proceedings, International Seating Symposium: 2001: pp 181-184.

**Houlden DA, Rowed DW, Schwartz ML, Fazl M, Midha R, Finkelstein JA, Burkholder LM:** Iatrogenic nerve root injury and continuous electromyography during cervical spine surgery. Restorative Neurological Neuroscience: January 2001: 16: pp 283.

**Houlden DA, Rowed DW, Schwartz ML, Fazl M, Midha R, Finkelstein JA, Burkholder LM:** Risk factors associated with iatrogenic nerve root injury during cervical spine surgery. Canadian Journal of Neurological Science: January 2001: pp S58.

**McKee MD, Kim J, Kebaish K, Stephen DJG, Kreder HJ, Schemitsch EH:** Functional outcome after open supracondylar fractures of the humerus: Effect of surgical approach. Journal of Bone and Joint Surgery: September 2000: 82(B): pp 646-651.

**Mihailidis A, Fernie G:** The development of an intelligent cueing device for use by people with dementia during activities of daily living. Proceedings, Rehabilitation Engineering Society of North America Conference (Winters J, ed). Rehabilitation Engineering Society of North America Press, Arlington: 2000: pp 22-24.

**Mihailidis A, Fernie GR:** The use of technology in developing supportive environments for people with dementia. Proceedings, Special Conference of the Alzheimer Society of Ontario, Toronto: 2001: pp 153-160.

**Nolan P, Kim M, Finkelstein J:** Evaluation of the eleventh rib extra-pleural retroperitoneal approach to the thoracolumbar junction. Spine: September 2000: 93: pp 168-174.

**Perry SD, McIlroy WE, Maki BE:** The role of cutaneous mechanoreceptors in the control of compensatory stepping reactions evoked by unpredictable, multi-directional perturbation. Brain Research: September 2000: 877: pp 401-406.

**Pinkney S, Fernie GR:** 3D computer modeling in wheelchair design: A case study. Proceedings, Rehabilitation Engineering Society of North America Conference (Winters J, ed). Rehabilitation Engineering Society of North America Press, Arlington: 2000: pp 477-479.



**Randle JA, Kreder HJ, Hu R, Stephen D, Jaglal S, Williams J:** Should calcaneal fractures be treated surgically: A meta-analysis. *Clinical Orthopaedics and Related Research*: December 2000: 377: pp 217-227.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Fernie GR:** Unicamp Conference on Alternative Augmentative Communication and Mobility, Sao Paulo, Brazil, November 2000. Keynote address.

**Maki BE:** Tampa Veterans Administration, Tampa, Florida, January 2001. Control of limb movements to preserve postural balance: Age-related impairment and implications for fall prevention.

**Maki BE:** National Consensus Conference on Fall Prevention, Tampa, Florida, January 2001. Invited participant.

**Whyne C:** Lawson Research Institute, University of Western Ontario, London, Ontario, March 2001. (1) Biomechanics of burst fracture, (2) Cancer in the spine.

**Whyne C:** Discover Engineering Conference, Ryerson University, Toronto, Ontario, May 2001. Discover engineering: Perspectives from the field.

**Whyne C:** Discover Engineering Program, Ryerson University, Toronto, Ontario, July 2000. Discover engineering: Perspectives from the field.

#### **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A multi-processor workstation for finite element analysis to investigate the biomechanics of the metastatically involved thoracic spine. *Whyne C: Natural Sciences and Engineering Research Council (\$25,612 2001 - 2002).*

A novel technique for percutaneous vertebroplasty in the treatment of metastatically involved vertebral bodies. *Whyne C, Finkelstein J: United States Army Medical Research and Material Command, Department of Defense Breast Cancer Research* (\$98,000 2000 - 2001).

An economic evaluation of internal fixation as compared with bipolar hemiarthroplasty for displaced femoral neck fractures. *Jaglal S, Kreder HJ, Goel V, Schatzker J: Orthopaedic Trauma Association* (\$30,000 1998 - 2002).

Analysis of the biomechanics of a novel cervical spine plate. *Whyne C, Finkelstein J: Sofamor-Danek, Canada* (\$17,628 2000 - 2001).

Biomechanical stability of intra-medullary nailed high proximal tibial fractures with oblique screws. *Whyne C, Stephens D: Zimmer Canada Incorporated* (\$33,592 2000 - 2001).

Assistive technology for mobility. *Fernie GR: Ontario Ministry of Health* (\$200,000 2000 - 2001).

Assistive technology for mobility. *Fernie GR: Ontario Rehabilitation Technology Consortium* (\$174,500 2001 - 2002).

Balance. *Maki BE, Fernie GR: Medical Research Council of Canada* (\$340,000 1999 - 2004).

Control of limb movements to recover balance: Effect of environment and activity. *Maki BE, McIlroy WE, Fernie GR: Medical Research Council of Canada* (\$368,160 1999 - 2004).

Development of Rocket (wheelchair) seating. *Fernie GR: Nimble Incorporated/National Research Council* (\$150,000 2000).

Examining the relationship between evidence-based practice and physician and patient opinion. *Wright JG, Kreder HJ, Coyte PC, Glazier RH, Mahomed NN, Hawker GA: Arthritis Society* (\$65,000 1999 - 2002).

Examining the relationship between evidence-based practice and physician and patient opinion. *Wright JG, Kreder HJ, Hawker GA, Mahomed NN, Coyte PC, Glazier RH: Medical Research Council of Canada* (\$212,988 1999 - 2002).

Humeral shaft fractures: What are we doing and does it work? *Kreder HJ, Stephen DJG, McKee MD, Schemitsch EH: Canadian Orthopaedic Foundation* (\$10,000 2000 - 2001).

Impact of sertraline and paroxetine on postural stability in seniors: A pilot study. *Maki BE, Liu BA, Mittman N, Herrmann N: Physicians Services Incorporated Foundation* (\$104,500 1999 - 2000).

Organization of international conference on technology and aging. *Fernie GR: Ministry of Economic Development and Trade* (\$20,000 2001).

Organization of international conference on technology and aging. *Fernie GR: Ministry of Health and Long-Term Care* (\$100,000 2001).

Outcomes following total hip replacement after acetabular fracture. *Borkhoff C, Kreder HJ, Tile MT, Stephen DJG: Canadian Orthopaedic Foundation* (\$10,000 1999 - 2000).

Planning and organization of international conference on technology and aging to be held in conjunction with a federal/provincial/territorial meeting of ministers responsible for senior citizens. *Fernie GR: Ontario Ministry of Energy, Science and Technology/Ontario Seniors' Secretariat* (\$150,000 2000 - 2001).

Prediction of burst fracture risk in the metastatic thoracic spine with finite element analysis. *Whyne C: Natural Sciences and Engineering Research Council* (\$96,000 2001 - 2005).

Prospective assessment of symptom palliation for patients attending a rapid response radiotherapy program and bone metastasis clinic. *Chow E, Danjoux C, Szumacher E, Wong R, Axelrod T, Finkelstein J, Stephen D: Geoffrey H. Wood Foundation* (\$10,000 2000).

Rehabilitation following total hip replacement. *Mori B., Lunden K, Kreder HJ: Canadian Orthopaedic Foundation* (\$10,000 1999 - 2000).

Revision total hip replacement: Why do primaries fail? *Davis A., Kreder HJ, Schemitsch EH, Gollish G, Waddell JP, Gross AE, Arthroplasty Group: Canadian Orthopaedic Foundation* (\$10,000 2000 - 2001).

Sunnybrook spinal trauma prospective database. *Finkelstein JA: Sofamor Danek* (\$30,000 2000).

The at-home early discharge (AHEAD) project for hip fracture patients. *Jaglal S, Kreder HJ, Coyte P, Naglie G, Schatzker J: Medical Research Council of Canada* (\$284,289 1997 - 2001).

The Canadian joint registry: Methodologies and outcomes. *Bourne R, Kreder HJ, Hawker G, Fortin P: Canadian Arthritis Network* (\$64,000 1999 - 2000).

Upgrading the Orthopaedic Biomechanics Laboratory for clinically translational research. *Whyne C: Canada Foundation for Innovation/Ontario Innovation Trust* (\$137,460 2001 - 2002).

Validity and utility of biomechanically determined guidelines in metastatic burst fracture risk assessment. *Whyne C, Finkelstein J, Chow E: Canadian Breast Cancer Foundation* (\$38,000 2000 - 2001).

#### **DIVISION OF PLASTIC SURGERY**

**Dr. O. Antonyshyn - Assistant Professor**

**Dr. M. Beveridge – Assistant Professor**

**Dr. P. Binhammer - Lecturer**

**Dr. R.C. Cartotto - Assistant Professor**

**Dr. J. Fialkov - Assistant Professor**

**Dr. J.S. Fish - Assistant Professor**

**Dr. J.L. Semple - Associate Professor (*Division Head*)**

#### **PUBLICATIONS**

**Zhang J, Lipa JE, Black CE, Huang N, Neligan P, Ling FTK, Levine RH, Semple JL, Pang CY:** Pharmacological characterization of vasomotor activity of human musculo cutaneous perforator artery and vein. *Journal of Applied Physiology*: July 2000: 89: pp 2268-2275.

**Andrade WN, Baxter N, Semple JL:** Clinical determinants of patient satisfaction with breast reconstruction. *Plastic and Reconstructive Surgery*: January 2001; 107: pp 46-54.

**Foster RD, Antonyshyn OM, Lee C, Holland MC, Fazl M:** Cranioplasty: Indications, techniques and results. In: *Operative Neurosurgical Techniques: Indications, Methods and Results, Fourth Edition, Volume 1* (Schmidek HH, Sweet L, eds). W.B. Saunders Company, Philadelphia September 2000: pp 29-44.

**Semple JL, Lugowski S, Smith D:** Breast-feeding and silicone implants: Good news for mothers and infants. *Perspectives in Plastic Surgery*: January 2001; 15(1): pp 81-89.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Antonyshyn OM:** American Society of Plastic Surgeons/Plastic Surgery Educational Foundation/American Society of Maxillofacial Surgery, Los Angeles, California, October 2000. Clinical applications of imaging technology in facial reconstructive surgery.

**Antonyshyn OM:** AO-ASIF Challenges and Advances in Orbital Reconstruction Course, Redondo Beach, California, October 2000. (1) Management of the radiated enucleated orbit, (2) Peri-orbital post-traumatic soft tissue deformities and their correction, (3) The sinking prosthesis.

**Antonyshyn OM:** Rotary Club, Toronto, Ontario, November 2000. Treacher Collins' syndrome.

**Antonyshyn OM:** Toronto Ophthalmological Society, Toronto, Ontario, November 2000. Orbital fractures.

**Antonyshyn OM:** North York General Hospital, Toronto, Ontario, May 2001. Outcomes of craniofacial skeletal reconstruction.

**Antonyshyn OM:** University of Montreal, Montreal, Quebec, May 2001. (1) 3D imaging, modeling and virtual reality in craniofacial surgery, (2) Craniofacial skeletal reconstruction: Outcomes.

**Antonyshyn OM:** Quebec Society of Plastic Surgeons, Montreal, Quebec, May 2001. Management of peri-orbital soft tissue deformities, (2) Discussant: Craniofacial surgery: Complex cases and complications.

**Binhammer P:** American Society for Peripheral Nerve, San Diego, California, January 2001. Alternatives to randomized trials in clinical research.

**Binhammer P:** Workplace Safety and Insurance Board, Toronto, Ontario, November 2000. Ligamentous injuries of the wrist.

**Binhammer P:** First Annual Stroke Rehabilitation Symposium, Toronto, Ontario, December 2000. Surgery for the hemiplegic limb: How surgery may help.

**Sample J:** Michigan Association of Plastic Surgeons, Mackinac Island, Michigan, July 2000. (1) Breast reconstruction: A Canadian perspective, (2) A decision-making process for surgeons encountering new technology, (3) Laparoscopic delay of a major flap, (4) Water colors: Developing an illustrated journal.

**Sample J:** Ontario Medical Secretaries Association, Toronto, Ontario, November 2000. Modern approach to breast reconstruction.

**Sample J:** Canadian Society of Plastic Surgeons, Jasper, Alberta, June 2001. (1) Eye-opener session: Modern approach to breast reconstruction, (2) *In vitro* fibroplasia in a porcine acellular dermal matrix (40).

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Acellular placental matrix in tissue engineering. *Sample JL*, Hopper RA: *Aesthetic Surgical Education and Research Foundation* (\$5,000 1999 - 2000).

BoneSource survival following applications in craniofacial surgery: An in vivo study of volume retention and revascularization. *Antonyshyn O*, Fialkov J, Caldwell C: *Stryker Canada* (\$59,600 1999 - 2001).

Carpal tunnel syndrome: Morbidity and management outcomes in Ontario. *Manktelow R, Binhammer P, Brill V, Szalai J: Workplace Safety and Insurance Board (\$205,025 1999 - 2001).*

Comparison of allevyn versus acticoat as a skin graft donor site dressing. *Cartotto R, Innes M: Research and Development Health Research Foundation/Canadian Institutes of Health Research (\$4,048 2000).*

Craniofacial skills lab. *Fialkov J: Liebingger-Stryker (\$50,000 2000 - 2001).*

Engineered bone growth in a rabbit femoral model. *Fialkov JA, Davies J: Physicians Services Incorporated Foundation (\$56,000 2000).*

#### **HONOURS AND AWARDS RECEIVED**

**Sample J:** Elected President of the Canadian Society of Plastic Surgeons. April 2001.

#### **DIVISION OF UROLOGY**

**Dr. L.K. Carr - Lecturer**  
**Dr. N.E. Fleshner – Assistant Professor**  
**Dr. S. Herschorn - Professor**  
**Dr. L.H. Klotz – Professor (Division Head)**  
**Dr. R.T. Kodama - Assistant Professor**

#### **PUBLICATIONS**

**Akduman B, Fleshner NE, Ehrlich L, Klotz L:** Early experience in intermediate-risk penile cancer with sentinel node identification using the gamma probe. *Urology: July 2001: 58: pp 65-68.*

**Akduman B, Fleshner N, Ehrlich L, Klotz L:** Scintigraphic identification of the sentinel lymph node for biopsy in penile cancer. *American Urology Association News: October 2000: 5(7): pp 18.*

**Akduman B, Klotz LH:** Intestinal segments in urology. In: *Urology Pearls of Wisdom* (David Levy, ed). Boston Medical Publishing Corporation, Boston, 2001: pp 136-142.

**Bondy SJ, Iscoe NA, Rothwell DM, Gort EH, Fleshner NE, Browman GP:** Trends in hormonal management of advanced prostate cancer: A population-based study. *Medical Care*: April 2001: 39: pp 384-396.

**Bruchovsky N, Klotz L, Sada M, Crook J, Hoffart D, Godwin L, Warkentin M, Gleave M, Goldenberg L:** Intermittent androgen suppression for prostate cancer: Canadian prospective trial and related observations. *Molecular Urology*: November 2000: 4(3): pp 191-199.

**Choo R, DeBoer G, Klotz L, Danjoux C, Morton GC, Rakovitch E, Fleshner N, Bunting P, Kapusta L, Hruby G:** PSA doubling time of prostate carcinoma managed with watchful observation. *International Journal of Radiation Oncology, Biology, Physics*: July 2001: 50: pp 615-620.

**Elhilali MM, Gleave M, Fradet Y, Davis I, Venner P, Saad F, Klotz L, Moore R, Ernst L, Paton V:** Placebo-associated remissions in a multi-centre, randomized double-blind trial of interferon gamma-1b for the treatment of metastatic renal cell carcinoma. *British Journal of Urology*: October 2000: 86: pp 613-618.

**Fleshner N, Kapusta L, Ezer D, Herschorn S, Klotz L:** p53 nuclear accumulation is not associated with decreased disease-free survival in patients with node positive transitional cell carcinoma of the bladder. *The Journal of Urology*: September 2000: 164: pp 1177-1182.

**Fleshner N, Kucuk O:** Anti-oxidant vitamins in prostate cancer prevention: Rationale and current status. *Urology*: April 2001: 57: pp 90-94.

**Herschorn S:** Current status of injectable agents for female stress urinary incontinence. *Canadian Journal of Urology*: November 2000: 8: pp 1281-1289.

**Herschorn S:** Urodynamic evaluation of bladder outflow obstruction: Is it Necessary? *Canadian Journal of Continuing Medical Education*: August 2000: pp 12.



**Herschorn S:** Urological management. (Benzel EC, Tator CH, ed). American Academy of Neurological Surgeons, Illinois: 2000.

**Herschorn S:** Video-urodynamics. In: Textbook of Female Urology and Urogynaecology (Cardozo L, Staskin D, eds). Isis Medical Media, London: 2001: pp 263-274.

**Hruby G, Choo R, Lehman S, Herschorn S, Kapusta L:** Female clear cell adeno carcinoma arising within a urethral diverticulum. Canadian Journal of Urology: January 2001: 7: pp 1160-1163.

**Hruby G, Choo R, Klotz L, Danjoux C, Murphy J, DeBoer G, Morton G, Rakovitch E, Szumacher E, Fleshner N:** The role of serial trans-rectal ultrasonography in a watchful waiting protocol with localized prostate cancer. British Journal of Urology: May 2001: 87: pp 643-647.

**Klotz LH:** Evidence supports value of PSA screening. The Medical Post: May 2000: 37(17): pp 16.

**Klotz LH:** The Canadian Journal of Urology is indexed! Canadian Journal of Urology: December 2000: 7(6): pp 1133.

**Klotz LH:** Waiting lists. Canadian Journal of Urology: October 2000: 7(5): pp 1088.

**Klotz LH:** Combined androgen blockade in prostate cancer: Meta-analyses and associated issues. British Journal of Urology: June 2001: 87: pp 806-813.

**Klotz LH:** Hormone therapy for patients with prostate cancer. Cancer: July 2000: 88(12): pp 3009-3014.

**Klotz LH:** Improving hormonal treatment for prostate cancer. Our Voice: July 2000: 3: pp 5.

**Klotz LH, Gleave M, Goldenberg SL:** Neoadjuvant hormone therapy: The Canadian trials. Molecular Urology: November 2000: 4(3): pp 233-240.

**Klotz LH, Heaton J, Jewett MAS, Chin J, Fleshner N, Goldenberg SL, Gleave M:** A randomized phase 3 study of intra-operative cavernous nerve stimulation with penile tumescence monitoring to improve nerve sparing during radical prostatectomy. *Journal of Urology*: November 2000; 164: pp 1573-1578.

**Klotz LH, Prouse O:** Ureteral and renal pelvic tumors. In: *The Five-Minute Urology Consult* (Gomella L, eds). Lipincott, Williams and Wilkins Publishers, Philadelphia 2000: pp 550-551.

**Nickel C, Downey J, Johnston B, Clark J, Canadian Prostatitis Research Group (including Klotz LH):** Predictors of patient response to antibiotic therapy for the chronic prostatitis/chronic pelvic pain syndrome: A prospective multi-centre clinical trial. *Journal of Urology*: May 2001; 165(5): pp 1539-1544.

**Phillips C, Gray R, Fitch M, Labrecque M, Fergus K, Klotz LH:** Early post-surgery experience of prostate cancer patients and spouses. *Cancer Practice*: July 2000; 8(4): pp 165-171.

**Pierratos A, Dharamsi N, Carr LK, Ibanez D, Jewett MA, Honey RJ:** Higher urinary potassium is associated with decreased stone growth after shock wave lithotripsy. *Journal of Urology*: November 2000; 164: pp 1486-1489.

**Rendon RA, Stietzky N, Panzarella T, Robinette M, Klotz LH, Thruston W, Jewett MAS:** Natural history of small renal masses. *Journal of Urology*: October 2000; 164(4): pp 1143-1148.

**Segal R, Lukka H, Klotz LH, Eady A, Bestic N, Johnston M:** Surveillance programs for early stage non-seminomatous testicular cancer: A practice guideline. *Canadian Journal of Urology*: February 2001; 8(1): pp 1184-1192.

**Van Poppel H, Nilsson S, Algaba F, Bergerheim U, Dal Cin P, Fleming S, Hellsten S, Kirkali Z, Klotz LH:** Precancerous lesions in the Kidney: WHO Consensus conference report. *Scandinavian Journal of Urology and Nephrology*: December 2000; 205: pp 136-165.

**Zhang W, Klotz LH:** Telomerase assay in renal cancer. In: *Methods in Molecular Medicine: Renal Cancer Methods and Protocols* (Mydlo J ed). Humana Press, New Jersey 2001: pp 55-67.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Fleshner N:** Trinity College, Dublin, Ireland, September 2000. Innovators in urology: Biomarkers of oxidative stress in prostate cancer.

**Fleshner N:** Canadian-Mexican Uro-Oncology Congress, Ixtapa, Mexico, January 2001. Prostatic intraepithelial neoplasia and progression: Where are we now?

**Fleshner N:** Visiting Professor, University of Manitoba, Winnipeg, Manitoba, April 2001. Role of nutrition in prostate cancer.

**Fleshner N:** Southwest Oncology Group, San Francisco, California, April 2001. Strategy to obtain aboriginal participation in the select trial.

**Herschorn S:** Cleveland Clinic Urological Institute, Cleveland, Ohio, October 2000. (1) This is her bladder on drugs, (2) Moderator panel: Medical treatment of over-active bladder, (3) Panellist: What I do surgically for my patients and why, (4) Debate: Bladder instability is not a risk factor for failure of SUI surgery, (5) Urethral diverticula.

**Herschorn S:** Man to Man, Toronto, Ontario, January 2001. Incontinence and erectile dysfunction with prostate cancer treatment.

**Herschorn S:** Canadian Resident's Advanced Course in Urology, Kingston, Ontario, February 2001. Lower urinary tract reconstruction.

**Herschorn S:** New Brunswick Urology, Fredericton, New Brunswick, September 2000. (1) Advances in the management of urinary incontinence, (2) Treatment of over-active bladder.

**Herschorn S:** Hamilton Area Urologists, Hamilton, Ontario, February 2001. Urinary incontinence: Medical and surgical treatment advances.

**Herschorn S:** Visiting Professor, Division of Urology, Laval University, Quebec City, Quebec, September 2000. Advances in urinary incontinence.

**Herschorn S:** Department of Urology, Memorial Sloan-Kettering Cancer Center, New York, New York, January 2001. Challenges in urologic reconstruction.

**Herschorn S:** New York University, New York, New York, December 2000. (1) Update on peri-urethral bulking agents for treatment of SUI, (2) Complex reconstructive surgery for incontinence.

**Klotz LH:** Calgary Urology Group, Calgary, Alberta, July 2000. Advances in nerve sparing prostatectomy: Use of the Cavermap.

**Klotz LH:** Brookline University Hospital, Brooklyn, New York, October 2000. Controversies in androgen ablation for prostate cancer.

**Klotz LH:** Pittsburgh Medical Society, Urology Division, Pittsburgh, Pennsylvania, October 2000. Current practice and evidence-based medicine in hormone therapy for prostate cancer.

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A clinical study to evaluate the safety and efficacy of the Conticare<sup>®</sup> female continence device in women with stress urinary incontinence. *Herschorn S: Conticare* (\$10,000 2000-2001).

A double-blind, placebo controlled, randomized study of combination Vitamin E, selenium and soy products in patients with high-grade prostatic intraepithelial neoplasia. *Fleshner N, Klotz L, Redelmeier D, Szalai J: National Cancer Institute of Canada* (\$430,000 2001-2003).

A multi-centre international open label study of the efficacy and safety of controlled release darifenacin in the treatment of subjects with over-active bladder. *Herschorn S: Pfizer* (\$15,000 2000-2001).

A multi-centre prospective cohort study to evaluate the safety and effectiveness of the AMS InVance<sup>®</sup>99 male sling fixation system for the treatment of ISD incontinence secondary to TURP or radical prostatectomy. *Herschorn S: American Medical Systems* (\$35,000 2001-2002).

Anti-oxidants and markers of oxidative stress in prostate cancer. *Fleshner N, Rao V Kapusta L: Canadian Prostate Cancer Research Foundation* (\$35,000 2000 - 2001).

A phase III multi-centre, double-blind, randomized, placebo-controlled, parallel group study of the efficacy and safety of controlled release darifenacin versus tolterodine in the treatment of subjects with over-active bladder. *Herschorn S: Pfizer* (\$40,000 2000-2001).

A phase IIIb at-home use study evaluating the efficacy and safety of apomorphine SL (Uprima\*) 3 mg, escalating to 4 mg or decreasing to 2 mg, in the treatment of patients with erectile dysfunction. *Herschorn S: Abbott Laboratories* (\$30,000 2000-2001).

A prospective phase 3 randomized trial comparing intermittent versus continuous androgen suppression for patients with PSA progression in the clinical absence of distant metastases following radiotherapy for prostate cancer. *Klotz LH, Crook J: National Cancer Institute of Canada/Hoechst Marion Roussel* (\$2,800,000 1997 - 2002).

A randomized, double-blind, placebo-controlled study of the safety and efficacy of IC351(LY450190) administered "on demand" to patients with male erectile dysfunction. *Herschorn S: Eli Lilly* (\$35,000 1999-2000).

A randomized, double-blind, placebo-controlled, multi-centre, fixed-dose, parallel group, 3-month comparison study to investigate the efficacy and safety of the phosphodiesterase type V inhibitor BAY 38-9456 in males with erectile dysfunction following radical prostatectomy. *Herschorn S: Bayer Incorporated* (\$35,000 2001).

A randomized, double-blind, parallel comparison of the efficacy and safety of controlled release oxybutynin and immediate release oxybutynin for urinary incontinence. *Herschorn S: Perdue/Pharma* (\$15,000 1999-2000).

Basic science companion studies to National Cancer Institute of Canada trial PR-7: Intermittent versus continuous androgen ablation. *Klotz LH, Crook J, Fleshner N, Pollak M: National Cancer Institute of Canada* (\$305,925 1998 - 2001).

Companion to PR 7. *Klotz L, Fleshner N, Pollack M, Crook J: National Cancer Institute of Canada* (\$300,000 1998 - 2001).

Controlled clinical trial to investigate the safety and efficacy of the urethral bulking agents macroplastique for the treatment of stress incontinence after transurethral resection of the prostate or radical prostatectomy. *Herschorn S, Radomski S: Uroplasty Incorporated* (\$45,000 1999-2001).

Differential gene expression in prostate cancer. *Squire J, Klotz L, Zielenska M, Sweet J, Jewett M, Kapuska L, Trachtenberg J: National Cancer Institute of Canada* (\$377,000 1999 - 2003).

Effectiveness of PSA screening in preventing metastatic prostate cancer: A population-based case-control study. *Fleshner N, Goel V, Kopec J, Bunting P, Warde P: National Cancer Institute of Canada* (\$420,595 1999 - 2002).

Effects of Vitamin E and selenium in cell cycle regulation in prostate cancer. *Klotz L, Fleshner N: Prostate Cancer Research Foundation of Canada* (\$100,000 2000 – 2001).

Micro-nutrients and cell cycle effects in prostate cancer. *Klotz L, Fleshner N: Canadian Prostate Cancer Research Foundation* (\$150,000 2001).

Phase II study of oral melatonin in patients with relapsed prostate cancer. *Fleshner N: Hoechst Marion Roussel* (\$20,000 1998 - 2000).

Phase III study of soy, selenium and vitamin E in patients with prostatic intraepithelial neoplasia. *Fleshner N, Redelmeier D, Klotz L, Kapusta L, Rao AV, Szalai JP: National Cancer Institute of Canada* (\$417,679 2000 - 2003).

Prognostic factors for metastatic progression of localized prostate cancer. *Narod S, Jewett M, Trachtenberg J, Fleshner N, Klotz L: National Cancer Institute of Canada* (\$135,917 1998 - 2001).

Randomized trial of enriched soy supplement among men with prostatic intraepithelial neoplasia. *Fleshner N, Klotz L, Kapusta L, Rao AV, Jewett M: Protein Technologies International* (\$107,500 1999 - 2001).

SELECT trial: Vitamin E and selenium for prevention of prostate cancer: *Coltman C*, South Western Oncology Group including *Klotz LH*: *National Institutes of Health* (\$170 1999 - 2009).

The role of serum IGF-1 levels and androgen receptor phenotype in prostate cancer diagnosis. *Narod S*, *Fleshner N*, *Trachtenberg J*, *Jewett M*, *Toi A*: *National Cancer Institute of Canada* (\$216,903 1999 - 2001).

Use of complementary/alternative health services in men with prostate cancer. *Boon H*, *Fleshner N*, *Gray R*: *Medical Research Council of Canada* (\$36,483 1999 - 2000).

Women's Pelvic Health Centre: Pilot Project. *Carr LK*, *Meschino D*, *Reicher A*, *Kung R*, *Lie K*, *Lee P*, *Holzapfel S*, *Richardson B*, *Blake J*, *Herschorn S*: *Sunnybrook and Women's College Health Sciences Centre Innovation Fund* (\$692,000 2001 - 2003).

#### HONOURS AND AWARDS RECEIVED

**Herschorn S:** Peters-Boyd Academy Clinical Teaching Award, University of Toronto, May 2001.

**Herschorn S:** A.W. Bruce Division of Urology Undergraduate Teaching Award, University of Toronto, May 2001.

**Kodama R:** Aitkins Award for Undergraduate Teaching. May 2001.

**Kodama R:** A.W. Bruce Undergraduate Teaching Award, University of Toronto, Division of Urology. April 2001.

**Kodama R:** Postgraduate Teaching Award, University of Toronto, Division of Urology. May 2001.

**DIVISION OF VASCULAR SURGERY**

**Dr. D.S. Kucey - Assistant Professor**  
**Dr. R. Maggisano - Assistant Professor (*Division Head*)**

**PUBLICATIONS**

**Al-Omran, Mohammed, Kucey DS:** Intra-vascular lipoma of the left common femoral vein. *Journal of Vascular Surgery*: May 2001: 33: pp 1104-1107.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Kucey DS:** Expert Panel Meeting, Calgary, Alberta, June 2001. Carotid appropriateness.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Carotid endarterectomy health services research program. *Tu JV*, Kucey DS, Anderson G, Perry M: *Heart and Stroke Foundation of Ontario* (\$180,000 1999 - 2003).



## WOMEN'S COLLEGE CAMPUS

### DIVISION OF GENERAL SURGERY

**Dr. G.Y. Hiraki - Assistant Professor**  
**Dr. C.M.B. Holloway - Assistant Professor**  
**Dr. H.L.A. Lickley - Professor**  
**Dr. T.M. Ross - Associate Professor (Division Head)**

### PUBLICATIONS

**Chapman JW, Mobbs BG, Hanna W, Kahn HJ, Murray D, Lickley HLA, fish EB, Trudeau ME Miller NA, McCready DR:** A changing role for steroid hormone receptors in primary breast cancer? *Current Topics in Steroid Research*: October 2000: 3: pp 39-51.

**Denstman F, Lowry A, Vernava A, Burnstein M, Fazio V, Glennon E, Hicks T, Hyman N, Kerner B, Kilkenny J, Moore R, Oliver G, Peters W, Ross T, Savoca P, Senatore P, Simmang C, Wong WD:** Practice parameters for the prevention of venous thromboembolism. *Diseases of the Colon and Rectum*: August 2000: 43(8): pp j1037-1047.

**Fisher SJ, Shi ZQ, Lickley HLA, Efendic S, Vranic M, Giacca A:** Low-dose IGF-I has no selective advantage over insulin in regulating glucose metabolism in hyper-glycemic depancreatized dogs. *Journal of Endocrinology*: February 2001: 168: pp 49-58.

**Heisey RE, Lickley HLA:** Breast cancer in the elderly: Is there a role for primary or secondary prevention strategies? *Geriatrics*: March 2001: 4: pp 16-17.

**McCready DR, Chapman JW, Hanna WM, Kahn HG, Murray D, Fish EB, Trudeau ME, Lickley HLA:** Factors affecting disease-free survival for primary invasive breast cancer: Use of a log-normal survival model. *Annals of Surgical Oncology*: September 2000: 7(6): pp 416-426.

**McCready DR, Chapman JW, Hanna WM, Kahn HJ, Yap K, Fish EB, Lickley HLA:** Factors associated with local breast cancer recurrence after lumpectomy alone: Post-menopausal patients. *Annals of Surgical Oncology*: October 2000: 7(8): pp 562-567.

**Olive G, Lowry A, Vernava A, Hicks T, Burnstein M, Denstman F, Fazio V, Kerner B, Moore R, Peters W, Ross T, Senatore P, Simmang C, Wexner S, Wong WD:** Practice parameters for antibiotic prophylaxis to prevent infective endocarditis or infected prosthesis during colon and rectal endoscopy. *Diseases of the Colon and Rectum*: September 2000: 43(9): pp 1193-1200.

**Richard CS, Gregoire R, Plewes EA, Silverman R, Burul C, Buie D, Reznick R, Ross T, Burnstein M, O'Connor BI, Mukraj D, McLeod RS:** Internal sphincterotomy is superior to topical nitroglycerin in the treatment of chronic and fissure. *Diseases of the Colon and Rectum*: August 2000: 43(8): pp 1048-1058.

**Ross TM, Onders RP, Van Dam J:** Contemporary management of gallstone disease. *Patient Care*: September 2000: 11(9): pp 65-71.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Lickley HLA:** Canadian Cancer Society, Scarborough Unit of the Pink Ribbon Breakfast, September 2000. Breast cancer prevention.

#### **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A comparison of the volume and projected area of mammographically dense breast tissue as risk factors for breast cancer. *Yaffe MJ, Boyd NF, Fishell E, Hanna W, Holloway C, Jong R, Trichter DL, Wright B: Canadian Breast Cancer Research* (\$472,930 1998 - 2000).

A population-based study of the outcome of surveillance mammography after treatment for primary breast cancer. *Paszat L, Bondy S, Coyle D, Grunfeld E, Holowaty E, Benk V, Tu D, Holloway C, Shumak R, Sawka C, Van Walraven C, Vallis K: Canadian Breast Cancer Research* (\$286,180 2000 - 2002).

Breast cancer prevention study of tamoxifen and raloxifene (STAR). *Lickley HLA*, Down N, Cheung A, Pritchard KI, Oldfield M, Mandel M: *National Surgical Adjuvant Breast and Bowel Project* (\$417,725 1999 - 2001).

Multi-disciplinary breast cancer studies. *Lickley L*, Trudeau M, Hanna W, Kahn H, McCreedy D, Blondal J, Seth A, Holloway C: Women's College Hospital Research Fund (\$260,000 1997 - 2001).

Novel radio-pharmaceuticals for radio-guided surgery of ductal carcinoma in situ of the breast. *Reilly R*, Holloway C, Catzavelos C, Sandhu J, Hendler A: *United States Army Diagnostic and Surgical Breast Imaging* (\$364,410 2000 - 2003).

Novel radio-pharmaceuticals for radio-guided surgery of ductal carcinoma in situ of the breast. *Reilly R*, Holloway C, Catzavelos C, Sandhu J, Hendler A: *Canadian Breast Cancer Research* (\$232,043 2000 - 2003).

Prognostic factors in breast cancer. *Lickley HLA*: *Lichen Foundation* (\$50,000 2000 - 2001).

Sunnybrook and Women's College Health Sciences Centre  
Comprehensive Multi-disciplinary Breast Cancer Research Centre.  
*Pritchard KI*, *Hanna WM*, *Lickley HLA*, *Hanna WM*, *Lickley HLA*,  
*Narod S*, *Plewes D*, *Sawka C*, *Seth A*, *Slingerland J*, *Warner E*, *Yaffe M*,  
*Kahn H*, *Wright B*, *Catzavelos C*, *Holloway C*, *Vargidis D*,  
*Sutherland D*, *Rakevitch E*, *Taylor G*, *Blondal J*, *Semple J*, *Roche K*,  
*Paszat L*, *Trudeau M*, *Bronskill M*, *Chart P*, *Burns P*, *Shumak R*, *Jong R*,  
*Berry S*, *Samuels T*, *Goel V*: *Canadian Foundation for Innovation /Ontario Institute of Technology* (\$11,250,000 2000 - 2004).

Ten-year breast cancer survival; at what cost in human and physical terms: A case-control study of long-term survivors of breast cancer and their physical and functional well-being. *Trudeau ME*, *Blondal J*, *Lickley HLA*, *Narod S*, *McCreedy D*, *Sawka C*, *Hawker G*, *Doane F*, *Rubin L*, *Miller J*, *Chiamvinonvat V*: *National Cancer Institute of Canada* (\$486,275 1997 - 2003).

The role of angiogenesis in tumor cell invasion. *Lickley HLA*, *Seth A*, *Hanna WM*, *Catzavelos C*: *Bennett Family Foundation* (\$250,000 2000 - 2001).

**HONOURS RECEIVED**

**Ross TM:** E.B. Tovee Undergraduate Education Award, May 2001, University of Toronto, Department of Surgery.

**DIVISION OF PLASTIC SURGERY**

**Dr. M.H. Brown - Assistant Professor**  
**Dr. J. Semple – Associate Professor (*Division Head*)**

**PUBLICATIONS**

**Zhang J, Lipa JE, Black CE, Huang N, Neligan P, Ling FTK, Levine RH, Semple JL, Pang CY:** Pharmacological characterization of vasomotor activity of human musculocutaneous perforator artery and vein. *Journal of Applied Physiology*: July 2000: 89: pp 2268-2275.

**Andrade WN, Baxter N, Semple JL:** Clinical determinants of patient satisfaction with breast reconstruction. *Plastic and Reconstructive Surgery*: January 2001: 107: pp 46-54.

**Semple JL, Lugowski S, Smith D:** Breast-feeding and silicone implants: Good news for mothers and infants. *Perspectives in Plastic Surgery*: January 2001: 15(1): pp 81-89.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Brown MH:** Israel Cancer Research Fund, Toronto, Ontario, September 7, 2000. Current options in breast reconstruction.

**Brown MH:** Canadian Society for Aesthetic Plastic Surgery, Montreal, Quebec, September 8 - 9, 2000. Host faculty.

**Brown MH:** Emergency Medicine Update, Toronto, Ontario, May 25, 2001. Suturing skills workshop.

**Sample J:** Michigan Association of Plastic Surgeons, Mackinac Island, Michigan, July 2000. (1) Breast reconstruction: A Canadian perspective, (2) A decision-making process for surgeons encountering new technology, (3) Laparoscopic delay of a major flap, (4) Water colors: Developing an illustrated journal.

**Sample J:** Ontario Medical Secretaries Association, Toronto, Ontario, November 15, 2000. Modern approach to breast reconstruction.

**Sample J:** Canadian Society of Plastic Surgeons, Jasper, Alberta, June 7, 2001. (1) Eye-opener session: Modern approach to breast reconstruction, (2) In vitro fibroplasia in a porcine acellular dermal matrix (40).

### **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Acellular placental matrix in tissue engineering. *Sample JL*, Hopper RA: *Aesthetic Surgical Education and Research Foundation* (\$5,000 1999 - 2000).

Evaluating the effectiveness of a two-year curriculum in a surgical skills centre: The future of surgical training. *Brown MH*, Anastakis D, Reznick R, Hutchison C, Regehr G, Herold J, Ali J: *Physicians Services Incorporated Foundation* (\$82,000 1998 - 2000).

Needs assessment for a web site as an educational tool in breast reconstruction surgery. *Brown MH*, Wanzel K: *Mentor Corporation* (\$5,000 2001).

### **HONOURS AND AWARDS RECEIVED**

**Sample J:** Elected President of the Canadian Society of Plastic Surgeons. April 2001.

**TORONTO EAST GENERAL HOSPITAL****Surgeon-in-Chief – Dr. L.J. Harrington**

The past year has been a very positive year for the Toronto East General Hospital. The hospital completed its building plan and the Minister of Health and Long-Term Care, the Honorable Tony Clement, officially opened the hospital's new three-story addition: New maternal, newborn and child health centre; a new state-of-the-art surgical suite and a new complex continuing care service. The grand opening celebration was held June 25, 2001. It is anticipated that the new three-story addition will bring new and enhanced services to the East York community. Plans are also underway to create new on-site physician office space. The old interns' residence will be demolished and a new building constructed to house administration, physicians' offices and additional space for the Department of Radiology, including the housing of an MRI suite.

Mr. Ron Mulchey has completed his three-year term as the hospital Chief Executive Officer. Ms. Janet Davidson, formerly Executive Vice-President and Chief Operating Officer has replaced him.

The Department of Surgery continues to provide postgraduate training for family practice and emergentology residents. As well, it remains a popular teaching centre for postgraduate surgical trainees in general surgery and orthopaedic surgery.

Dr. Ian Harrington completed his second five-year term as Head of the Division of Orthopaedic Surgery, December 1999. Dr. Gianni Maistrelli was appointed the new head of the Division of Orthopaedic Surgery January 1, 2000. Dr. Harrington also completed his term as Surgeon-in-Chief on June 30, 2001. Dr. Harrington was recognized for his contributions to the Toronto East General Hospital at the hospital's Staff Appreciation Dinner on May 28, 2001. The new Surgeon-in-Chief is Dr. Laura Tate, Past-President of the Medical Staff Association, Toronto East General Hospital.

The hospital was saddened by the death of Dr. William Charles Forder, past Head of the Division of Urology at the Toronto East General Hospital, a beloved friend, colleague and respected surgeon. Dr. Forder died July 26, 2000.

Dr. Paul Bernick was appointed to the Division of General Surgery July 1, 2000. Dr. Bernick's sub-specialty is colorectal surgery. Dr. Bernick was appointed Lecturer, Department of Surgery, Division of General Surgery, University of Toronto July 2000.

Dr. Peter Kalman was appointed to the Division of Vascular Surgery July 1, 2000. He previously was a vascular surgeon at the University Health Network. He participated in a number of invited visits and lectures, including the Pan American Congress on Vascular and Endovascular Surgery in Rio de Janeiro, Brazil, December 7, 2000, the Canadian Winter Vascular Symposium, discussing saccular aortic aneurysms, Mount Tremblant, Quebec on February 16, 2001, and the Pennsylvania Hospital Vascular Symposium in Philadelphia, Pennsylvania, March 23, 2001 on techniques in treating mesenteric artery stenosis.

Dr. Gianni Maistrelli participated in the Challenge in Total Hip Replacement in Madrid, Spain on June 14, 2000, presenting his work on hydroxyapatite coatings in total hip implants. He also participated in the Strategies in Hip and Knee Joint Reconstruction Symposium in Toronto in June of 2000 and discussed the results of hydroxyapatite-coated stems and the importance of hip offset at the University of San Juan, San Juan, Puerto Rico, January 25, 2001. He was also a participant in the Sunoma State Orthopaedic Society Annual Meeting in San Carlos, Mexico on June 1, 2001 discussing cementless hip arthroplasty and acetabular revision surgery.

Dr. Paul Wong remains active in orthopaedic research with recent publications related to the management of acetabular defects in hip revision surgery, using roof ring re-enforcement and allograft techniques.

Dr. Wayne Tanner was a member of the Ontario Medical Association team that negotiated a new contract with the Ministry of Health for Ontario physicians in May 2000, including an agreement for the payment of physicians and surgeons for emergency work. He remains Chair of the Specialists Coalition of Ontario and Section Chair for Vascular Surgery of the Ontario Medical Association.

Dr. Gary Stoik has resigned from the Department of Surgery and continues to work as a thoracic surgeon in Adis Ababa.

Dr. Robert MacMillan completed his term as Head of the Division of Urology on June 30, 2001. He remains active in urological research, participating in studies related to the use of cranberry extract in the prevention of urinary tract infections in spinal cord injured patients, Sildenafil for erectile dysfunction and BPH Alufuzosin in the treatment of acute urinary retention.

Dr. Tom Gilas, Division of General Surgery, remains active with Surginet, a venue for international communication among surgeons. Dr. Gilas was instrumental in establishing the Surginet program.

The Department of Surgery remains interested in obtaining the services of a pediatric general surgeon in order that the hospital can fulfill its responsibilities as a Level 2 pediatric facility.

It is anticipated that the Department of Surgery of the Toronto East General Hospital will continue to be a postgraduate teaching centre for family practice, emergentology, general surgery and orthopaedic surgery residents.



FACULTY

**Dr. T.W. Barrington - Assistant Professor – Orthopaedic Surgery**  
**Dr. P. Bernick – Lecturer – General Surgery**  
**Dr. V. Campbell – Lecturer – Vascular Surgery**  
**Dr. D.C. Evans - Assistant Professor – Orthopaedic Surgery**  
**Dr. T. Gilas – Assistant Professor – General Surgery**  
**Dr. I.J. Harrington - Associate Professor – Orthopaedic Surgery**  
**Dr. P.G. Kalman - Associate Professor – Vascular Surgery**  
**Dr. W.J. Kraemer – Lecturer – Orthopaedic Surgery**  
**Dr. R. MacKenzie – Assistant Professor – General Surgery**  
**Dr. R. MacMillan – Assistant Professor - Urology**  
**Dr. G.L. Maistrelli - Associate Professor – Orthopaedic Surgery**  
**Dr. G. Stoik – Assistant Professor – General Surgery**  
**Dr. W. Tanner – Lecturer – Vascular Surgery**  
**Dr. P.J. Weiler – Assistant Professor– Orthopaedic Surgery**  
**Dr. P. Wong – Lecturer – Orthopaedic Surgery**  
**Dr. R. Zeldin – Assistant Professor – General Surgery**

PUBLICATIONS

**Gloviczki P, Kalman PG, Wilson SE, Moore WS:** Management of small abdominal aortic aneurysms. *Perspectives in Vascular Surgery*: June 2001: 14: pp 115-128.

**Gross AE, Wong P, Saleh KJ:** Grafts and cages: Managing massive bone loss. *Orthopaedics*: September 2000: 23(9): pp 973-974.

**Kalman PG:** Unilateral retro-peritoneal ileofemoral bypass. In: *Current Therapy in Vascular Surgery, Fourth Edition* (Ernst CB, Stanley JC, eds). Mosby Incorporated, St. Louis: 2001: pp 405-406.

**Kalman PG:** Percutaneous aspiration thromboembolectomy for peripheral arterial occlusions. In: *Current Therapy in Vascular Surgery, Fourth Edition*, (Ernst CB, Stanley JC, eds). Mosby Incorporated, St. Louis: 2001: pp 566-568.

**Kalman PG, Gloviczki P, Moneta G, Asch M:** Management of chronic venous ulcers: Endoscopic subfascial ligation versus conservative management. *Perspectives in Vascular Surgery*: December 2000: 13: pp 103-117.

**Kalman PG, Irvine J, Ritvo P:** How do vascular surgeons perceive atherosclerotic risk factor management? *Annals of Vascular Surgery*: November 2000: 14: pp 652-658.

**Maistrelli GL:** Functional osseointegration. In: *Total Hip Arthroplasty* (Salvi V, ed) Tielle Dia, Italy 2001: pp 232.

**Saleh KJ, Holtzman J, Gafni A, Saleh L, Jaroczynski G, Wong P, Woodgate IE, Gross A:** Development, test-reliability and validation of a classification for revision hip arthroplasty. *Journal of Orthopaedic Research*: January 2001: 19(1): pp 50-56.

**Wong PKC, King A, Saleh K, Hutchison CR, Gross AE:** Acetabular revision with a roof reinforcement ring and impacted allograft bone. *Hip International*: July 2000: 10(3): pp 145-150.

#### INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

**Kalman PG:** Pan American Congress on Vascular and Endovascular Surgery, Rio de Janeiro, Brazil, December 2000. (1) A rational approach for operating on AAAs between 4.5 and 5.5 cm, (2) Lower extremity distal bypass: Implications of predictors of survival on patient selection, (3) Moderator: Current topics of interest in vascular surgery.

**Kalman PG:** *Vascular and Endovascular Issues, Techniques and Horizons*, New York, New York, November 2000. (1) Hemodialysis access salvage: Are there cost implications?, (2) Should AAAs less than 5.5 cm in diameter be repaired?: Should our practice be influenced by the availability of endovascular grafts?

**Kalman PG:** Mayo Clinic Vascular Symposium, Rochester, Minnesota, September 2000. Iliac artery atherosclerosis: Surgical treatment, angioplasty or stent?

**Kalman PG:** American College of Surgeons, Toronto, Ontario. April 2001. Postgraduate course: Infrarenal AAAs: Unusual presentations.

**Kalman PG:** Ontario Community Nephrologists, Huntsville, Ontario, August 2000. Multi-disciplinary management of vascular access for hemodialysis.

**Kalman PG:** Canadian Winter Vascular Symposium, Mt. Tremblant, Quebec, February 2001. Saccular aortic aneurysms.

**Kalman PG:** Pennsylvania Hospital Vascular Symposium, Philadelphia, Pennsylvania, March 2001. Techniques in treating mesenteric artery stenosis: Tricks of surgical repair.

**Maistrelli GL:** University of San Juan, San Juan, Puerto Rico, January 2001. (1) Results of HA-coated stems, (2) The importance of hip offset.

**Maistrelli GL:** Sonoma State Orthopaedic Society, San Carlos, Mexico, June 2001. (1) Cementless hip arthroplasty: State of the art, (2) Acetabular revision surgery.

### **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Home exercise training for patients with intermittent claudication. *Irvine J, Kalman PG, Ritvo P, McKelvie RS: Heart and Stroke Foundation (\$312,504 2000 - 2002).*

Magnetic resonance imaging for ischemia. *Wright GA, Kalman PG, Merchant N: Medical Research Council (\$133,187 1997 - 2000).*

**UNIVERSITY HEALTH NETWORK**

**Dr. B.R. Taylor, James Wallace McCutcheon Professor  
– Surgeon-in-Chief**

**HEADS OF DIVISIONS**

**Dr. T. David – Cardiac Surgery  
Dr. O.D. Rotstein – General Surgery  
Dr. M. Bernstein – Neurosurgery  
Dr. J.R. Davey – Orthopaedic Surgery  
Dr. P. Neligan – Plastic Surgery  
Dr. R. Ginsberg – Thoracic Surgery  
Dr. M. Jewett – Urology  
Dr. K.W. Johnston – Vascular Surgery**

The University Health Network, with its newly appointed Chief Executive Officer, Tom Closson, began an important planning process, part of which was devoted to the definition of program groupings within the three hospitals. Surgical specialties were extremely well-represented in the seven program groupings; Transplantation, Cardiovascular diseases, Neurosciences and Visual Sciences, Community and Population Health, Oncology and Blood Disorders, Musculoskeletal Health and Arthritis, and Advanced Medical and Surgical Diseases. Excellent recruitment and continued academic productivity marked the past year.

**Cardiac Surgery**

Clinical volumes and quality of outcomes, such as risk-adjusted operative mortality rate in coronary artery bypass grafting, were once again outstanding. In addition, operative mortality rates and morbidity for valve surgery rank among the best in North America. Despite these heavy clinical activities, the division members remained academically productive, with Chris Feindel, Linda Mickleborough, Charles Peniston, Richard Weisel, and Terry Yau securing peer-reviewed funding from the Canadian Institutes of Health Research and the Heart and Stroke Foundation. In addition, Drs. Feindel, Mickleborough,

Peniston, Yau and David all held industrial grants. Dr. Chris Feindel received the Ross Fleming Award for surgical teaching at the University Health Network. Dr. Tirone David was re-elected Secretary of the American Association for Thoracic Surgery, and was also given the annual Achievement Award from the Canadian Cardiovascular Society. Dr. Richard Weisel received the Research Achievement Award from the Canadian Cardiovascular Society, and Dr. Hugh Scully was inducted into the Canadian Motorsport Hall of fame.

### **General Surgery**

The Division of General Surgery welcomed no fewer than four new recruits to collaborate with surgeons at the Toronto General Hospital, the Princess Margaret Hospital, the Toronto Western Hospital and Mount Sinai Hospital. Dr. Lloyd Smith became Director of Minimally Invasive Surgery, and his appointment was an important factor in attracting Dr. David Urbach to the Minimally Invasive Surgery program after completing a clinical fellowship year with Dr. Lee Swanstrom in Portland. The Department of Surgical Oncology at the Princess Margaret Hospital recruited Dr. Alan Dackiw as a surgical oncologist specializing in endocrine tumors, and Dr. Phil Haigh as an oncologist experienced in radioguided surgery.

The Multi-Organ Transplant Group initiated a program in living-related liver transplantation, completing over 30 grafts successfully by the end of the academic year. Dr. Richard Reznick was awarded the prestigious James Fourth Travelling Fellowship, and Dr. Lorne Rotstein took over as sole Program Director in the Division of General Surgery, steering the University division throughout the successful Royal College review in April. Dr. Ori Rotstein was appointed Director of the Institute of Medical Science for a five-year term. One notable event was the retirement from active clinical practice of Dr. Bernie Langer, who continued into his second year as President of the Royal College of Physicians and Surgeons of Canada. We trust Bernie will remain active in counselling clinicians, researchers and administrators at our hospital and university for years to come.

As of July 1, 2000, Dr. John Marshall was promoted to Full Professor.

**Neurosurgery**

Division members held research grants from the Canadian Institutes of Health Research, the National Institutes of Health, and a variety of other agencies. The members boasted a large number of visiting professorships. Andres Lozano became secretary-elect of the Movement Disorder Society, and Charles Tator was honoured with the Penfield Lectureship of the Congress of Canadian Neurological Surgeons. The Compeau Chair was announced, with Dr. Charles Tator as the first holder.

Dr. Michael Fehlings was promoted to Full Professor on July 1, 2000.

**Orthopaedic Surgery**

In the program groupings methodology at the University Health Network, orthopaedic surgery was an important part of the new Musculoskeletal Health and Arthritis grouping. Dr. Stephen Lewis returned as an orthopaedic surgeon in the Spine Program.

Research grants were held by Dr. Rod Davey (Canadian Orthopaedic Foundation); Dr. Nizar Mahomed (Medical Research Council of Canada, the Arthritis Society, Physicians Services Incorporated Foundation, Canadian Orthopaedic Foundation, National Institutes of Health, Anaemia Institute for Research and Education, Canadian Arthritis Network, Smith and Nephew Canada); and Dr. Raj Rampersaud (Physicians Services Incorporated Foundation, Dean's Fund).

Dr. Tony Miniaci was Chair of the subsection of sports medicine for the Canadian Orthopaedic Association, and Dr. Nizar Mahomed became Program Director of the new Musculoskeletal Health and Arthritis group. Dr. Rod Davey continued as Chair of the Clinical Quality Committee for the University Health Network.

**Plastic Surgery**

The members of this Division continued as collaborators in a variety of surgical fields. Dr. Peter Neligan remains an integral part of the reconstructive aspects of oncology and the living-related liver transplant program with his hepatic microvascular anastomosis support. Dr. Dimitri Anastakis and Dr. Brent Graham continue to support the multi-disciplinary Hand Program at the Toronto Western Hospital site. Other specialty areas, such as facial reanimation and aesthetic surgery, are components of this multi-faceted Division.

Dr. Dimitri Anastakis served as the Director of Surgical Services at the Toronto Western Hospital site, while continuing his educational research. Members of the Division received research funding from the Canadian Institutes of Health Research, The Hospital for Sick Children Foundation and W.S.I.B. Dr. Arnie Freiberg won the Outstanding Educator Award from the Society of Surgical Education in recognition of his outstanding teaching contributions.

**Thoracic Surgery**

Dr. Bob Ginsberg was appointed Head of the Division of Thoracic Surgery at the University Health Network and Chair of the Division at the University of Toronto in January 2001. He brings a wealth of administrative experience and expertise in oncology to the Division and the University.

Thoracic surgeons maintained research funding with the National Cancer Institute of Canada, the National Sanatorium Association of Canada, the Canadian Cystic Fibrosis Foundation, the Canadian Institutes of Health Research and the Physicians Services Incorporated Foundation.

Division members gave a large number of scientific presentations and invited lectures during the year. Dr. Shaf Keshavjee was named one of the top 50 alumni from the University of Toronto. Dr. Mingyao Liu was promoted to Associate Professor.

**Urology**

Division members continued their funded research activities, with grants held by Drs. Michael Jewett, Lori Burrows, Magdi Hassouna and

John Trachtenberg in the fields of uro-oncology, biomaterials and infection and neurourology.

Clinical highlights involved the development of laparoscopic donor nephrectomy, laparoscopic radical prostatectomy, and the maturation of the Prostate Centre at the Princess Margaret Hospital.

Dr. Sid Radomski won the surgical skills teaching award. This year the Brazilian Ball was held in support of Prostate cancer research at the Princess Margaret Hospital, and was a resounding success.

### **Vascular Surgery**

The Division members endured the departures of Dr. Peter Kalman and Dr. Paul Walker during the academic year, but maintained their position of academic vascular surgery pre-eminence in the country. All three surgeons, Drs. Wayne Johnston, Barry Rubin and Tom Lindsay continued their grants with the Canadian Institutes of Health Research, and the Physicians Services Incorporated Foundation respectively.

Dr. Wayne Johnston gave three named lectures during visiting professorships, and was Editor-in-Chief for the Journal of Vascular Surgery. Dr. Tom Lindsay was promoted to Associate Professor, was given a teaching award from the Wightman-Berris Academy, and was named President of the Peripheral Vascular Surgical Society.



**DIVISION OF CARDIAC SURGERY**

**Dr. S.J. Brister - Associate Professor**  
**Dr. R.J. Cusimano - Assistant Professor**  
**Dr. T.E. David – Professor (*Division Head*)**  
**Dr. C.M. Feindel - Associate Professor**  
**Dr. R-K. Li - Associate Professor**  
**Dr. L.L. Mickleborough - Professor**  
**Dr. C.M. Peniston - Assistant Professor**  
**Dr. A.C. Ralph-Edwards – Lecturer**  
**Dr. H.E. Scully - Professor**  
**Dr. R.D. Weisel - Professor**  
**Dr. T.M. Yau - Assistant Professor**

**PUBLICATIONS**

**Azaki A, David TE, Peniston CM, Rao V, Williams WG:** Ruptured sinus of valsalva aneurysm: Early recurrence and fate of the aortic valve. *Annals of Thoracic Surgery*: November 2000: 70(5): pp 1466-1470.

**Borger MA, Ivanov J, Weisel RD, Rao V, Peniston CM:** Stroke during coronary bypass surgery: Principal role of atherosclerotic macroemboli. *European Journal of Cardiothoracic Surgery*: June 2001: 19: pp 627-632.

**Borger MA, Peniston CM, Weisel RD, Vasiliou M, Green RE, Feindel CM:** Neuropsychologic impairment after coronary bypass surgery: Effect of gas microemboli during perfusionist interventions. *Journal of Thoracic and Cardiovascular Surgery*: April 2001: 14: pp 743-749.

**Borger MA, Rao V, Weisel RD, Floh A, Feindel CM, Yau TM:** Re-operative coronary bypass surgery: Effect of patent grafts on peri-operative outcomes. *Journal of Thoracic and Cardiovascular Surgery*: January 2001: 121: pp 83-90.

**Borger MA, Rao V, Weisel RD, Floh AA, Cohen G, Feindel CM, Scully HE, Mickleborough LL, Yau TM:** Re-operative coronary bypass surgery: Effect of patent grafts and retrograde cardioplegia. *Journal of Thoracic and Cardiovascular Surgery*: January 2001: 121: pp 83-90.

**Buchanan MR, Brister SJ:** Anti-coagulant and anti-thrombotic effects of intimatedan, a heparin co-factor II agonist. *Thrombosis Research*: September 2000: 99(6): pp 603-612.

**Buchanan MR, Schwartz L, Bourassa MG, Brister SJ, Peniston CM:** Results of the BRAT study: Benefits and risks of aspirin on thrombosis in patients undergoing coronary artery bypass: Lack of an aspirin non responder effect. *Canadian Journal of Cardiology*: November 2000: 11: pp 1385-1390.

**David TE:** Aortic surgery in the Marfan syndrome. *Advances in Cardiac Surgery*: February 2001: 13: pp 61-75.

**David TE, Ivanov J, Armstrong S, Feindel CM, Cohen G:** Late results of heart valve replacement with the Hancock II bioprosthesis. *Journal of Thoracic and Cardiovascular Surgery*: February 2001: 121(2): pp 268-277.

**Ghali WA, Rothwell DM, Quan H, Brant R, Tu JV, CCN Steering Committee:** A Canadian comparison of data sources for coronary artery bypass surgery outcome report cards. *American Heart Journal*: October 2000: 140: pp 402-408.

**Goldman BS, David TE, Wood JR, Pepper JR, Goldman SM, Verrier ED, Petracek MR:** Clinical outcomes after aortic valve replacement with the Toronto stentless. *Annals of Thoracic Surgery*: May 2001: 7(5): pp 302-305.

**Hynninen M, Borger MA, Rao V, Weisel RD, Christakis GT, Carroll JA, Cheng DC:** The effect of insulin cardioplegia on atrial fibrillation after high-risk coronary bypass surgery: A double-blinded, randomized, controlled trial. *Anesthesia and Analgesia*: April 2001: 92: pp 810-816.

**Ivanov J, Borger MA, David TE, Cohen G, Walton N, Naylor CD:** Predictive accuracy study: Comparing a statistical model to clinician's estimate after coronary bypass surgery. *Annals of Thoracic Surgery*: July 2000: 70(1): pp 162-168.

**Li R-K:** Cardiomyocytes. In: *Human Cell Culture, Volume Five*. (Koller MR, Palsson BO, Masters JRW, eds). Kluwer Academic Publishers, Boston: 2001: pp 103-124.

**Li RK, Yau TM:** Commentary: Patch augmentation of the pulmonary artery with bioabsorbable polymers and autologous cell seeding. *Journal of Thoracic and Cardiovascular Surgery*: December 2000: 120: pp 1168.

**Marchand MA, Aupart MR, Norton R, Goldsmith IR, Pelletier LC, Pellerin M, Dubiel T, Herijgers P, Casselman FP, Holden MP, David TE:** Fifteen-year experience with the mitral Carpentier-Edwards PERIMOUNT bioprosthesis. *Annals of Thoracic Surgery*: May 2001: 7(5): pp 236-239.

**Mickleborough LL, Carson S, Ivanov J:** Repair of dyskinetic or akinetic left ventricular aneurysm: Results obtained with a modified linear closure. *Journal of Thoracic and Cardiovascular Surgery*: January 2001: 121: pp 675-682.

**Ojha M, Leask RL, Johnston KW, David TE, Butany J:** Histology and morphology of 59 internal thoracic artery grafts and their distal anastomosis. *Annals of Thoracic Surgery*: October 2000: 70(4): pp 1338-1344.

**Raanani E, Albage A, David TE, Armstrong S, Yau TM:** The efficacy of the Cox/Maze III procedure combined with mitral valve surgery: A matched control study. *European Journal of Cardiothoracic Surgery*: April 2001: 19(4): pp 438-442.

**Raanani E, David TE, Dellgren G, Armstrong S, Ivanov J, Feindel CM:** Redo aortic root replacement: Experience with 31 patients. *Annals of Thoracic Surgery*: May 2001: 71(5): pp 1460-1463.

**Raanani E, Yau TM, David TE, Dellgren G, Sonnenberg BD, Omran A:** Risk factors for late pulmonary homograft stenosis after the Ross procedure. *Annals of Thoracic Surgery*: December 2000: 70: pp 1953-1957.

**Rao V, Feindel CM, Cohen G, Borger MA, Ross HJ, Weisel RD:** Effects of metabolic stimulation on cardiac allograft recovery. *Annals of Thoracic Surgery*: January 2001: 71: pp 219-225.

**Rao V, Ivanov J, Weisel RD, Cohen G, Borger MA, Mickle DAG:** Lactate release during re-perfusion predicts low cardiac output syndrome after coronary bypass surgery. *Annals of Thoracic Surgery*: June 2001: 71: pp 1925-1930.

**Rao V, Jamieson WR, Ivanov J, Armstrong S, David TE:**

Prosthesis-patient mis-match affects survival after aortic valve replacement. *Circulation*: November 2000; 7:102(19): pp III5-III9.

**Rao V, Van Arsdell GS, David TE, Azakie A, Williams WG:**

Aortic valve repair for adult congenital heart disease: A 22-year experience. *Circulation*: November 2000; 7:102(19): pp III40-III43.

**Sakai T, Li R-K, Weisel RD, Mickle DAG, Kim E-J, Jia Z-Q, Yau**

**TM:** The fate of a tissue-engineered cardiac graft in the right ventricular outflow tract. *Journal of Thoracic and Cardiovascular Surgery*: May 2001; 121(5): pp 932-942.

**Sarjeant J, Yau TM, Li R-K, Weisel RD, Mickle DAG:**

Cell therapy for ventricular dysfunction. *Cardiovascular Review and Reports*: July 2000; 21: pp 287-292.

**Scully HE:** President's page: Canada's healthcare system: Is it sustainable? *Canadian Journal of Cardiology*: August 2000; 16: pp 963-964.

**Scully HE:** President's page: Sustainability of Canadian medicare:

Optimism for the future (Part 1). *Canadian Journal of Cardiology*: September 2000; 16: pp 1069-1070.

**Scully HE:** President's page: Sustainability of Canadian medicare:

Optimism for the future (Part II). *Canadian Journal of Cardiology*: October 2000; 16: pp 1203-1204.

**Thomson DJ, Jamieson WRE, Dumesnil JG, Burgess JH, Peniston**

**CM:** Medtronic mosaic porcine bio-prosthesis mid-term investigational trial results. *Annals of Thoracic Surgery*: May 2001; 71: pp S269-S272.

**Weisel RD, Li RK, Mickle DAG, Yau TM:**

Cell transplantation comes of age. *Journal of Thoracic and Cardiovascular Surgery*: May 2001; 121: pp 835-836.

**Yau TM, Borger MA, Weisel RD, Ivanov J:**

The changing pattern of re-operative coronary surgery: Trends in 1,230 consecutive re-operations. *Journal of Thoracic and Cardiovascular Surgery*: July 2000; 120: pp 156-163.

**Yokomuro H, Li R-K, Mickle DAG, Weisel RD, Verma S, Yau TM:** Transplantation of cryo-preserved cardiomyocytes. *Journal of Thoracic and Cardiovascular Surgery*: January 2001: 121: pp 98-107.

**Yoo K-J, Li R-K, Weisel RD, Mickle DAG, Jia Z-Q, Kim E-J, Tomita S, Yau TM:** Heart cell transplantation improves heart function in dilated cardiomyopathic hamsters. *Circulation*: November 2000: 102(3): pp 204-209.

**Yoo K-J, Li R-K, Weisel RD, Weisel RD, Mickle DAG, Li G-M, Kim E-J, Tomita S, Yau TM:** Autologous smooth muscle cell transplantation improved heart function in dilated cardiomyopathy. *Annals of Thoracic Surgery*: September 2000: 70: pp 859-865.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Brister SJ:** Canadian Cardiovascular Society, Vancouver, British Columbia, October 2000. Women and ischemic heart disease.

**Brister SJ:** Radio Station CKMW, Vancouver, British Columbia, October 2000. Women and heart disease.

**Brister SJ:** Ontario Medical Association, Toronto, Ontario, April 2001. Women and cardiovascular disease.

**David TE:** American College of Cardiology, Snowmass, Colorado, January 2001. (1) Dilated cardiomyopathy: Current approaches and management, (2) Surgical repair for aortic valve insufficiency: When to operate: Biologic or mechanical?

**David TE:** Yale University School of Medicine, New Haven, Connecticut, September 2000. (1) Repair of LV septal rupture, (2) Stentless aortic valve replacement, (3) Repair of LV septal rupture, (4) Valve-sparing aortic root replacement.

**David TE:** Universite catholique de Louvain, Brussels, Belgium, May 2001. (1) Surgical expertise in mitral valve repair for degenerative disease, (2) Twenty-first century management of aortic valve surgery.

**David TE:** Symposium on Adult Cardiac Surgery, San Diego, California, May 2001. Changing choice of techniques for valve-sparing aortic root replacement.

**David TE:** Symposium on Cardiac Bioprostheses, Cancun, Mexico, November 2000. Debate: Biological versus mechanical in patients below 70 years.

**David TE:** New York Society for Thoracic Surgery, New York, New York, November 2000. Functional anatomy of the aortic valve and its application in heart surgery.

**David TE:** Ohio State University Medical Center, Columbus, Ohio, January 2001. Is there a future for the surgical Maze procedure?

**David TE:** Mount Sinai Medical Center, New York New York, March 2001. Mitral valve surgery in patients with floppy valve.

**David TE:** International Society of Cardiothoracic Surgeons, Vancouver, British Columbia, August 2000. Preservation of the native aortic and mitral valves: Indications and techniques.

**David TE:** World Congress of Pediatric Cardiology and Cardiac Surgery, Toronto, Ontario, May 2001. Save the valve and save the patient.

**David TE:** Gentofte Hospital, Copenhagen, Denmark, May 2001. Surgery of the aortic root.

**David TE:** Developing the Academic Surgeon: A Symposium, San Diego, California, May 2001. The future of academic cardiothoracic surgery: Canadian perspective.

**David TE:** American College of Cardiology, Toronto, Ontario, May 2001. The stentless porcine valve.

**Li R-K:** International Society for Adaptive Medicine, Lyon, France, August 2000. Adaptation of transplanted cells to improve heart function.

**Li R-K:** Electro-Anatomy of the Heart, Hamburg, Germany, October 2000. (1) Chair, (2) Bone marrow cell transplantation.

**Li R-K:** Canadian Cardiovascular Society, Vancouver, British Columbia, October 2000. Can somatic cell transplantation induce myocardial angiogenesis?

**Li R-K:** International Atherosclerosis Society, Lugano, Switzerland, February 2001. Cell therapy of myocardial infarction.

**Li R-K:** International Society of Heart Research, India, New Delhi, India, January 2001. Cell transplantation for cardiovascular disease.

**Li R-K:** University of Western Ontario, London, Ontario, November 2000. Cell transplantation: A new therapy for cardiovascular disease.

**Li R-K:** Society of Chinese Bioscientists in America, Toronto, Ontario, May 2001. Cell transplantation: A novel therapy for heart failure.

**Li R-K:** University Medical Centre Utrecht, Utrecht, The Netherlands, October 2000. Cell transplantation: A novel treatment for the failing heart.

**Li R-K:** Japanese College of Cardiology, Osaka, Japan, September 2000. Myocardial cell transplantation.

**Li R-K:** Visiting Professor, Cardiovascular Institute, Fu Wai Hospital/Chinese Academy of Medical Sciences/Peking Union Medical College, Beijing, China, December 2000. The possible clinical application of cell transplantation for cardiovascular disease.

**Mickleborough LL:** Cardiologia 2000, Milano, Italy, September 2000. Results of re-vascularization in patients with severe ventricular dysfunction - EF  $\leq$  20%.

**Mickleborough LL:** C.C.S. Consensus Conference, Vancouver, British Columbia, October 2000. What is the role of aorto-coronary bypass grafting for coronary artery disease in women?

**Peniston CM:** Sulzer Medica Tropics 2001, Turks and Caicos, February 2001. How do we learn?

**Peniston CM:** Sino-American Cardiovascular Symposium, Guangdong, China, August 2000. The clinical experience with the Toronto SPV valve.

**Peniston CM:** York-Finch Hospital, Toronto, Ontario, February 2001. What's new in cardiac surgery?

**Scully HE:** John F. Kennedy School of Government, Harvard University, Cambridge, Massachusetts, November 2000. Canada's health-care system today and tomorrow.

**Scully HE:** Financial Executives Institute, Toronto, Ontario, March 2001. Future directions in health care in Canada.

**Scully HE:** Health Authorities for Health Authorities, Edmonton, Alberta, March 2001. Improving performance through effective medical staff relationships.

**Scully HE:** New Hampshire Medical Society, Hanover, New Hampshire, September 2000. Over-view of mental and behavioral health in the United States.

**Scully HE:** Canadian Society for Physician Executives, Toronto, Ontario, February 2001. Physicians leading change.

**Scully HE:** Institute for International Research, Toronto, Ontario, January 2001. Reorganizing the continuum of care in Canada.

**Scully HE:** Medico-Legal Society of Toronto, Toronto, Ontario, September 2000. Mock trial: Resource allocation and accountability in health-care.

**Scully HE:** Canadian Association of Interns and Residents, Winnipeg, Manitoba, June 2001. The Canadian approach to physician workforce needs.

**Scully HE:** Association of Program Directors in Surgery, Nashville, Tennessee, March 2001. (1) The Canadian approach to surgical manpower needs, (2) Panelist.

**Weisel RD:** Society for Thoracic Surgical Education, Lana'i, Hawaii, February 2001. Cell transplantation: A novel treatment for the failing heart.

**Weisel RD:** Terumo Cardiovascular Systems Corporation, San Diego, California, May 2001. How I monitor, insure and improve the safety of my cardiac surgery patients.



**Weisel RD:** American Association for Thoracic Surgery, San Diego, California, May 2001. (1) Intellectual property and technology transfer, (2) Discussant: Intra-operative metabolic monitoring of the heart: Clinical assessment of coronary sinus metabolites.

**Weisel RD:** San Diego Cardiothoracic Surgery Symposium, San Diego, California, May 2001. (1) Myocardial protection, (2) The future of myocardial cell transplantation.

**Weisel RD:** Canadian Cardiovascular Society, Vancouver, British Columbia, October 2000. Myocardial protection, cell transplantation and the development of surgical-scientists.

**Weisel RD:** Society for Cardiovascular Anesthesiologists, Breckenridge, Colorado, March 2001. (1) Debate: Off pump surgery is not ready for prime time, (2) Stented versus stentless aortic valve replacement.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

A prospective evaluation of the St. Jude Incorporated cardiovascular group aortic connector. *Yau TM: St. Jude Medical Incorporated* (\$40,000 2000 - 2001).

Cerebral protection by insulin for cardiac surgery. *Peniston CM, Weisel RD, Naylor CD, McLean RF: Heart and Stroke Foundation* (\$131,584 1999 - 2001).

Endothelin and peri-operative ischemia in diabetics. *Weisel RD, Rao V: Canadian Diabetes Association* (\$138,536 2000-2002).

Endothelin antagonism and cardiac surgery in diabetes. *Weisel RD, Verma S: Physicians Services Incorporated Foundation* (\$18,000 2001).

Insulin cardioplegia for poor left ventricular function. *Yau TM, Weisel, RD: Heart and Stroke Foundation* (\$69,000 1999 - 2001).

Long-term survival benefit of internal thoracic artery grafting in severe LV dysfunction. *Fedak P, Weisel RD: Physicians Services Incorporated Foundation* (\$18,000 2000).

Magnetic resonance imaging for ischemic heart disease. *Merchant N, Mickleborough LL: Medical Research Council of Canada* (\$75,225 2000 - 2001).

Mosaic heart valve study. *Peniston CM, David TE: Medtronic Incorporated* (\$30,000 1999 - 2000).

Multi-centre radial artery patency study. *Fremes SE, Yau TM: Medical Research Council of Canada* (\$270,000 2000 - 2001).

Myocardial transgene expression in transplanted cells. *Yau TM: Connaught Foundation* (\$30,000 2000 - 2002).

Prolonged storage of cardiac allografts with shed donor blood. *Feindel CM: Heart and Stroke Foundation* (\$134,724 1999 - 2001).

Protection from peri-operative ischemia. *Weisel RD: Heart and Stroke Foundation* (\$160,000 2000-2003).

Role of growth factor over-expression in idiopathic hypertrophic cardiomyopathy. *Li R-K: Medical Research Council of Canada* (\$170,000 1998 - 2001).

The expedition trial ( $\text{Na}^+/\text{H}^+$  exchange inhibition to prevent events in acute cardiac conditions). *Yau TM, Weisel RD: Adventis Pharmaceuticals Incorporated* (\$120,000 2001-2002).

The safety and effects of O-raffinose cross-linked human hemoglobin in patients undergoing coronary artery bypass grafting: Phase II. *Davy RJ, Cheng CH, Karski JM, Mazer D, Ralph-Edwards AC, Cusimano RJ, Yeo E: Hemosol Incorporated* (\$85,000 1999 - 2000).

Women and blood transfusions in cardiac surgery. *Karkouti K, Mickleborough LL: Janssen-Ortho* (\$20,000 2000 - 2001).

## HONOURS RECEIVED

**Li R-K:** Clemson Award for Applied Research, Society for Biomaterials, April 2001.

**Scully HE:** Inductee, Canadian Motorsport Hall of Fame, February 2001.

**Weisel RD:** Research Achievement Award, Canadian Cardiovascular Society, October 2000.

**DIVISION OF GENERAL SURGERY**

**Dr. M.S. Cattral - Associate Professor**  
**Dr. A. Dackiw – Assistant Professor**  
**Dr. R.M. Gorczynski – Professor**  
**Dr. D. Grant - Professor**  
**Dr. P.D. Greig – Professor**  
**Dr. P. Haigh – Assistant Professor**  
**Dr. H.S. Himal - Associate Professor**  
**Dr. A. Kapus - Assistant Professor**  
**Dr. B. Langer – Professor**  
**Dr. J.C. Marshall - Professor**  
**Dr. R.E. Mathews - Assistant Professor**  
**Dr. D.R. McCready - Associate Professor**  
**Dr. R.K. Reznick - Professor**  
**Dr. L.E. Rotstein - Associate Professor**  
**Dr. O.D. Rotstein - Professor (*Division Head*)**  
**Dr. L. Smith – Assistant Professor**  
**Dr. B.R. Taylor – Professor**  
**Dr. D. Urbach – Assistant Professor**

**PUBLICATIONS**

**Ben-Meir A, Urbach DR, Khajanchee YS, Hansen PD, Swanstrom LL:** Quality of life before and after laparoscopic Heller myotomy for achalasia. *American Journal of Surgery*: May 2001: 181: pp 471-474.

**Brenner RJ, Haigh PI:** Stereotactic core needle breast biopsy. In: *Operative Techniques in General Surgery* (van Heerden A, Farley M eds), W.B. Saunders Company, Philadelphia: 2000: pp 104-109.

**Carpentier A, Patterson BW, Uffelman KD, Giacca A, Vranic M, Cattral MS, Lewis GF:** The effects of systemic versus portal insulin delivery in pancreas transplantation on glucose, fatty acid, and VLDL metabolism. *Diabetes*: June 2001: 50: pp 1402-1413.

**Catral MS, Bigam D, Hemming AW, Carpentier A, Greig PD, Wright E, Cole E, Donat D, Lewis G:** Portal venous and enteric exocrine drainage versus systemic venous and bladder exocrine drainage of pancreas grafts: Clinical outcome of 40 consecutive transplant recipients. *Annals of Surgery*: November 2000: 232: pp 688-695.

**Catral MS, Lilly LB, Levy GA:** Immuno-suppression in liver transplantation. *Seminars in Liver Disease*: November 2000: 20: pp 523-531.

**Chapman JW, Mobbs BG, Hanna W, Kahn HJ, Murray D, Lickley A, Fish EB, Trudeau ME, Miller NA, McCready DR:** A changing role for steroid hormone receptors in primary breast cancer? *Current Topics in Steroid Research*: November 2000: 3: pp 39-51.

**Clark DA, Ding JW, Yu G, Phillips J, Levy G, Gorczynski RM:** Transplantation tolerance-promoting molecule OX2 expressed in the uterus prevents cytokine-triggered fgl2 prothrombinase-mediated "fetal rejection" syndrome in allo-pregnant mice. January 2001: *Molecular Human Reproduction*.

**Cohen J, Guyatt G, Bernard GR, Calandra T, Cook D, Elebourne D, Marshall J, Nunn A, Opal S:** New strategies for clinical trials in patients with sepsis and septic shock. *Critical Care Medicine*: April 2001: 29: pp 880-886.

**Cook DJ, Heyland D, Marshall JC, Canadian Critical Care Trials Group:** On the need for observational studies to design and interpret randomized trials in the intensive care unit patients: A case study in stress ulcer prophylaxis. *Intensive Care Medicine*: February 2001: 27: pp 347-354.

**Essner R, Bostick PJ, Glass EC, Foshag LJ, Haigh PI, Wang H-J, Morton DL:** Standardized probe-directed sentinel node dissection in melanoma. *Surgery*: September 2000: 127: pp 26-31.

**Essner R, Hsueh EC, Haigh PI, Glass EC, Huynh Y, Daghigian F:** Application of an <sup>18</sup>F fluorodeoxyglucose-sensitive probe for the intra-operative detection of malignancy. *Journal of Surgical Research*: January 2001: 96: pp 120-126.

**Fan J, Shek PH, Suntres ZE, Li YH, Oreopoulos GD, Rotstein OD:** Liposomal anti-oxidants provide prolonged protection against acute respiratory distress syndrome. *Surgery*: August 2000: 128: pp 332-338.

**Fecteau A, Atkinson P, Grant D:** Early referral is essential to achieve a successful outcome after pediatric small bowel transplantation: A review of the Canadian experience. *Journal of Pediatric Surgery*: October 2000: 36(S): pp 681-684.

**Gershon AS, Margulies M, Gorczynski RM, Heathcote EJ:** Serum cytokine values and fatigue in chronic hepatitis C infection. November 2000: *Journal of Viral Hepatology*: 7(6): pp 397-402.

**Giuliano AE, Haigh PI, Hansen NM, Kelley MC, Brennan MB, Ye W, Glass EC, Turner RR:** Prospective observational study of sentinel lymphadenectomy without further axillary dissection in patients with sentinel node-negative breast cancer. *Journal of Clinical Oncology*: December 2000: 18: pp 2553-2559.

**Gorzynski RM:** Understanding classical conditioning of immune responses. In: *Neuroimmune Biology: New Foundations of Biology*, (Gorzynski RM, Beinenstock A, Berczi L, eds), Elsevier Press, Switzerland: July 2001: 1: pp 237-254.

**Haigh PI, Brenner RJ, Giuliano AE:** Origin of metallic particles resembling microcalcifications on mammograms after use of abrasive cautery-tip cleaning pads during breast surgery: Experimental demonstration. *Radiology*: September 2000: 216: pp 539-544.

**Haigh PI, Edwards GK, Hansen NM, Giuliano AE, Ye W, Glass EC:** Factors affecting sentinel node localization during pre-operative breast lymphoscintigraphy. *Journal of Nuclear Medicine*: October 2000: 41: pp 1682-1688.

**Haigh PI, Essner R, Glass EC:** Accuracy of gamma probes in localizing radioactivity: In-vitro assessment and clinical implications. *Cancer Biotherapy and Radiopharmacology*: December 2000: 15: pp 561-570.

**Haigh PI, Giuliano AE:** Critical evaluation of sentinel lymph node dissection for malignancy. *PPO Updates*: December 2000: 14: pp 1-11.

**Haigh PI, Giuliano AE:** Sentinel lymph node dissection for thyroid malignancy: Recent results. *Cancer Research*: December 2000: 157: pp 201-205.

**Haigh PI, Giuliano AE:** The role of sentinel lymph node dissection in breast cancer. *Annals of Medicine*: August 2000: 32: pp 51-56.

**Haigh PI, Hansen NM, Qi K, Giuliano AE:** Biopsy method and excision volume do not affect success rate of subsequent sentinel lymph node dissection in breast cancer. *Annals of Surgical Oncology*: July 2000: 7: pp 21-27.

**Haigh PI, Ituarte P, Wu H-S, Posner M, Quivey J, Duh Q-Y, Clark OH:** Completely resected anaplastic thyroid carcinoma combined with adjuvant chemo-radiation is associated with prolonged survival. *Cancer*: April 2001: 91: pp 2335-2342.

**Hebert PC, Blachman MA, Cook DJ, Yetisir E, Wells G, Marshall JC:** Do blood transfusions improve outcomes related to mechanical ventilation? *Chest*: June 2001: 119: pp 1850-1857.

**Hebert PC, Martin C, Blachman MA, Wells G, Tweeddale M, Marshall JC, Pagliarello G, Schweitzer I, Yetisir E, Transfusion Requirements in Critical Care Investigators for the Canadian Critical Care Trials Group:** Is a low transfusion threshold safe in critically ill patients with cardiovascular diseases? *Critical Care Medicine*: February 2001: 29: pp 227-234.

**Hemming AW, Cattral MS, Reed AI, Van der Werf WJ, Greig PD, Howard RJ:** Liver transplantation for hepatocellular carcinoma. *Annals of Surgery*: May 2001: 233: pp 652-659.

**Hemming AW, Gallinger S, Greig PD, Cattral M, Langer B, Taylor BR, Verjee Z, Giesbrecht E, Nakamachi Y, Furuya KN:** The Hippocratic ratio as an indicator of functional hepatic reserve for resection of hepatocellular carcinoma in cirrhotic patients. *Journal of Gastrointestinal Surgery*: May 2001: 5: pp 316-321.

**Himal HS:** Common bile duct stones: The role of pre-operative, intra-operative, and post-operative E.R.C.P. *Seminars in Laparoscopic Surgery*: December 2000: 7(4): pp 237-245.

**Himal HS:** Appendicitis and C.T. scans. *Canadian Journal of Continuing Medical Education*: March 2001: 13: pp 27-28.

**Humar A, Ostromecki A, Direnfeld J, Marshall JC, Lazar N, Houston PC, Boiteau P, Conly JM:** A prospective randomized trial of 10% povidone-iodine versus 0.5% tincture of chlorhexidine as cutaneous antisepsis for prevention of central venous catheter infection. *Clinical Infectious Diseases*: October 2000: 31: pp 1001-1007.

**Jimenez MF, Marshall JC:** Abdominal infections in critically ill patients. In: *Critical Care Medicine* (Lovesio C, ed). Librerias Yenny, Buenos Aires: 2001: pp 563-573.

**Jimenez MF, Marshall JC:** Source control in the management of sepsis. *Intensive Care Medicine*: February 2001: 27: pp S49-S62.

**Levine M, Ginsburg D, Pritchard K, Crump M, Dhaliwal D, Douglas MS, Down N, Graham I, Holowaty E, Johnston M, Lada B, Laukkanen E, McCready D, Mirsky D, Myers R, O'Malley F, Perera F, Sawka C, Shelley W, Tomiak E, Warr D, Whelan T:** The role of adjuvant systemic therapy in node-negative breast cancer. *Current Oncology*: December 2000: 6(2): pp 78-89.

**Marshall JC:** Complexity, chaos, and incomprehensibility: Parsing the biology of critical illness. *Critical Care Medicine*: July 2000: 28: pp 2646-2648.

**Marshall JC:** Light and shadow: Perspectives on host-microbial interactions in the pathogenesis of intensive care unit-acquired infection. In: *Sepsis and Organ Dysfunction* (Baue AE, Berlot G, Gullo A, Vincent JL, eds). Springer-Verlag, Milano: 2000: pp 75-83.

**Marshall JC:** Measuring treatment outcomes in intensive care: Mortality, morbidity, and organ dysfunction. In: *Evaluating Critical Care: Using Health Services Research to Improve Quality* (Sibbald W, Bion J, eds). Springer-Verlag, Berlin: 2000: pp 69-58.

**Marshall JC:** Risk prediction and outcome description in critical surgical illness. In: *Surgery: Basic Science and Clinical Evidence* (Norton JA, Bollinger RR, Chang AE, Lowry SE, Mulvihill SJ, Pass HI, Thompson RW, eds). Springer-Verlag, New York: 2000: pp 305-320.

**Marshall JC:** Scoring systems for sepsis and the multiple organ dysfunction syndrome. In: *Surgical Research* (Souba WW, Wilmore DW, eds). Academic Press, San Diego: 2001: pp 921-931.

**Marshall JC:** SIRS and MODS: What is their relevance to the science and practice of critical care? *Shock*: December 2000: 14: pp 586-589.

**Marshall JC:** Source control in the management of infection in the critically ill patient. In: *Intensivmedizin* (Van Aken, Reinhart K, Zimpfer, eds). George Thieme Verlag, Stuttgart: 2001: pp 775-778.

**Marshall JC:** The microbial ecology of the gastrointestinal flora. In: *Intra-abdominal Infections* (Tellado JM, Christou NV, eds). Harcourt Limited, Madrid: 2000: pp 13-30.

**Marshall JC:** The multiple organ dysfunction syndrome. In: *Surgical Treatment: Evidence-based and Problem-oriented* (Holzheimer RG, Mannick JA, eds). W. Zuckschwerdt Verlag, Munich: 2001: pp 780-785.

**Marshall JC, Aarts MA:** From Celsus to Galen to bone: The illnesses, syndromes, and diseases of acute inflammation. In: *Yearbook of Intensive Care and Emergency Medicine* (Vincent JL, ed). Springer-Verlag, Berlin: 2001: pp 3-12.

**Matsumoto ED, Reznick RK:** Assessment of surgical competency in trainees. *Surgery*: April 2001: 19(4): pp 1-2.

**McGregor CS, Marshall JC:** Enteral feeding in acute pancreatitis: Just do it. *Current Opinion in Critical Care*: April 2001: 7: pp 89-91.

**McLeod RS, Geerts W, Sniderman K, Greenwood C, Gregoire R, Taylor B, Silverman R, Atkinson K, Burnstein M, Marshall J, Burul C, Anderson D, Ross T, Wilson S, Barton P:** Subcutaneous heparin versus low molecular weight heparin as thromboprophylaxis in patients undergoing colorectal surgery: Results of the Canadian colorectal DVT prophylaxis trial: A randomized double-blind trial. *Annals of Surgery*: March 2001: 233: pp 438-444.



**Oreopoulos GD, Hamilton J, Rizoli SB, Fan J, Lu Z, Li YH, Marshall JC, Kapus A, Rotstein OD:** *In vivo* and *in vitro* modulation of intracellular adhesion molecule (ICAM)-1 expression by hypertonicity. *Shock*: September 2000: 14: pp 409-415.

**Pallister C, Rotstein OD:** *Yersinia enterocolitica*. *Canadian Journal of Surgery*: April 2001: 44: pp 135-136.

**Reznick RK:** I am a good teacher, maybe even a really good teacher, is that okay? *American Journal of Surgery*: September 2000: 180(3): pp 157-161.

**Rotstein OD, Parodo J, Taneja R, Marshall JC:** Phagocytosis of *Candida albicans* induces apoptosis of human neutrophils. *Shock*: September 2000: 14: pp 278-283.

**Rotstein LE:** Pharyngeal reconstruction with the gastric pull-up. In: *Plastic Surgery: Indications, Operations and Outcomes, Volume 3* (Achauer BM, Eriksson E, Guyuron B, Coleman JJ, Russell RC, Vander Kolk CA, eds). Mosby Incorporated, Philadelphia: 2000: pp 1315-1321.

**Sielaff TD, Taylor BR, Langer B:** Recurrence of hydatid disease. *World Journal of Surgery*: January 2001: pp 83-86.

**Solomkin JS, Wilson SE, Christou NV, Rotstein OD, Dellinger EP, Benion RS, Pak R, Tack K:** Results of a clinical trial of clinafloxacin versus imipenem/cilastatin for intra-abdominal infections. *Annals of Surgery*: January 2001: 233: pp 79-87.

**Taneja R, Li Y, Marshall JC:** Programmed cell death (apoptosis) and the immunologic derangements of critical illness. In: *The Immune Response in the Critically Ill*. (Marshall JC, Cohen J, eds). Springer-Verlag, Berlin: 2000: pp 264-279.

**Taneja R, Marshall JC:** Vasoactive agents and the gut: Fuelling the motor of multiple organ failure. *Critical Care Medicine*: August 2000: 28: pp 3107-3108.

**Taylor B:** Bile duct injuries: Incidence, prevention and management. *Scalpel*: December 2000: 14(5): pp 12-13.

**Urbach DR:** Current status of minimally invasive surgery. *Geriatrics and Aging*: May 2001: 4: pp 20-21.

**Urbach DR, Hansen PD, Khajanchee YS, Swanstrom LL:** A decision analysis of the optimal initial approach to achalasia: Laparoscopic Heller myotomy with partial fundoplication, thoracoscopic Heller myotomy, pneumatic dilatation, or botulinum toxin injection. *Journal of Gastrointestinal Surgery*: February 2001: 5: pp 192-205.

**Urbach DR, Herron DM, Khajanchee YS, Swanstrom LL, Hansen PD:** Laparoscopic hepatic artery pump placement: Operative technique. *Archives of Surgery*: June 2001: 136: pp 1417-1423.

**Urbach DR, Khajanchee YS, Jobe BA, Hansen PD, Swanstrom LL:** Cost-effective management of common bile duct stones: A decision analysis of the use of ERCP, intra-operative cholangiography, and laparoscopic common bile duct exploration. *Surgical Endoscopy*: January 2001: 15: pp 4-13.

**Urbach DR, Marrett L, Kung R, Cohen MM:** Association of perforation of the appendix with female tubal infertility. *American Journal of Epidemiology*: March 2001: 153: pp 566-571.

**Urbach DR, Swanstrom LL:** Laparoscopic repair of para esophageal hiatal hernia. In: *Current Surgical Therapy, Seventh Edition* (Cameron JL, ed). Mosby-Year Book Incorporated, St. Louis: 2001: pp 201.

**Urbach DR, Swanstrom LL, Khajanchee YS, Hansen PD:** Incidence of cancer of the pancreas, extra-hepatic bile duct and ampulla of Vater in the United States, before and after the introduction of laparoscopic cholecystectomy. *American Journal of Surgery*: June 2001: 181: pp 38-40.

**Vincent JL, Thijs L, Artigas, A, Marshall JC, Suter P:** Clinical implications of anti-coagulation mediator replacement in sepsis and acute respiratory distress syndrome. *Critical Care Medicine*: September 2000: 28: pp S86-S87.

**Von Dadelszen P, Magee LA, Marshall JC, Rotstein OD:** The maternal syndrome of pre-eclampsia: A forme fruste of the systemic inflammatory response syndrome. *Sepsis*: October 2000: 4: pp 43-47.

**Wexner SD, Garbus JE, Singh JJ, Sages Colonoscopy Outcomes Study Group including Himel HS:** A prospective analysis of 13,580 colonoscopies. *Surgical Endoscopy*: April 2001; 15: pp 251-261.

**Wu HM, McCready DR:** Role of lymphatic mapping and sentinel node biopsy in the staging of melanoma. *Current Oncology*: January 2001; 7(4): pp 262-266.

**Wu L, Rappaport DC, Hanbidge A, Merchant N, Shepherd FA, Greig PD:** Lympho-proliferative disorders after liver transplantation: Imaging features. *Abdominal Imaging*: March 2001; 2: pp 200-206.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Cattral MS:** Canadian Life Insurance Medical Officers Association, Toronto, Ontario, April 2001. Advances in the treatment of type I diabetes.

**Greig PD:** Fugisawa Canada, Honolulu, Hawaii, February 2001. Canadian steroid withdrawal trial: Three-year data a liver dyslipidemia trial.

**Greig PD:** Canadian Blood and Marrow Transplant Group, Toronto, Ontario, October 2000. Funding opportunities: Government and industry.

**Greig PD:** Fugisawa Canada, Montreal, Quebec, January 2001. (1) Hepatocellular carcinoma: Resect, ablate or transplant?, (2) Long-term results of early steroid withdrawal following liver transplantation.

**Greig PD:** Sanguin Consultation Services Mult-disciplinary Laboratory Seminar, Toronto, Ontario, November 2000. Liver transplantation.

**Greig PD:** Trillium Queensway Hospital, Mississauga, Ontario, September 2000. Liver transplantation.

**Haigh PI:** Royal College of Physicians and Surgeons of Canada, Edmonton, Alberta, September 2000. (1) Radioguided surgery in general surgery: What's hot, what's not, (2) The role of axillary lymph node dissection in breast cancer.

**Himal HS:** Society of American Gastrointestinal Endoscopic Surgeons, Cincinnati, Ohio, January 2001. (1) Minimally invasive surgery, (2) Endoscopy, (3) E.R.C.P.

**Langer B:** Hong Kong Academy of Medicine, Hong Kong, China, November 2000. A pilot project in regionalization of pancreatic cancer surgery based on volume outcome studies.

**Langer B:** American College of Surgeons, Toronto, Ontario, April 2001. The Royal College of Physicians and Surgeons of Canada maintenance of certification programs.

**Marshall JC:** Toronto Critical Care Medicine Symposium, Toronto, Ontario, October 2000. (1) Apoptosis for the intensivist, (2) Antibiotics: A reasoned approach.

**Marshall JC:** Argentine Congress on Intensive Care Medicine, Buenos Aires, Argentina, September 2000. (1) Apoptosis for the intensivist, (2) Evaluation of the multiple organ dysfunction syndrome, (3) The Canadian critical care trials group, (4) Then, now, and then: Diseases, syndromes and the future of critical care medicine.

**Marshall JC:** Visiting Professor, Burn Shock Trauma Institute, Loyola University, Chicago, Illinois, January 2001. (1) Immune cell apoptosis in critical illness, (2) Limiting iatrogenesis in the Intensive Care Unit: Antibiotics and transfusion.

**Marshall JC:** Jena International Symposium on Sepsis and Multiple Organ Failure, Jena, Germany, February 2001. (1) Bacterial translocation: Myth or reality?, (2) Measurement of endotoxin in the Intensive Care Unit: Can we? Does it help?

**Marshall JC:** Society of Critical Care Medicine, San Francisco, California, February 2001. (1) Is endotoxemia a frequent event in surgical patients?, (2) Organ dysfunction in sepsis, (3) Morbidity measures in critical illness, (4) Guidelines for surgical source control in the management of sepsis.

**Marshall JC:** International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 2001. (1) Re-thinking systemic inflammation, (2) Intra-abdominal infection, (3) Regulation of neutrophil survival in critical illness, (4) Management guidelines: Severe pancreatitis, (5) Anti-TNF antibodies: Who may benefit?

**Marshall JC:** International Symposium on Critical Care Medicine, Mexico City, Mexico, September 2000. (1) Sepsis, trauma, and pancreatitis. Does the origin matter?, (2) The gut-liver-pulmonary axis in critical illness, (3) Measuring organ dysfunction as an outcome in critical illness, (4) Nutritional support of the patient with multiple organ dysfunction, (5) How I manage severe pancreatitis, (6) Rapid detection of endotoxin: The MEDIC trial, (7) Modeling organ dysfunction as an outcome measure in clinical trials, (8) Organ dysfunction in sepsis, (9) Sepsis markers.

**Marshall JC:** Hospital Sao Lucas da Pucrs, Porto Alegre, Brazil, June 2001. (1) The multiple organ dysfunction score, (2) Iatrogenesis in the Intensive Care Unit, (3) The role of the surgeon in abdominal sepsis, (4) The gut-liver axis in MODS.

**Marshall JC:** Napa Workshop on the Role of Tissue Factor in the Pathogenesis of Critical Illness, Yountville, California, November 2000. Coagulation activation and tissue factor biology in critical illness.

**Marshall JC:** Queensville Lecture Series, Newmarket, Ontario, February 2001. Difficult infections in the Intensive Care Unit.

**Marshall JC:** Conference on Conundrums in Critical Care, Vail, Colorado, April 2001. Does sepsis exist?

**Marshall JC:** Hellenic Society of Intensive Care Medicine, Athens, Greece, October 2000. Dysregulated apoptosis in sepsis.

**Marshall JC:** Surgical Infection Society Europe, Gdansk, Poland, June 2001. Is sepsis a syndrome?

**Marshall JC:** Intensive Care Society, Bournemouth, United Kingdom, May 2001. Is the gut still the motor of multiple organ failure?

**Marshall JC:** International Symposium on Critical Care Medicine APICE, Trieste, Italy, November 2000. Light and shadows in the prevention and management of severe infections.

**Marshall JC:** Toronto Sepsis Roundtable, Toronto, Ontario, October 2000. Mediators and markers: An overview.

**Marshall JC:** Margaux Conference on Critical Illness, Margaux, France, November 2000. Microvascular coagulopathy and organ dysfunction in sepsis.

**Marshall JC:** Roundtable Conference on Mechanisms of Organ Dysfunction in Critical Illness, Brussels, Belgium, March 2001. Prolongation of inflammation through inhibition of neutrophil apoptosis in critical illness.

**Marshall JC:** American Society of Nephrologists Update Course, Toronto, Ontario, October 2000. Sepsis and the multiple organ dysfunction syndrome.

**Marshall JC:** Visiting Professor, Johns Hopkins University, Baltimore, Maryland, January 2001. The septic response in critical surgical illness.

**Marshall JC:** Visiting Professor, Jersey Shore Medical Center, Robert Wood Johnson Medical School, Neptune, New Jersey, February 2001. Transfusion strategies in critically ill surgical patients.

**Marshall JC:** American College of Surgeons, Chicago, Illinois, October 2000. Transfusion triggers.

**McCready DR:** Royal College of Physicians and Surgeons of Canada, Edmonton, Alberta, September 2000. Surgical debate: Resolved: Breast surgical can be improved by axillary dissection.

**McCready DR:** Division of General Surgery City Wide Rounds, Edmonton, Alberta, May 2001. FNA sentinel node biopsy and neo adjuvant therapy: Will breast cancer surgery be relegated to salvage only?

**Reznick RK:** George W.B. Starkey Memorial Lectureship, Beth Israel Deaconess Medical Center, Boston, Massachusetts, September 2000. Are our residents ready to operate: How would we know?

**Reznick RK:** Departmente de Chirurgie de L'Universite de Montreal Journee Scientifique, Montreal, Quebec, November 2000. (1) Are our residents ready to operate: How would we know?, (2) Is education a bona fide career path for an aspiring academic surgeon?

**Reznick RK:** Association of Canadian Medical Colleges/Canadian Association of Medical Education, Toronto, Ontario, May 2001. (1) Co-Chair: What do our future doctors need to know about alternative/complementary medicine?, (2) Symposium: Direct assessment of clinical performance: An international perspective.

**Reznick RK:** Association for Surgical Education, Nashville, Tennessee, March 2001. Developing a sustainable educational research effort.

**Reznick RK:** University of Iowa, Iowa City, Iowa, September 2000. (1) Medical education as a career path for clinicians, (2) Performance-based assessment.

**Reznick RK:** Society of Directors of Research in Medical Education, Whistler, British Columbia, July 2000. Residency education in Canada.

**Reznick RK:** The Society of Gynecologic Surgeons, Orlando, Florida, March 2001. Teaching and assessing technical skills: A laboratory-based approach.

**Reznick RK:** Association of Program Directors in Surgery, Nashville, Tennessee, March 2001. The use of the OSCE for licensing in Canada.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

A pilot study of antiviral activity of entecavir in liver transplant recipients re-infected with hepatitis B. *Lilly LS, Greig PD, Cattral MS, Levy GA, Girrah N, Grant DR: Bristol Myers Squibb (\$45,000 2000 - 2001).*

A three-year randomized multi-centre study of the efficacy and safety of RAD versus MMF in liver transplantation. *Levy GA, Greig PD, Cattral MS, Lilly LS, Grant DR, Girrah N: Novartis Pharma Canada (\$60,000 2000 - 2001).*

Albumin as an immuno-modulatory agent in hemorrhagic shock: Studies in a model of post-shock lung injury. *Rotstein OD: Plasma Protein Therapeutic Association (\$89,540 2000 - 2001).*

An open-label, comparative trial of two daclizumab dosing strategies versus no induction treatment in combination with tacrolimus, mycophenolate mofetil, and steroids for the prevention of acute allograft rejection in simultaneous kidney/pancreas transplant recipients. *Catral M: Hoffman LaRoche Limited* (\$120,000 1999 - 2001).

Anti-HCV immune globulin for the prevention of graft re-infection in HCV-related liver transplant patients. *Greig PD, Lilly LS: Cangene Corporation* (\$70,000 2000 - 2001).

A randomized trial of regional radiation therapy in early breast cancer. *Whelan, TJ, Olivotto I, Kirkbride P, Craighead P, Benk V, Pritchard K, Levine M, McCready DR, Shepherd L, Tu D, Coyle D, Lewis MJ: Canadian Breast Cancer Research* (\$916,313 2000 - 2003)

Are advanced laparoscopic skills for senior residents learned in a short training course and transferred to operations? *Dath D, MacRae H, Friedlich M, Mamazza J, Schlachta C, Reznick RK, Regehr G: Association for Surgical Education* (\$36,568 1999 - 2000).

Bone mineral density after pediatric liver transplant. *Ng V, Fecteau A, Hawkel G, MacArthurs C: The Hospital for Sick Children Foundation* (\$32,232 2001 - 2003).

Cell volume-dependent signaling mechanisms. *Kapus A: Medical Research Council of Canada* (\$165,162 1998 - 2000).

Cellular mechanisms of lipopolysaccharide-induced lung injury following shock. *Rotstein OD: Canadian Institutes of Health Research* (\$451,715 2000 - 2005).

Designing new strategies in combat casualty care: From bench to bedside. *Rotstein OD: Defense and Civil Institute of Environmental Medicine* (\$107,000 1999 - 2002).

Development and evaluation of computer-based versions of the decision board for early breast cancer. *Whelan TJ, Gafni M, Sebalt A, Lewis R, Julian J, Reid S, Arnold A, McCready DR, Ryno L, Sanders K: United States Army Medical and Material Command* (\$448,994 1998 - 2001).



Evaluating the effectiveness of a two-year curriculum in a surgical skills centre: The future of surgical training? *Brown M, Hutchison C, Anastakis D, Reznick RK, Regehr G, Herold J: Physicians Services Incorporated Foundation* (\$82,000 1998 - 2000).

Evaluation of excretion of a biopharmaceutical oral cyclosporin formulation in clinical studies of bile diverted liver transplant recipients. *Levy GA, Greig PD, Catral MS, Grant DR, Lilly LS: Novartis Pharma Canada* (\$84,000 1999 - 2000).

Facilitating the adoptions of clinical practice guidelines. Promotion of urine microalbuminuria screening among primary care physicians: A randomized, educational intervention trial. *Naimark DMJ, Bott MT, Tobe SW, Nickell LA, Davis DA, Reznick RK, Poldre P, Hux JE: Canadian Institutes of Health Research* (\$60,323 2001 - 2002).

Glycine conjugation of para-amino benzoic acid (PABA): A new quantitative test of liver function. *Hemming AW, Furuka K, Greig PD: Physicians Services Incorporated Foundation* (\$92,000 1998 - 2000).

Health communications research laboratory in the Faculty of Medicine. *Whiteside C, Davis D, Frecker R., Goel V, Wilson-Pauwels L, Reznick RK: Bell Canada* (\$263,652 2000 - 2001).

How accurate is self-assessment of technical skill, and does self-assessment improve by evaluating peers' performance? *MacRae H, Reznick RK, Regehr G: Association for Surgical Education* (\$34,059 2001 - 2002).

Hypertonicity-induced signaling in neutrophils: Cellular mechanisms underlying a beneficial immuno-modulatory effect. *Kapus A: Connaught Foundation* (\$29,500 1998 - 2000).

Media-based health communication: Exploring the power of visual media to promote understanding (development of an internet CPD course on the breast including sentinel node biopsy). *Wilson-Pauwels L, Woolridge N., Wiley M, Stewart P, McCready D, Jenkinson J, Hamstra SJ, Schraefel MC: Bell University Laboratories* (\$153,424 2000 - 2001)

Measurement of hypoxia in breast tumors. *Ballinger JR, Fyles AW, McCready DR, Hedley DW: Canadian Breast Cancer Foundation* (\$35,000 1999 - 2000).

National surgical adjuvant breast and bowel project. *McCready DR: National Cancer Institute of Canada* (\$51,000 2001)

Novel approaches to prevent islet allograft rejection. *Cattral MS: Canadian Diabetes Association* (\$120,000 2000 - 2002).

Obesity and related factors in breast cancer: A prospective cohort study. *Goodwin P, Pritchard K, Trudeau M, McCready DR, Koo J, Diamandis E, Page D: Canadian Breast Cancer Research* (\$156,193 1998 - 2001).

Open label comparative trial of two daclizumab doses versus no induction with tacrolimus, MMF, and steroids following pancreas kidney transplantation. *Cattral MS, Greig PD, Grant DR, Levy GA, Lilly LS: Hoffman LaRoche Limited* (\$48,000 2000 - 2001).

Pre-conditioning using 25% albumin: A novel method for organ protection in ischemia-reperfusion injury. *Rotstein OD: Bayer Incorporated/Canadian Blood Services* (\$70,000 2000)

Prognostic value of novel pathologic markers in women with lymph-node negative breast cancer. *Liu FF, Fyles A, Banerjee D, Tsao M, Benchimol S, McCready DR, Youngson B, Manchul L, Trudeau M, Pintilie M, Henry M: Canadian Breast Cancer Research* (\$190,296 1998 - 2001).

Prograf as intervention in treatment of hypercholesterolemia after liver transplantation. *Lilly LS, Greig PD, Levy GA, Girgrah N: Fujisawa Canada Incorporated* (\$100,000 2000 - 2001).

Radiation and tamoxifen for breast cancer. *Fyles AW, Manchul LA, McCready DR, Trudeau ME: Ministry of Health* (\$73,966 2001 - 2002).

Randomized clinical trial of conventional dose tacrolimus and steroids compared with reduced dose tacrolimus and steroids in liver transplant patients. *Lilly LS, Greig PD, Levy GA, Cattral MS, Grant DR, Girgrah N: Wyeth-Ayerst Research Canada Incorporated* (\$200,000 2000 - 2001).

Regulation of neutrophil-programmed cell death (apoptosis) in clinical and experimental inflammation. *Marshall JC: Medical Research Council of Canada* (\$270,000 1999 - 2002).

Teaching technical skills in oral surgery: Evaluating the utility of basic dexterity training. *Caminiti M, Reznick RK, Regehr G, Hamstra S, Brown M: Association of Canadian Medical Colleges* (\$19,437 1999 - 2000).

The Hu-SCID mouse: An experimental model for the development and testing of candidate TB vaccines. *Sandhu JS, Gorczynski R: Natural Sciences and Engineering Research Council* (\$80,883 1997 - 2000).

Toronto Hospital/Ontario Cancer Institute centralized flow cytometry facility. *Julius MH, Rotstein OD: Medical Research Council of Canada* (\$641,895 1999 - 2004)

Use of a SCID mouse model to develop vaccines for tuberculosis in mice. *Sandhu J, Gorczynski RM: Natural Sciences and Engineering Research Council* (\$270,000 1997 - 2000).

#### **HONOURS RECEIVED**

**Langer B:** Elected President of the Royal College of Physicians and Surgeons of Canada, September 2000.

**Langer B:** Honorary Fellowship, Royal Australasian College of Physicians, May 2001.

**Reznick RK:** James IV Traveling Fellowship 2001, July 2000.

### DIVISION OF NEUROSURGERY

**Dr. M. Bernstein – Professor (*Division Head*)**  
**Dr. K.D. Davis - Assistant Professor**  
**Dr. J.H. Eubanks - Assistant Professor**  
**Dr. M.G. Fehlings – Professor**  
**Dr. F. Gentili - Assistant Professor**  
**Dr. A. Guha - Associate Professor**  
**Dr. W.D. Hutchison - Assistant Professor**  
**Dr. A. Krassioukov - Assistant Professor**  
**Dr. A.M. Lozano - Professor**  
**Dr. J.A. Saint-Cyr - Associate Professor**  
**Dr. C.H. Tator - Professor**  
**Dr. M. Tymianski - Assistant Professor**  
**Dr. M.C. Wallace - Associate Professor**

### PUBLICATIONS

**Agrawal S, Nashmi R, Fehlings MG:** Role of L and N type calcium channels in the pathophysiology of traumatic spinal cord white matter injury. *Neuroscience*: September 2000: 99: pp 179-188.

**Al-Yamany M, terBrugge K, Willinsky R, Montanera W, Tymianski M, Wallace MC:** Palliative embolization of untreatable brain arteriovenous malformations with progressive neurological deficit. *Interventional Neuroradiology*: September 2000: 6: pp 177-183.

**Alkhani A, Lozano AM:** Pallidotomy for Parkinson's disease: A review of contemporary literature. *Journal of Neurosurgery*: January 2001: 94: pp 43-49.

**Balkhoyor KB, Bernstein M:** Infarction and shrinkage of a meningioma after extensive cosmetic surgery. *Journal of Neurology, Neurosurgery and Psychiatry*: April 2001: 70: pp 405.

**Bampoe J, Glen J, Hubbard S, Salhia B, Shannon P, Rutka J, Bernstein M:** Adenoviral vector mediated gene transfer: Timing of wild-type p53 gene expression in vivo and effect of tumor transduction on survival in a rat glioma brachytherapy model. *Journal of Neurooncology*: March 2001: 49: pp 27-39.

**Bampoe J, Laperriere N, Pintilie M, Glen J, Micallef J, Bernstein M:** Quality of life in patients with glioblastoma participating in a randomized study of boost brachytherapy. *Journal of Neurosurgery*: March 2001: 93: pp 917-926.

**Bampoe J, Nag S, Leung P, Laperriere N, Bernstein M:** Brain necrosis after permanent low activity iodine-125 implants: Case report and review of toxicity from focal radiation. *Brain Tumor Pathology*: April 2001: 17: pp 139-145.

**Bernstein M:** Outpatient craniotomy for brain tumor: A pilot feasibility study in 46 patients. *Canadian Journal of Neurological Sciences*: April 2001: 28: pp 120-124.

**Blanshard HJ, Chung F, Manninen PH, Taylor MD, Bernstein M:** Awake craniotomy for removal of intracranial tumor: Anesthetic considerations for early discharge. *Anesthesia and Analgesia*: March 2001: 92: pp 89-94.

**Casha S, Yu WR, Fehlings MG:** Oligodendroglial apoptosis occurs along degenerating axons and is associated with FAS and P75 expression following spinal cord injury in the rat. *Neuroscience*: March 2001: 103(1): pp 203-218.

**Chu GK, Tator CH:** Calcium influx is necessary for optimal regrowth of transected neurites of rat sympathetic ganglion neurons in vitro. *Neuroscience* January 2001: 102: pp 945-957.

**Chu GK, Tawadros P, Tator CH:** Death of rat sympathetic ganglion cells in vitro caused by neurite transection: Effect of extra-cellular calcium. *Journal of Neurotrauma* June 2001: 18: pp 699-710.

**DiAngelo DJ, Foley KT, Vossel K, Rampersaud YR, Jansen T:** Anterior cervical plating reverses load transfer through multi-level strut grafts. *Spine*: December 2000: 25(7): pp 783-795.

**Dominique D, Montanera W, Fehlings MG:** Imaging of spinal cord injury. In: *Contemporary Management of Spinal Cord Injury: From Impact to Rehabilitation* (Benzel E, Tator CH, eds). American Association of Neurological Surgery Publications, Chicago: 2000: pp 73-90.

**Dostrovsky JO, Levy R, Wu JP, Hutchison WD, Tasker RR, Lozano AM:** Micro-stimulation-induced inhibition of neuronal firing in human globus pallidus. *Journal of Neurophysiology*: July 2000: 84(1): pp 570-574.

**Dostrovsky JO, Manduch M, Davis KD, Tasker RR, Lozano AM:** Thalamic stimulation-evoked pain and temperature sites in pain and non-pain patients. *Proceedings, World Congress on Pain* (Devor M, Rowbotham, Wiesenfeld-Hallin Z, eds). IASP Press, Seattle: 2000: pp 419-425.

**Dromey C, Kumar R, Lang AE, Lozano AM:** An investigation of sub thalamic nucleus stimulation on acoustic measures of voice. *Movement Disorders*: September 2000: 15(6): pp 1132-1138.

**Etchels E, Bernstein M:** Improving patient safety: Just do it. *Healthcare Papers*: April 2001: 2: pp 59-65.

**Fayaz I, Tator CH:** Modeling axonal injury in vitro: Injury and regeneration following acute neuritic trauma. *Journal of Neuroscience Methods* October 2000: 102: pp 69-79.

**Fehlings MG, Sekhon LHS:** Cellular, ionic and biomolecular mechanisms of the injury process. In: *Contemporary Management of Spinal Cord Injury: From Impact to Rehabilitation* (Benzel E, Tator CH, eds). American Association of Neurological Surgeons Publications, Chicago: 2000: pp 33-50.

**Fehlings MG, Sekhon LHS:** Posterior occipito-cervical instrumentation and fusion for ventral compression in rheumatoid arthritis: Case report. [www.spineuniverse.com](http://www.spineuniverse.com): March 2001: pp 1-13.

**Fehlings MG, Sekhon LHS:** Acute interventions in spinal cord injury: What do we know, what should we do? In: *Clinical Neurosurgery* (Andrews B, ed). Lippincott, Williams and Wilkins, Baltimore: 2001: pp 226-242.

**Foley KT, Simon DA, Rampersaud YR:** Virtual fluoroscopy: Computer-assisted fluoroscopic navigation. *Spine*: February 2001: 26: pp 347-351.

- Foley KT, Simon Da, Rampersaud YR:** Virtual fluoroscopy. *Operative Techniques in Orthopaedics*: August 2000: 10(1): pp 77-81.
- Guridi, J, Rodriguez-Oroz MC, Lozano AM, Moro E, Albanese A, Nuttin B, Gybels J, Ramos E, Obeso JA:** Targeting the basal ganglia for deep brain stimulation in Parkinson's disease. *Neurology*: December 2000: 55(16): pp S21-S28.
- Kirkley A, Rampersaud YR, Griffin S, Amendola A, Litchfield R, Fowler PJ:** Tourniquet versus no tourniquet use in routine knee arthroscopy: A double-blinded randomized clinical trial. *Arthroscopy*: October 2000: 16(2): pp 121-126.
- Kojima A, Tator CH:** Epidermal growth factor and fibroblast growth factor 2 cause proliferation of ependymal pre-cursor cells in the adult rat spinal cord in vivo. *Journal of Neuropathology and Experimental Neurology* August 2000: 59: pp 687-97.
- Kumar R, Lang AE, Rodrigues-Oroz MC, Lozano AM, Limousin P, Plak P, Benabid AL, Guridi J, Ramos E, van der Linder C, Vandewalle A, Caemaert J, Lannoo E, van den Abbeele D, Vingerhoets G, Wolters M Obeso JA:** Deep brain stimulation of the globus pallidus pars interna in advanced Parkinson's disease. *Neurology*: December 2000: 55(16): pp S34-S39.
- Levy R, Hutchison WD, Lozano AM, Dostrovsky JO:** High frequency synchronization of neuronal activity in the sub thalamic nucleus of Parkinsonian patients with limb tremor. *Journal of Neurosciences*: October 2000: 20(20): pp 7766-7775.
- Matsubara S, Bourdeau A, ter Brugge KG, Wallace MC, Letarte M:** Analysis of endoglin expression in normal brain tissue and in cerebral arteriovenous malformations. *Stroke*: August 2000: 31: pp 2653-2660.
- Montgomery EB, Hallett M, Litvan I, Lozano AM, Goetz C, Koller WC:** Evaluation of surgery for Parkinson's disease: Report of the Therapeutic and Technology Assessment Subcommittee of the American Academy of Neurology. *Neurology*: July 2000: 55(1): pp 154.

**Namiki J, Kojima, Tator CH:** Effect of brain-derived neurotrophic factor, nerve growth factor, and neurotrophin-3 on functional recovery and regeneration after spinal cord injury in adult rats. *Journal of Neurotrauma*: December 2000: 17: pp 1219-1231.

**Namshi R, Fehlings MG:** Role of voltage-gated potassium channels in the pathophysiology of spinal cord injury. *Modulator*: January 2001: 14: pp 5-9.

**Nashmi R, Fehlings MG:** Changes in axonal physiology and morphology after chronic compressive injury of the thoracic spinal cord. *Neuroscience*: April 2001: 104(1): pp 235-251.

**Pahapill PA, Lozano AM:** The pedunculo pontine nucleus and Parkinson's disease: A review. *Brain*: September 2000: 123: pp 1767-1783.

**Pirouzmand F, Tator CH, Rutka J:** Management of hydrocephalus associated with vestibular Schwannoma and other cerebello pontine angle tumors. *Neurosurgery* June 2001: 48: pp 1246-53.

**Rainov NG, Bernstein M, Rutka JT:** A phase III clinical evaluation of herpes simplex virus type 1 thymidine kinase and gan ciclovir gene therapy as an adjuvant to surgical presection and radiation in adults with previously untreated glioblastoma multiforme. *Human Gene Therapy*: November 2000: 11: pp 2389-2401.

**Willinsky R, Goyal M, terBrugge K, Montanera W, Wallace MC, Tymianski M:** Embolization of small (<3cm) brain arteriovenous malformations. *Interventional Neuroradiology*: April 2001: 7: pp 19-27.

**Saint-Cyr JA, Trepaniere LL, Kumar R, Lozano AM, Lang AE:** Neuropsychological consequences of chronic bilateral stimulation of the subthalamic nucleus in Parkinson's disease. *Brain*: October 2000: 123(10): pp 2091-2108.

**SchwartzG, Fehlings MG:** Evaluation of the neuro-protective effects of sodium channel blockers after spinal cord injury: Improved behavioral and neuroanatomical recovery with riluzole. *Spine*: April 2001: 94: pp 245-256.



**Shamisa A, Bance N, Nag S, Tator C, Wong S, Noren G, Guha A:** Glioblastoma multiforme occurring in a patient treated with gamma knife surgery: Case report and review of the literature. *Journal of Neurosurgery* May 2001; 94: pp 816-821.

**Tator CH, Fehlings MG:** Clinical trials in spinal cord injury. In: *Clinical Trials in Neurologic Practice* (Biller J, ed). Butterworth Heinemann, Indianapolis: 2001: pp 99-120.

**Taylor MD, Bernstein M:** Image-guided awake craniotomy for brain tumors. In: *Advances in Clinical Neurosciences* (Sinha K, Chandra P, eds). Catholic Press, India: 2001: pp 1083-1092.

**Velasco M, Lozano A:** Neuro-modulations of the intractable neurologic symptoms. *Archives of Medical Research*: December 2000: 31: pp 231.

**Willinsky RA, Ter Brugge KG, Montanera W, Tymianski M, Goyal M, Wallace MC:** Embolization of small (<3 cm) brain arteriovenous malformations: Correlation of angiographic results to a proposed angioarchitecture grading system. *Interventional Neuroradiology*: April 2001; 7: pp 19-27.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Bernstein M:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. (1) Low-grade gliomas, (2) Commentary: Stereotactic radiosurgery.

**Bernstein M:** Congress of Neurological Surgeons, San Antonio, Texas, September 2000. (1) Controversies in radiation for brain tumors, (2) Novel therapeutics for gliomas.

**Bernstein M:** Visiting Professor, Henry Ford Hospital, Detroit, Michigan, May 2001. Surgery for gliomas: The good, the bad, and the homely.

**Bernstein M:** Visiting Professor, Tel Aviv Medical Center, Tel Aviv, Israel, March 2001. The limits of surgery in the treatment of glial tumors.

**Fehlings MG:** AO Spine Course, Captiva Island, Florida, July 2000. (1) Spinal cord anatomy and common neurological syndromes, (2) Radiographic evaluation of the polytrauma patient, (3) Spinal cord injury: Immediate decompression?, (4) Laminoplasty limitations.

**Fehlings MG:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. (1) Panelist: Spinal stabilization: State-of-the-art, (2) Panelist: Spinal cord injury: Contemporary management, (3) Faculty: The treatment of post-operative wound infections, (4) Approaches and stabilization techniques for the craniovertebral junction, (5) Head and spinal trauma, (6) Image-guided surgery of the cervical spine, (7) Presentation to residents: Biology of bone fusion: Choices of bone graft substitutes, (8) Principles of acute spinal cord injury management, (9) Discussant abstract: J Huang et al: Experimental support for the supratentorial compartmentalization of intracranial pressure, (10) Co-moderator scientific session.

**Fehlings MG:** Universite de Montreal, Montreal, Quebec, May 2001. Surgical trials in acute spinal cord injury.

**Fehlings MG:** Canadian Congress of Neurological Sciences, Halifax, Nova Scotia, June 2001. (1) Chair: Management of lesions of the cervicothoracic junction, (2) Anterior approaches to the cervicothoracic junction, (3) Chair debate: Neurosurgery, (4) Prospective multi-centre evaluation of the Codman semi-constrained anterior cervical plating system in 195 cases: Long-term evaluation of clinical and radiological outcomes with quantitative evidence for load sharing.

**Fehlings MG:** AO-ASIF Comprehensive and Interactive Spine Course, Tucson, Arizona, May 2001. (1) Advanced level case presentation: C5 burst fracture with incomplete spinal cord injury, (2) Debate: Traumatic spinal cord injury: Early versus late surgery, (3) . Pathophysiology and pharmacologic manipulation of traumatic spinal cord injury, (4) Practical exercise I: Odontoid screw fixation; C1-C2 transarticular screw: Comprehensive, (5) Practical exercise II: Anterior cervical fixation: Posterior cervical fixation, (6) Practical exercise/optional: Scoliosis: Posterior USS: Posterior lumbar interbody fusion (PLIF): Comprehensive/interactive, (7) Practical exercise II: Occipitocervical instrumentation: Posterior sub axial instrumentation: Interactive.

**Fehlings MG:** AO North American Visiting Professor, Boston University School of Medicine, Boston, Massachusetts, April 2001. Neuro-protective agents.

**Fehlings MG:** Congress of Neurological Surgeons Practical Course, San Antonio, Texas, September 2000. (1) Cervical spine stabilization, (2) Image-guided spinal surgery, (3) Moderator: Management of acute spinal cord injury, (4) Management of acute spinal cord injury: What do we know? What should we do?, (5) Moderator: Management of odontoid fractures, (6) Role of steroids in spinal cord injury: evidence based analysis, (7) Spinal cord injury research and spine fellowship at the University of Toronto.

**Fehlings MG:** International Neurotrauma Society, Garmisch-Partenkirchen, Germany, October 2000. (1) Chair: Regeneration, re-organization and repair, neurotrophins, (2) Chair poster session: Cell injury, genomic involvement and transplantation in spinal cord injury, (3) Keynote address: Spinal cord injury: Similarities with and differences from traumatic brain injury.

**Fehlings MG:** Update on Disorders of the Spine, Whistler, British Columbia, January 2001. (1) Discussion: Hands on workshop, (2) Instructor: Hands on workshops on image-guided spine surgery, (3) Spine trauma: Should we decompress complete cord injuries?

**Fehlings MG:** Yonsei University College of Medicine, Seoul, Korea, November 2000. Surgical management of spinal cord injury,

**Fehlings MG:** Cervical Spine Research Society, Charleston, South Carolina, December 2000. (1) The cervical spine: Degenerative conditions, (2) Results of treatments of cervical afflictions in the worker's compensation population.

**Fehlings MG:** Rachidian Society, Medical College of Wisconsin, Kona, Hawaii, February 2001. Novel developments in the pathophysiology and treatment of acute spinal cord injury: From gene to the operating room.

**Fehlings MG:** Society for Neurological Surgeons, Cleveland, Ohio, May 2001. Molecular approaches to target spinal cord injury.

**Fehlings MG:** Synthes, New York, New York, November 2000.  
Spine course: Rheumatoid diseases: Surgical indications and management.

**Fehlings MG:** Visiting Professor, University of Calgary, Calgary, Alberta, November 2000. (1) Role of surgical decompression for acute spinal cord injury: Rationale, evidence and future directions, (2) Novel mechanisms of axonal dysfunction after spinal cord injury: Role of aberrant K<sup>+</sup> channel expression, (3) Pathophysiology of spinal cord injury: Primary and secondary mechanisms with a view to new treatment horizons.

**Fehlings MG:** Visiting Professor, McGill University, Montreal Neurological Institute, Montreal, Quebec, February 2001.  
Oligodendroglial apoptosis after spinal cord injury: Significance, mechanisms and potential role of the FAS death receptor.

**Fehlings MG:** Visiting Professor, Queen's University, Kingston, Ontario, February 2001. Advances in the pathophysiology and treatment of acute spinal cord injury: From bench to bedside.

**Fehlings MG:** Visiting Professor, Wayne State University, Chicago, Illinois, January 2001. (1) Management of complex disorders of the craniocervical junction, (2) Pathophysiology and treatment of acute spinal cord injury.

**Fehlings MG:** Visiting Professor, University of Montreal, Montreal, Quebec, November 2000. Role of surgical decompression in spinal cord injury: From bench to bedside.

**Fehlings MG:** Visiting Professor: Stanford University Medical Center, Stanford, California, May 2001. (1) Resident teaching didactic session, (2) Current concepts in the pathophysiology and treatment of spinal cord injury: From gene to the operating room.

**Krassioukov A:** Miami University, Miami, Florida, March 2001.  
Abnormal cardiovascular control after spinal cord injury: Are changes in spinal autonomic circuits to blame?

**Krassioukov A:** Canadian Syringomyelia Network, Toronto, Ontario, April 2001. Syringomyelia: Research and clinical update.

**Lozano AM:** Congress of Neurological Surgeons, San Antonio, Texas, September 2000. (1) Case management: Advanced Parkinson's disease and dystonia, (2) Movement disorders: Pathophysiology, diagnosis, treatment, (3) Re-defining neurosurgery: Restorative surgeries and future technology, (4) Surgical management of tremor: Role of thalamotomy, chronic thalamic stimulation and stereotactic radiosurgical thalamotomy, (5) Update on stereotactic radiosurgery.

**Lozano AM:** American Epilepsy Society. Los Angeles, California, December 2000. Deep brain stimulation for intractable epilepsy.

**Lozano AM:** University of Rochester, Rochester, New York, December 2000. Invited participant.

**Lozano AM:** Neural Prosthesis Meeting, National Institute of Health, Bethesda, Maryland, October 2000. Investigation of brain stimulation.

**Lozano AM:** Shanghai International Workshop on Functional Neurosurgery and Imaging, Fudan University Huashan Hospital, Center of Functional Neurosurgery, Shanghai, China, November 2000. Movement disorder surgery and psycho-surgery.

**Lozano AM:** Neurosurgery Colombian Congress, Medellin, Colombia, August 2000. (!) Overview of the anatomy, physiology and pathophysiology of the basal ganglia, thalamus and the subthalamic nucleus, (2) Subthalamic nucleus stimulation for movement disorders, (3) Surgical management of tremor, (4) Thalamic and pallidal stimulation for movement disorders.

**Lozano AM:** Dystonia Medical Research Foundation, Atlanta, Georgia, December 2000. Surgery for dystonia.

**Tator CH:** American Association of Spinal Cord Injury Psychologists and Social Workers, Las Vegas, Nevada, September 2000. Restoration of function after spinal cord injury.

**Tator CH:** International Neurotrauma Symposium, Garmisch-Partenkirchen, Germany, October 2000. (1) Retrograde and anterograde labeling of spinal cord tracts in the same animal as applied to spinal cord repair, (2) Spinal cord injury: Achievements and failures.

**Tator CH:** Canadian Paraplegic Association, Charlottetown, Prince Edward Island, October 2000. Spinal cord injury: functional impact and advances in research.

**Tator CH:** National Neurotrauma Society Symposium, New Orleans, Louisiana, November 2000. Neutralization of myelin-induced neurite inhibition by the IN-1 and 10D antibodies.

**Tator CH:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. (1) Bio-compatibility of a novel synthetic graft used for spinal cord injury repair, (2) Histological and functional evidence of spinal cord repair using two surgical repair strategies, (3) Intrathecal administration of epidermal growth factor and fibroblast growth factor-2 and ependymal proliferation: Functional recovery after SCI in adult rats, (4) Management of the injured athlete: Return to play decisions after head injury, (5) Medical management of spinal cord injury, ABC's of trauma management, intensive care, and pharmacotherapy, (6) Neutralization of myelin and chondroitin sulfate proteoglycan inhibition of neurite growth, (7) Surgery after failed radiotherapy for acoustic neuroma, (8) Transplantation of subependymal stem cells from the adult mammalian forebrain: Therapeutic strategy for traumatic spinal cord injury.

**Tator CH:** International Symposium of the Centre for Research in Neurological Sciences, Montreal, Quebec, May 2001. (1) A novel spinal cord repair strategy, (2) Functional neurological improvement with adult mammalian subcortical pluripotent cells transplanted into the injured spinal cord, (3) Involvement of L-type calcium channels in regeneration of cultured sympathetic neurons.

**Tymianski M:** Canadian Congress of Neurological Sciences, Halifax, Nova Scotia, June 2001. (1) Asymptomatic aneurysms; CT-neg SAH; vertebral dissection, (2) Strategies for treatment of giant aneurysms.

**Tymianski M:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. (1) Clipping strategies for giant intracranial aneurysms, (2) Combined endovascular and surgical management of cranial and spinal dural AVFs.

**Tymianski M:** University of Minnesota, Minneapolis, Minnesota, April 2001. Distinct signaling pathways in glutamate and non-glutamate mediated neuronal damage.

**Tymianski M:** University of British Columbia, Vancouver, British Columbia, May 2001. Distinct signaling pathways: A common theme in excito-toxic neuronal damage.

**Wallace MC:** Neuroradiology Symposium, Toronto, Ontario, June 2001. (1) Surgical approach to skull base dural AVF's, (2) Team approach in the management of brain AVM patients.

**Wallace MC:** HHT Conference, Toronto, Ontario, September 2000. Brain manifestations of HHT.

**Wallace MC:** North American Stroke Meeting, Toronto, Ontario, September 2000. Carotid artery disease: How and when to intervene.

**Wallace MC:** The Royal College of Surgeons of England, London, England, November 2000. Contemporary treatment strategies in neurovascular disease.

**Wallace MC:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. Current options and guidelines in the evaluation and management of the asymptomatic vascular lesion.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

Angiogenic growth factors in cerebral ischemia. *Guha A, Wallace C, Nagy A: Heart and Stroke Foundation (\$231,000 1998 - 2001).*

Canadian brain tumor network. *Guha A, Kaplan D, Murphy R, Mason W, Rutka J: Medical Research Council of Canada/Canadian Institutes of Health Research (\$30,000 1999 - 2000).*

Canadian brain tumor network. *Guha A, Kaplan D, Mason W, Murphy R, Rutka J: National Cancer Institute of Canada (\$20,000 1999 - 2000).*

Centralized flow cytometry: Ontario Cancer Institute/Princess Margaret Hospital. *Guha, A: Medical Research Council of Canada (\$641,895 1999 - 2004).*

Co-enzyme Q10 and remacemide: Evaluation in HD. *Saint-Cyr JA, Guttman M*, Clinical Trial Group HSG: *National Institutes of Health* (\$181,118 1997 - 2000).

Composition and molecular organization of post-synaptic densities following transient global ischemia. *Gurd JW, Wallace MC*: *Heart and Stroke Foundation* (\$225,000 2001 - 2004).

Deep brain stimulation effects on task-driven fMRI. *Saint-Cyr JA, McAndrews M-P, Mikulis DJ*: *Natural Sciences and Engineering Research Council* (\$64,000 2000 - 2004).

Enhancing axonal regeneration following spinal cord injury by in situ delivery of neurogenerative factors. *Shoichet M, Tator CH*: *Canadian Institutes of Health Research* (\$101,000 2001 - 2003)

Ependymal stem cells for spinal cord repair. *Tator CH*: *Ontario Neurotrauma Foundation* (\$63,000 1999 - 2001).

Examination of the excitotoxic hypothesis of spinal cord injury using genetically modified mice. *Roder J, Fehlings MG*: *Spinal Cord Research Foundation* (\$156,000 1999 - 2000).

Expression and functional role of angiopoietins in human astrocytomas. *Guha A*: *Medical Research Council of Canada* (\$270,000 1999 - 2002).

Fluorescence and infrared imaging system for neurotrauma patch clamping. *Fehlings MG, Carlen PL*: *Canadian Institutes of Health Research* (\$69,757 2001 - 2002).

fMRI investigation of the temporal changes that occur in cerebral sensorimotor cortex following cervical spinal cord injury. *Mikulis D, Fehlings MG, McIlroy W, Verrier M*: *Ontario Neurotrauma Foundation/Rick Hansen Institute* (\$165,000 2000 - 2003).

Human studies of pain and temperature sensation. *Davis KD*: *Medical Research Council of Canada* (\$251,314 1998 - 2001).

Human sympathetic pre-ganglionic neurons and abnormal cardiovascular control after spinal cord injury. *Krassioukov A, Fehlings M, Shannon P*: *Connaught Foundation* (\$29,167 2001 - 2002).



International sub arachnoid aneurysm trial. *Willinsky RA, Wallace MC: Medical Research Council of Canada* (\$32,400 1998 - 2001).

Intra-operative computerized tomography and spinal navigation: Applications in the cervical spine. *Rampersaud YR, Fehlings MG: American Association of Neurological Surgeons/Congress of Neurological Surgeons* (\$22,500 2001).

Investigation and treatment of traumatic axonal dysfunction after spinal cord injury. *Fehlings MG: Canadian Institutes of Health Research* (\$346,332 2000 - 2003).

Investigation and treatment of traumatic axonal dysfunction after spinal cord injury (MT-14459). *Fehlings MG: Medical Research Council of Canada* (\$161,233 1997 - 2000).

Lab support. *Tator CH: Samuel Lunenfeld Charitable Foundation* (\$50,000 1999 - 2000)

Lab support. *Tator CH: Canadian Paraplegic Association, Ontario Branch* (\$30,820 2000 - 2001)

Mechanisms of deep-brain stimulation for Parkinson's disease. *Dostrovsky JO, Hutchison WD, Lozano AM: National Institutes of Health* (\$375,000 2001 - 2003).

Neo-angiogenesis in cerebral ischemia. *Guha A, Wallace MC, Nagy A: Heart and Stroke Foundation* (\$246,428 1998 - 2004).

Neurophysiological studies of human subthalamic nucleus. *Dostrovsky JO, Hutchison WD, Lozano AM, Saint-Cyr J: Canadian Institutes of Health Research* (\$84,177 2000 - 2003).

Neuroprotection of the injured spinal cord: Evaluation of the therapeutic role of caspase inhibitors in blocking post-traumatic apoptosis. *Fehlings MG: Cervical Spine Research Society* (\$46,000 1999 - 2000).

Neuroprotection of the injured spinal cord: role of the mGluR1 receptor. *Fehlings MG: Physicians Services Incorporated Foundation* (\$140,000 2000 - 2002).

Pilot trial of thalamic stimulation for epilepsy. *Fisher RS, Dichter M, Lesser R, Henry T, Lozano AM: National Institutes of Health* (\$1,256,307 2000).

Repair of spinal cord injury with peripheral nerve grafts, neurotrophic factors and neutralization of inhibitory factors. *Tator CH: Ontario Neurotrauma Foundation* (\$73,000 1999 - 2001).

Role of a novel ischemia-induced gene in neuronal death. *Wallace MC, Eubanks J: Heart and Stroke Foundation* (\$121,000 2001 - 2003).

Role of FAS activated caspases in the pathophysiology of spinal cord injury. *Fehlings MG: Premier's Research Excellence Award* (\$148,850 1999 - 2002).

Role of glial AMPA/Kainate receptors in neurotrauma. *Fehlings MG, Zhang L, Eubanks J, Gurd J, Carlen P; Baker A: Medical Research Council of Canada/Canadian Neurotrauma Research Program* (\$279,000 1999 - 2002).

Role of the mGluR1 metabotropic glutamate receptor in the pathophysiology of central nervous system trauma. *Fehlings MG, Baker A: Ontario Neurotrauma Foundation/Rick Hansen Institute* (\$163,300 2000 - 2003).

Stroke. *Tymianski M: National Centres of Excellence* (\$50,000 2000 - 2002).

The fate of human sympathetic pre-ganglionic neurons after spinal cord injury. *Krassioukov A, Fehlings M, Shannon P: Cervical Spine Research Society* (\$27,750 2001 - 2002).

The fate of human sympathetic pre-ganglionic neurons after spinal cord injury. *Krassioukov A, Fehlings M, Shannon P, Norenberg M: Christopher Reeve Foundation* (\$43,950 2001 - 2002).

The role of the NGF receptors. TrkA and p75 and calcium in neurite regeneration. *Tator CH: Ontario Neurotrauma Foundation* (\$25,000 2000 - 2001)

Tissue engineering repair strategies for spinal cord injury. *Shoichet M, Tator CH: Natural Sciences and Engineering Research Council of Canada* (\$135,644 2001 - 2003)

Transgenic modeling of human astrocytomas. *Gutmann D, Guha A: Monsanto Biomedical Research Grant (\$40,000 1999 - 2000).*

Tyrosine phosphorylation and molecular organization of the NMDA receptor following transient global ischemia: Implications for neuronal survival. *Gurd J, Wallace MC: Heart and Stroke Foundation (\$230,700 1998 - 2001).*

Use of genetically modified mice to probe the excitotoxic hypothesis of spinal cord injury. *Roder J, Fehlings MG: Ontario Neurotrauma Foundation (\$150,000 1998 - 2001).*

Vascular growth factor receptors as a target for auger electron radiotherapy of malignant astrocytomas. *Sandhu J, Guha A, Reilly R: Natural Sciences and Engineering Research Council (\$239,607 1999 - 2002).*

#### **HONOURS RECEIVED**

**Bernstein M:** Bruce Tovee Award for Postgraduate Teaching, University of Toronto, Department of Surgery, May 2001.

**Fehlings MG** Award for Clinical Research, Cervical Spine Research Society December 2000.

**Tator CH:** Penfield Lecture Award, the Canadian Neurosurgical Society. April 2001.

**DIVISION OF ORTHOPAEDIC SURGERY**

**Dr. J.R. Davey - Assistant Professor (*Division Head*)**

**Dr. B.A. Graham - Assistant Professor**

**Dr. J.D. Graham - Assistant Professor**

**Dr. S. Lewis – Assistant Professor**

**Dr. N. Mahomed - Assistant Professor**

**Dr. K.W. Marshall - Assistant Professor**

**Dr. A. Miniaci - Associate Professor**

**Dr. D.J. Ogilvie-Harris - Associate Professor**

**Dr. Y.R. Rampersaud - Lecturer**

**PUBLICATIONS**

**Blackstein-Hirsch P, Hawker G, Gollish J, Kreder H, Mahomed N, Williams J:** ICES consensus report: Recommendations for prioritization on joint replacement registry. ICES Technical Report: September 2000.

**DiAngelo DJ, Foley KT, Vossel K, Rampersaud YR, Jansen T:** Anterior cervical plating reverses load transfer through multi-level strut grafts. *Spine*: December 2000: 25(7): pp 783-795.

**Doherty PJ, Zhang H, Manolopoulos V, Tremblay L, Trogadis J, Marshall KW:** Adhesion of transplanted chondrocytes onto cartilage in vitro and in vivo. *Journal of Rheumatology*: July 2000: 27(7): pp 1725-1731.

**Foley KT, Simon DA, Rampersaud YR:** Virtual fluoroscopy: computer-assisted fluoroscopic navigation. *Spine*: February 2001: 26: pp 347-351.

**Foley KT, Simon Da, Rampersaud YR:** Virtual fluoroscopy. *Operative techniques in orthopaedics*: August 2000: 10(1): pp 77-81.

**Hurtig M, Pearce S, Warren S, Kalra M, Miniaci A:** Arthroscopic mosaic arthroplasty in the equine third carpal bone. *Veterinary Surgery*: May 2001: 3: pp 228-239.

**Kirkley A, Rampersaud YR, Griffin S, Amendola A, Litchfield R, Fowler PJ:** Tourniquets versus no tourniquet use in routine knee arthroscopy: A double-blinded randomized clinical trial. *Arthroscopy*: October 2000: 16(2): pp 121-126.

**Lattanzio P-J, Marshall KW, Damyanovich AZ, Peemoeller H:** Articular cartilage macromolecule: Water molecule magnetization exchange by two dimensional time domain NMR. *Magnetic Resonance in Medicine*: December 2000: 44(6): pp 840-851.

**Mahomed NN:** Effectiveness of manual physical therapy and exercise in osteoarthritis of the knee. *Journal of Bone and Joint Surgery*: September 2000: 82A: pp 1324-1325.

**Marshall KW:** Intra-articular hyaluronan therapy. *Current Opinion in Rheumatology*: September 2000: 5(12): pp 468-474.

**Meunier MJ, von Schroeder HP, Boyer MI:** Subtotal palmar and digital fasciectomy for Dupuytren's contracture. *Atlas Hand Clinic*: September 2000: 5: pp 1-18.

**Miniaci A:** Massive tears. In: *Hands-On Skills (American Academy of Orthopaedic Surgeons, ed)*. Canadian Orthopaedic Association: 2000: pp 65-71.

**Miniaci A:** Treatment of articular cartilage injuries: Micro-fracture/OATS. In: *Hands-On Skills - Summer Institute (American Academy of Orthopaedic Surgeons, ed)*. Canadian Orthopaedic Association, 2000: pp 155-159.

**Miniaci A:** The stiff shoulder following instability surgery. In: *Proceedings, ISAKOS Congress (Jakob RP, Renstrom PA, eds)*. Switzerland: 2001: pp 1.55-1.60.

**Miniaci A:** Articular cartilage injuries: Clinical treatment options and basic science and osteochondritis dissecans. In: *Specialty Day*. American Orthopaedic Society for Sports Medicine, Illinois: 2001: pp 15.

**Ogilvie-Harris DJ, Choi CK:** Rehabilitation after ankle sprains. In: *Sports Injuries: Evidence-based Approach (Basmajian H, ed)*. Churchill Livingstone, New York: 2000: pp 355-368.

**Rampersaud YR, Foley:** Radiation exposure during fluoroscopically-assisted pedicle screw insertion. *Spine*: December 2000: 25: pp 2637-2645.

**Rampersaud YR, Foley KT:** Image-guided spinal surgery. *Operative Techniques in Orthopaedics*: August 2000: 10(1): pp 64-68.

**Rampersaud YR, Simon DA, Foley KT:** Accuracy requirements for image-guided spinal pedicle screw placement. *Spine*: February 2001: 26: pp 352-359.

**Tytherleigh-Strong G, Hirahara A, Miniaci A:** Rotator cuff disease. *Current Opinion in Rheumatology*: March 2001: 13: pp 135-145.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Davey JR:** National Congress of SCHOT, Iquique, Chile, November 2000. (1) The ideal cemented stem, (2) The Mallory head primary hip system, (3) Dislocation following total hip replacement.

**Davey JR:** Canadian Orthopaedic Association, London, Ontario, June 2001. Determining the commonly used knee scores for total knee arthroplasty.

**Davey JR:** Comprehensive Surgery of Primary and Revision Total Hip and Total Knee Arthroplasty, Steamboat, Colorado, January 2001. Femoral offset.

**Davey JR:** Hips and Knees in Pinehurst, Pinehurst, North Carolina, October 2000. Femoral offset.

**Davey JR:** Emerging Trends in Total Joint Arthroplasty, Halifax, Nova Scotia, April 2001. Metal on metal total hip arthroplasty: Exposures for revision total hip arthroplasty.

**Davey JR:** Festschrift for William Harris, Boston, Massachusetts, May 2001. The effect of femoral offset: A canine total hip model.

**Mahomed NN:** American College of Rheumatology, Philadelphia, Pennsylvania, November 2000. Exercise following total hip replacement.

**Mahomed NN:** Joint Effort 2001, The Arthritis Society, Toronto, Ontario, May 2001. When is surgery necessary?

**Marshall KW:** Articular Cartilage Repair and Management, San Diego, California, September 2000. Comprehensive approaches to articular cartilage repair and management: Non-operative treatments for knee osteoarthritis: hyaluronic acid.

**Marshall KW:** Robert Wood Johnson University Hospital, New Brunswick, New Jersey, September 2000. Non-arthroplasty management of knee.

**Marshall KW:** Hyaluronan 2000, Wrexham, Wales, September 2000. Visco supplementation: Current status and unresolved issues.

**Miniaci A:** Whistler 2001 Orthopedic Meeting, Whistler, British Columbia, February 2001. Hemiarthroplasty for proximal humerus fractures: How I do it.

**Miniaci A:** Visiting Professor, University of Nebraska Medical Center, Omaha, Nebraska, October 2000. (1) Articular cartilage injuries: Basic science and treatment options, (2) Massive rotator cuff tears: Current concepts and treatment techniques.

**Miniaci A:** Italian Society of Orthopaedics and Traumatology, Montecatini Terme, Italy, October 2000. (1) Articular cartilage resurfacing: Autograft transplants: (2) Mosaic plasty and basic science, (3) Basic science of articular cartilage lesions, (4) Articular cartilage injuries, clinical treatment options.

**Miniaci A:** Course: Diagnosis and Treatment of Knee Instability, Tamung, Guam, August 2000. (1) Chair, (2) Diagnosis and treatment of osteochondral defects, (3) Lab: Bioskills (2 presentations).

**Miniaci A:** Course: Princess Margaret Rose Orthopaedic Hospital, Edinburgh, Scotland, November 2000. (1) Faculty (2) Debate: There is no role for the arthroscopic management of full thickness tears of the rotator cuff, (3) The irreparable rotator cuff tear, (4) Arthroscopic stabilization using the caspari technique, (5) Failed instability surgery- what went wrong and what to do?, (6) Is there a role for capsular shrinkage in MDI?, (7) Shoulder pain in the throwing athlete- instability or impingement?

**Miniaci A:** American Academy of Orthopaedic Surgeons, Toronto, Ontario, September 2000. (1) Lab faculty: Open rotator cuff and instability repairs: Total shoulder arthroplasty, (2) Moderator: Panel discussion.

**Miniaci A:** Course, American Academy of Orthopaedic Surgeons, Toronto, Ontario, September 2000. (1) Lab instructor: Lateral knee anatomy: Repairs and reconstruction, (2) Instructor: Lateral knee anatomy: Repairs and reconstruction, (3) Treatment of articular cartilage injuries, (4) Lab instructor: Open patella realignment/OATS/tibial osteotomies.

**Miniaci A:** American Academy of Orthopaedic Surgeons, Rosemont, Illinois, September 2000. (1) Massive rotator cuff tear: (2) Shoulder instability: (3) Lab instruction & demonstration - latissimus dorsi transfer.

**Miniaci A:** American Orthopaedic Society for Sports Medicine, San Francisco, California, March 2001. Osteoarticular transplantation technique.

**Miniaci A:** Canadian Orthopaedic Association, London, Ontario, June 2001. (1) Osteochondral autograft, (2) Rotator cuff, biceps and labral injuries: Subscapularis tears: Why bother?, (3) Demonstration: Total shoulder arthroplasty.

**Miniaci A:** Arthroscopy Association of North America, Seattle, Washington, April 2001. Osteochondral autografting: Mosaicplasty.

**Miniaci A:** Arthritis Health Professions Association, Toronto, Ontario, May 2001. Surgical approach to osteoarthritis: Osteochondral autograft.

**Rampersaud YR:** Ski with the Spine Institute, Whistler, British Columbia, January 2001. (1) Posterior surgical management of thoracolumbar trauma, (2) Virtual fluoroscopic navigation.

**Rampersaud YR:** AO, Toronto, Ontario, June 2001. AO-basic nursing course.

**Rampersaud YR:** Canadian Congress of Neurological Surgeons, Halifax, Nova Scotia, June 2001. Cervicothoracic fixation.



**Rampersaud YR:** Canadian Orthopaedic Association, London, Ontario, June 2001. (1) Computer assisted spinal surgery, (2) Non-operative management of spinal metastases

**Rampersaud YR:** Thoracic Pedicle Screw Workshop, Memphis, Tennessee, September 2000. Computer assisted thoracic pedicle screw placement.

**Rampersaud YR:** International Spine Workshop, The uniformed Services University of the Health Sciences and Spinal Research and Education Foundation, Bethesda, Maryland, June 2001. Computer-assisted spinal surgery.

**Rampersaud YR:** Spinal Science Advancement Foundation, Langkawi, Malaysia, February 2001. (1) Occipito-cervical instrumentation, (2) Vertebroplasty.

**Rampersaud YR:** International Advanced Spine Techniques, Barcelona, Spain, July 2000. Virtual fluoroscopic navigation.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

Course of osteoarthritis: Three pilot studies to develop tools to measure the trajectory of functional decline. *Badley E, Hawker G, Fortin P, Wright J, Mahomed N, Abrahamovicz M, Clarke A, Coyte P, Cibere J, Gignac M, Poole R, Davis A, Penrod J: Canadian Arthritis Network (\$236,558 2001).*

Determinants and outcomes of revision total knee arthroplasty. *Mahomed N, Myerthall S, Davey JR, Gross A, Koo M: Canadian Orthopaedic Foundation (\$10,000 1999 - 2001).*

Evaluating patient demographics, condition pre-surgery and type of revision hip arthroplasty. *Davis A, Mahomed N, Katz J: Division of Orthopaedic Surgery, University of Toronto (\$10,000 2000 - 2001).*

Evaluation of commonly used hip rating systems. *Mahomed N, Lau J, Koo M, Davey JR, Waddell JP, Schemitsch E, Davis A: Canadian Orthopaedic Foundation (\$9,642 2001 - 2002).*

Examining the relationship between evidence-based practice and physician and patient opinion. *Wright JG, Coyte P, Glazier R, Hawker G, Kreder H, Mahomed NN: Arthritis Society* (\$72,489 1999 - 2001).

Examining the relationship between evidence-based practice and physician and patient opinion. *Wright JG, Hawker G, Coyte P, Mahomed NN, Kreder H: Medical Research Council of Canada* (\$56,239 1999 - 2002).

Intra-operative computerized tomography and spinal navigation: applications in the cervical spine. *Rampersaud YR, Fehlings MG: American Association of Neurological Surgeon/Congress of Neurological Surgeons* (\$22,500 2001).

Microarray analysis of osteoblast differentiation. *von Schroeder HP: Zimmer of Canada* (\$10,000 2001).

Microarray analysis of osteoblast proliferation. *von Schroeder HP: Canadian Orthopaedic Foundation* (\$10,000 2001).

Mid-term follow-up of primary and revision total hip arthroplasty. *Katz JN, Mahomed NN, Harris WH, Phillips CS, Baron J: Arthritis Foundation (US)* (\$450,000 2000 - 2005).

Osteoblast viology. *von Schroeder HP: The Toronto Hospital* (\$50,000 1998 - 2001).

Pilot study for a randomized controlled trial of standardized arthroscopic debridement protocol (SADP) versus total knee arthroplasty (TKA) for advanced knee osteoarthritis. *Mahomed NN, Davey JR, Carette S, Waddell JP, Schemitsch E: University of Toronto, Division of Orthopaedic Surgery Research Committee* (\$10,000 2001 - 2002).

Predictors of outcome following revision total hip arthroplasty. *Davis A, Gross AE, Badley E, Hutchison C, Kreder HJ, Gollish J, Saleh K, Schemitsch E, Szalai JP, Davey JR: Arthritis Society* (\$196,983 1998 - 2001).

Randomized controlled trial of inpatient versus home based rehabilitation following primary total hip and knee arthroplasty. *Mahomed NN, Wright J, Hawker G, Badley L, Davis A, Coyte P, Naglie G, Steve F, Jaglal S, Koo M, Kraetschmer B: Physicians Services Incorporated Foundation* (\$129,000 1999 - 2001).

Randomized controlled trial of standardized arthroscopic debridement protocol versus total knee arthroplasty for advanced knee osteoarthritis: A pilot project. *Mahomed NN, Carette S, Davey R, Waddell JP, Schemitsch E, Kreder H: Division of Orthopaedic Surgery, University of Toronto* (\$10,000 2000 - 2001).

Revision total joint replacement: Why do primaries fail? *Davis A, Kreder H, Schemitsch E, Mahomed NN, Gollish J, Gross AE: Canadian Orthopaedic Foundation* (\$10,000 2000 - 2001).

The effect of hospital and surgeon procedure volume on the outcomes of primary and revision total knee replacement: Magnitude and mechanisms. *Katz JN, Baron J, Mahomed NN, Liang M, Barrett J, Guadiganoli E, Daltroy L: National Institutes of Health* (\$1,500,000 2001 - 2006).

The role of late co stimulatory pathways in sustaining T cell responses in RA. *Albert L, Watts T, Mahomed NN, Marshall KW: Arthritis Society* (\$30,000 2000 - 2001).

#### **HONOURS RECEIVED**

**Mahomed NN:** Sanofi-Synthelabo Research Award, University of Toronto, Department of Surgery, Division of Orthopaedic Surgery, November 2000.

**von Schroeder HP:** Robert Salter Award, Canadian Orthopaedic Foundation, June 2001.

**DIVISION OF PLASTIC SURGERY**

**Dr. D.J. Anastakis - Assistant Professor**  
**Dr. T.A.B. Bell - Lecturer**  
**Dr. A. Freiberg - Professor**  
**Dr. B.A. Graham - Assistant Professor**  
**Dr. R.T. Manktelow - Professor**  
**Dr. P.C. Neligan - Associate Professor (*Division Head*)**  
**Dr. H. von Schroeder – Assistant Professor**

**PUBLICATIONS**

**Anastakis DJ, Hamstra S, Matsumoto E:** Visual-spatial abilities in surgical training: A point of view. *American Journal of Surgery*: July 2000: 179(6): pp 469-471.

**Chang DW, Langstein HN, Gupta A, DeMonte F, Do KA, Wang X, Robb G, Neligan PC:** Reconstructive management of cranial base defects after tumor ablation. *Plastic and Reconstructive Surgery*: May 2001: 107: pp 1356-1357.

**Gullane PG, Neligan PC:** Modern day approaches to lip reconstruction. In: *Advances in Otolaryngology: Head and Neck Surgery*, Volume 15: Mosby: 2001: pp 203-226.

**Hopper RA, Forrest CR, Xu H, Zhong A, He W, Rutka J, Neligan PC, Pang CY:** Role and mechanism of PKC in ischemic preconditioning of pig skeletal muscle infarction. *American Journal of Physiology*: August 2000: 279: pp 666-676.

**Irish JC, Gullane PJ, Mulholland S, Neligan PC:** Medicinal leech in head and neck reconstruction. *Journal of Otolaryngology*: October 2000: 29: pp 327-332.

**Khoo M, Soo K-C, Gullane P, Neligan PC, Hong S-W, Lee J, Siow J-K:** Resurfacing of the nasopharynx following nasopharyngectomy using a free radial forearm flap. *Head and Neck*: May 2001: pp 1-7.

**Neligan P:** Breast reconstruction. In: *Core Curriculum in Plastic Surgery* (Granick M, ed). Plastic Surgery Educational Foundation, Chicago: 2000: Web pages.

**Neligan P:** Wound healing. In: Core Curriculum in Plastic Surgery (Granick M, ed). Plastic Surgery Educational Foundation, Chicago: 2000: Web pages.

**Pang CY, Xu H, Huang N, Forrest CR, Perreault TM, Neligan PC:** Amplification effect and mechanism of action of endothelin-1 in U46619-induced vasoconstriction in pig skin. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*: March 2001: 280: pp R713-R720.

**Shpitzer T, Gullane PJ, Neligan PC, Irish JC, Freeman JE, Van den Brekel M:** The free vascularized flap and the flap plate options: Comparative results of reconstruction of lateral mandibular defects. *The Laryngoscope*: December 2000: 110: pp 2056 - 2060.

**von Schroeder HP:** The ulnar nerve at the arcade of Struthers. *Proceedings, Congress of the IFSSH*: June 2001: pp 259-262.

**von Schroeder HP, Botte MJ:** The anatomy and functional significance of the long extensors to the fingers and thumb. *Clinical Orthopaedics and Related Research*: March 2001: 383: pp 74-83.

**von Schroeder HP, Botte MJ:** The dorsal aponeurosis, intrinsic, hypothenar and thenar musculature of the hand. *Clinical Orthopaedics and Related Research*: April 2001: 383: pp 97-107.

**von Schroeder HP, Gilchrist A, Payandeh J, Tsai V, McInnes M:** MCCQE 2001 review notes. In: *Orthopaedics*, University of Toronto Press, Toronto: 2001: pp 1-46.

**von Schroeder HP, Kuiper SD, Botte MJ:** Osseous anatomy of the scapula. *Clinical Orthopaedics and Related Research*: March 2001: 383: pp 131-139.

**Zhang J, Lipa JE, Black CE, Huang N, Neligan PC, Ling FTK, Levine RH, Semple JL, Pang CY:** Pharmacological characterization of vasomotor activity of human musculocutaneous perforator artery and vein. *Journal of Applied Physiology*: December 2000: 89(6): pp 2268-2275.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Anastakis DJ:** Swiss Society for Surgery of the Hand, Lausanne, Switzerland, October 2000. (1) Free functioning muscle transfers in the upper extremity: Indications and results, (2) Reanimation of the paralyzed shoulder, (3) Revue a long terme de 35 transpositions des muscles epitrochleens selon Steindler pour la reanimation de la flexion du coude.

**Anastakis DJ:** York University, Schulich School of Business, Toronto, Ontario, November 2000. Service operations and surgical programs overview.

**Anastakis DJ:** Southern Society of Clinical Surgeons, Toronto, Ontario, April 2001. Skills training outside the O.R.

**Neligan PC:** North American Skull Base Society, Lake Burna Vista, Florida, March 2001. (1) Panelist: The place of microsurgery in skull base reconstruction, (2) Panel moderator: Reconstruction free tissue transfer, (3) Panel moderator: Free flap reconstruction in the cranial base.

**Neligan PC:** British Virgin Islands Workshop in Plastic Surgery, Tortola, British Virgin Islands, January 2001. (1) The role of radioprotection in preventing radiation induced wound healing problems, (2) Indications for multiple free flaps in head and neck reconstruction.

**Neligan PC:** North American Skull Base Meeting, Orlando, Florida, February 2001. (1) Panelist: Free tissue transfer and the Petroux apex, (2) Panelist: The place of microsurgery in skull base reconstruction, (3) Panel moderator: Reconstruction: Free tissue transfer.

**Neligan PC:** Atlantic Society of Plastic Surgery, Halifax, Nova Scotia, November 2000. (1) Lip reconstruction, past, present and future, (2) Reconstruction of the chest, (3) The use of perforator flaps in reconstructive surgery.

**Neligan PC:** American Society of Plastic Surgeons, Los Angeles, California, October 2000. (1) Instructional course: Lip reconstruction following tumor resection, (2) Instructional course: Multimedia computerized presentations for education, (3) Panel: The web and your practice.

**Neligan PC:** American Society for Reconstructive Microsurgery, San Diego, California, January 2001. (1) Instructional course: Craniofacial reconstruction, (2) Moderator: Head and neck reconstruction.

**von Schroeder HP:** Canadian Orthopaedic Association, London, Ontario, June 2001. Instructional course: Operative treatment of acute scaphoid fractures and established non-unions.

**von Schroeder HP:** Canadian Orthopaedic Association, London, Ontario, June 2001. Scaphoid ORIF.

**von Schroeder HP:** Manus Canada and Great Lakes Hand Meetings, London, Ontario, June 2001. (1) Six-strand tendon repair, (2) Tendon repair.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

Determinants of treatment outcomes in work-related carpal tunnel syndrome. *Manktelow RT, Binhammer P, Bril V, Szalai JP, Tomat L: Workplace Safety and Insurance Board (\$205,025 1999 - 2001).*

Evaluating the effectiveness of a two-year curriculum in a surgical skills centre: The future of surgical training. *Anastakis DJ, Brown M, Ali J, Hamstra S, Hutchison C, Murnaghan J, Regehr G, Reznick R: Physicians Services Incorporated Foundation (\$82,555 1998 - 2000).*

Functional MRI: Mapping brain activity following amputation and peripheral nerve injury. *Anastakis DJ, Mikulis D, Chen R: Workers Safety and Insurance Board (\$47,700 1998 - 2000).*

Investigation of histo pathophysiology and pharmacologic intervention of radiation-induced craniofacial bone growth retardation. *Neligan PC, Forrest C, Pang CY: The Hospital for Sick Children Foundation (\$127,025 2000 - 2002).*

Mechanism and intervention for radiation-induced impaired wound healing. *Neligan PC, Pang CY, Shenker R: Plastic Surgery Educational Foundation (\$4,927 2000 - 2001).*

Skin flap ischemia: Pathophysiology and pharmacological intervention. *Neligan PC, Pang CY: Canadian Institutes of Health Research* (\$402,800 2001 - 2006).

Specification of visual-spatial abilities relevant to surgical training. *Hamstra SJ, Anastakis DJ, Caminiti MF, Cusimano MD, Matsumoto ED: Physicians Services Incorporated Foundation* (\$24,000 2000 - 2001).

#### **DIVISION OF THORACIC SURGERY**

**Dr. G.E. Darling - Associate Professor**  
**Dr. R.J. Ginsberg – Professor (*Division Head*)**  
**Dr. M.R. Johnston - Associate Professor**  
**Dr. S.H. Keshavjee - Assistant Professor**  
**Dr. M. Liu - Associate Professor**  
**Dr. M.F. McKneally - Professor**  
**Dr. T.K. Waddell - Assistant Professor**

#### **PUBLICATIONS**

**Asamur H, Ginsberg RJ:** Treatment of small cell lung cancer: Treatment of SLCL: Surgery. In: *The International Association for the Study of Lung Cancer Textbook of Lung Cancer* (Hansen HH ed). Martin Dunitz Publishers. London 2000. pp 243-249.

**Canadian Lung Oncology Group (including Johnston MR):** Investigating extra-thoracic metastatic disease in patients with apparently operable lung cancer. *Annals of Thoracic Surgery*: February 2001: 71(2): pp 425-433.

**Cardella JA, Keshavjee S, Mourgeon E, Cassivi SD, Fischer S, Isowa N, Slutsky A, Liu M:** A novel cell culture model for studying ischemia-reperfusion injury in lung transplantation. *Journal of Applied Physiology* October 2000: 89(4): pp 1553-1560.



**Cassivi SD, Liu M, Pierre A, Boehler A, Tanswell AK, Slutsky AS, Keshavjee S:** Transplant immunosuppression increases and prolongs transgene expression in adenoviral-mediated transfection of rat lungs. *Journal of Heart and Lung Transplantation*: October 2000: 19(10): pp 984-994.

**Chaparro C, Maurer J, Gutierrez C, Kraiden M, Chan C, Winton T, Keshavjee S, Scavuzzo M, Tullis E, Hutcheon M, Kesten S:** Infection with *Burkholderia cepacia* in cystic fibrosis outcome following lung transplantation. *American Journal of Respiratory and Critical Care Medicine* March 2001: 163(1): pp 43-48.

**Fischer S, Hopkinson D, Liu M, Edwards V, MacLean A, Cutz E, Keshavjee S:** Raffinose improves twenty-four-hour lung preservation in low potassium dextran glucose solution: A histological and ultra structural analysis. *Annals of Thoracic Surgery*: May 2001: 71: pp 1140-1145.

**Fischer S, MacLean AA, Liu M, Cardella JA, Slutsky AS, Suga M, Moreira JF, Keshavjee S:** Dynamic changes in apoptotic and necrotic cell death correlate with severity of ischemia-reperfusion injury in lung transplantation. *American Journal of Respiratory and Critical Care Medicine* October 2000: 162(5): pp 1932-1939.

**Fischer S, MacLean AA, Liu M, Kalirai B, Kekshavjee S:** Inhibition of angiotensin-converting enzyme by captopril: A novel approach to reduce ischemia-reperfusion injury after lung transplantation. *Journal of Thoracic and Cardiovascular Surgery* October 2000: 120 (3): pp 573-580.

**Fischer S, Matte-Martyn A, dePerrot M, Sekine Y, Waddell T, Keshavjee S:** Low potassium dextran preservation solution improves lung function after human lung transplantation. *Surgical Forum* October 2000: 41: pp 337-338.

**Fischer S, Matte-Martyn A, de Perrot M, Waddell TK, Sekine Y, Hutcheon M, Keshavjee S:** Low-potassium dextran preservation improves lung function after human lung transplantation. *Journal of Thoracic and Cardiovascular Surgery*: March 2001: 121 (3): pp 594-596.

**Fischer S, Merchant N, Keshavjee S:** Cine magnetic resonance imaging of a giant bronchial carcinoid. <http://www.ctsnet>. 2000\_fischer\_cin.ram March 2001.

**Iswa N, Keshavjee SH, Liu M:** Role of microtubules in LPS-induced macrophages inflammatory protein-2 production from rat pneumocytes. *American Journal of Physiology Cell Molecular Physiology* October 2000: 279(6): pp L1075-L1078.

**Iswa N, Liu M:** Role of LPS-induced microfilament depolymerization in MIP-2 production from rat pneumocytes. *American Journal of Physiology Lung Cellular and Molecular Physiology*: April 2001: 280(4): pp L762-L770.

**Janssen LJ, Premji M, Netherton S, Catalli A, Cox G, Keshavjee S, Crankshaw DJ:** Excitatory and inhibitory actions of isoprostanines in human and canine airway smooth muscle. *Journal of Pharmacology and Experimental Therapy* October 2000: 295(2): pp 506-511.

**Johnston MR, Mullen JBM, Pagura ME, Howard RB:** Validation of an orthotopic model of human lung cancer with regional and systemic metastases. *Annals of Thoracic Surgery*: April 2001: 71(4): pp 1120-1125.

**Keshavjee S, Zhang XM, Fischer S, Liu M:** Ischemia-reperfusion induced dynamic changes of protein tyrosine phosphorylation during human lung transplantation. *Transplantation* October 2000: 70(3): pp 525-531.

**Koong HN, Battafarano J, Ginsberg RJ:** Malignant pleural mesothelioma. In: *Prognostic Factors in Cancer, Second Edition*, John Wiley and Sons Incorporated, New York, 2001: pp 371-385.

**MacLean AA, Liu M, Fischer S, Suga M, Keshavjee S:** Targeting the angiotensin system in post-transplant airway obliteration: The antifibrotic effect of angiotensin converting enzyme inhibition. *American Journal of Respiratory and Critical Care Medicine* January 2001: 162 (1): pp 310-315.

**McKneally MF, Martin DK:** An entrustment model of consent for surgical treatment of life-threatening illness: Perspective of patients requiring esophagectomy. *Journal of Thoracic and Cardiovascular Surgery* August 2000: 120: pp 264-269.

**Niisato N, Van Driessche W, Liu M, Marunaka Y:** Involvement of protein tyrosine kinase in osmoregulation of Na<sup>+</sup> transport and membrane capacitance in renal A6 cells. *Journal of Membrane Biology*: July 2000: 175(1): pp 63-77.

**Port JL, Ginsberg RJ:** Surgery for thymoma. *Chest Surgery Clinics of North America*: January 2001: pp 421-437.

**Simon G, Ginsberg RJ, Ruckdeschel JC:** Small-cell lung cancer. *Chest Surgery Clinics of North America*: January 2001: pp 165-188.

**Slinger PD, Johnston MR:** Pre-operative assessment for pulmonary resection. In: *Thoracic Anaesthesia* (Slinger PD, Benumof J, eds). W.B. Saunders Company, Philadelphia: 2001: pp 411-434.

**Suga M, MacLean AA, Keshavjee S, Fischer S, Moreira JF, Liu M:** RANTES plays an important role in the evolution of allograft transplant-induced fibrous airway obliteration. *American Journal of Respiratory and Critical Care Medicine*: November 2000: 162: pp 1940-1948.

**Tammemagi MC, McLaughlin JR, Mullen JB, Bull SB, Johnston MR, Tsao MS, Casson AG:** A study of smoking, p53 tumor suppressor gene alterations and non-small cell lung cancer. *Annals of Epidemiology*: September 2000: 10:3: pp 176-185.

**Waddell, TK, Johnston MR:** Lung abscess. In: *Surgical Decision-Making, Fourth Edition* (Norton LW, Steigman GV, Eiseman B, eds). W.B. Saunders Company, Philadelphia: 2000: pp 201-205.

**Walters RW, Yi S, Keshavjee S, Brown KE, Welsh MJ, Chiorini JA, Zabner J:** Binding of adeno-associated virus type 5 to 2.3 - linked salic acid is required for gene transfer. *Journal of Biological Chemistry* April 2001: 276(23): pp 20610-20616.

**Weill D, Keshavjee S:** Lung transplant for COPD: Two lungs or one. *Journal of Heart-Lung Transplantation* May 2001: 20(7): pp 739-742.

**Zhang H, Porro G, Orzech N, Mullen B, Kavanagh B, Liu M, Slutsky AS:** Neutrophil defensins mediated acute inflammatory responses and lung dysfunction in dose-related fashion. *American Journal of Physiology Lung Cellular and Molecular Physiology*: May 2001: 280(5): pp L947-L954.

**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Darling G:** Society of Thoracic Surgeons, Louisiana, September 2000. Anti-reflux procedures tailored to the patients.

**Ginsberg RJ:** American Association of Thoracic Surgeons, San Diego, California, May 2001. Multi modality therapy in the management of early stage non-small cell lung cancer.

**Johnston MR:** Shanghai Chest Hospital, Shanghai, China, September 2000. Controversies in treating stage IIIA lung cancer.

**Johnston MR:** Saitama University Medical School, Saitama, Japan, September 2000. Treatment for stage IIIA lung cancer.

**Johnston MR:** Workman's Safety and Insurance Board, Toronto, Ontario, December 2000. Treatment of mesothelioma.

**Keshavjee S:** Canadian Pulmonary Hypertension Symposium, Toronto, Ontario, September 2000. (1) Lung transplantation for pulmonary hypertension, (2) Lung transplant update.

**Keshavjee S:** American College of Surgeons, Chicago, Illinois, October 2000. Myasthenia gravis.

**Keshavjee S:** North American Cystic Fibrosis Society, Baltimore, Maryland, November 2000. Living-donor lung transplantation.

**Keshavjee S:** University of Colorado, Vail, Colorado, February 2001. (1) COPD: Which operation?, (2) Preventing reperfusion injury: Inhaled nitric oxide, (3) Cell death, gene therapy and lung preservation.

**Keshavjee S:** Canadian Transplant Society, Lake Louise, Alberta, March 2001. Bronchiolitis obliterans.

**Keshavjee S:** Southern Society of Clinical Surgeons, Toronto, Ontario, April 2001. Lung transplantation.

**Keshavjee S:** American Thoracic Society, San Francisco, California, May 2001. Cytokines in allograft rejection.

**Keshavjee S:** University of California San Francisco, San Francisco, California, May 2001. (1) Apoptosis and gene therapy in lung transplantation, (2) Resource management in lung transplantation, (3) Lung transplantation.

**Keshavjee S:** Chinese Canadian Association of Biomedical Professionals/Society of Chinese Bioscientists in America, Toronto, Ontario, May 2001. Gene therapy in lung transplantation.

**Keshavjee S:** University of Zurich, Zurich, Switzerland, June 2001. Long-term results of lung transplantation for emphysema.

**Keshavjee S:** University of Madrid, Madrid, Spain, June 2001. (1) Lung preservation solutions: Comparative studies, (2) Nitric oxide, (3) Marginal donor lungs: The effect of broadening selection criteria, (4) Gene therapy, cell death and lung preservation.

**Liu M:** Lawson Research Institute, University of Western Ontario, London, Ontario, June 2001. Cytokine production from alveolar epithelial cells.

**Liu M:** The Toronto Critical Care Medicine Symposium, Toronto, Ontario, October 2000. Epithelial defense and LPS.

**Liu M:** Ray Wu Society for Life Science, Cape Cod, Massachusetts, July 2000. Molecular cloning and identifying a novel gene.

**Liu M:** National Congress of Chinese Pathophysiological Society, Nanjing, China, October 2000. Physical factors and lung injury: Mechano transduction.

**Liu M:** MBR Cancer Center, West Virginia University, Morgantown, West Virginia, March 2001. Two novel adaptor type proteins and their role in mechano transduction.

**McKneally MF:** American College of Surgeons Colloquium on Ethics, Chicago, Illinois, October 2000. The ethics of self-improvement through surgery: Reasons not to repair moderate pectus excavatum.

**McKneally MF:** Harvard University Kennedy School of Government Health Policy Course, Boston, Massachusetts, November 2000. Lessons from the Shouldice Hospital.

**McKneally MF:** Society of Thoracic Surgeons Postgraduate Course, New Orleans, Louisiana, January 2001. Ethical issues in introducing new technology.

**McKneally MF:** Society of Cardiovascular Anesthesiologists, Breckenridge, Colorado, March 2001. Ethics of innovation and informed consent.

**McKneally MF:** Albany Medical College, Albany, New York, April 2001. Entrustment and consent for surgical treatment of life-threatening illness.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

A digital imaging system. *Liu M: Ontario Thoracic Society* (\$3,500 1999 - 2000).

A molecular epidemiologic study of modifiers of the association between tobacco smoke and lung cancer. *McLaughlin J., Johnston MR, Casson A, Narod S, Rohan T, Tsao MS: National Cancer Institute of Canada* (\$750,000 1997 - 2000).

Alteration of nitric oxide syntheses during human lung transplantation. *Liu M, Keshavjee S: Ontario Thoracic Society* (\$31,500 2000 - 2001). Cellular and molecular mechanisms of ventilation-induced acute lung injury. *Liu M: Medical Research Council of Canada* (\$240,000 1998 - 2001).

A phase III comparison between concurrent chemotherapy plus radiotherapy and concurrent chemotherapy and radiotherapy followed by surgical resection for Stage III a (n2) non-small cell lung cancer. *Darling G: National Cancer Institute of Canada* (Per patient \$1,300 2001).

A randomized trial of mediastinal lymph node sampling versus complete lymphadenectomy during pulmonary resection in the patient with N0 or N1 (less than hilar) non small cell lung cancer. *American College of Surgeons Oncology Group* (including Darling G): (Per patient \$1,500 2001).

Breast disease and early detection of breast cancer: A study of effectiveness of a course of home study on medical student performance. *Darling G: National Breast Cancer Fund* (\$10,000 2000-2001).

CF transplant centre. *Hutcheon M, Keshavjee S: Canadian Cystic Fibrosis Foundation* (\$172,728 1997 - 2000).

Construction of DNA micro arrays for clinical analysis of novel genes in non-small cell lung cancer. *Wigle D, Keshavjee S: Physicians Services Incorporated Foundation* (\$20,000 2000 - 2001).

Critical thinking about informed consent: A patient-based empiric study. *McKneally MF: Physicians Services Incorporated Foundation* (\$121,000 1998 - 2000).

Development of a small animal model for lung cancer adjuvant therapy. *Johnston MR: Agouron Pharmaceuticals* (\$15,000 2000 - 2001).

Development of a small animal model for lung cancer adjuvant therapy. *Johnston MR: Kinetek Pharmaceuticals* (\$75,000 2001 - 2002).

Early detection of second primary lung cancers by sputum cytology immunostaining (Toronto Group). *Johnston MR, Bayer Corporation, Lung Cancer Early Detection Working Group: Bayer Corporation* (\$150,000 1998 - 2001).

Gene expression in xenograft accommodation. *Waddell TK: Physician Services Incorporated Foundation* (\$123,321 2001 - 2002).

Gene therapeutic applications in transplant related acute lung injury. *Keshavjee S: Canadian Institutes of Health Research* (\$268,413 2000 - 2003).

ILK activity in the nude rat lung cancer model system. *Johnston MR, Tsao M: Kinetek Pharmaceuticals, Inc* (\$33,627 2000 - 2001).

Leukocyte-endothelial interactions in xeno-transplantation. *Waddell TK: American Association for Thoracic Surgery* (\$165,000 2000 - 2002).

Mechanisms of tumor cell invasion and metastasis of lung cancer cells. *Hu J, Johnston MR, Tsao M: Grant Miller Cancer Research* (\$20,000 2001 - 2002).

NF-kB activation: Regulation by proteins of the Bcl-2 family. *Waddell TK: Connaught New Staff Matching Grant* (\$30,000 2001).

Novel biomarkers and screening strategies in early lung detection of lung cancer. *Tsao MS, Minden M, Banerjee D, Johnston MR, Shepherd F: C.I.T.* (\$300,000 2000 - 2002).

Nutritional factors and gene-environment interactions in the etiology of adenocarcinoma of the esophagus. *Birkett N, Maziak D, Labuda D, Sinnott D, Darling G, Incullet R, Guindi M, McKeown-Eyssen G, Ambrosone C, Casson A: Cancer Research Society* (\$300,000 2000 - 2003).

Oligo-nucleotide microarrays for the detection of non-small cell lung cancer. *Wigle D, Keshavjee S: Physicians Services Incorporated Foundation* (\$20,000 2001).

Phase III chemo prevention trial of selenium supplementation in persons with resected stage I non-small cell lung cancer. *Johnston MR, University of Toronto Group: Eastern Cooperative Oncology Group* (\$1,725 2001 - 2002).

Protective effect of adenoviral-mediated IL-10 gene transfer on allograft transplant-induced airway lesions. *Keshavjee S, Liu M: Canadian Cystic Fibrosis Foundation* (\$200,000 1999 - 2002).

Role of cytoskeleton in cytokine production from lung alveolar epithelial cells. *Liu M: Canadian Institutes of Health Research* (\$190,000 2000 - 2003).

Study of the prognostic significance of occult metastases in the patients with resectable non-small cell lung carcinoma. *Darling G: American College of Surgeons Oncology Group* (Per patient \$1,000 2000 - 2001).

The role of Bcl-2 family proteins in TNF-mediated NF-KB activation. *Waddell TK: Thoracic Surgery Foundation for Research and Education* (\$90,000 2000 - 2002).



The role of Bcl-2 family proteins in TNF-mediated NF-KB activation.  
*Waddell TK: University of Toronto Life Sciences Committee (\$35,000 2000 - 2001).*

Xeno-transplantation. *Waddell TK: Canadian Foundation for Innovation (\$150,000 2000 - 2003).*

#### **HONOURS RECEIVED**

**Keshavjee SJ:** University of Toronto Magazine, University of Toronto, Top 50 Alumni Under 40. January 2001.

**Waddell TK:** Elsie Winifred Crann Memorial Trust Award, August 2000.

#### **DIVISION OF UROLOGY**

**Dr. M. Beheshti - Lecturer**  
**Dr. G. Farrow – Assistant Professor**  
**Dr. M.A.S. Jewett – Professor (*Division Head*)**  
**Dr. M. Hassouna - Associate Professor**  
**Dr. S.B. Radomski - Assistant Professor**  
**Dr. R. Rameseshan – Lecturer**  
**Dr. M. Robinette - Associate Professor**  
**Dr. J. Trachtenberg – Professor**  
**Dr. J. Tsihlias – Assistant Professor**

#### **PUBLICATIONS**

**Al-Maghrabi J, Jewett MAS, Gospodarowicz M, Kamel-Reid, S, Wells W, Banderjee D:** Primary low grade B-cell lymphoma of MALT type of the urinary bladder: Report of four cases with molecular genetic analysis. *Archives of Pathology and Laboratory Medicine:* March 2001: 125: pp 332-336.

**Alibhai SMH, Nam R, Naglie G, Trachtenberg J, Krahn MD:** Influence of age, comorbidity, and source of efficacy data on optimal treatment choice for localized prostate cancer: a decision analytic view. *Clinical and Investigative Medicine*: September 2000: 23(5): pp 331-332.

**Beheshti B, Park PC, Sweet JM, Trachtenberg J, Jewett MAS, Squire JA:** Evidence of chromosomal instability in prostate cancer determined by spectral karyotyping (SKY) and interphase FISH analysis. *Neoplasia*: January 2001: 3(1): pp 62-69.

**Klotz L, Heaton J, Jewett MAS, Chin J, Gleave M, Casey R, Goldenberg L:** A randomized phase study of intra-operative cavernous nerve stimulation with penile tumescence monitoring (Cavermap TM surgical aid) to improve nerve sparing during radical prostatectomy. *Journal of Urology*: November 2000: 164: pp 1573-8.

**Jewett MAS:** Prostate cam: Laparoscopic radical prostatectomy comes to an operating theatre near you. *Our Voice*: March 2001.

**Nam RK, Elhaji Y, Krahn MD, Hakimi J, Ho M, Chu W, Sweet J, Trachtenberg J, Jewett MA, Narod SA:** Significance of the CAG repeat polymorphism of the androgen receptor gene in prostate cancer progression. *Journal of Urology*: August 2000: 164(2): pp 567-572.

**Nam RK, Toi A, Vesprini D, Ho M, Harvie S, Sweet J, Trachtenberg J, Jewett MA, Narod SA:** V89L polymorphism of the type-2, 5-alpha reductase enzyme gene (SRD5A2) predicts prostate cancer development and progression. *Urology*: January 2001: 57(1): pp 199-204.

**Peters R, Chan E, Trachtenberg J:** Magnetic resonance thermometry for predicting thermal damage: An application of interstitial laser coagulation in an in vivo canine prostate model. *Magnetic Resonance in Medicine*: December 2000: 44(6): pp 873-883.

**Pierratos A, Dharamsi N, Carr LK, Ibanez D, Jewett MAS, and Honey RJD:** Higher urinary potassium is associated with lower stone growth following extra-corporal shock wave lithotripsy (SWL). *Journal of Urology*: November 2000: 164: pp 1486-1489.

**Rendon R, Stanietzky N, Panzarella T, Robinette M, Klotz L, Thurston W, Jewett MAS:** Natural history of small renal masses. *Journal of Urology*: November 2000: 164: pp 1143-1147.

**Ritchie JP, Einhorn LH, Foster RS, Jewett MAS, Studer UE:** Testis Cancer: Options in the land of plenty. *Contemporary Urology*: May 2001: 13: pp 26-45.

**Trachtenberg J, Fleshner N:** Eating right for life: Prostate Cancer Nutrition and You Parkhurst Publishing, Montreal: 2000.

**Vaziri SAJ, Hughes NC, Sampson H, Darlington G, Jewett MAS, Grant DM:** Variation in enzymes of arylamine procarcinogen biotransformation among bladder cancer patients and control subjects. *Pharmacogenetics*: February 2001: 11: pp 7-20.

**Vesprini D, Nam RK, Trachtenberg J, Jewett MAS, Tavtigian SV, Emami M, Ho M, Toi A, Narod SA:** HPC2 variants and screen-detected prostate cancer. *American Journal of Human Genetics*: April 2001: 68(4): pp 912-917.

**Yu H, Nicar MR, Shi R, Berkel HJ, Nam RK, Trachtenberg J, Diamandis EP:** Levels of insulin growth factor-1 (IGF-1) and IGF binding proteins 2 and 3 in serial post-operative serum samples and risk of prostate cancer recurrence. *Urology*: March 2001: 57(3): pp 471-475.

#### INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

**Jewett MAS:** Pan American Congress on Urologic Oncology, Ixtapa, Mexico, January 2001. (1) Panel: Invasive bladder cancer, (2) Workshop: Intravesical therapy: How should it be used?, (3) Workshop: Laparoscopic radical prostatectomy, (4) Moderator: Prostate cancer, (5) Discussant: Treatment options for high risk stage1 testicular cancer (non-seminomatous). .

**Jewett MAS:** Issues and Controversies in Prostate Care, Whistler, British Columbia, March 2001. (1) How to improve your prostatectomy: Pearls from my practice, (2) . Moderator: Laparoscopy will replace open radical prostatectomy.

**Jewett MAS:** Urology Update, 2001, University of West Virginia, Morgantown, West Virginia, March 2001. Laparoscopic radical prostatectomy.

**Jewett MAS:** Man to Man, Barrie, Ontario, May 2001. New surgical techniques: Robotic laparoscopic radical prostatectomy.

**Jewett MAS:** Man to Man, Prostate Cancer Support Group, Toronto, Ontario, November 2000. New surgical techniques: Robotic laparoscopic radical prostatectomy.

**Jewett MAS:** Ontario GU Radiation Oncology Retreat, Huntsville, Ontario, October 2000. Surgical techniques for improving quality of life: Minimizing consequences of surgery.

**Jewett MAS:** American Urological Association, Anaheim, California, June 2001. Testicular malignancy update course.

**Radomski SB:** Man to Man: Prostate Cancer Support Group, Canadian Cancer Society, Toronto, Ontario, September 27, 2000. Taking control of your incontinence and erectile dysfunction.

**Radomski SB:** Man to Man Prostate Cancer Support Group (Barrie Chapter), Barrie, Ontario, October 25, 2000. Taking control of your incontinence and erectile dysfunction.

**Radomski SB:** Winnipeg Health Science Centre, Winnipeg, Manitoba, November 28, 2000. Laparoscopy in cancer.

**Radomski SB:** Winnipeg Urologists, Winnipeg, Manitoba, November 28, 2000 - November 29, 2000. Pharmacologic management of urinary incontinence.

**Radomski SB:** Canadian Syringomyelia Network Conference, Richmond Hill, Ontario, April 27, 2001. Urological aspects of syringomyelia.

**Radomski SB:** Windsor Urological Group, Windsor, Ontario, May 17, 2001. The non surgical management of the overactive bladder.

**Radomski SB:** Canadian Urological Association, Toronto, Ontario, June 24, 2001. (1) The unstable bladder forum: New drugs for the overactive bladder, (2) Minimally invasive surgery forum: Laparoscopic adrenalectomy.

**Trachtenberg J:** University of California Berkeley, Santa Monica, California, November 2000. (1) New concepts in androgen deprivation therapy (2) New hormonal therapies for prostate cancer.

**Trachtenberg J:** University of Colorado, Vail, Colorado, January 2001. (1) New treatments for prostate cancer, (2) Results of a new GnRH analog for prostate cancer.

**Trachtenberg J:** American Society of Clinical Oncology, San Francisco, California, May 2001. (1) Abarelix depot monotherapy reduces PSA levels comparable to leuprolide acetate plus bicalutamide results of a multi-centre trial of rising PSA, advanced (D1/D2), neo adjuvant hormonal therapy, and intermittent hormonal therapy prostate cancer patients, (2) Avoidance of FSH surge and maintained suppression of follicle-stimulating hormone with abarelix depot compared to leuprolide and bicalutamide in prostate cancer patients.

**Trachtenberg J:** International Conference on Androgen Deprivation Therapy, Sarasota, Florida, October 2000. Molecular markers of prostatic intraepithelial neoplasia.

**Trachtenberg J:** University of California San Diego, Palm Springs, California, November 2000. New concepts in androgen deprivation therapy.

**Trachtenberg J:** CaPCure, Lake Tahoe, Nevada, September 2000. New treatments for advanced prostate cancer.

**Trachtenberg J:** University of Miami, Miami, Florida, January 2001. Novel compounds for the treatment of prostate cancer.

**Trachtenberg J:** Wayne State University, Dorado, Puerto Rico, December 2000. The effects of follicle stimulating hormone on prostate cancer.

**Tsihlias J:** Man to Man and Side by Side, Toronto, Ontario, March 2001. Radical prostatectomy.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A multi-centre randomized controlled study to evaluate the safety and effectiveness of Uryx urethral bulking agent in patients with urinary incontinence. *Herschorn S, Radomski SB: Genyx Medical Incorporated* (\$108,000 2000 - 2001).

A randomized controlled trial of an antiandrogen in patients with prostatic intraepithelial neoplasia; molecular correlates. *Trachtenberg J, Squire J, Brown TJ, Sweet J, Stewart R: AstraZeneca* (\$300,000 2000 - 2003).

A randomized, double-blind parallel group comparison of the efficacy and safety of controlled-release oxybutynin and immediate release oxybutynin for urinary incontinence. *Radomski SB: Purdue Frederick* (\$54,000 1999 - 2000).

A risk model for development of prostate cancer. *Trachtenberg J, Narod SA: AstraZeneca* (\$55,000 2000).

Accrual to prostate cancer trials: A collaborative project investigating factors influencing patient recruitment. *Robinson J, Ernst S, Venner P, Jewett MAS, Moritz S, Sampson H, Repka G, Gospodarowicz M: National Cancer Institute of Canada* (\$10,000 1999 - 2000).

Adjusting treatment to meet patient preferences: A molecular and psychosocial approach. *Squire J, Ritvo P, Sherar M, Bristow R, Trachtenberg J: Princess Margaret Hospital Foundation* (\$1,000,000 2000 - 2002).

Controlled clinical trial to investigate the safety and efficacy of the urethral bulking agent Macroplastique for the treatment of stress incontinence after TURP or radical prostatectomy. *Herschorn S, Radomski SB: Uroplasty Incorporated* (\$48,600 2000 - 2001).

Determining the predictive significance of serum human glandular kallikrein-2 protease levels and its optimal cut-off value for detecting prostate cancer. *Nam R., Jewett MAS: Canadian Urologic Oncology* (\$5,000 1999 - 2000).

Development of a prostate cancer prevention clinic. *Trachtenberg J, Ritvo P, Paterson A, Squire J, Yue C, Matthew AG: Princess Margaret Hospital Foundation* (\$1,000,000 2000 - 2010).

Differential gene expression in prostatic cancer. *Squire J, Zielenska AM, Sweet J, Jewett M, Trachtenberg J, Klotz L, Kapusta L: CaP Cure* (\$200,000 2000 - 2002).

Differential gene expression in prostate cancer. *Squire, J., Zeielensa M, Sweet J, Jewett MAS, Trachtenberg J: National Cancer Institute of Canada* (\$366,550 2000 - 2003).

Effects of 5-alpha reductase inhibitor on benign prostatic hyperplasia. genotyping. *Trachtenberg J, Browne Ted: Glaxo Wellcome* (\$33,000 1999 - 2001).

Effects of a GnRH antagonist in men with prostate cancer. *Trachtenberg J: Amgen Incorporated* (\$36,000 1999 - 2000).

Effects of a novel sub dermal implant LHRH agonist on advanced prostate cancer. *Trachtenberg J: Roberts Pharmaceuticals* (\$8,000 1999 - 2000).

Effects of a sperm inhibitor on androgen-independent prostate cancer. *Trachtenberg J: Novartis Pharmaceuticals* (\$28,000 1999 - 2000).

Effects of antiandrogen in combination with castration on metastatic prostate cancer. *Trachtenberg J: Astra Zeneca* (\$22,000 1999 - 2000).

Effects of bisphosphonate plus standard therapy in men with recurrent prostate cancer. *Trachtenberg J: Novartis Pharmaceuticals* (\$12,000 1999 - 2001).

Efficacy of EB1089 enteric-coated capsules (5 ug) or placebo in inducing apoptosis in patients with prostate cancer. *Klotz L, Jewett MAS, Morash D: Leo Pharmaceuticals* (\$16,000 1999 - 2003).

Long-term safety and efficacy of tolterodine prolonged release capsules: An open-label, uncontrolled, multinational study in patients with symptoms of overactive bladder. *Radomski SB: Pharmacia and Upjohn* (\$12,000 1999 - 2000).

Molecular markers of progression of prostate cancer. Effects of 5-alpha reductase inhibition. *Trachtenberg J, Brown T, McLusky N: PMAC/Medical Research Council of Canada/Glaxo Pharmaceutical* (\$370,000 1998 - 2001).

Phase III randomized study of a single adjunctive instillation of intravesical AD32 (N-trifloracetylramycin-14-valorate) versus no adjuvant therapy immediately following transurethral resection in patients with multiple superficial (TA/T1) bladder tumors. *Jewett MAS: Anthra Pharmaceuticals* (\$10,000 1998 - 2002).

Preference functions for a health state classification for prostate cancer. *Krahn M, Ritvo P, Irvine J, Naglie G, Warde P: National Cancer Institute of Canada* (\$191,000 2000 - 2002).

Preference functions for a health state classification system for prostate cancer. *Krahn M, Bezzak A, Irvine J, Naglie G, Ritvo P, Tomlinson G, Torrance G, Trachtenberg J, Warde P: Canadian Institutes of Health Research* (\$121,000 2000 - 2002).

Prognostic factors for metastatic progression of localized prostate cancer. *Narod S., Nam RK, Pollak M, Jewett MAS, Trachtenberg J, Klotz LH, Fleshner N, Sweet J, Kapusta L, Banerjee D, Diamondis E: National Cancer Institute of Canada* (\$251,790 1997 - 2000).

Randomized controlled study of neo adjuvant reversible androgen withdrawal therapy in the surgical management of localized prostate cancer. *Jewett MAS: Canadian Uro-Oncology Group* (\$64,000 1993 - 2001).

Strategic planning, priorities and partnership to promote trans formative research in kidney/genitourinary tract disease and kidney transplantation in Canada. *Whiteside C, Jewett MAS, Ludwin D: Medical Research Council, Canadian Institutes of Health Research* (\$50,000 1999 - 2000).

The role of intravesical capsaicin in the management of neurogenic bladder of patients with spinal cord lesion. *Hassouna M: Canadian Spinal Research Foundation* (\$45,000 1999 - 2000).

The role of serum IGF-1 levels and androgen receptor genotype in prostate cancer diagnosis. *Narod S, Trachtenberg J, Jewett MAS, Toi A, Pollak M: Canadian Cancer Society* (\$280,000 1999 - 2001).



The role of serum IGF-1 levels and androgen receptor genotype in prostate cancer diagnosis. *Narod SA, Nam RK, Pollak M, Jewett MA, Trachtenberg J, Fleshner N, Toi A, Girardi S: National Cancer Institute of Canada* (\$560,000 1999 - 2002).

The SELECT trial. *Trachtenberg J, Jewett M, Tshilias J: National Cancer Institute* (\$60,000 2000 - 2001).

Thermal ablation of small renal tumors. *Jewett MAS, Sherar M, Asch MR, Trachtenberg J, Tshilias J, Robinette M, Sweet J, Rendon RA: Kidney Foundation of Canada* (\$50,000 2000 - 2002).

## **HONOURS AND AWARDS**

**Radomski SB:** First Prize, Northeastern Section of the American Urological Association Essay Contest (Clinical): (with Matsumoto, Hamstra, Cusimano), September 2000.

**Radomski SB:** First Prize, Wyeth-Ayerst Canada Award in Medical Education and Clinical Epidemiology (with Matsumoto, Hamstra, Cusimano), April 2001.

**Radomski SB:** Third Prize Essay Contest (Clinical) American Urological Association. May 2001.

**DIVISION OF VASCULAR SURGERY**

**Dr. K.W. Johnston – Professor (*Division Head*)**  
**Dr. P. Kalman – Associate Professor**  
**Dr. T.F. Lindsay - Assistant Professor**  
**Dr. B.B. Rubin - Associate Professor**  
**Dr. P.M. Walker - Professor**

**PUBLICATIONS**

**Degousee N, Borregaard N, Marshall J, Lindsay T, Tischfield J, Arm J, Stefanski E, Walker P, Rubin B:** Identification of group V phospholipase A2 in human neutrophils: role in E. coli phospholipid hydrolysis. *Surgical Forum*: October 2000: LI: pp 243-241.

**Gloviczki P, Kalman PG, Wilson SE, Moore WS:** Management of small abdominal aortic aneurysms. *Perspectives in Vascular Surgery*: June 2001: 14: pp 115-128.

**Johnston KW:** Arteriomegaly and arteriomegaly with aneurysms. In: *Current Therapy in Vascular Surgery* (Ernst CB, Stanley JC, eds). Mosby-Year Book Incorporated, Philadelphia: 2000: pp 310-313.

**Johnston KW, Hertzner NR, Rutherford RB, Smith RB 3rd, Yao JS:** Joint council guidelines for disclosure of conflict of interest. *Journal of Vascular Surgery*: July 2000: 32: pp 231-235.

**Kalman PG:** Percutaneous aspiration thromboembolectomy for peripheral arterial occlusions. In: *Current Therapy in Vascular Surgery Fourth Edition*, (Ernst CB, Stanley JC, eds). Mosby Incorporated, St. Louis: 2001: pp 566-568.

**Kalman PG:** Unilateral retroperitoneal ileofemoral bypass. In: *Current Therapy in Vascular Surgery, Fourth Edition* (Ernst CB, Stanley JC, eds). Mosby Incorporated, St. Louis: 2001: pp 405-406.

**Kalman PG, Gloviczki P, Moneta G, Asch M:** Management of chronic venous ulcers: endoscopic subfascial ligation versus conservative management. *Perspectives in Vascular Surgery*: December 2000: 13: pp 103-117.

**Kalman PG, Irvine J, Ritvo P:** How do vascular surgeons perceive atherosclerotic risk factor management? *Annals of Vascular Surgery*: November 2000: 14: pp 652-658.

**Klein L, Shahani R, Rubin B, Lindsay T:** Interleukin 10 inhibits TNF and decreases fluid requirements but does not attenuate pulmonary or intestinal injury in a rat model of ruptured abdominal aortic aneurysm. *Surgical Forum*: October 2000: LI: pp 392-395.

**Mahinpey N, Ojha M, Johnston KW, Trass O:** Electrochemical mass transfer measurements in a Y-bifurcation model. *Canadian Journal of Chemical Engineering*: October 2000: 78: pp 902-907.

**Marshall J, Krump E, Lindsay T, Downey G, Ford D, Zhu P, Walker P, Rubin B:** Involvement of cytosolic phospholipase A2 and secretory phospholipase A2 in arachidonic acid release in human neutrophils. *Journal of Immunology*: July 2000: 164(4): pp 2084-2091.

**Myers JG, Moore JA, Ojha M, Johnston KW:** Factors influencing blood flow patterns in the human right coronary artery. *Annals of Biomedical Engineering*: February 2001: 29: pp 109-120.

**Myers JG, Ojha M, Johnston KW, Ethier CR:** Branch flow effects in the human right coronary artery trunk. In: *Advances in Bioengineering* (Conway TA, ed). American Society of Mechanical Engineers, New York: 2000: pp 265-266.

**Ojha M, Leask R, David T, Johnston KW, Butany J:** Histology and morphology of 59 internal thoracic artery grafts and their distal anastomosis. *Annals of Thoracic Surgery*: September 2000: 70: pp 1338-1344.

**Pope M, Johnston KW:** Anaphylaxis after thrombin injection of a femoral pseudo aneurysm: Recommendations for prevention. *Journal of Vascular Surgery*: July 2000: 32: pp 190-191.

**Tu JV, Austin PC, Johnston KW:** The influence of surgical specialty training on the outcomes of elective AAA surgery. *Journal of Vascular Surgery*: March 2001; 33: pp 447-452.

#### INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

**Johnston KW:** University of West Virginia, Charleston, West Virginia, October 2000. (1) Applications of the UK small aneurysm study data to clinical practice, (2) Errors in carotid Doppler duplex scanning.

**Johnston KW:** Vascular Surgery 2000, Northwestern University Medical School, Chicago, Illinois, December 2000. Conflict of interest.

**Johnston KW:** American College of Surgeons, Chicago, Illinois, October 2000. Discussion: Ethical issues involving the role of industry in surgical research and education.

**Johnston KW:** Southern Association of Vascular Surgery, Rio Grande, Puerto Rico, January 2001. Issues in contemporary vascular surgery management.

**Johnston KW:** Uniformed Services University of the Health Sciences, Bethesda, Maryland, November 2000. Issues in current vascular surgery practice.

**Johnston KW:** St. Luke's Hospital, Bethlehem, Pennsylvania, November 2000. Issues in current vascular surgery practice.

**Johnston KW:** Current Clinical Problems, New Horizons and Techniques in Vascular and Endovascular Surgery, New York, New York, November 2000. Results of abdominal aortic aneurysm surgery by general and vascular surgeons.

**Johnston KW:** First Empeczinski Lecturer, University of Cincinnati, Cincinnati, Ohio. February 2001. (1) Issues in current vascular surgery management, (2) Technology--what's known and what is unknown.

**Johnston KW:** New York Presbyterian Hospital, Cornell Medical School, New York, New York, April 2001. Contemporary issues in surgical practice.

**Johnston KW:** Kenton Lecturer, Massachusetts General Hospital, Boston, Massachusetts, May 2001. What are realistic expectations for conventional open AAA repair in contemporary practice: The gold standard.

**Johnston KW:** New England Doppler Conference, Lake Rousseau, Ontario, June 2001. Doppler peak velocity errors.

**Johnston KW:** First Mo Iype Annual Lecture, Dalhousie University, Saint John, New Brunswick, June 2001. Challenges in current surgical practice.

**Kalman PG:** Pan American Congress on Vascular and Endovascular Surgery, Rio de Janeiro, Brazil, December 2000. (1) A rational approach for operating on AAAs between 4.5 and 5.5 cm, (2) Lower extremity distal bypass: Implications of predictors of survival on patient selection, (3) Moderator: Current topics of interest in vascular surgery.

**Kalman PG:** Vascular and Endovascular Issues, Techniques and Horizons, New York, New York, November 2000. (1) Hemodialysis access salvage: Are there cost implications?, (2) Should AAAs less than 5.5 cm in diameter be repaired?: Should our practice be influenced by the availability of endovascular grafts?

**Kalman PG:** Mayo Clinic Vascular Symposium, Rochester, Minnesota, September 2000. Iliac artery atherosclerosis: Surgical treatment, angioplasty or stent?

**Kalman PG:** American College of Surgeons, Toronto, Ontario. April 2001. Postgraduate course: Infrarenal AAAs: Unusual presentations.

**Kalman PG:** Ontario Community Nephrologists, Huntsville, Ontario, August 2000. Multidisciplinary management of vascular access for hemodialysis.

**Kalman PG:** Canadian Winter Vascular Symposium, Mt. Tremblant, Quebec, February 2001. Saccular aortic aneurysms.

**Kalman PG:** Pennsylvania Hospital Vascular Symposium, Philadelphia, Pennsylvania, March 2001. Techniques in treating mesenteric artery stenosis: Tricks of surgical repair.

**Lindsay T:** Peripheral Vascular Surgical Society, Baltimore, Maryland, June 2001. Presidential address: No great mischief: The battle for New France.

**Rubin BB:** Board of Trustees, Pacific Vascular Research Foundation, San Francisco, California, October 2000. Wylie scholarship annual report.

**Rubin BB:** American College of Surgeons, Toronto, Ontario, April 2001. (1) Identification of group V phospholipase A2 in human neutrophils: Role in E coli phospholipid hydrolysis, (2) Venous ulcers: Dealing with perforators.

**Rubin BB:** FEBS, Lisbon, Portugal, June 2001. p38 MAP kinase regulates group IIa phospholipase A2 expression in interleukin-1B stimulated cardiomyocytes.

## RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

Biological functions of secretory phospholipase A2 enzymes in human neutrophils. *Rubin, B: Physicians Services Incorporated Foundation* (\$160,000 2001 - 2003).

Fundamental ultrasound studies. *Johnston KW, Cobbold RSC: Medical Research Council of Canada* (\$368,225 1997 - 2002).

Home exercise training for patients with intermittent claudication. *Irvine J, Kalman PG, Ritvo P, McKelvie RS: Heart and Stroke Foundation of Canada* (\$312,504 2000 - 2002).

Magnetic resonance imaging for ischemia (renewal). *Wright GA, Kalman PG, Merchant N: Medical Research Council* (\$133,187 1997 - 2000).

Mechanistic studies in organ injury after ruptured aortic aneurysm. *Lindsay TF: Physicians Services Incorporated Foundation* (\$135,000 2000 - 2001).

Molecular mechanisms of neutrophil activation: role of cytosolic phospholipase A2 isoforms. *Rubin B: Pacific Vascular Research Foundation* (\$225,000 1998 - 2001).

Neutrophil mediated cardiomyocyte cytotoxicity: role of phospholipase A2. *Rubin, B: Heart and Stroke Foundation* (\$220,000 1999 - 2002).

Peri-operative ischemic evaluation study. *Yang H, Rubin B, et al: Canadian Institutes of Health Research* (\$1,700,000 2001 - 2004).

#### **HONOURS RECEIVED**

**Johnston KW:** Honorary Member, Southern Association of Vascular Surgery. 2001

**Lindsay TF:** The Wightman-Berris Academy Award for Individual Teaching Excellence. April 2001.

**Rubin BB:** Finalist, Wightman-Berris Academy Teaching Award for ASCEM II Teaching. July 2000.

## DIVISION OF ANATOMY

**Dr. A. Agur - Associate Professor**  
**Dr. B. Liebgott - Professor**  
**Dr. C.M. Morshead - Lecturer**  
**Dr. J.A. Saint-Cyr - Associate Professor**  
**Dr. P.A. Stewart - Professor**  
**Dr. I.M. Taylor - Professor**  
**Dr. M.J. Wiley – Professor (*Division Head*)**

### INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

**Agur A:** Physiotherapy Department, Isaac Watt-Killam Grace Health Centre, Halifax, Nova Scotia, November 2000. Clinical applications of neuro anatomy in pediatrics.

### RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*

Co-enzyme Q10 and remacemide: Evaluation in HD. *Saint-Cyr JA, Guttman M*, Clinical Trial Group HSG: *National Institutes of Health* (\$181,118 1997 - 2000).

Deep brain stimulation effects on task-driven fMRI. *Saint-Cyr JA, McAndrews M-P, Mikulis DJ*: *Natural Sciences and Engineering Research Council* (\$64,000 2000 - 2004).

E-based education: Examining an evaluative process. *Nyhof-Young J, Stewart P*: *Information Technology Development Fund* (\$18,220 2001-2002).

Functional neuroanatomy. *Stewart P, Agur A, Liebgott B, Wiley MJ, Mikulis D*: *Provost's Information Technology Development Fund, University of Toronto* (\$108,000 1998 - 2000).

Interactive multimedia gross anatomy for dental and speech pathology students. *Liebgott B*: *Information Technology Development Fund* (\$16,500 1999-2001).



Media-based health communication: Exploring the power of visual media to promote understanding. *Wilson-Pauwels L, Woolridge N, Wiley M, Stewart P, McCready D, Jenkinson J, Hamstra S, Schraefel M: Bell University Laboratories* (\$154,424 2000-2001).

Neurophysiological studies in human subthalamic nucleus. *Saint-Cyr JA, Hutchison WD, Lozano AM: Canadian Institutes of Health Research* (\$262,801 2000 - 2003).

The in-vivo utilization of cell survival factors to investigate the regenerative potential of the adult mammalian brain. *Morshead C: Dean's Research Funds* (\$10,000 2001-2002).

**DIVISION OF BIOMEDICAL COMMUNICATIONS**

**D. Aldrich – Assistant Professor**  
**K. Brine – Assistant Professor**  
**K. Chorney - Lecturer**  
**S. Gilbert – Professor Emeritus**  
**C. Godkin – Associate Professor**  
**I. Healey - Lecturer**  
**J. Jenkinson – Lecturer**  
**N. Joy – Professor Emeritus**  
**L. Lax – Assistant Professor**  
**H. Loth – Lecturer**  
**M. Mackay – Associate Professor**  
**L. Magdenko – Lecturer**  
**D. Mazierski – Associate Professor**  
**S. Nancekivell – Assistant Professor**  
**P. Reid – Lecturer**  
**Dr. J. Semple – Associate Professor**  
**S. Tulk – Assistant Professor**  
**T. Watkinson – Assistant Professor**  
**Dr. L. Wilson-Pauwels – Professor (*Division Head*)**  
**N. Woolridge – Assistant Professor**

**AUTHORSHIP (Textbooks, Journals, Theses or Papers)**

**Gilbert S:** *Tattoo History*. Juno Books, New York, 2001.

**Midha R, Mackay MB:** Principles of nerve regeneration and surgical repair. *Seminars in Neurosurgery*: 2001 January: 12(1): pp 81-92. (5 illustrations by **MacKay MB**).

**ILLUSTRATIONS (Textbooks, Journals)**

**Blitz N, Steel C, Willhite C:** Diagnosis and treatment evaluation in cosmetic dentistry. *American Academy of Cosmetic Dentistry*, Wisconsin. 2000. (33 illustrations by **Mazierski D**).

**Carey B, Cormie G, Eichorn D, Farenholtz A, Martha J, Neal J, Reading S, Sandner L:** Science in Action 7. Pearson Education (Addison Wesley), Toronto. 2000. (3 illustrations by **Mazierski D**).

**Carey B, Cormie G, Eichorn D, Farenholtz A, Martha J, Neal J, Reading S, Sandner L:** Science in Action 8. Pearson Education (Addison Wesley), Toronto. 2000. (7 illustrations by **Mazierski D**).

**Carey B, Cormie G, Eichorn D, Farenholtz A, Martha J, Neal J, Reading S, Sandner L:** Science in Action 9. Pearson Education (Addison Wesley), Toronto, Ontario. 2000. (44 illustrations by **Mazierski D**).

**Durand N, Marmoreo J:** Isoflavones and menopause. Medical Post: October 2000: pp Q1 (1 illustration by **Mazierski D**).

**Gauthier S, McDougall A:** Treatment of mild-to-moderate Alzheimer's disease. Medical Post: September 2000: pp Q1. (1 illustration by **Mazierski D**).

**Kiss Z, Parrent A:** Co-ordinates: Letters to Ron Tasker. University of Toronto Press: 2000. (Cover and 3 illustrations by **Mackay MB**).

**Zhanel G, Balter M, Borins M:** Antibiotic resistance and AECB. The Medical Post: October 2000: pp Q1. (9 illustrations by **Mazierski D**).

**Tannenbaum H, Russell T:** Mechanisms in rheumatology. CORE Health Services Incorporated, Concord: 2001. (4 illustrations by **Mazierski D**).

#### **MULTIMEDIA/HYPERMEDIA**

##### **New Media - Projection Media**

**Anastakis DJ:** Biceps Reconstruction with Free Muscle Transfer. (1 illustration by **Mackay MB**).

**Anastakis DJ:** Donor Nerves for Neurotization of Brachial Plexus Injuries. (1 illustration by **Mackay MB**).

**Manktelow RT:** Static Sling Reconstruction of the Lower Eyelid.  
(3 illustrations by **Mackay MB**).

**Manktelow RT:** Use of Gold Weight for Lagophthalmos.  
(1 illustration by **Mackay MB**).

**Manktelow RT:** Depressor Labii Inferioris. (1 illustration by  
**Mackay MB**).

#### **Interactive Media**

**Jenkinson J:** The Neurological Exam website, Year I MD Program,  
Adjunct to Brain and Behaviour. Course Director: Stewart P.  
Authors: Hohol M, Stewart P.

**Jenkinson J:** Web MD Interactive Patient Education Module: Cancer  
Fundamentals. Hurd Studios, New York, 2000.

**Jenkinson J:** Web MD Interactive Patient Education Module: Breast  
Cancer. Hurd Studios, New York, 2000.

#### **Feature Film Storyboards**

**Burke M, Brine K:** Avenging Angelo, Franchise Pictures, 2001.

**Burns B, Brine K:** You Stupid Man, New Legend Media, 2001.

**Lussier P, Brine K:** Dracula 2000, Carfax Productions, 2000.

**O'Haver T, Brine K:** Getting Over Alison, Miramax, 2000.

**Lemmon K, Brine K:** Caveman Valentine, Universal/Jersey, 2000.

#### **Television Movie Storyboards**

**Frawley J, Brine K:** Thieves, Warner, 2001.

**Levy S, Brine K:** Jett Jackson: The Movie, Disney, 2000.

**Parker D/Tass N, Brine K:** The Miracle Worker, American Broadcasting Corporation, 2000.

**Surjik S, Brine K:** Bull, TNT/Warner, 2000.

#### **Television Series Storyboards**

**Surjik S, Brine K:** Da Vinci's Inquest, Canadian Broadcasting Corporation, 2001.

**Surjik S, Brine K:** Soul Food, Paramount, 2001.

#### **HEALTH COMMUNICATIONS**

**Chorney K:** Cold symptoms. Headcan/Wallace-Wyeth-Ayerst, 2001. Patient education booklet.

**Chorney K:** Learning about leukemia. Headcan, 2001. Patient education booklet.

**Chorney K:** Path to wellness. Headcan, 2001. Patient education booklet.

**Chorney K:** Understanding glaucoma. Headcan, 2001. Patient education booklet,

**Chorney K:** Understanding serious childhood infections. Headcan, 2000. Patient education booklet.

**Chorney K:** You and your kidney: Explaining kidney transplantation. Wyeth Ayerst/Headcan, 2000. Patient education tear sheet.

**Chorney K:** Understanding acne. Galderna/Headcan, 2000. Patient education poster.

**INVITED PRESENTATIONS**

**Woolridge N, Jenkinson J:** Digital Media Innovations Conference, Sheridan Centre for Animation and Emerging Technologies, Toronto, Ontario. October 2000. New media and medicine.

**Posters**

**Kupiec N, Wilson-Pauwels L, Ohlsson A:** Beyond 2000 Healthy Tomorrows for Children and Youth, Ottawa, Ontario, July 2000. Communication of information on intraventricular hemorrhage (IVH) through animation to the parents of pre-term infants.

**Kupiec N, Wilson-Pauwels L, Ohlsson A:** Pediatric Academic Societies/American Academy of Pediatrics, Boston, Massachusetts, May 2001. Providing information on intraventricular hemorrhage (IVH) through animation to parents of pre-term infants.

**Lee A, Jenkinson J, Rappaport D, Sherar M, Tshlias J, Trachtenberg J, Jewett M:** Canadian Urological Association, Toronto, Ontario, June 2001. Pelvimetry for planning access in laparoscopic radical prostatectomy.

**Woolridge N:** Bell Canada Research Fair, Toronto, Ontario, July 2000. Research in the collection of health data and effective delivery of health information.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Media-based health communication: Exploring the power of visual media to promote understanding. *Wilson-Pauwels L, Woolridge N, Jenkinson J, Hamstra S, McCreedy D, Stewart P, Wiley M, Schraefel M:* Bell University Laboratories at the University of Toronto (\$153,424 2001 ).

Health communication research laboratory in the Faculty of Medicine. *Whiteside C, David D, Frecker R, Goel V, Wilson-Pauwels L, Reznick RD:* Bell University Laboratories at the University of Toronto, (\$250,000 2001)

Wireless mobility: Mapping long-term mood variations in bipolar mood disorder. *Lumsden CJ, Kreindler D, Levitt A, Woolridge N*: Palm Canada, Incorporated (\$132,250 2001).

**HONOURS RECEIVED**

**Lax L**: Certificate of Appreciation for Excellence in Teaching, Division of Biomedical Communications, University of Toronto, April 2001.

**Mazierski D**: Certificate of Appreciation for Excellence in Teaching, Division of Biomedical Communications, University of Toronto, April 2001.

**RESEARCH IN EDUCATION**

**Dr. C.E. Bayliss – Professor**  
**Dr. S.J. Hamstra - Assistant Professor**

**PUBLICATIONS**

**Bayliss CE, Ackermann U:** Edith. Structure/Function Course, Case 1, University of Toronto, Faculty of Medicine, Toronto: 2000: pp 1-42.

**Bayliss CE, Ackermann U, Cormack DH, Murray RK:** Week 12 Syllabus. Structure/Function Course, University of Toronto, Faculty of Medicine, Toronto: 2000: pp 1-83.

**Bayliss CE, Ackermann U, Cormack DH, Murray RK:** Week 13 Syllabus. Structure/Function Course, University of Toronto, Faculty of Medicine, Toronto: 2000: pp 1-97.

**Bayliss CE, Ackermann U, Cormack DH, Murray RK:** Week 14 Syllabus. Structure/Function Course, University of Toronto, Faculty of Medicine, Toronto: 2000: pp 1-45.

**Bayliss CE, Cormack DH, Murray RK:** Week 11 Syllabus. Structure/Function Course, University of Toronto, Faculty of Medicine, Toronto: 2000: pp 1-107.

**Bayliss CE, Goldlist BJ, Senn JS:** Mrs. Lively. Structure/Function Course - Case #2, University of Toronto, Faculty of Medicine, Toronto: 2000: pp 1-50.

**Bayliss CE, Goode RC, Duffin J, Senn JS:** Bart Giamatti. Structure/Function Course - Case #3, University of Toronto, Faculty of Medicine, Toronto: 2000: pp 1-42.

**Hamstra SJ, Sinha T, Hallett PE:** The joint contributions of saccades and ocular drift to repeated ocular fixation. *Vision Research*: March 2001: 41: pp 1709-1721.



**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Hamstra SJ:** University of Sherbrooke, Sherbrooke, Quebec, May 2001. Training technical skills in surgery: transfer of learning and the specification of essential constructs.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

Evaluating the effectiveness of a two-year curriculum in a surgical skills centre: The future of surgical training. *Brown M, Anastakis D, Ali J, Hamstra SJ, Hutchison C, Murnaghan J, Regehr G, Reznick R: Physicians Services Incorporated Foundation (\$41,278 1998 - 2001).*

Evaluating a method of assessing brachial plexus nerve block skills: establishing construct validity and reliability. *Naik VN, Chan V, Naik JS Hamstra SJ, Houston PL, McCartney CJL: American Society of Regional Anesthesia Foundation (\$4,500 2001 - 2002).*

Fiber-optic orotracheal intubation on anesthetized patients: Does training on a simple model transfer into the operating room? *Naik V, Matsumoto ED, Houston P, Hamstra SJ, Yeung R, Mallon J, Martire TM: Physicians Services Incorporated Foundation (\$8,609 2000 - 2001).*

Media-based health communication: Exploring the power of visual media to promote understanding. *Wilson-Pauwels L, Woolridge N, Wiley M, Stewart P, McCready D, Jenkinson J, Hamstra SJ, Schraefel M: Bell University Laboratories (\$143,534 2001 - 2002).*

Medical physiology teaching unit: Educational research. *Bayliss CE: Department of Surgery Trust (\$19,107 1988 - 2002).*

Shape discrimination in stereopsis. *Hamstra SJ: Natural Sciences and Engineering Research Council (\$80,790 1998 - 2002).*

Specification of visual-spatial abilities relevant to surgical training. *Hamstra SJ, Anastakis DJ, Caminiti MF, Cusimano MD, Matsumoto ED: Physicians Services Incorporated Foundation (\$23,200 2000 - 2001).*

Teaching technical skills in oral surgery: Evaluating the utility of basic dexterity training. *Caminit, MF, Brown M, Regehr G, Hamstra SJ, Reznick RK: Association of Canadian Medical Colleges/Medical Research Council of Canada* (\$20,437 1999 - 2000).

The nature of specific processing deficits underlying dyslexia: Temporal mechanisms and developmental comparisons of auditory gap detection. *Benson NJ, Hamstra SJ, Schneider BA, Lovett ML, Pichora-Fuller MK, Barron RW: International Dyslexia Association* (\$30,259 2001 - 2002).

#### **HONOURS RECEIVED**

**Bayliss CE:** Mentor Award, Cardiovascular Collaborative Program, University of Toronto, February 2001.

## **EMERGENCY MEDICINE**

**Dr. P.A. Arnold - Assistant Professor**  
*(University Health Network)*

**Dr. J.C. Fallis - Assistant Professor**  
*(The Hospital for Sick Children)*

**Dr. L. Fulton - Lecturer**  
*(Sunnybrook and Women's College Health Sciences Centre)*

**Dr. B.A. McLellan - Associate Professor**  
*(Sunnybrook and Women's College Health Sciences Centre)*

**Dr. S. Reicheld - Instructor**  
*(University Health Network)*

**Dr. D. Saslove - Instructor**  
*(St. Michael's Hospital)*

**Dr. D. Williams - Assistant Professor**  
*(Sunnybrook and Women's College Health Sciences Centre)*

## **RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A feasibility study for a neurotrauma surveillance database in Ontario.  
*Tator C, Cusimano M, Verrier M, Walker J, Williams J, McLellan B:*  
*Ontario Neurotrauma Foundation (\$71,600 1999 - 2000).*

An analysis and dissemination of current neurotrauma incidence and  
causal data in Ontario. *Walker J, Williams J, Chipman M, Cusimano*  
*M, McLellan B, Simson H, Tator C, Verrier M: Ontario Neurotrauma*  
*Foundation (\$49,665 1999 - 2000).*

Neurotrauma injury prevention project. *Banfield J, McLellan BA:*  
*Neurotrauma Institute (\$110,000 1998 - 2001).*

## CROSS APPOINTMENTS

- Dr. A.J. Baker - Assistant Professor (*Anesthesia*)**  
**Dr. B.V. Bapat - Assistant Professor**  
*(Laboratory Medicine and Pathobiology)*  
**Dr. P. Birek – Associate Professor (*Dentistry*)**  
**Dr. A. Campbell – Assistant Professor (*Medicine*)**  
**Dr. J. Carson - Assistant Professor**  
*(Family and Community Medicine)*  
**Dr. A. Damyanovich – Assistant Professor (*Medical Imaging*)**  
**Dr. J.E. Davies - Associate Professor (*Dentistry*)**  
**Dr. A.M. Davis - Assistant Professor (*Physical Therapy*)**  
**Dr. W.A. Demajo - Assistant Professor (*Anesthesia*)**  
**Dr. D. DePetrillo - Professor (*Obstetrics and Gynecology*)**  
**Dr. F. DiCosmo - Associate Professor (*Botany*)**  
**Dr. R.J. Eby - Lecturer (*Medicine*)**  
**Dr. V.L. Fornasier - Associate Professor**  
*(Laboratory Medicine and Pathobiology)*  
**Dr. R. Gilbert - Assistant Professor (*Otolaryngology*)**  
**Dr. M. Greenberg - Associate Professor (*Pediatrics*)**  
**Dr. M.D. Grynbas - Associate Professor**  
*(Laboratory Medicine and Pathobiology)*  
**Dr. P.J. Gullane - Professor (*Otolaryngology*)**  
**Dr. B. Harvey - Assistant Professor (*Public Health Sciences*)**  
**Dr. J. Irvine – Associate Professor (*Medicine*)**  
**Dr. G. Jackowski - Assistant Professor**  
*(Laboratory Medicine and Pathobiology)*  
**Dr. M.G. Johnston - Associate Professor**  
*(Laboratory Medicine and Pathobiology)*  
**Dr. W. Kucharczyk - Professor (*Medical Imaging*)**  
**Dr. G.A. Levy - Professor (*Medicine*)**  
**Dr. A. McDonald - Assistant Professor (*Medicine*)**  
**Dr. D.A.G. Mickle - Professor**  
*(Laboratory Medicine and Pathobiology)*  
**Dr. M. Milner - Professor (*Rehabilitation Science*)**  
**Dr. W. Montanera - Assistant Professor (*Medical Imaging*)**  
**Dr. S. Narod - Associate Professor (*Public Health Sciences*)**  
**Dr. C.D. Naylor - Associate Professor (*Medicine*)**  
**Dr. M. Ojha - Assistant Professor (*Rehabilitation Science*)**  
**Dr. K.P.H. Pritzker - Professor**  
*(Laboratory Medicine and Pathobiology)*

**Dr. R. Rameseshan – Lecturer** (*Radiation Oncology*)  
**Dr. G. Regehr - Assistant Professor** (*Psychiatry*)  
**Dr. P. Ritvo - Assistant Professor** (*Public Health Sciences*)  
**Dr. A. Romaschin - Associate Professor**  
(*Laboratory Medicine and Pathobiology*)  
**Dr. A.S. Slutsky – Professor** (*Medicine*)  
**Dr. B. Steinhart - Instructor** (*Medicine*)  
**Dr. D.E. Stewart - Professor** (*Psychiatry*)  
**Dr. K.G. terBrugge - Professor** (*Medical Imaging*)  
**Dr. R. Willinsky - Associate Professor** (*Medical Imaging*)  
**Dr. G.J. Wilson - Professor**  
(*Laboratory Medicine and Pathobiology*)  
**Dr. T.W. Wu - Professor** (*Laboratory Medicine and Pathobiology*)

## PUBLICATIONS

**Ahmad F, Stewart DE, Cameron JI, Hyman L:** Rural physicians' perspectives on cervical and breast cancer screening: A gender-based analysis. *Journal of Women's Health and Gender Based Medicine*: January 2001: 10: pp 201-208.

**Al-Yamany M, terBrugge KG, Willinsky R, Montanera W, Tymianski M, Wallace MC:** Palliative embolism of brain arteriovenous malformations presenting with progressive neurological deficit. *Interventional Neuroradiology*: September 2000: 6: pp 177-183.

**Alter DA, Naylor CD, Austin PC, Tu JV:** Long-term MI outcomes at hospitals with or without on-site revascularization. *Journal of the American Medical Association*: April 2001: 285(16): pp 2101-2108.

**Austin PC, Naylor CD, Tu JV:** A comparison of a Bayesian versus a frequentist method for profiling hospital performance. *Journal of Evaluation in Clinical Practice*: February 2001: 7(1): pp 35-45.

**Belitsky P, Dunn S, Johnston A, Levy G:** Impact of absorption profiling on efficacy and safety of cyclosporin therapy in transplant recipients. *Clinical Pharmacokinetics*: August 2000: 39(2): pp 117-125.

**Bigam DL, Pennington LJ, Carpentier A, Hemming AW, Croxford R, Greig PD, Lilly LB, Heathcote EJ, Levy GA, Cattral MS:** Hepatitis C-related cirrhosis: A predictor of diabetes after liver transplanted. *Hepatology*: July 2000: 32(1): pp 87-90.

**Blackley HR, Davis AM, Hutchison CR, Gross AE:** Proximal femoral allografts for reconstruction of bone deficiency in revision arthroplasty of the hip: A nine to fifteen year follow-up. *Journal of Bone and Joint Surgery*: March 2001: 83A(3): pp 346-354.

**Branigan M, Stewart DE, Tardif GS, Veltman A:** Perceptions of primary health care services among persons with physical disabilities. *MedGenMed*: April 2001:

**Cardella JA, Keshavjee S, Mourgeon, Cassivi SD, Fischer S, Isowa N, Slutsky AS, Liu M:** A novel cell culture model for studying ischemia-reperfusion injury in lung transplantation. *Journal of Applied Physiology*: October 2000: 89(4): pp 1553-1560.

**Carson JD:** Risk of head and neck injuries in ice hockey with full-face shields or half face shields. *Clinical Journal of Sports Medicine*: October 2000: 10: pp 215.

**Cassivi SD, Liu M, Boehler A, Pierre A, Tanswell AK, O'Brodovich H, Mullen JB, Slutsky AS, Keshavjee SH:** Transplant immunosuppression increases and prolongs transgene expression following adenoviral-mediated transfection of rat lungs. *Journal of Heart and Lung Transplantation*: October 2000: 19(10): pp 984-994.

**Cattral MS, Lilly LB, Levy GA:** Immunosuppression in liver transplantation. *Seminars in Liver Disease*: November 2000: 20(4): pp 523-531.

**Charamos GS, Millar AL, Pal T, Narod S, Bapat B:** Do MSH6 mutations contribute to double primary cancers of the colorectum and endometrium? *Human Genetics*: December 2000: 107(6): pp 623-629.

**Clark DA, Ding JW, Yu G, Levy GA, Gorczynski RM:** Fg12 prothrombinase expression in mouse trophoblast and decidua triggers abortion but may be countered by OX-2. *Molecular Human Reproduction*: February 2001: 7(2): pp 185-194.

**Courtman DW, Errett BF, Wilson GJ:** The role of cross-linking in modification of the immune response elicited against xenogenic vascular acellular matrices. *Journal of Biomedical Materials Research*: June 2001: 55(4): pp 576-586.

**Dalfen AK, Stewart DE:** Who develops serious or fatal adverse drug reactions to SSRIs? *Canadian Journal of Psychiatry*: January 2001: 46: pp 258-262.

**Damyanovich AZ, Peternel J, Pintar MM:** Tunneling spectroscopy from magnetization evolution in a tilted rotating frame of nuclear spins. *Journal of Magnetic Resonance*: July 2000: 145(1): pp 1-7.

**Davidson J, Gilbert R, Irish J, Witterick I, Brown D, Birt D, Freeman J, Gullane PJ:** The role of panendoscopy in the management of mucosal head and neck malignancy: A prospective evaluation. *Head and Neck Surgery*: September 2000: 22: pp 449-455.

**Davis AM:** Neoplastic bone disease. In: *Orthopaedic Rehabilitation Science: Principles for Clinical Management of Bone* (London KL, ed). Butterworth-Heinemann, Incorporated, Boston: 2000: pp 143-152.

**Davis AM, Wunder JS, Bell RS:** Tumors of bone and soft tissues: Osteosarcoma. In: *Prognostic Factors in Cancer, Second Edition* (Gospodarowicz M, ed). John Wiley and Son Incorporated, New York: 2001: pp 357-370.

**Dell D, Stewart DE:** Menopause and mood. *Postgraduate Medicine*: July 2000: 108: pp 34-43.

**Dell DL, Chen H, Ahmad F, Stewart DE:** Knowledge about human papillomavirus among adolescents. *Obstetrics and Gynecology*: July 2000: 96: pp 653-656.

**Dos Santos CC, Slutsky AS:** Invited Review: Mechanisms of ventilator-induced lung injury: a perspective. *Journal of Applied Physiology*: October 2000: 89(4): pp 1645-1655.

**Fischer S, MacLean AA, Liu M, Cardella JA, Slutsky AS, Suga M, Moreira JF, Keshavjee S:** Dynamic changes in apoptotic and necrotic cell death correlate with severity of ischemia-reperfusion injury in lung transplantation. *American Journal of Respiratory and Critical Care Medicine*: November 2000: 162(5): pp 1932-1939.

**Fuchs B, Davis AM, Wunder JS, Bell RS, Masri BA, Isler M, Turcotte R, Rock MG:** Sciatic nerve resection in the thigh: A functional evaluation. *Clinical Orthopaedics and Related Research*: January 2001: 382: pp 34-41.

**Ghaall WA, Quan H, Norris CM, Dzavik V, Naylor CD, Mitchell LB, Brant R, Knudtson ML:** Prognostic significance of diabetes as a predictor of survival after cardiac catheterization. *American Journal of Medicine*: November 2000: 109(7): pp 543-548.

**Gladstone D, Silver F, Willinsky RA, Tyndel F, Wennberg R:** Deep cerebral venous thrombosis: An illustrative case with reversible diencephalic dysfunction. *Canadian Journal of Neurological Sciences*: January 2001: 28: pp 000-000.

**Gullane P, Neligan PC:** Modern day approaches to lip reconstruction. In: *Advances in Otolaryngology: Head and Neck Surgery, Volume 15* Mosby Yearbook Publishers, New York: 2001:

**Gullane PJ:** Changing concepts in soft tissue repair of oral and oropharyngeal defects. *Archives of Otolaryngology: Head and Neck Surgery*: July 2000: 126: pp 912-913.

**Guyatt GH, Haynes RB, Jaeschke RZ, Cook DJ, Green L, Naylor CD, Wilson MC, Richardson WS:** Users' guide to the medical literature: XXV: Evidence-based medicine: Principles for applying the users' guides to patient care: Evidence-based medicine working group. *Journal of the American Medical Association*: October 2000: 284(10): pp 1290-1296.

**Hyman I, Guruge S, Ahmad F, Stewart DE:** Primary prevention of violence against women. *Women's Health Issues*: November 2000: 10: pp 288-293.

**Imai Y, Slutsky AS:** Ventilator-induced lung injury: Damage beyond the lung (A review). *Clinical Intensive Care*: November 2000: 11(4): pp 177-185.



**Irish JC, Gullane PJ, Mulholland S, Neligan PC:** Medicinal leech in head and neck reconstruction. *Journal of Otolaryngology*: November 2000: 29(5): pp 327-332.

**Johnson K, Hashimoto S, Lotz M, Pritzker KPH, Goding J, Terkeltaub R:** Up-regulated expression of the phosphodiesterase nucleotide pyrophosphatase (PDNP) family member plasma cell membrane glycoprotein-1 (PC-1) is a marker and pathogenic factor for knee meniscal cartilage matrix calcification. *Arthritis and Rheumatism*: May 2001: 44(5): pp 1071-1081.

**Kawaura M, Pathak I, Gullane P, Mancer K, Irish J, Brown D, Rotstein L:** Multi-centricity in papillary thyroid carcinoma: Analysis of predictive factors. *Journal of Otolaryngology*: February 2001: 30(2): pp 102-105.

**Khoo M, Soo K-C, Gullane P, Neligan P, Hong S-W, Lee J, Siow J-K:** Resurfacing of the nasopharynx following nasopharyngectomy using a free radial forearm flap. *Head and Neck Surgery*: February 2001: pp 1-7.

**Levy GA, Grant D, Paradis K, Campestrini J, Smith T, Kovarik JM:** Pharmacokinetics and tolerability of 40-0[2-hydroxyethyl] rapamycin in de novo liver transplant recipients. *Transplantation*: January 2001: 71(1): pp 160-163.

**Lewish SJ, Wunder JS, Couture J, Davis AM, Catton CN, Kandel RA, Kotwall C, O'Sullivan B, Bell RS:** Soft tissue sarcomas involving the pelvis. *Journal of Surgical Oncology*: June 2001: 77(1): pp 8-14.

**Liu R, Gullane P, Brown D, Irish J:** Pectoralis major myocutaneous pedicled flap in head and neck reconstruction: Retrospective review of indications and results in 244 consecutive cases at the Toronto General Hospital. *Journal of Otolaryngology*: February 2001: 30(1): pp 34-40.

**Matsubara S, Bourdeau A, terBrugge KG, Wallace C, Letarte M:** Analysis of endoglin expression in normal brain tissue and in cerebral arteriovenous malformations. *Stroke*: November 2000: 31: pp 2653-2660.

**Matsubara S, Manzia J, terBrugge K, Willinsky RA, Montanera W, Faughan ME:** Angiographic and clinical characteristics of patients with cerebral arteriovenous malformations associated with hereditary hemorrhagic telangiectasia. *American Journal of Neuroradiology*: December 2000: 21: pp 1016-1020.

**Mazzotta D, Stewart DE, Atanackovic G, Koren G, Magee LA:** Psychosocial morbidity among women with nausea and vomiting of pregnancy: Prevalence and association with anti-emetic therapy. *Journal of Psychosomatic Obstetrics and Gynecology*: July 2000: 21: pp 129-136.

**Mazzotta P, Stewart DP, Koren G, Magee LA:** Factors associated with elective termination of pregnancy among Canadian and American women with nausea and vomiting of pregnancy. *Journal of Psychosomatic Obstetrics and Gynecology*: April 2001: 22: pp 7-12.

**Meade MO, Guyatt GH, Cook RJ, Groll R, Kachura JR, Wigg M, Cook DJ, Slutsky AS, Stewart TE:** Agreement between alternative classifications of acute respiratory distress syndrome. *American Journal of Respiratory and Critical Care Medicine*: February 2001: 163(2): pp 490-493.

**Meana M, Stewart DE:** Pain: Adding to the affective burden. In: *Mood Disorders in Women* (Steiner M, Yonkers K, Eriksson E, eds). Martin Dunitz, London: 2000: pp 469-484.

**Morroco A, Stewart DE:** We've come a long way, maybe: Recruitment of women and analysis of results by sex in clinical research. *Journal of Women's Health and Gender Based Medicine*: January 2001: 10: pp 175-179.

**Mourgeon E, Isowa N, Keshavjee S, Zhang X, Slutsky AS, Liu M:** Mechanical stretch stimulates macrophage inflammatory protein-2 secretion from fetal rat lung cells. *American Journal of Physiology - Lung Cellular and Molecular Physiology*: October 2000: 279(4): pp L699-L706.

**Murphy DB, Cregg N, Tremblay L, Engelberts D, Laffey JG, Slutsky AS, Romaschin A, Kavanagh BP:** Adverse ventilatory strategy causes pulmonary-to-systemic translocation of endotoxin. *American Journal of Respiratory and Critical Care Medicine*: July 2000: 162(1): pp 27-33.

**Perrillo RP, Wright T, Rakela J, Levy G, Schiff E, Gish R, Martin P, Dienstag J, Adams P, Dickson R, Anschuetz G, Bell G, Condreay L, Brown N, Lamivudine North American Transplant Group:** Hepatology: February 2001: 33: pp 424-432.

**Peters W, Smith D, Lugowski S, Pritzker KPH, Holmyard D:** Calcification properties of saline-filled breast implants. Plastic and Reconstructive Surgery: February 2001: 107(2): pp 356-363.

**Ranieri VM, Zhang H, Mascia L, Aubin M, Lin CY, Mullen JB, Grasso S, Binnie M, Volgyesi GA, Slutsky AS:** Pressure-time curve predicts minimally injurious ventilatory strategy in an isolated rat lung model. Anesthesiology: November 2000: 93(5): pp 1320-1328.

**Reddy PP, Barrieras DJ, Wilson GJ, Bagli DJ, McLorie GA, Khoury AE, Merguerian PA:** Regeneration of functional bladder substitutes using large segment (.40cm<sup>2</sup>) acellular matrix allografts in a porcine model: Long term results. Journal of Urology: September 2000: 55(4): pp 576-586.

**Redelmeier DA, Naylor CD, Brenneman FD, Sharkey PW, Juurlink DN:** Major trauma in elderly adults receiving lipid-lowering medications. Journal of Trauma: April 2001: 50(4): pp 678-683.

**Ribeiro SP, Rhee K, Tremblay L, Veldhuizen R, Lewis JF, Slutsky AS:** Heat stress attenuates ventilator-induced lung dysfunction in an ex vivo rat lung model. American Journal of Respiratory and Critical Care Medicine: May 2001: 163(3): pp 1451-1456.

**Richardson WS, Wilson MC, Williams JW Jr., Moyer VA, Naylor CD:** Users' guides to the medical literature: XXIV: How to use an article on the clinical manifestations of disease. Journal of the American Medical Association: August 2000: 284(7): pp 869-875.

**Robinson GE, Stewart DE:** Postpartum psychiatric disorders. In: Psychological Aspects of Women's Health Care: The Interface Between Psychiatry and Obstetrics and Gynecology, Second Edition (Stotland NL, Stewart DE, eds). American Psychiatric Press Incorporated, Washington: 2001: pp 117-140.

**Rochon PA, Tu JV, Anderson GM, Gurwitz JH, Clark JP, Lau P, Szalai JP, Sykora K, Naylor CD:** Rate of heart failure and 1-year survival for older people receiving low-dose beta-blocker therapy after myocardial infarction. *Lancet*: October 2000: 356(9230): pp 639-644.

**Saleh JS, Gafni A, Saleh L, Jaroszynski G, Wong P, Woodgate I, Davis AM, Gross AE:** Development, test reliability and validation of a severity index for revision hip surgery. *Journal of Orthopaedic Research*: June 2001: 19(1): pp 50-56.

**Schaubel D, Stewart DE, Morrison HI, Zimmerman DL, Cameron JI, Jeffery J, Fenton SA:** Sex inequality in kidney transplantation rates. *Archives of Internal Medicine*: July 2000: 160: pp 2349-2354.

**Shneck ZM, Irvine J, Stewart DE, Abbey S:** Psychosocial factors in ischemic heart disease. *Health Psychology*: January 2001: 20: pp 141-145.

**Shpitzer T, Gullane PJ, Neligan PC, Irish JC, Freeman FE, Van den Brekel M:** The free vascularized flap and the flap plate options: Comparative results of reconstruction of lateral mandibular defects`. *Laryngoscope*: December 2000: 110: pp 2056-2060.

**Silkoff PE, McClean P, Spino M, Erlich L, Slutsky AS, Zamel N:** Dose-response relationship and reproducibility of the fall in exhaled nitric oxide after inhaled beclomethasone dipropionate therapy in asthma patients. *Chest*: May 2001: 119(5): pp 1322-1328.

**Slutsky AS:** Basic science in ventilator-induced lung injury: Implications for the bedside (Editorial). *American Journal of Respiratory and Critical Care Medicine*: March 2001: 163: pp 599-600.

**Slutsky AS, Ranieri VM:** Mechanical ventilation: Lessons from the ARDSNet trial. *Respiratory Research*: August 2000: 1: pp 73-77.

**Spayne JA, Warde P, O'Sullivan B, Payne D, Liu F-F, Waldron J, Gullane P, Cummings J:** Carcinoma-in-situ of the glottic larynx: Results of treatment with radiation therapy. *International Journal of Radiation Oncology, Biology, Physics*: February 2001: 49(5): pp 1235-1238.

**Steiner M, Stewart DE:** Fluoxetine's efficacy in improving physical symptoms associated with premenstrual dysphoric disorders. *British Journal of Obstetrics and Gynecology*: April 2001: 108: pp 462-468.

**Stewart DE:** Antidepressant drugs in pregnancy and lactation. *International Clinical Psychopharmacology*: November 2000: 15: pp S19-S24.

**Stewart DE:** Women and selective serotonin receptor inhibitor antidepressants in the real world. *Medscape Women's Health*: April 2001: 6(3): pp 103-109.

**Stewart DE, Cheung AM, Duff S, Wong F, McQuestion M, Cheng T, Purdy L, Bunston T:** Attributions of cause and recurrence in long-term breast cancer survivors. *Psycho-Oncology*: November 2000: 10: pp 179-183.

**Stewart DE, Cheung AM, Duff S, Wong F, McQuestion M, Cheng T, Purdy L, Bunston T:** Long-term breast cancer survivors: Confidentiality, disclosure, effects on work and insurance. *Psycho-Oncology*: April 2001: 10: pp 259-263.

**Stewart DE, Robinson GE:** Psychotropic drugs and ECT in pregnancy and lactation. In: *Psychological Aspects of Women's Health Care: The Interface Between Psychiatry and Obstetrics and Gynecology, Second Edition* (Stotland NL, Stewart DE, eds). American Psychiatric Press Incorporated, Washington: 2001: pp 67-94.

**Stewart DE, Robinson GE:** Reproduction and eating disorders. In: *Psychological Aspects of Women's Health Care: The Interface Between Psychiatry and Obstetrics and Gynecology, Second Edition* (Stotland NL, Stewart DE, eds). American Psychiatric Press Incorporated, Washington: 2001: pp 441-456.

**Stotland NL, Stewart DE:** *Psychological Aspects of Women's Health Care: The Interface Between Psychiatry and Obstetrics and Gynecology, Second Edition* (Stotland NL, Stewart DE, eds). American Psychiatric Press Incorporated, Washington: 2001:

**Stotland NL, Stewart DE:** The interface between psychiatry and obstetrics and gynecology. In: *Psychological Aspects of Women's Health Care: The Interface Between Psychiatry and Obstetrics and Gynecology*, Second Edition (Stotland NL, Stewart DE, eds). American Psychiatric Press Incorporated, Washington: 2001: pp 1-12.

**Tator CH, Carson JD, Cushman R:** Prevention of spinal injuries in ice hockey. In: *Safety in Ice Hockey* (Blasca N, Montag W, Gerber C, eds). International Ice Hockey Federation/A. Manani, Zurich: 2000: pp 56-64.

**Tator CH, Carson JD, Edmonds VE:** Spinal and head injuries in ice hockey: A three decade perspective. In: *Safety in Ice Hockey, Third Volume* (Ashare AB, ed). American Society for Testing and Materials, Pennsylvania: 2000: pp 150-164.

**van Walraven CA, Austin P, Naylor CD:** How much money could be saved if we switched all elderly Ontarians from vitamin B12 to oral supplementation? *Canadian Family Physician*: January 2001: 47: pp 79-86.

**Veldhuizen RA, Slutsky AS, Joseph M, McCaig L:** Effects of mechanical ventilation of isolated mouse lungs on surfactant and inflammatory cytokines. *European Respiratory Journal*: March 2001: 17(3): pp 488-94.

**Veldhuizen RAW, Tremblay LN, Govindarajan A, van Rozendaal BAWM, Haagsman HP, Slutsky AS:** Pulmonary surfactant is altered during mechanical ventilation of isolated rat lung. *Critical Care Medicine*: July 2000: 28(7): pp 2545-2551.

**Veltman A, Stewart DE, Tardif GS, Branigan M:** Perceptions of primary healthcare services among persons with physical disabilities: Part I-Access Issues. *MedGenMed*: April 2001:

**Vilela P, Willinsky RA, terBrugge K:** Treatment of intracranial venous occlusive disease with sigmoid sinus angioplasty and stent placement in a case of infantile multi focal dural arteriovenous shunts. *Interventional Neuroradiology*: January 2001: 7: pp 51-60.

**Villar J, Mendez S, Slutsky AS:** Critical care medicine in the 21st century: From CPR to PCR. *Critical Care*: May 2001: 5(3): pp 125-30.

**Volgyesi GA, Tremblay LN, Webster P, Zamel N, Slutsky AS:** A new ventilator for monitoring lung mechanics in small animals. *Journal of Applied Physiology*: August 2000: 89(2): pp 413-421.

**Waldron JN, O'Sullivan B, Gullane PJ, Witterick I, Liu F-F, Payne D, Warde P, Cummings B:** Carcinoma of the maxillary antrum: A retrospective analysis of 110 cases. *Radiotherapy and Oncology*: July 2000: 57: pp 167-173.

**Willinsky R, terBrugge KG:** Use of a second micro catheter in the management of a perforation during endovascular treatment of cerebral aneurysm. *American Journal of Neuroradiology*: September 2000: 21: pp 1537-1540.

**Willinsky RA, Goyal M, ter Brugge K, Montanera W, Wallace MC, Tymiansky M:** Embolization of small (>3cm) brain arteriovenous malformation: Correlation of angiographic results to a proposed angioarchitecture grading system. *Interventional Neuroradiology*: January 2001: 7: pp 19-27.

**Wong F, Stewart DE, Cheung A, Dancy J, Meana M, McAndrews MP, Bunston T:** Men with prostate cancer: The influence of psychological factors on information needs and decision-making. *Journal of Psychosomatic Research*: July 2000: 49: pp 13-19.

**Wunder JS, Bull SB, Aneliunas V, Lee PD, Davis AM, Beauchamp CP, Conrad EU, Grimer RJ, Healey JH, Rock MJ, Bell RS, Andrulis IL:** MDR1 gene expression and outcome in osteosarcoma: A prospective multi-centre study. *Journal of Clinical Oncology*: July 2000: 18(14): pp 2685-2694.

**Wunder JS, Leitch K, Griffin AM, Davis AM, Bell RS:** Comparison of two methods of reconstruction for primary malignant tumors at the knee: A sequential cohort study. *Journal of Surgical Oncology*: June 2001: 77(2): pp 88-99.

**Yuwaraj S, Ding JW, Liu MF, Marsden P, Levy GA:** Genomic characterization, localization, and functional expression of Fg12, the human gene encoding fibroleukin: A novel human procoagulant. *Genomics*: March 2001: 71: pp 330-338.

**Zhang H, Porro G, Orzech N, Mullen B, Liu M, Slutsky AS:**  
Neutrophil defensins mediate acute inflammatory response and lung dysfunction in a dose related fashion. *American Journal of Physiology - Lung Cellular and Molecular Physiology*: May 2001: 280(5): pp L947-L954.

**Zimmerman D, Donnelly S, Miller J, Stewart DE, Albert SE:**  
Gender disparity in living renal transplant donation. *American Journal of Kidney Disease*: July 2000: 36: pp 534-540.

#### **INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Bapat BV:** Leeds Castle Polyposis Group and International Collaborative Group on Hereditary Non-polyposis Colorectal Cancer, Venice, Italy, April 2001. (1) Epigenetic regulation of APC in colorectal tumorigenesis, (2) Association of functional polymorphism Pal-1 in PAP patients with aggressive fibromatosis, (3) Chair session.

**Gullane PJ:** American Association of Otolaryngology, Washington, D.C., September 2000. (1) Adult laryngotracheal stenosis, (2) Lip reconstruction.

**Gullane PJ:** American Head and Neck Society, Palm Desert, California, May 2001. (1) Adult synchronous laryngotracheal stenosis, (2) Panel member: Laryngotracheal stenosis, (3) Panel member: Free flaps: Are they really worth it?

**Gullane PJ:** University of Alberta, General Surgery Banff Resident Retreat, Banff, Alberta, February 2001. (1) Grand rounds: Approaches to cranial base surgery, (2) Academic teaching session with residents, (3) Tumors of the parapharyngeal space: Diagnostic approach and surgical management, (4) Interesting cases and personal insights.

**Gullane PJ:** International Conference on Head and Neck Cancer, San Francisco, California, July 2000. (1) Moderator: Head and neck reconstruction, (2) Moderator: Skull base malignancy.

**Gullane PJ:** International Interdisciplinary Congress on Skull Base and Cranial Facial Surgery, Interlaken, Switzerland, March 2001. (1) Skull base neoplasms: Analysis and management, (2) Reconstruction of the skull base following major ablative resection: Is it always necessary?



**Gullane PJ:** Menarini Course in Otolaryngology Laryngotracheal Stenosis, Sevilla, Spain, October 2000. (1) Subglottic tracheal stenosis: Surgical management and outcome, (2) Combined laryngo-tracheal stenosis: Outcome and analysis, (3) Posterior glottic stenosis: Is it treatable?

**Gullane PJ:** Hopitaux Universitaires of Geneva, Geneva, Switzerland, March 2001. Adult laryngotracheal stenosis management.

**Gullane PJ:** Triological Society, Eastern Section, Toronto, Ontario, January 2001. Moderator: Management of thyroid nodule.

**Gullane PJ:** Cherry Blossom Conference, Update on Cutaneous Malignancies of the Head and Neck, Arlington, Virginia, March 2001. Panel member: Cutaneous melanoma: Case management.

**Gullane PJ:** American College of Chest Physicians, San Francisco, California, October 2000. Surgery for disorders of the larynx and subglottis.

**Levy GA:** Tongji University Hospital, Wuhan, China, October 2000. Advances in diagnosis and treatment of patients with viral hepatitis B and C: Liver transplantation for hepatitis B and C and insights into the molecular basis of viral hepatitis.

**Levy GA:** Japan Liver Transplantation Study Group, Kyoto, Japan, July 2000. Hepatitis C and liver transplantation and optimal use and new possibility of neoral in liver transplantation.

**Levy GA:** Australian Neoral C2 Symposium, Sydney, Australia, February 2001. Neoral C2 monitoring.

**Levy GA:** Keio University, Keio, Japan, March 2001. Neoral C2 monitoring.

**Levy GA:** Latin American Transplant Congress, Bavaro, Dominican Republic, June 2001. Neoral C2 monitoring.

**Levy GA:** National Congress of Transplantation, Acapulco, Mexico, November 2000. Neoral C2 monitoring.

**Levy GA:** Neoral Absorption Profiling and C2 Conference, Guatamela, January 2001. Neoral C2 monitoring.

**Levy GA:** Neoral Absorption Profiling and C2 Conference, Costa Rica, January 2001. Neoral C2 monitoring.

**Levy GA:** Neoral Absorption Profiling and C2 Conference, Auckland, New Zealand, February 2001. Neoral C2 monitoring.

**Levy GA:** Bionics for Human Beings in the Third Millennium, Toronto, Ontario, September 2000. What next in overcoming the scientific barriers of cross species transplantation?: Needs for clinical trials.

**Levy GA:** Visiting Professor, University of Zurich, Zurich, Switzerland, December 2000. Xeno-transplantation and neoral C2 monitoring.

**Naylor CD:** Van Den Ende Lecturer, University of Capetown, Capetown, South Africa, March 2001. (1) Evidence-based medicine: Necessary but not sufficient, (2) Overview of the Canadian health care system.

**Naylor CD:** Canadian Medical Protective Association, Ottawa, Ontario, May 2001. The impact of genomics and e-health on doctors, patients and the health system.

**Pritzker KPH:** Rice University, Houston, Texas, June 2001. Invited guest, Department of Chemistry.

**Slutsky AS:** National Congress on Intensive Care, Buenos Aires, Argentina, September 2000. (1) Mechanical ventilation: From barotrauma to biotrauma to bedside, (2) Heat shock response, (3) Lung protection and techniques to reopen lung tissue: review of recent clinical trials, (4) What makes fatal asthma fatal?

**Slutsky AS:** McGill University, Montreal, Quebec, June 2001. (1) Systemic effects of ALI, (2) Volume-pressure curves in the management of ALI.

**Slutsky AS:** International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 2001. (1) The future of ARDS management, (2) Ventilator-induced lung injury: Role of alveolar distension, (3) Management guidelines (Moderator), (4) Mechanical ventilation: High frequency ventilation: How does it work?

**Slutsky AS:** Advances in Respiratory and Critical Care Medicine, Whistler, British Columbia, March 2001. (1) Ventilator induced lung injury, (2) Review of clinical trials in ARDS.

**Slutsky AS:** Conference on Mechanical Ventilation: A Ventilator Odyssey, Seville, Spain, April 2001. (1) Co-Chair: Is there a role for empirical treatment of ventilator-associated pneumonia in the intensive care unit? (2) SIRS, pipes and biotrauma.

**Slutsky AS:** American Thoracic Society, San Francisco, California, May 2001. A look to the future: The management of ARDS/ALI.

**Slutsky AS:** American College of Chest Physicians, San Francisco, California, October 2000. Panelist: ARDS Management: What are our alternatives? High frequency ventilation

**Slutsky AS:** European Congress of Anesthesiology (CENSA), Florence, Italy, June 2001. Lower versus higher tidal volume in mechanical ventilation.

**Slutsky AS:** Congress of the European Society of Intensive Care Medicine, Rome, Italy, October 2000. Lung Recruitment in patients with ALI/ARDS, Chairman.

**Slutsky AS:** University of Colorado School of Medicine, Denver, Colorado, January 2001. Medical Grand Rounds: Mechanical ventilation: From barotrauma to biotrauma, to the bedside.

**Slutsky AS:** Beth Israel Deaconess Medical Center, Boston, Massachusetts, June 2001. Ventilator-induced lung injury: A model of translational research.

**Stewart DE:** World Psychiatric Association, Berlin, Germany, March 2001. (1) Harassment and intimidation of medical trainees, (2) Hormonal, physical and psychosocial aspects of menopause, (3) Psychiatric aspects of domestic violence, (4) Gender and stress in physicians, (5) Cortisol levels in male and female physicians, (6) Trans-cultural policy issues in women's mental health.

**Stewart DE:** Greek Conference on Women's Health, Thessalonika, Greece, January 2001. (1) Plenary address: The disconnect: Infertility patients information and decision-making, (2) Premenstrual dysphoric disorder and depression.

**Stewart DE:** American Psychiatric Association, New Orleans, Louisiana, May 2001. (1) Psychotropic drugs in pregnancy and lactation, (2) Distinguished psychiatric award and lecture: What do women really want?

**Stewart DE:** Royal College Visiting Research Professor Lecture, Queen's University, Kingston, Ontario, October 2000. (1) Women, depression and ischemic heart disease, (2) Premenstrual dysphoric disorder and depression, (3) Moving research findings into health policy.

**Stewart DE:** University of Krakow Women's Health Initiative, Krakow, Poland, April 2001. Challenges of women's health in the new Eastern Europe.

**Stewart DE:** Advisory Committee Meeting, San Juan, Puerto Rico, December 2000. Depression and pain.

**Stewart DE:** National Institutes of Health, Budapest, Hungary, April 2001. Eastern European women's health issues.

**Stewart DE:** Slovak Women's Health Initiative, Kosice, Poland, April 2001. International women's health policy.

**Stewart DE:** University of Pennsylvania/Pennsylvania Psychiatric Society Women's Health Congress, Pittsburgh, Pennsylvania, February 2001. Plenary address: Broken Hearts: Women's depression on ischemic heart disease.

**Stewart DE:** North American Society for Psychosocial Obstetrics and Gynecology, Hawaii, February 2001. Plenary address: Women's information and decisional preferences in infertility: Is there a problem?

**Stewart DE:** Miami, Florida, September 2000. Premenstrual dysphoric disorder and depression.

**Stewart DE:** American Professors of Obstetrics and Gynecology, Chantilly Retreat, Chantilly, Virginia, November 2000. Psychosocial women's health education.

**Stewart DE:** Arab Conference on Women's Health, Tunis, May 2001. The impact of violence on women's health.

**Stewart DE:** East Tennessee State University Women's Health Conference, Tennessee, April 2001. Women and ischemic heart disease.

**Stewart DE:** Hillside Hospital Long Island Jewish Health System, Long Island, New York, September 2000. Women and ischemic heart disease.

**Stewart DE:** Mount Sinai Medical School, New York, New York, September 2000. Women and sexuality.

**Stewart DE:** Depression Summit, National Institute of Mental Health, Wye River, Colorado, October 2000. Women and SSRI adverse drug reaction.

**Stewart DE:** International Congress of Sexology, Oporto, Portugal, March 2001. Women, pregnancy and sexuality.

**Stewart DE:** Norwegian Technical University, Trondheim, Norway, October 2000. Women, violence and depression.

**terBrugge KG:** Academy of Medicine, Hong Kong, China, March 2001. (1) Endovascular treatment of acute stroke prevention, (2) Endovascular management of malformations affecting the central nervous system.

**terBrugge KG:** Asian Pacific Congress of Cardiovascular and Interventional Radiology, Singapore, Malaysia, July 2000. (1) Imaging and endovascular management of acute stroke, (2) Imaging and endovascular management of intracranial aneurysms, (3) Classification, imaging and embolization of vascular lesions of the spine and spinal cord, (4) Imaging: Clinical symptoms and embolization of brain AVMs, (5) Classification, indications and endovascular treatment of intracranial dural AVMs.

**terBrugge KG:** Interventional Radiology Society of Australasia, Penang, Malaysia, July 2000. (1) Imaging and endovascular management of acute stroke, (2) Imaging and treatment of intracranial aneurysms, (3) Neuro intervention, imaging and management of vascular head and neck lesions, (4) Brain AVM: Relationship of clinical symptoms to angioarchitecture, (5) Imaging and treatment of vascular lesions of the spine and cord, (6) Pediatric neuro-intervention, (7) Dural AVF: Clinical symptoms, imaging and treatment strategies.

**terBrugge KG:** International Master Degree in Neurovascular Diseases, Chiangmai, Thailand, March 2001. (1) Imaging strategies of stroke: Assymptomatic carotid stenosis, (2) Venous thrombosis, (3) Arterial dissection, (4) Vertebro-basillar insufficiency, (5) Ante-natal imaging of vascular diseases, (6) Brain AVM in children, (7) Aneurysms in children, (8) Vein of Galen malformations, (9) Stroke in children, (10) Multiple brain AVMs in children.

**terBrugge KG:** South African Interventional Neuroradiology Peer Review Group, Kruger Park, South Africa, September 2000. (1) Management of small size brain AVM's, (2) Stroke management, (3) Dural AVM, (4) Venous vascular disease, (5) Vascular lesions of head and neck, (6) 3D DSA in INR procedures: Future trends in INR, (7) Brain AVM clinical symptoms relationship to angioarchitecture.

**terBrugge KG:** International Master Degree in Neurovascular Diseases, Chiangmai, Thailand, October 2000. (1) Natural history of DAVs, venous injuries, thromboses and hemorrhages, (2) Para spinal and epidural lesions, (3) Spinal cord vascular tumors (hemangioblastomas).

**terBrugge KG:** American Association of Neurological Surgeons, Toronto, Ontario, April 2001. (1) The role of three-dimensional angiography in the management of intracranial aneurysms, (2) Endovascular management of pediatric intracranial aneurysm.

**terBrugge KG:** Eastern Neuroradiological Society, Vermont, August 2000. 3D-DSA: Who needs it?

**terBrugge KG:** Society of Neurosurgeons of South America, South Africa, September 2000. Approach to intracranial dural arterio-venous malformations: Endovascular treatment of arterio-venous malformations with particular reference to lesions of small size.

**terBrugge KG:** ABC/WIN Course, Vald'Iscre, France, January 2001. Complication of endovascular treatments in intracranial aneurysms.

**terBrugge KG:** Visiting Professor, University of Liden, Liden, Holland, May 2001. Endovascular management of stroke.

**terBrugge KG:** Visiting Professor, Karolinska Hospital, Stockholm, Sweden, February 2001. Endovascular management of stroke and stroke prevention.

**terBrugge KG:** LINC Course, Houston, Texas, October 2000. Vascular anatomy of the spinal cord and classification of spinal vascular malformations.

**Willinsky R:** United Kingdom Neuro-interventional Group, Oxford, England, November 2000. (1) Spinal arteriovenous malformations: A classification based on angioarchitecture, (2) Management of complications in GDC treatment of cerebral aneurysms.

**Willinsky R:** HHT Conference, Toronto, Ontario, September 2000. Brain manifestation of HHT: Children and HHT.

**Willinsky R:** Visiting Professor, Health Sciences Centre, Winnipeg, Manitoba, May 2001. Live demonstration: GDC embolization of intracranial aneurysm.

**Willinsky R:** American-Japanese Cerebrovascular Meeting, Hawaii, February 2001. Management of spinal AVMs.

**Willinsky R:** Visiting Professor, Karolinska Institute, Stockholm, Sweden, September 2000. Spinal arteriovenous malformations: Endovascular treatment.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A clinical research proposal to study wound healing in irradiated tissues. *Hill R, Bell RS, Keating A, O'Sullivan B, Davis AM: Princess Margaret Hospital Foundation (\$194,500 1999 - 2001).*

A cost-effectiveness study of home-based therapy for people with rheumatoid arthritis: A pilot study. *Li L, Bombardier C, Coyte P, Davis AM, Linaker S: Physiotherapy Foundation of Canada (\$4,200 2000 - 2001).*

A molecular epidemiologic case-control study of pediatric brain tumors in Ontario. *McLaughlin J, Greenberg M, Malkin D, Rutka J: National Cancer Institute of Canada (\$480,829 1997 - 2000).*

Acellular matrix: Tissue engineering approaches for pediatric cardiovascular reconstruction. *Wilson GJ, Courtman DW: Medical Research Council of Canada/Canadian Institutes of Health Research (\$236,811 2000 - 2003).*

Bio-imaging facilities. *Pritzker KPH: Canadian Foundation for Innovation (\$1,150,000 1999 - 2000).*

Biotrauma: physiological mechanisms, biological consequences. *Shutsky AS: Medical Research Council of Canada (\$579,651 1999 - 2004).*

Brain trauma and axonal injury: New models and mechanisms. *Baker AJ, Tian GF, Moulton R: Ontario Neurotrauma Foundation/National Rick Hansen Neurotrauma Initiative (\$104,000 1999 - 2001).*

Canadian programs on genomics and global health: International and comparative perspectives on health systems and insurance implications of new genetic testing. *Singer P, Cheung A, Deber R, Dickens B, Flood A, Lemmens T, Mullen M, Mykitiuk R, Robertson A, Stewart DE, Till J: Genome Canada (\$1,000 2001 - 2006).*

Canadian women's health status report: A multi-dimensional look at the health of Canadian women. *Demeules M, Stewart DE, Payne J, Vissandjee B, Kazanjion A, Maclean H, Mao Y: Canadian Population Health Initiative (\$125,000 2001 - 2003).*



Cellular and molecular mechanisms of organ injury. *Levy GA, Gorczynski RM, Issekutz T, Paul L, Phillips MJ, Rotstein OD, Marsden P, Zhang L: Medical Research Council of Canada* (\$2,656,620 1995 - 2000).

Cellular and molecular mechanisms of organ injury. *Levy GA, Cybulsky M, Downey G, Marsden P, Rotstein O, Zhang L: Canadian Institutes of Health Research* (\$587,578 2000 - 2004).

CFRCCS micro-satellite instability project. *Lindor NM, Bapat B: National Institutes of Health* (\$2,390,570 1999 - 2001).

Clinical significance of molecular genetic profiles of endometrial cancer. *Bapat B: Concern Foundation* (\$100,000 2000 - 2002).

Clinical trial of raloxifen use in the heart (RUTH). *Cheung A, Stewart DE, Liu P, Abramson B: Eli Lilly* (\$500,000 1998 - 2003).

Co-operative family registry for epidemiologic studies of colon cancer. *Gallinger S, Holowaty E, Andrulis I, Bapat B, Boyd N, Redston M, Darlington G, Kreiger N, Knight J, Theis B, Chart P, Gardner A, Goel V, Malkin D, McKeown-Eyssen G, McLaughlin J: National Institutes of Health* (\$3,200,000 1997 - 2001).

Comparison of quality of life and economic cost across home and institutional care settings: Pilot study. *Cameron JI, Stewart DE, Cheung AM: University Health Network* (\$5,000 2000 - 2001).

Defensins as mediators in inflammatory response in acute lung injury. *Slutsky AS, Zhang H: Ontario Thoracic Society* (\$30,000 2000 - 2001).

Developing and operating an internet-based interactive genetics service to health care providers in Ontario. *Wyatt P, Pritzker KPH: .* (\$100,000 2000 - 2002).

Development of a finite element model for prediction of osseointegration potential of bone interfacing. *Pilliar RM, Meguid SA, Grynbas MD: Medical Research Council of Canada* (\$198,585 1997 - 2000).

Effects of aryl hydrocarbon receptor ligands on osteoporosis and reproductive function. *Casper R, Grynbas MD, Savouret JF: Medical Research Council of Canada* (\$200,000 1998 - 2003).

Evaluating the effectiveness of a two-year curriculum in a surgical skills centre: The future of surgical training? *Brown M, Anastakis D, Hutchison C, Reznick R, Regehr G: Physicians Services Incorporated Foundation* (\$82,000 1998 - 2000).

Evaluation of family history characteristics and molecular features for hereditary colorectal cancer. *Gallinger S, Bapat B: National Cancer Institute of Canada* (\$112,500 1997 - 2000).

Factors influencing dietary adherence in women at elevated risk for breast cancer. *Irvine J: Princess Margaret Hospital Foundation* (\$100,000 2000 - 2001).

Functional imaging research network. *Kucharczyk W, Stuss D, Henkelman M, Vaccarino F: Canadian Foundation for Innovation/Ontario Institute for Technology* (\$6,200,000 2000 - 2005).

Gender differences in pain and analgesic response to kappa and mu opioids after surgery. *Katz J, Gagliese L, Snijdelaar D, Stewart DE, MacRae H, Taddio A, Sandler P: Medical Research Council of Canada* (\$90,000 2000 - 2003).

Glomerular osteopontin in murine lupus nephritis. *Cole EH, Levy GA: Kidney Foundation* (\$220,000 1998 - 2002).

Glomerular osteopontin in murine lupus nephritis. *Levy GA, Cole EH: Arthritis Society* (\$361,200 1995 - 2002).

Guidelines for adjustment to medical conditions. *Abbey S, Stewart D: Ontario Ministry of Health* (\$23,000 1999 - 2000).

HN3: Basic science study on the chronobiology of oral cancer. *Jordan R, Gilbert RW, Bjarnason G: National Cancer Institute of Canada* (\$93,524 1999 - 2000).

Immuno-pathogenesis of viral hepatitis. *Levy GA, Clark DA: Canadian Institutes of Health Research* (\$932,095 2000 - 2005).

Institutional addiction to tobacco. *Cohen J, Ashley MJ, Terrance R, Stewart D, Kyle K, Wilson E, Schenban C, Schultz P: National Cancer Institute of Canada* (\$112,153 1999 - 2002).

Insurance and breast cancer in Canada: Present practices and future directions. *Stewart D, Lemmens T, Cheung A, Bunston T, Dancey J, Deber R, Ghadarian P, Lowden S, Meana M, Purdy L: Canadian Breast Cancer Research* (\$160,877 1997 - 2000).

Inter-disciplinary health research team in musculoskeletal neoplasia. *Bell RS, Alman B, Wunder J, Hill R, Davis AM, Andrulis I, Bramwell V, Kandel R, Greenberg M, Malkin D, Masri B, O'Sullivan B, Turcotte R: Canadian Institutes of Health Research* (\$6,000,000 2001 - 2005).

International sub-arachnoid aneurysm trial. *Willinsky RA, Wallace MC: Medical Research Council of Canada* (\$32,400 1998 - 2001).

Ischemic pre-conditioning of the myocardium: Role of chloride channels. *Wilson GJ, Backx PH: Heart and Stroke Foundation* (\$315,772 1999 - 2002).

Matrix-mediated mineralization in normal bone and osteogenesis imperfecta. *Hunter GK, Grynpas MD: Medical Research Council of Canada* (\$214,641 1997 - 2000).

Measuring quality of life in nausea and vomiting of pregnancy (NVP): Assessment of the measurement of a new evaluation questionnaire. *Magee L, von Dadelszen P, Guyatt G, Koren G, Ross S, Stephenson M, Stewart DE: Vancouver Foundation* (\$47,948 2001 - 2002).

Molecular biology approaches in lung transplantation. *Slutsky AS, Keshavjee S: National Sanitarium Association* (\$1,500,000 1996 - 2001).

Non-collagenous protein binding to crystal surfaces in the theme of cellular and molecular biology of joint tissues. *Goldberg H, Grynpas M, Hunter G, McKee M, Sodek J: Canadian Arthritis Network* (\$27,000 2000 - 2001).

Novel biodegradable implants for anchorage of tissue engineered fibro cartilage to bone. *Pilliar RM, Grynpas MD, Kandel R: Natural Sciences and Engineering Research Council* (\$784,000 1997 - 2001).

Ontario rehabilitation technology consortium. *Milner MM, Fernie GR, Jamieson D, Naumann S, Olney S, Ryan S, Strong G, Shein F: Ministry of Health* (\$15,000,000 1992 - 2002).

Peri-prosthetic bone remodeling around the KMFTR for distal femoral tumors: A follow-up study using DEXA analysis. *Davis AM, Bell RS, White L, Wunder J: Stryker Howmedica Osteonics* (\$16,000 2000 - 2001).

POGO operating grant for Centre of Comprehensive Research in Childhood Cancer. *Greenberg C, Barr R, Greenberg M: Ministry of Health* (\$600,000 1997 - 2003).

Predicting emotional distress in family caregivers: Analysis of the longitudinal national population health survey data. *Cheung AM, Cameron JJ, Hyman I, Franche RL, Stewart DE: National Health Research and Development Program* (\$24,020 2000 - 2001).

Predictors of outcome following revision total hip arthroplasty. *Davis AM, Gross AE, Badley E, Davey R, Gafni A, Gollish J, Kreder H, Saleh K, Mahomed N, Schemitsch E, Szalai J-P, Waddell J: Arthritis Society* (\$133,000 1999 - 2001).

Preferred role of people with HIV and AIDS in treatment decision making. *Deber R, Halman M, Millson P, Meyers T, Stewart D, Urowitz S, Walmsley S, Bauman A: Ontario HIV Treatment Network* (\$152,000 1999 - 2001).

Prevention of delayed cardiac xenograft rejection by modulation of the potent fg12 prothrombinase gene. *Grant D, Gordzynsky R, Levy G, Phillips MJ: Heart and Stroke Foundation of Canada* (\$131,000 2000 - 2002).

Psychosocial impact of predictive genetic risk assessment in patients at risk for familial adenomatous polyposis (FAP). *Ritvo P, Bapat B, Barrera M, Berk T, Brown L, Cunningham A, Gallinger S, Gray R, Irvine J, Mullen M, Madlensky L: National Cancer Institute of Canada* (\$52,250 1998 - 2000).

Quality of acute myocardial infarction care. *Tu JV, Naylor CD: Medical Research Council of Canada* (\$186,196 1998 - 2000).

Randomized controlled trial of inpatient versus home-based rehabilitation following primary total hip and knee arthroplasty. *Mahomed N, Badley E, Fried S, Coyte P, Davis AM, Jaglal S, Hawker G, Naglie G, Wright J: Physicians Services Incorporated Foundation* (\$129,000 1999 - 2001).

Randomized controlled trial of standardized arthroscopic debridement protocol versus total knee arthroplasty for advanced knee osteoarthritis: A pilot study. *Mahomed N, Carette S, Davis AM, Fortin P, Szalai J-P: Zimmer Incorporated* (\$10,000 2001).

Recombinant peptides for promotion and inhibition of mineralization in the theme of cellular and molecular biology of joint tissues. *Goldberg H, Grynepas M, Hunter G, McKee M, Sodek J: Canadian Arthritis Network* (\$27,000 2000 - 2001).

Role of glial AMPA/kainate receptors in traumatic CNS white matter injury. *Fehlings MG, Zhang L, Eubanks J, Carlen P, Gurd J, Baker AJ: Medical Research Council of Canada/Ontario Neurotrauma Foundation* (\$279,000 1999 - 2002).

Structure-function analysis of the APC tumor protein. *Bapat B, Hannigan G: Medical Research Council of Canada* (\$301,374 1999 - 2002).

The cumulative effects of ingested fluoride on bone quality. *Grynepas M, Pritzker KPH: Medical Research Council of Canada* (\$246,900 2000 - 2003).

The effect of zoledronate on bone quality in the treatment of aseptic loosening of hip arthroplasty. *Grynepas MD: Medical Research Council of Canada* (\$100,000 1998 - 2000).

The effect of zoledronate on bone quality in the treatment of aseptic loosening of hip arthroplasty. *Grynepas MD: Novartis* (\$400,000 1998 - 2000).

The effects of the HMG-CoA reductase inhibitor, Lavastatin, on recurrent and pre-malignant lesions of the head and neck. *Gullane P, Kamel-Reid S, Dimitroulakos, Knox, Siu, Irish JC, Moore, Yeger, MacMillan C, Squire P, Oza, Gyles, Chapman, Laframboise, Lickrish, Dimitroulakos: Terry Fox New Frontiers Initiative* (\$746,230 2000 - 2003).

The impact of instructions on candidate behavior during an objective structured clinical examination. *Herold J, Hodges B, Regehr G, McNaughton N: National Board of Medical Examiners* (\$37,936 1999 - 2000).

The process and outcomes of care for soft tissue sarcoma of the extremities. *Paszat L, Bell RS, Bramwell V, Davis AM, Groome P, McKillop W, O'Sullivan B: Canadian Institutes of Health Research* (\$220,000 2001 - 2003).

The role of susceptibility genes and dietary risk factors in the etiology of mutator versus suppressor pathway of colon cancer. *Bapat B, Knight J: American Institute of Cancer Research* (\$83,350 2000 - 2002).

The scalability and validity of four visual perceptual instruments frequently used by pediatric occupational therapists: A comparison using Rasch analysis. *Brown T, Davis AM, Rodgers S: Bloorview MacMillan Centre* (\$30,444 2000).

The scalability and validity of four visual perceptual instruments frequently used by pediatric occupational therapists: A comparison using Rasch analysis. *Brown T, Davis AM, Rodgers S: Children's Hospital of Eastern Ontario Research Institute* (\$25,000 2000).

The social science of novel bio-technology integration theme of CANVAC. *Irvine J: Medical Research Council of Canada/Canadian Network for Vaccines and Immunotherapeutics of Cancer and Chronic Viral Diseases* (\$482,000 2000 - 2004).

The use of community newspaper to promote breast cancer screening among South Asian women. *Stewart DE, Ahmad F: Ontario Breast Cancer Foundation* (\$34,000 2000 - 2003).

Total hip arthroplasty: Why do primaries fail? *Davis AM, Kreder H, Mahomed N, Gross A, Gollish J, Davey R: Canadian Orthopaedic Foundation* (\$10,000 2000 - 2001).

When home care ends and institutional care begins: A longitudinal study of stroke survivors and their family caregivers. *Cheung AM, Cameron JJ, Stewart DE, Steiner D, Feldberg G: Social Sciences and Humanities Research Council* (\$121,820 2001 - 2004).

Women's Health Institute. *Bellam P, Grant K, Stewart D: Medical Research Council of Canada/Canadian Institutes of Health Research* (\$45,000 1999 - 2000).

Women's health services in Ontario. *Ferris L, Williams J, Hyman I, Stewart D, Cohen M, Maher J: Ontario Ministry of Health (\$100,000 1999 - 2000).*

Women's health status in Ontario. *Hyman I, Stewart DE, Williams J, Ferris L, Cohen M, Maher J: Ontario Ministry of Health (\$100,000 2000 - 2001).*

#### **HONOURS RECEIVED**

**Davis AM:** Five-Year New Investigator Health Career Award, Canadian Institutes of Health Research/Social Sciences and Health Research Council/National Health Research and Development Program, September 2000.

**Davis AM:** Rising Star Research Award, Department of Physical Therapy and Graduate Department of Rehabilitation Science, University of Toronto, April 2001.

**Naylor CD:** Health Services Research Advancement Award In Recognition of Leadership, Influence and Stature in the Field of Health Services Research in Canada, September 2000.

**Pritzker KPH:** Distinguished Service Award, Canadian Association of Pathologists, June 2001.

**Stewart DE:** Gibbs Leadership Award, Jacob's Institute of Women's Health (with Hyman I, Geruge S, Ahmad F), July 2000.