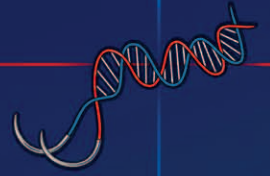




Surgery
UNIVERSITY OF TORONTO

A photograph of two surgeons in an operating room. The surgeon on the left is wearing a blue surgical cap and mask, and is using a surgical microscope. The surgeon on the right is wearing a patterned surgical cap and mask, and is using a yellow surgical instrument. The background is a solid blue color.

Transforming Surgery: Beyond the Cutting Edge

STRATEGIC PLAN 2012-2017

“Over the next five years, I should like to see the Department of Surgery at a stage where we are recognized continentally and internationally as a world leader in surgery – among the top five – using the traditional metrics that are applied to such rankings including peer-reviewed publications, grant capture, surgical expertise, education and innovation.”

Dr. James T. Rutka
R.S. McLaughlin Chair, Department of Surgery, University of Toronto



University of Toronto Faculty of Medicine

**Department of Surgery
Strategic Plan
2012-2017**

**Transforming Surgery:
Beyond the Cutting Edge**

May 25, 2012

Prepared by: Helena Axler & Associates

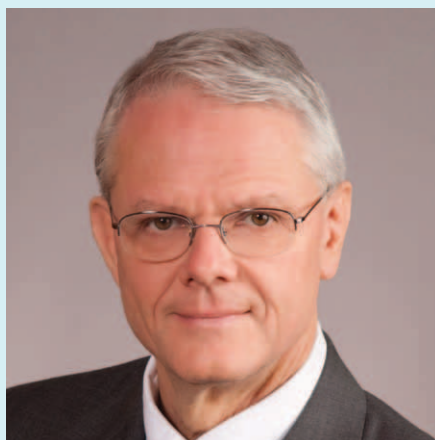


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MESSAGE FROM THE CHAIR



Dr. James Rutka

It is my pleasure to share the new five year Strategic Plan for the Department of Surgery at the University of Toronto. The plan is ambitious in its vision and scope, and reflects the collective aspirations of our surgical leaders, faculty, trainees and partners. It builds on the progress achieved in our previous plan – *Breaking through the Boundaries – 2004 - 2009*.

Our new Strategic Plan for 2012 to 2017 – *Transforming Surgery: Beyond the Cutting Edge* acknowledges the Department's position as one of Canada's leading Departments of Surgery and one of the top tier Departments in the world. This plan builds on a strong history of excellence in patient care and surgical innovation. It challenges us to push to new frontiers in surgical practice, education and research.

Planning for the future can be difficult in an environment of continuing economic pressures and uncertainty. There have been incredible advances in surgical education and technology this past decade which demand the development of enhanced surgical skills and competencies. The sustainability of our health care system relies heavily on innovative and integrated patient-centred solutions aimed at improving the quality of care. This plan underscores the importance of our most valued resource – our faculty, scientists, learners and staff.

Our Strategic Plan responds to these challenges with a renewed vision that reinforces our drive for international leadership in improving health through innovation and excellence in surgical practice, research and education. It provides a roadmap for advancing innovations in surgical care and transforming the health care agenda.



To transform surgery beyond the traditional cutting edge, we will:

- Focus on quality and best practices in surgery.
- Foster innovations in surgical practice, education, and research.
- Support all faculty in achieving their full academic potential while recognizing the importance of work-life balance.
- Welcome new community-affiliated partners and facilitate their engagement with the department.
- Promote greater integration and interdisciplinarity across divisions, hospitals, research institutes and other academic units for increased impact in research, education and surgical care.
- Pursue a bold advancement agenda that engages partners from beyond our traditional spheres.
- Embody transparency and fairness in all of our strategic directions.
- Extend our reach locally and globally to fulfill our social responsibility.

Implementing this plan will require dedication, distributed leadership across the department, highly engaged partners with a shared vision, and the appropriate infrastructure to support new initiatives.

Over the next five years, our success will be measured by achieving optimal/excellent outcomes by basing care on best practices and establishing standards of care for surgical patients across all divisions, by increasing the number of high impact publications and

peer-reviewed grants, by processing new patents towards commercialization, and by leading in novel education technologies and methods. We will concentrate our efforts to attract the best and the brightest medical students to consider careers in surgery, and we will graduate outstanding, technically superior trainees with a focus on academic surgery. We will encourage and support our faculty to pursue academic leadership positions. And finally, we will lead efforts to firmly establish our role in delivering expertise in education and research on the global stage.

This Plan would not have been possible without the collective wisdom and dedication of the Strategic Planning Committee and working group leaders who provided sustained leadership with this effort. A special thanks to our strategy consultants, Helena Axler and Susan Tremblay for their expertise and to our administrative staff, Sylvia Perry, Nancy Condo, and Stephanie Neilson for their support throughout the process.

I look forward to your continued support of the Department of Surgery and to working together with you as we pursue our shared vision.



James Rutka, MD, PhD, FRCSC, FACS, FAAP, FAANS, FRSC
R.S. McLaughlin Chair
Department of Surgery

Strategic Planning Committee Members

James Rutka, Chair

Ben Alman, Vice-Chair of Research

Dimitri Anastakis, Vice Dean of Continuing Education and Professional Development

George Christakis, Director of Undergraduate Education

Nancy Condo, Business Manager

Norman Hill, Vice President, Medical & Academic Affairs, The Credit Valley Hospital and Trillium Health Centre

Andras Kapus, Associate Vice-Chair of Research

Paul Karanicolas, General Surgery

Darina Landa, Senior Development Officer

David Latter, Vice-Chair, Education

Ron Levine, Director, Postgraduate Education

Robin McLeod, General Surgery

Cindi Morshead, Division Chair, Anatomy

Avery Nathens, General Surgery

Robin Richards, Vice-Chair, Clinical

Ori Rotstein, Associate Chair

Lakho Sandu, Resident, General Surgery

Carol Swallow, General Surgery

Bryce Taylor, General Surgery

Andy Williams, Vice-President Marketing & Sales, Johnson & Johnson Medical Companies

Department of Surgery Strategic Plan: Summary of Strategic Directions and Goals 2012-2017

Strategic Direction	Goals
Education	<p>1-1 Strengthen the recruitment, development, and support of surgeon teachers.</p> <p>1-2 Refine the core undergraduate surgery curriculum that outlines the essential learning elements for surgery clerkship, the learning objectives, and an expanded range of learning sites.</p> <p>1-3 Expand novel teaching approaches and methods, and capitalize on communications technologies and advances in simulation.</p> <p>1-4 Develop a competency-based assessment program for residency training.</p> <p>1-5 Enhance career development for residents and provide career assistance to our graduates.</p> <p>1-6 Promote a robust array of continuing medical education opportunities in surgery.</p>
Research & Innovation	<p>2-1 Pursue stable funding for research through the identification of new sources of revenue.</p> <p>2-2 Institute new policies to improve support for the Department's scientists to be successful.</p> <p>2-3 Sustain and enhance the training of residents in the Surgeon Scientist Training Program.</p> <p>2-4 Pursue greater integration of research across disciplines, sites and types of researchers.</p> <p>2-5 Enhance knowledge translation and commercialization of surgical inventions.</p> <p>2-6 Be a world leader in surgical innovation.</p>
Quality & Best Practices	<p>3-1 Institute a robust quality and best practices program across the Department.</p> <p>3-2 Build capacity to advance the science of quality improvement.</p> <p>3-3 Integrate quality across the education programs of the Department.</p>
Faculty Development & Support	<p>4-1 Establish a rigorous mentoring program within the Department.</p> <p>4-2 Strengthen and extend faculty support across the spectrum of practice.</p> <p>4-3 Foster the development and succession of leaders across the Department.</p> <p>4-4 Strengthen the Department's processes for academic support, appointment reviews, assessments of academic performance, and promotions.</p>
Integration & Outreach	<p>5-1 Empower the Division Chairs in the Department to promote integration strategies across their hospital sites and across surgical divisions.</p> <p>5-2 Build on existing collaboratives to strengthen the infrastructure required for greater success.</p> <p>5-3 Build our international outreach and strengthen partnerships regionally, nationally and globally.</p>



Improving health through innovation
and excellence in surgical practice,
research and education



INTRODUCTION

The Department is an extensive network of faculty and learners, traversing six fully-affiliated hospitals and an expanding number of community-affiliated hospitals.

With over 400 faculty, the Department engages in **teaching** undergraduate medical programs; **training** of postgraduate residents, fellows and graduate students; **research** across basic, translational, and clinical spheres; **health care service** in multiple hospital and community sites; and **outreach** in international and global initiatives.

The Department of Surgery is steeped in a rich history of unique surgical innovations which have had enormous impact on the health of mankind (*see side table*). Contemporary innovations in surgical education including the development of the *Surgeon Scientist Training Program (SSTP)* and the *Surgical Skills Centre (SSC)* have further solidified the Department's global reputation.

Our Strategic Plan is inspired by the Faculty of Medicine Strategic Academic Plan (2011-2016) which promulgates integration, innovation, and impact as core values to follow so that we reach our collective goals in uncommon hours.

In April 2011, the Department welcomed Professor James Rutka as the newly appointed Chair of the Department of Surgery. Professor Rutka articulated his early vision for the Department:

“to bring us to a stage where we are recognized continentally and internationally as a world leader in surgery – among the top 5 – using the traditional metrics that are applied to such rankings including peer-reviewed publications, grant capture, surgical expertise, education and innovation.”

The Department embarked on a strategic planning process in October 2011, with the aim of developing a robust roadmap and well defined priorities to guide the Department's efforts over the next five years.

The planning process was timely given the recent release of the new Faculty of Medicine Strategic Academic Plan. The following Strategic Plan reflects the key strategies, goals and priorities developed over a broad consultative process.¹

1. The planning process included a department survey of faculty, residents and fellows; a Steering Committee and six Working Groups; a departmental retreat on January 27, 2012 with over 80 participants. The Chair conducted a series of town hall meetings with affiliated organizations throughout the process.

University of Toronto Department of Surgery

Surgical Innovations and World Firsts

- | | |
|------|---|
| 1921 | Discovery of Insulin, Sir Frederic Banting, General Surgery |
| 1929 | First systematic surgical course of training in Canada (Dr. W.E. Gallie) |
| 1935 | Introduction of heparin for vascular thromboses (Dr. Gordon Murray) |
| 1936 | First mobile blood transfusion unit (Dr. Norman Bethune) |
| 1951 | World's first electronic pacemaker (Dr. Wilfred G. Bigelow) |
| 1962 | First complete heart valve transplant (Dr. Raymond Heimbecker) |
| 1962 | First procedure to repair transposition of the great arteries of the heart (Dr. William T. Mustard) |
| 1978 | First human use of continuous passive motion for immobilized limbs (Dr. Robert Salter) |
| 1983 | World's first single-lung transplant (Dr. Joel Cooper) |
| 1985 | Creation of Surgeon Scientist Training Program (Dr. Bernard Langer) |
| 1986 | Canada's first fresh tissue hip replacement (Dr. Allan Gross) |
| 1988 | First heterologous human nerve transplant (Drs. Alan Hudson & Susan Mackinnon) |
| 1995 | Separation of craniopagus twins (Dr. Harold Hoffman) |
| 2007 | First study of the use of deep brain stimulation for depression (Dr. Andres Lozano) |
| 2008 | Ex-Vivo lung perfusion to improve lung transplantation donor rates (Dr. Shaf Keshavjee) |



SHIFTING LANDSCAPE – THE CONTEXT FOR PLANNING

The Department's last strategic plan was formulated in 2004, "Breaking through the Boundaries". It laid the groundwork for many important directions that the Department pursued for the last seven years.

U of T Faculty of Medicine

Integration + Innovation = Impact

- **Integration** with our partners to promote new collaborative thinking and to address our strategic directions.
- **Innovation** that creates value by applying the full scope of our inter-disciplinary capability to answer complex health and biomedical questions.
- **Impact** of our education and research outcomes that reflects return on investment as we make meaningful contributions to improving health and prosperity.

Since that time, a number of changes and trends in the environment have occurred to influence and shape our planning for the future. The rate of change in systems of health care, the uncertain economic climate, and the increasingly competitive global market, have reinforced the need to be nimble and flexible to succeed as an international leader in the years ahead.

Changing Surgery Practice

- The practice of surgery is continually evolving both within and outside the operating room. There is more sophisticated technology in the operating room, more minimally and maximally invasive surgery, more use of surgical simulators, and more developments in information technology than ever before.

Changing Academic Environment

- The University of Toronto Faculty of Medicine Strategic Plan 2011-2016 focuses on integration, innovation and impact. A significant emphasis is placed on engaging the broader academic enterprise across TASHN and community affiliates.

- The network of academic hospitals has expanded with the addition of the Mississauga Academy and many new community-affiliated partner hospitals.
- Educational programs have grown with increasing numbers of trainees in undergraduate, postgraduate, fellowship and graduate programs.

Changing Education Environment

- Social responsibility and accountability are core values underpinning the roles of Canadian physicians and Faculties of Medicine². This translates into enhanced responsiveness to the diverse needs of individuals and communities throughout Canada, as well as increasing responsibilities to the global community.
- Medical education, in many jurisdictions across the world, is undergoing transformative change. Focused and innovative curricular changes in medical education are being directed and guided by the Future of Medical Education in Canada (FMEC)³, CanMEDS⁴ framework, and a Global Commission Report on Health Professionals for a New Century⁵. These changes require the development of robust assessment and evaluation strategies, competency-based curricula, and inclusion of non-traditional and innovative methods of experiential learning for trainees.

- Our learners' abilities and expectations are changing. Students are accomplished end-users of new technologies, communications, networking and on-line learning. Educational approaches must keep pace.
- Simulation and other novel methods for learning, training and assessment are rapidly proliferating.

Changing Research Environment

- The research climate is shifting markedly from a traditional focus on investigator-based, single-laboratory research to large multi-centre studies and large interdisciplinary collaborative teams.
- Health research funding is becoming more competitive than ever before. This is challenging researchers to pursue research that is highly relevant and actionable. Innovative approaches to research funding must be established.
- Emerging fields of research around genomics, proteomics, gene therapy, stem cells, and regeneration are being pursued by surgeons to expand opportunities for innovative surgical practice.

Changing Healthcare Context

- The healthcare system is becoming increasingly focused on accountability and performance measurement.

- Ontario's Excellent Care for All Act (2010) has introduced a comprehensive quality-focused agenda.
- The Drummond Report (2012) recommends limits on health care spending and shifts in care practices to contain the Ontario government's rising expenditures. The emphasis is on efficiency and effectiveness.
- Healthcare models are focusing on integration across Departments and health care settings, with patient-centred care at the forefront of all actions.
- Electronic medical records are leading to the possibility of greater connectivity, and enhanced access to medical information by patients and providers.

Changing Global and International Context

- Toronto's academic health sciences centres are advancing an international agenda with linkages to research and education partners throughout the world as a means of fulfilling their social responsibility.

As the Department of Surgery moves forward to develop strategies, goals and priorities for the next five years, its plans must align with the Faculty of Medicine, and this changing context and environment.

2. The Future of Medical Education in Canada FMEC: A Collective Vision for MD Education, 2010; Association of Faculties of Medicine of Canada, p5.

3. Future of Medical Education in Canada (FMEC): A Collective Vision for MD Education, 2010; Association of Faculties of Medicine of Canada.

4. CanMEDS

5. Health Professionals for a New Century: Transforming Education to Strengthen Health Systems in an Interdependent World, Lancet December 4, 2010.



“I see a very exciting future for the Department of Surgery – it is one of the best Departments in the Faculty of Medicine, the best Department of Surgery in Canada and should be among the top 5 Departments globally – a top destination for outstanding faculty and trainees... transforming health care through the application of discovery and knowledge into practice”.

Dean Catharine Whiteside –
January 27, 2012 –
Strategic Planning Retreat

RENEWING OUR VISION, MISSION & VALUES

VISION

International leadership in improving health through innovation and excellence in surgical practice, research, and education.

MISSION

We prepare surgical leaders, contribute to our communities and improve the health of individuals and populations locally and globally through discovery, application and communication of knowledge.

VALUES

- Excellence in patient-centred care
- Surgical innovation
- Effective teamwork and partnerships
- A supportive and collegial environment
- Social responsibility
- Accountability and transparency

STRATEGIC DIRECTIONS AND GOALS

This plan outlines five strategic directions and several key enabling and supporting strategies.

STRATEGY MAP

VISION

International leadership in improving health through innovation and excellence in surgical practice, research, and education.

MISSION

We prepare surgical leaders, contribute to our communities and improve the health of individuals and populations locally and globally through discovery, application and communication of knowledge.

STRATEGIC DIRECTIONS

EDUCATION

Foster excellence in teaching through new program development

RESEARCH & INNOVATION

Create and translate novel findings into surgical practice

QUALITY & BEST PRACTICES

Drive quality across surgical practice and education

FACULTY DEVELOPMENT & SUPPORT

Engage and value contributions of the faculty

INTEGRATION & OUTREACH

Consolidate our expertise for global impact

ENABLING & SUPPORTING STRATEGIES

Enhance the supporting infrastructure
Strengthen communications
Establish inspiring advancement initiatives

EDUCATION



Foster excellence in teaching through new program development⁶

Dr. David A. Latter

Division Head, Cardiovascular Surgery,
St. Michael's Hospital

Vice Chair of Education, Department
of Surgery Associate Professor,
University of Toronto

Director of Clinical Fellowships

The Department of Surgery is heavily invested in its focus on education with advanced programs in undergraduate, postgraduate, fellowship and graduate education.

New developments in education and training have included:

- Expanding clerkship into broader community sites, specifically the Mississauga campus hospitals and other community-affiliated hospitals
- Collaborating with the Department of Medicine to implement a combined undergraduate Medicine-Surgery OSCE
- Introducing a modular competency-based learning program in the Division of Orthopaedics
- Increasing surgical skills training in the Surgical Skills Centre to include undergraduate students
- Establishing and operationalizing a network of surgical simulation sites where learners can be trained on different models.

In planning for the next five years, a number of factors will influence the directions of surgical education:

- Accreditation of the Medical School by the Liaison Committee on Medical Education (LCME) and the Committee on Accreditation of Canadian Medical Schools in 2012, and the Postgraduate Medical Education training programs by the Royal College of Physicians and Surgeons in 2013.
- The Future of Medical Education in Canada (FMEC) emphasizing themes such as generalism, diverse learning contexts, competency-based and flexible approaches, and intra- and inter-professional learning.
- Integrated Medical Education – expansion of undergraduate education and postgraduate training in community-affiliated teaching sites
- The need to attract the best students to choose a postgraduate training program in surgery
- A focused effort to value and reward surgeon teachers – strengthening the

- Over **250** students in clerkship
- Opportunities in pre-clerkship
- **11** postgraduate training programs
- **8** postgraduate training sites
- **250** residents and **200** fellows
- **30** students enrolled in graduate school programs

recruitment, development, support and recognition of surgeon teachers

- The potential for increasing novel approaches to education with new technologies including enhanced capacity for surgical simulation.

Goals to Advance Education

The following six goals are central to advancing the Department's education enterprise.⁷

1-1 Strengthen the recruitment, development, and support of surgeon teachers.

The excellence of our education program is dependent on the engagement and effectiveness of our surgeon teachers. A significant opportunity exists to attract more surgeons into teaching roles, provide greater faculty development for new and experienced teachers, engage more residents in teaching, and recognize and promote teaching excellence.

1-2 Refine the core undergraduate surgery curriculum to outline the essential learning elements for surgery clerkship, the learning objectives, and an expanded range of learning sites.

An enhanced core surgery curriculum map will drive the quality of education across diverse sites, reduce redundancy and improve the overall preparation of learners.

1-3 Expand novel teaching approaches and methods, and capitalize on communications technologies and advances in simulation.

With the growth of on-line education and simulation, the opportunities for students to enrich and supplement their education are significant. Approaches to increasing mentorship and enhancing longitudinal experiences will be undertaken.

1-4 Develop a competency-based assessment program for residency training.

A competency-based assessment approach has the potential to provide a more reliable method of assessment of progress and attainment of competence than does traditional residency training. It will focus on well defined objectives, and will measure cognitive and technical skill acquisition at various levels of resident education.

1-5 Enhance career development for residents and provide career assistance to our graduates.

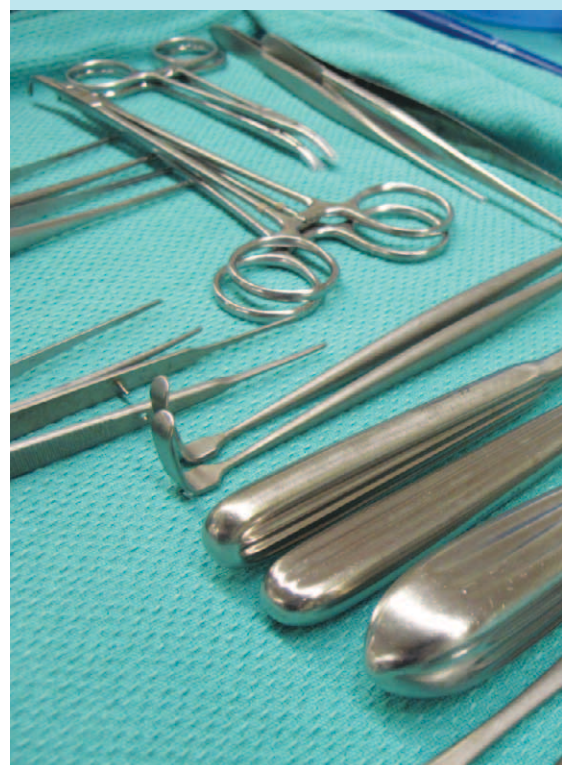
The current job market for graduating surgeons is challenging. The Department will find opportunities to prepare and assist graduates with career planning after residency.

1-6 Promote a robust array of continuing medical education (CME) opportunities in surgery.

The Department of Surgery has traditionally held numerous CME courses and lectures across all Divisions. Given the talent of the faculty in the Department, these CME opportunities should be expanded to encourage life-long learning at all stages of faculty development.

Expected Outcomes

- Better prepared generalist medical students at the completion of undergraduate education.
- More complete and effective methods of transmitting the core competencies to students.
- Recruitment of the best students to surgical residency training programs.
- Improved resident assessment methods and attainment of competence through competency-based assessment.
- Renewed enthusiasm for teaching excellence with highly engaged surgeon-teachers.
- Graduation of superior trainees fully capable of navigating in a challenging job market.
- Increased number of highly valued Departmental CME offerings.



6. The Education strategic direction aligns with Faculty of Medicine's goal to prepare tomorrow's leading scientists and scholars, clinical professionals and administrators who will contribute to fulfilling the social responsibility of Medicine at U of T.

7. Detailed actions and proposed measures for the Education goals are included in the Supplementary Appendix, Appendix IV. *Strategic Directions, Goals, Actions and Measures* (available on Departmental website <http://surgery.utoronto.ca>).

STRATEGIC DIRECTION #2

RESEARCH & INNOVATION



Create and translate novel findings into surgical practice⁸

Dr. Benjamin Alman

Division Head, Orthopaedics
The Hospital for Sick Children

Vice-Chair of Research,
Division of Orthopaedics,
Department of Surgery
A.J. Latner Professor and Chair,
University of Toronto

The Department of Surgery has consistently flourished in research with over \$40 million annually of external funding over each of the last five years. The Surgeon Scientist Training Program (SSTP) is unique, offering residents the opportunity for graduate training to the Masters or Doctorate levels. Each year over 30 SSTP residents partake in a wide range of scholarly work, including formal training in fundamental biology, clinical epidemiology, medical education, business administration and ethics. Unquestionably, the strength of the Department is built upon a broad foundation of research across the Faculty and Hospital Research Institutes.

- Over **\$40 Million** per annum in research funding
- **40** Scientists
- Over **1,000** peer reviewed publications per year
- **45** Surgeon Scientists
- Consistent external funding from National granting agencies including CIHR, Heart and Stroke, CCSRI, and NSERC
- Over **30** new patents annually

Goals to Advance Research & Innovation

The following six goals are critical to enhancing innovative research that will have great impact on the health of surgical patients⁹.

2-1 Pursue stable funding for research through the identification of new sources of revenue.

Traditional research funding sources are declining. Alternate revenue sources must be considered such as

endowments, philanthropy, industrial sector, partnerships, and commercial opportunities. The Department should assist faculty in identifying and applying for these new sources of research funding.

2-2 Institute new policies to improve support for the Department's scientists to be successful.

A recent white paper has outlined a number of policies and

recommendations that would enhance the environment for the Department's Surgeon Scientists (*see Appendix V – available on Departmental website <http://surgery.utoronto.ca>*). At a recent retreat of the Department's Full-Time Scientists (*see Appendix VI – <http://surgery.utoronto.ca>*), additional areas of critical support were identified to ensure their successes in their various research programs.

2-3 Sustain and enhance the training of residents in the Surgeon Scientist Training Program.

The Surgeon Scientist Training Program (SSTP) is the flagship program of the Department's postgraduate training program, attracting outstanding prospective surgical residents from across Canada. Stable funding and outstanding mentorship are essential to its ongoing success.

2-4 Pursue greater integration of research across disciplines, sites and types of researchers.

The University of Toronto's great strength is its relationship with multiple institutions under the Toronto Academic Health Sciences Network (TAHSN) umbrella. Greater success in research can be leveraged with enhanced collaboration and integration across disciplines, research institutes,

and hospitals. Opportunities to engage community hospitals should be pursued aggressively. Departmental infrastructure for information technology, editorial services, grant review and preparation would facilitate cross-organizational and -discipline initiatives.

2-5 Enhance knowledge translation and commercialization of surgical inventions.

The Department has been highly successful in research and innovation. This could be increased by the commercialization of novel and opportunistic research findings. To achieve this goal, we will work with key partners, including the Medical and Related Sciences (MaRS) Discovery Site and the University of Toronto Research Office.

2-6 Be a world leader in surgical innovation.

The Department will create an inventory of surgical innovation initiatives across the University. Surgical innovation should be promoted centrally, and a mechanism established to synergize with innovation efforts at the University. We will establish mechanisms to develop, transfer, adopt, and evaluate new technologies in a timely manner.

Expected Outcomes

- Increased research funding from non-traditional sources.
- Enhanced support for the Department's Scientists.
- Improved multi-site and -division collaborations.
- Expanded clinical and translational research efforts.
- New innovations in surgery leading to commercialization and early adaptation to clinical practice.



8. Research & Innovation strategic directions are aligned with FOM goals, "to lead research innovation in biomedical science, biotechnology, education, population and public health that answers questions of societal relevance" and to "translate discoveries to improve health and prosperity in our community and around the world".

9. Detailed actions and proposed measures for Research & Innovation goals are included in the Supplementary Appendix, Appendix IV. *Strategic Directions, Goals, Actions and Measures* (available on Departmental website <http://surgery.utoronto.ca>).

QUALITY & BEST PRACTICES



Drive quality across surgical practice and education

Dr. Robin McLeod

Angelo and Alfredo De Gasperis Families
Chair in Colorectal Cancer and IBD Research
Mount Sinai Hospital

Vice Chair, Quality and Performance
Department of Surgery
Professor, University of Toronto

The Department of Surgery has an opportunity to lead in innovative quality initiatives in surgery and to advance the science of quality.

Dr. Robin McLeod,
Vice Chair, Quality & Best Practices

The Department's initiatives with respect to best practices have been advanced to the greatest degree at the divisional level. For example, the Division of General Surgery initiated its Best Practices in General Surgery (BPiGS) Program in 2006 and established a rigorous process of audits, and development of guidelines. In addition, partnerships and collaborations with hospitals have been helpful in advancing the quality agenda in general surgery. This focus on quality and best practice is both timely and critical for the Department of Surgery.

Several key elements are important to the quality agenda:

- Encourage partnerships between hospitals aimed at improving quality and best practices across the TAHSN institutes and community affiliates.
- Develop an infrastructure to support quality, best practices and knowledge translation.
- Undertake knowledge translation initiatives to ensure surgical patients receive optimal care based on the best evidence.
- Audit practice and surgical outcomes to inform patients, providers and policy makers.

Goals to Advance Quality and Best Practices

The following three goals are proposed to strengthen quality and best practices across the Department. The aim is to provide sustainable, high quality, multidisciplinary standardized care to surgical patients at the University of Toronto affiliated hospitals based on best available evidence with careful

will be based on best evidence and will use multifaceted, knowledge translation strategies to ensure that surgical patients receive optimal multidisciplinary care. This will require collaboration across divisions, hospitals and other departments as well as champions to lead the program. Targeted goals and a supporting infrastructure will be essential to coordinate and implement quality initiatives.

Quality and quality improvement work are increasingly recognized as a legitimate academic pathway.

Dr. Kaveh G. Shojania,
Director, Institute for Patient Safety

evaluation of surgical and patient-centred outcomes.¹⁰

3-1 Institute a robust quality and best practice program across the Department of Surgery to ensure our patients receive optimal care and outcomes.

A quality and best practices program across the Department

3-2 Build capacity to advance the science of quality improvement.

In order to advance quality within the Department of Surgery, the quality initiative must be embedded with education, research and surgical practice. Building capacity in quality improvement will be addressed through faculty development and partnership with quality-focused academic organizations. The Department must promote quality within academic job descriptions, career paths and promotions.

3-3 Integrate quality across the education programs of the Department.

Quality must feature prominently in undergraduate medical education and residency training through formal educational objectives, specific curriculum elements, and learner initiatives and projects.

Expected Outcomes

- Creation of a robust quality program with well defined goals, objectives and targeted initiatives.
- Adoption of knowledge translation initiatives which are collaborative and inclusive.
- Measurement of surgical outcomes and assess performance to ensure optimal care is being provided to surgical patients.
- Growth in number of faculty who have expertise in quality and knowledge translation.
- Integration of quality curriculum within education and research training.



10. Detailed actions and proposed measures for Quality and Best Practices goals are included in the Supplementary Appendix, Appendix IV. *Strategic Directions, Goals, Actions and Measures* (available on Departmental website <http://surgery.utoronto.ca>).

STRATEGIC DIRECTION #4

FACULTY DEVELOPMENT & SUPPORT



Dr. Ori D. Rotstein

Surgeon-in-Chief, St. Michael's Hospital
Associate Chair, Department of Surgery
Director, Institute of Medical Science
Professor, University of Toronto

Engage and value contributions of the faculty

Several trends have underscored the importance of faculty development and its expansion as a goal in the Department of Surgery.

- The number of faculty in the Department continues to grow with new recruitment and expansion of community-affiliated teaching sites engaged in education of medical learners.
- Early and mid career faculty need support and mentoring as well as access to advanced academic and leadership opportunities.
- Many faculty are continuing to practice beyond the conventional retirement age and would benefit from late career planning opportunities.

Goals to Strengthen Faculty Development and Support

The Strategic Planning Working Group on Faculty Development strongly advocated the need to develop 'a

culture of transparency, fairness and equity' to ensure that all faculty members have equal opportunity to achieve their full academic potential. The following four goals focus on faculty development and support.¹¹

4-1 Establish a rigorous mentoring program within the Department of Surgery.

The mentoring program will align with the Faculty of Medicine mentorship program and be part of an overall strategy to support career goal setting. The program will also establish an award to recognize outstanding mentorship by a faculty member.

4-2 Strengthen and extend faculty support across the spectrum of practice.

Faculty support initiatives are needed to help faculty who are addressing

- **240** full-time faculty
- **40** scientists
- **42** part-time faculty; **105** adjunct faculty
- Faculty serve across **13** hospital and community sites
- **50** new recruits over the last five years

issues of stress and burnout, financial instability in their practices, extending their engagement beyond local settings and late career planning and retirement. The Department will support and assist faculty across the continuum of their careers to ensure their academic success and in turn, the success of the Department.

4-3 Foster the development and succession of leaders across the Department.

The Department must nurture and develop leaders across the Department and prepare trainees for leadership roles in various phases of their careers. The Department will facilitate and support access to formal leadership training programs, promote or publicize leadership positions and opportunities, and actively mentor those on a leadership track.

4-4 Strengthen the Department's processes for academic support, appointment reviews, assessments of academic performance, and promotions.

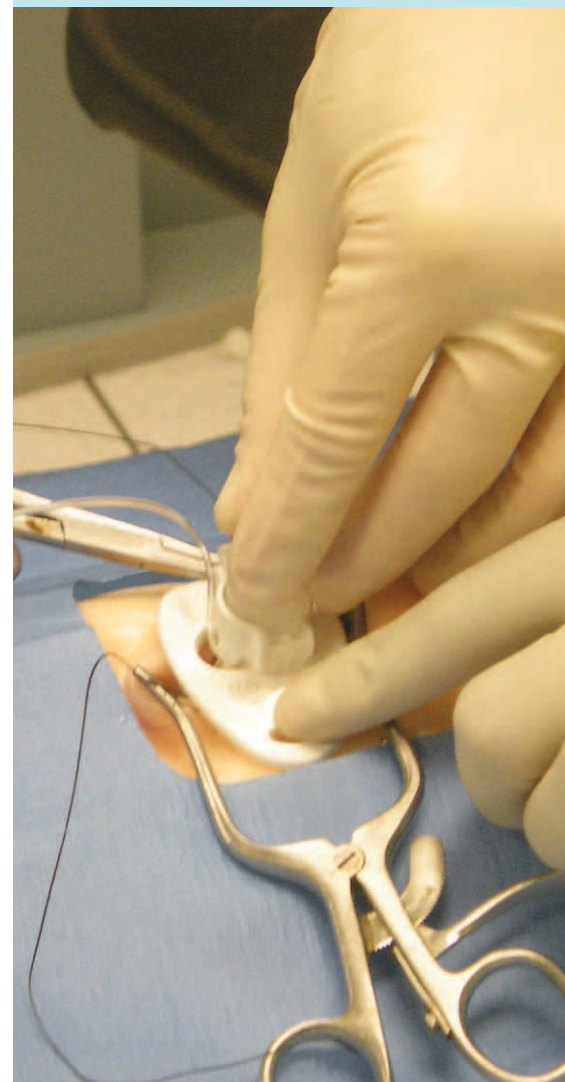
In the spirit of transparency, fairness and equity, there is an opportunity for the Department to be more explicit on providing academic support, conducting continuing appointment reviews (CARs), scoring of annual assessments of academic performance (AAP), and promoting faculty.

The Department will establish clear and defined expectations for every new recruit with respect to the clinical and academic terms of their engagement with the Department.

Expected Outcomes

- Development of a robust mentorship program with a growing number of faculty serving as primary mentors.
- New and increasing supports for faculty to include a Departmental pension plan, workshops on managing a practice, and late career planning.
- Creation of a leadership development program.
- Increased transparency around job descriptions, CARs, AAPs, and the promotion of faculty at the University.

11. Detailed actions and proposed measures for Faculty Development & Support are included in the Supplementary Appendix, Appendix IV. *Strategic Directions, Goals, Actions and Measures*. (available on Departmental website <http://surgery.utoronto.ca>).



STRATEGIC DIRECTION #5

INTEGRATION & OUTREACH



Dr. Avery B. Nathens

Surgeon-in-Chief

Sunnybrook Health Sciences Centre

Chair, Departmental Appointments Committee

Professor, Department of Surgery

University of Toronto

Consolidate our expertise for global impact

The Faculty of Medicine Strategic Plan emphasizes three key themes – Innovation – Integration – Impact. Integration of activities is of critical importance in the Department and will lead to increased strengths in education, research, quality, and faculty development. Many of the Department's programs and faculty operate and flourish in an integrated model – linking across departments, divisions, hospitals, research institutes and community sites.

Integration across the Department of Surgery

- Best Practices in General Surgery
- Vascular Centres of Excellence
- Bariatric Centres of Excellence
- Spine Program
- Trauma Program
- Surgical Oncology Program

The Department has contributed to developing several integrated program models, with examples outlined in the sidebar. TAHSN plays a significant role in enabling many of the integration initiatives.

The Department of Surgery has provided surgical expertise to international centres around the globe. The Department has pioneered surgical initiatives to improve surgical

treatment in developing countries through tele-surgery, medical missions, and international partnerships. Initiatives led independently by faculty as well as those coordinated through the University of Toronto's Office of International Surgery, such as the Bethune Roundtable, provide an opportunity for the Department to have greater impact in improving health care delivery in developing nations, decreasing inequities and enhancing

the relationships among providers and teachers across developed and developing countries.

The Department will align with the Faculty of Medicine's new global health strategy to focus its efforts in expressing its social responsibility in this increasingly global and interconnected world.

Three goals have been identified to advance integration and outreach.¹²

Goals to Advance Integration & Outreach

5-1 Empower the Division Chairs in the Department to promote integration strategies across their hospital sites and across departments.

Division Chairs are well positioned to work collaboratively across hospital sites to identify opportunities for joint or integrative initiatives. The Department can support the Division Chairs to engage in city-wide recruitment, cross-credentialing, and new programs.

5-2 Build on existing collaboratives to strengthen the infrastructure required for greater success.

With a growing number of collaborative and integrated programs, there are new opportunities to leverage these

programs around themes of quality, education, and research to enhance the quality and novel output of these programs.

5-3 Build our international outreach and strengthen partnerships regionally, nationally and globally.

It is important that the Department support an engaged surgery community across the GTA, welcoming new faculty from community-affiliated sites. Opportunities should be pursued to expand outreach with industry and government in support of the Department's innovation agenda across research, quality, education and knowledge exchange.

The next five years will see an expanded international outreach for the Department. That will require a clear understanding of the partnerships in which the Department will engage as well as identification of the priority global health projects in surgery that it will champion and support with capacity building and educational initiatives.

Developing a means of supporting faculty with an interest in global surgery will lead to opportunities to extend the reach of the Department across international boundaries.

Expected Outcomes

- Measurable improvements in access to care and quality of services through integrated initiatives across disciplines and hospitals.
- Increased recruitment and retention of talented faculty across the GTA.
- Enhanced funding and collaborative initiatives with industry, government partners and private donors.
- Measureable impact of contributions to surgical health initiatives on a global scale.



12. Detailed actions and proposed measures for Integration & Outreach goals are included in the Supplementary Appendix, Appendix IV. *Strategic Directions, Goals, Actions and Measures*. (available on Departmental website <http://surgery.utoronto.ca>).

ENABLING & SUPPORTING STRATEGIES

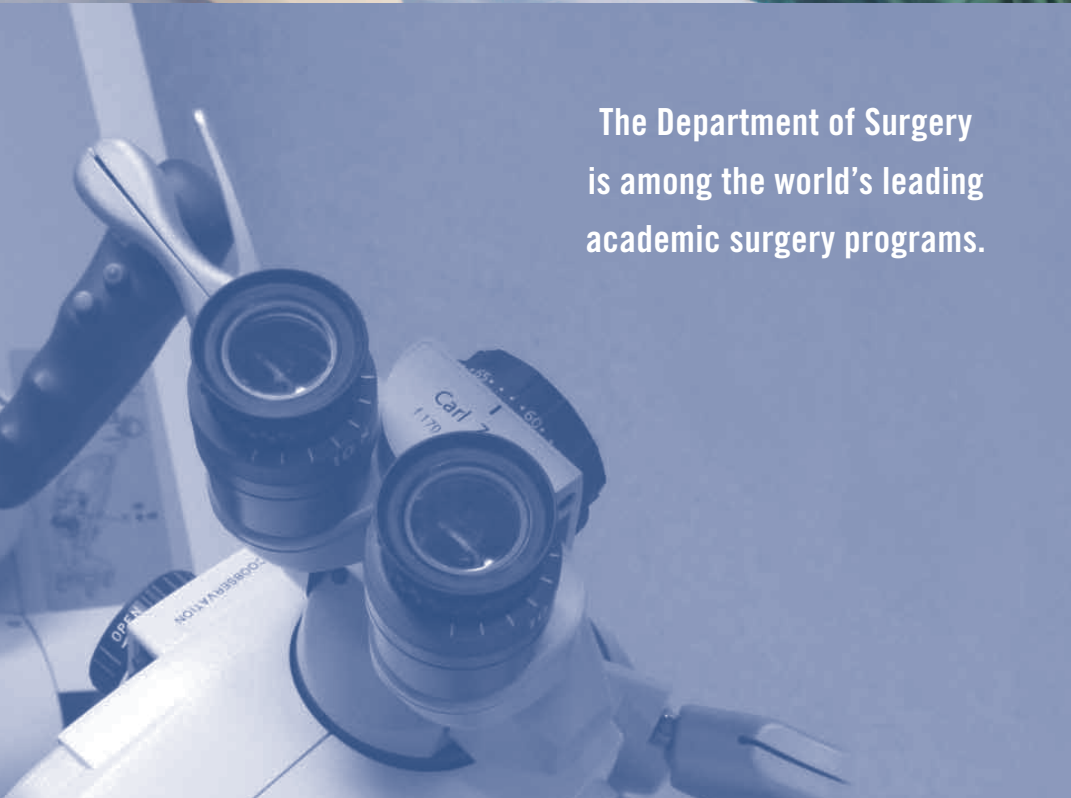
To move forward in these five strategic directions, several enabling and supporting strategies are required beginning in the first year of the plan.

Enabling Strategy	Actions
Advancement	<p>Develop the ‘brand’ for the Department of Surgery</p> <p>The Department of Surgery is among the world’s leading academic surgery programs. This can be leveraged to create the brand for the Department; to establish clear and consistent messaging to faculty, residents and fellows; and to instill a sense of belonging so that the whole is greater than the sum of the parts.</p> <p>Establish inspiring advancement initiatives</p> <p>The Department will develop a robust menu of advancement goals and opportunities; set reasonable but aggressive targets for Advancement; establish an Advancement Committee within the Department of Surgery and establish a focused strategy for enhancing Department revenues.</p> <p>By 2017 we should like to establish:</p> <ul style="list-style-type: none"> i) Five new Chairs in the Department of Surgery ii) A 20% increase in annual research funding iii) A 30% increase in funded academic fellowships iv) Additional endowed funds to provide the infrastructure to support the administration and operations of the Best Practices/Quality Initiative, the Surgeon-Scientist Training Program, and the Full-Time Scientists’ need for administrative and research support
Enhance the supporting infrastructure	<p>Build central resources to support priority initiatives</p> <p>As the Department seeks to advance goals around its quality program or pursue new research funding opportunities, the appropriate levels of support and infrastructure must be in place, including staff coordination of activities, grant writing and editorial assistance.</p> <p>Access to leading edge and emerging information technologies will be critical to innovation, integration and quality initiatives. Partnerships with hospitals and industry will be explored to establish effective e-platforms to support strategic priorities.</p>
Communications	<p>The growth and increasingly distributed configuration of the Department demands a sophisticated and robust communications strategy. The Department must continue to enhance its web based and diverse communications channels to engage with its faculty, learners and key stakeholders.</p>



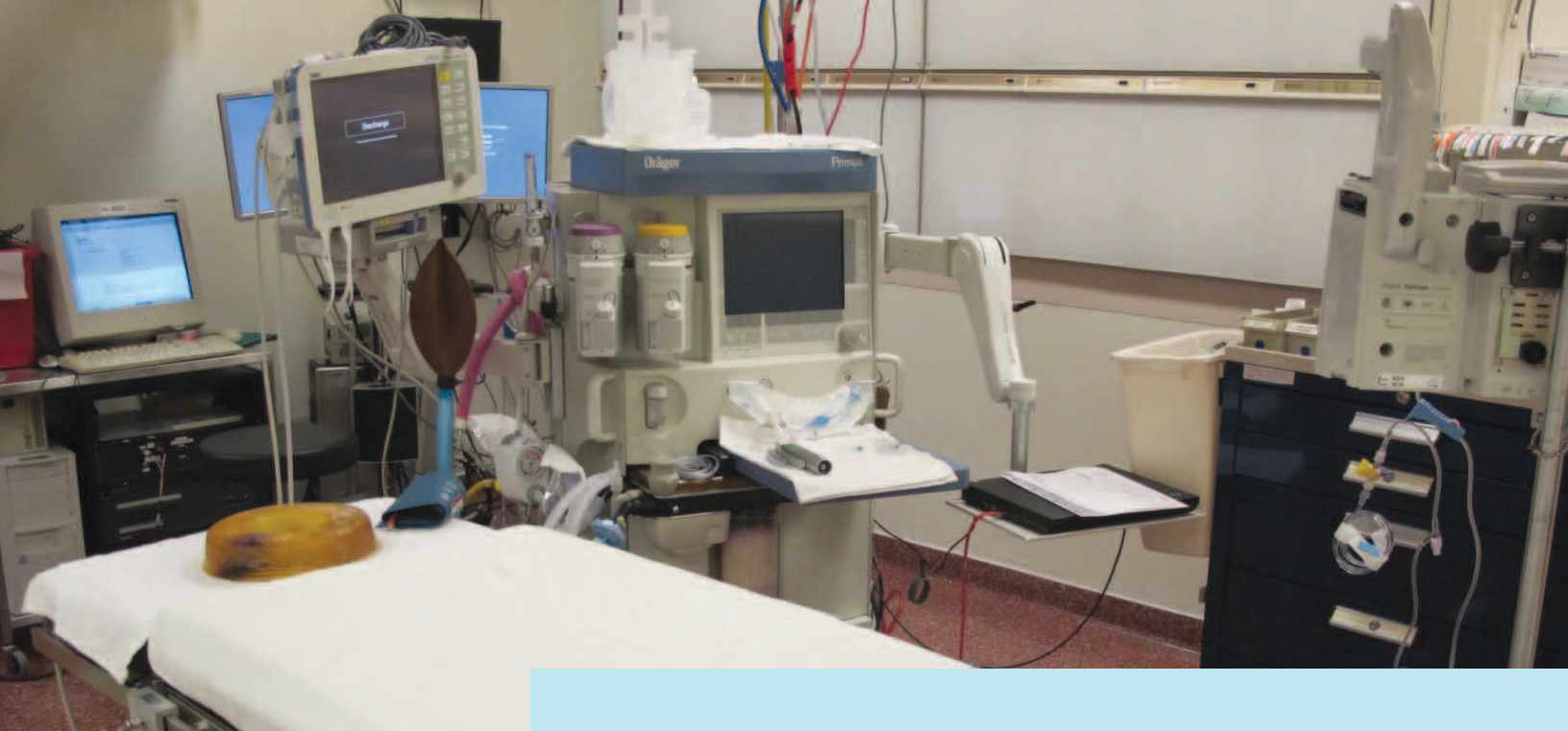
By 2017

- Five new Chairs in the Department of Surgery
- A 20% increase in annual research funding
- A 30% increase in funded academic fellowships
- Additional endowed funds to provide the infrastructure to support the administration and operations



The Department of Surgery is among the world's leading academic surgery programs.





IMPLEMENTATION PRIORITIES AND MEASUREMENT



Dr. Benjamin Alman and Dr. James Rutka

The Strategic Plan outlines a broad range of goals across five key strategic domains. To ensure that the goals are achieved in a timely manner, there will be appropriate oversight, implementation, and measurement of the plan.

Implementation Oversight and Guidance

The Department of Surgery Executive Committee will provide the leadership and oversight for the implementation of the Strategic Plan. Leads will be assigned for each strategic direction. The Executive Committee will develop a monitoring and tracking process, as well as confirm the specific measures and indicators, and will report to the Departments' members regularly on progress with the Plan.

Measures and Key Performance Indicators (KPIs)

The Faculty of Medicine's *Implementation of the Strategic Academic Plan 2011-2016* outlines a broad range of key performance indicators (KPIs) across multiple dimensions – Leadership, Innovation, Growth, Resources, Infrastructure and Communication. The Department of Surgery Executive Committee will compile the indicators and measure those that are most relevant in tracking the priorities and goals.

Performance measures and indicators should include both traditional and new metrics specific to this strategic plan. The following is considered a starting point for further development:

Education

- Number of divisions with a core curriculum and specific learning objectives identified and implemented
- Number of competency-based assessments in place

Research & Innovation

- Research funding, number of publications, citations, and impact factors
- Number of research chairs
- Increase in non-traditional funding sources
- Number of new innovations brought to commercialization

- Number of clinical trials underway/ number of patients in clinical trials

Quality & Best Practices

- Number of Department wide quality/ best practices initiatives in place
- Number of sites engaging in quality/ best practices
- Number of faculty with specific quality program skills
- Number of educational programs including quality-focused initiatives
- Number of publications related to quality improvement

Faculty Development & Support

- Number of faculty engaging in mentorship
- Number of workshops focused on business practice, career and related topics and attendees
- Number of faculty completing leadership development programs

Integration & Outreach

- Number of new integration initiatives led by the Department
- Number of faculty engaged in international surgery initiatives

Year 1 Priorities

The Strategic Plan outlines a broad range of goals and actions. It will not be possible to move forward on all of them at the same time. The following priorities have been identified for the first year and will be a solid foundation for advancing with the remaining goals.

Strategic Direction	Implementation Priorities – Year 1
Education	<ol style="list-style-type: none">1. Develop an undergraduate core curriculum and curriculum map.2. Initiate the steps towards a competency-based assessment for residency training – each Division to define competencies for end of PGY1.3. Renew and expand faculty development for surgeon teachers.
Research & Innovation	<ol style="list-style-type: none">4. Implement the policies and recommendations to support scientists according to the recommendations of both White Papers.5. Build central capacity and infrastructure to support research priorities (e.g. research coordinators, editorial office).
Quality & Best Practices	<ol style="list-style-type: none">6. Establish a quality committee with representatives from each Division.7. Build the central infrastructure to support a quality program.8. Outline specific short-term and longer-term priority initiatives.9. Begin to implement quality initiatives.
Faculty Development & Support	<ol style="list-style-type: none">10. Initiate a formal mentorship program.11. Evaluate job descriptions for academic positions for clear expectations and measures of performance.12. Establish and support initiatives that address financial stability throughout the entire academic career (e.g. pensions, workshops on the business of running a practice, late career and retirement planning).
Integration & Outreach	<ol style="list-style-type: none">13. Advocate for cross-credentialing of U of T faculty across TAHSN Hospitals.14. Division Chairs to identify/catalyze collaborative initiatives that cross Hospital sites and Departments with a focus on new and potentially practice altering procedures or technologies.



EXCELSIOR – EVER UPWARD

The Department of Surgery has committed to an exciting future that draws on the collective talent of its faculty, learners, staff and partners. Building on its strengths in research, education and surgical practice, the Department will pursue a new model of surgical care that promotes the highest quality of care, integration, innovation and best practices.



In developing this strategic plan, the Department has considered the key elements of its core business, education, research and clinical practice and challenged every aspect to transform surgery beyond the “cutting edge”. It has considered its key resource, its people, and identified strategies to nurture and support them to achieve their fullest potential.

As a world leader in surgery, the Department recognizes its social responsibility and will engage locally, provincially and globally to promote sustainable access to high quality surgical care.

APPENDIX 1 – ACCOUNTABILITY FRAMEWORK

Strategic Directions	Goals	Priorities First 12-18 Months	Longer Term Initiatives	Select Indicators and Performance Measures
1. Education Lead: Vice Chair Education Co-Leads: Postgraduate Director Undergraduate Director	<p>1-1 Strengthen the recruitment, development, and support of surgeon teachers.</p> <p>1-2 Refine the core undergraduate surgery curriculum that outlines the essential learning elements for surgery clerkship, the learning objectives, and an expanded range of learning sites.</p> <p>1-3 Expand novel teaching approaches and methods, and capitalize on communications technologies and advances in simulation.</p> <p>1-4 Develop a competency-based assessment program for residency training.</p> <p>1-5 Enhance career development for residents and provide career assistance to our graduates.</p> <p>1-6 Promote a robust array of continuing medical education opportunities in surgery.</p>	<p>1. Refine undergraduate core curriculum and curriculum map.</p> <p>2. Begin the development of competency-based assessment for residency training – each Division to define competencies for the end of PGY 1.</p> <p>3. Renew and expand faculty development for surgeon teachers.</p>	<p>1. Provide surgeon teachers with optimized template for activities leading to promotion.</p> <p>2. Competency-based assessments firmly in place in all Divisions.</p> <p>3. Simulation training to be adopted by all Divisions with metrics to show efficacy.</p> <p>4. E-learning methods and opportunities for learners to be available in all Divisions, with measurements to demonstrate efficacy.</p> <p>5. Collaborate with other Departments of Surgery and MOHLTC to optimize career opportunities for graduates.</p> <p>6. Be recognized as the centre in Canada for CME.</p>	<ul style="list-style-type: none"> • Increased number of promotions and career development of surgeon teachers. • More reliable method of assessments of residents and attainment of competence. • Number of divisions with core curriculum specified, learning objectives. • Number of competency-based assessments in place. • Better career placements for our graduates.

APPENDIX 1 - ACCOUNTABILITY FRAMEWORK (CONTINUED)

Strategic Directions	Goals	Priorities First 12-18 Months	Longer Term Initiatives	Select Indicators and Performance Measures
2. Research & Innovation Lead: Vice Chair Research	<p>2-1 Pursue stable funding for research through the identification of new sources of revenue.</p> <p>2-2 Institute new policies to improve support for the Department's scientists to be successful.</p> <p>2-3 Sustain and enhance the training of residents in the Surgeon Scientist Training Program.</p> <p>2-4 Pursue greater integration of research across disciplines, sites and types of researchers.</p> <p>2-5 Enhance knowledge translation, exchange of research discoveries, and commercialization.</p> <p>2-6 Be a world leader in surgical innovation.</p>	<p>1. Implement the policies and recommendations to support scientists according to the recommendations of both White Papers.</p> <p>2. Build a central capacity and infrastructure to support research priorities (e.g. research coordinators, editorial office).</p>	<p>1. Secure new departmental funding sources for conducting research.</p> <p>2. Develop cross university research groups focusing on all disciplines of research with a goal of accelerating the generation of new knowledge and facilitating the translation of research to patient care.</p> <p>3. Enhance Departmental administrative infrastructure to support the research initiatives.</p> <p>4. Secure stable and sustainable funding to support the Department's scientists.</p>	<ul style="list-style-type: none"> Increased funding available to support research from non-traditional sources. Higher rate of grant capture. Increased number of publications and citations, higher impact publications. Increase in numbers of trainees entering the Surgeon Scientist Training Program. Increase in number of multisite and multi-divisional collaborations. Increase in number of clinical trials and number of patients enrolled. Number of new innovations brought to commercialization.
3. Quality & Best Practices Lead: Vice Chair Quality & Best Practices	<p>3-1 Institute a robust quality and best practice program across the Department of Surgery.</p> <p>3-2 Build capacity to advance the science of quality improvement.</p> <p>3-3 Integrate quality across the education programs of the Department.</p>	<p>1. Establish a Quality Committee with representatives from each Division.</p> <p>2. Obtain funding to support quality programs in all divisions.</p> <p>3. Build the central infrastructure to support a quality program.</p> <p>4. Outline the shorter term and longer term quality initiatives.</p> <p>5. Begin to implement quality initiatives.</p>	<p>1. Establish and implement quality programs in all divisions.</p> <p>2. Develop and strengthen collaborations with other departments and at all hospitals.</p> <p>3. Begin to measure and report surgical outcomes and measure quality.</p> <p>4. Ensure sustainable resources to support a Quality Program.</p>	<ul style="list-style-type: none"> Number of department wide quality/best practices initiatives in place. Number of sites engaging in quality/best practices. Number of faculty with specific quality program skills. Quality contributions valued and recognized as career paths for faculty. Number of educational programs including quality-focused initiatives. Number of publications related to quality improvement.

APPENDIX 1 - ACCOUNTABILITY FRAMEWORK (CONTINUED)

Strategic Directions	Goals	Priorities First 12-18 Months	Longer Term Initiatives	Select Indicators and Performance Measures
4. Faculty Development & Support Lead: Associate Chair, Surgery	4-1 Establish a rigorous mentoring program within the Department of Surgery. 4-2 Strengthen and extend faculty support initiatives across the spectrum of practice. 4-3 Foster the development and succession of leaders across the Department. 4-4 Strengthen the Department's processes for academic support, appointment reviews, assessments of academic performance, and promotions.	1. Initiate a formal mentorship program. 2. Evaluate job descriptions for academic positions with clear expectations and measures of performance. 3. Establish and support initiatives that address financial stability throughout the academic career (e.g. pensions, workshops on business aspects of practice, late career and retirement planning).	1. Conduct evaluation of mentoring program at 3-5 years. 2. Update/create a manual which summarizes the essentials of academic career paths including job descriptions, continuing appointment and promotions. 3. Complete document which reports on faculty stress and burnout, defines methods to mitigate these and reports on results of initial implementation strategies. 4. Create and deliver workshops/symposia related to practice management including finances as well as leadership skills. 5. Explore opportunities for development of pension plan for faculty members.	<ul style="list-style-type: none"> • Number of faculty engaging in mentorship. • Faculty survey for degree of stress and burnout demonstrates fewer issues. • Number of workshops focused on business practice, career and related topics and attendees. • Number of faculty completing leadership development programs. • Explicit job descriptions, benchmarks, measures of performance and clear promotion criteria in place.
5. Integration & Outreach Lead: Departmental Appointments Committee Chair	5-1 Empower the Division Chairs in the Department to promote integration strategies across their hospital sites and across surgical divisions. 5-2 Build on existing collaboratives to strengthen the infrastructure required for greater success. 5-3 Build our international outreach and strengthen partnerships regionally, nationally and globally.	1. Advocate for cross-credentialing of U of T faculty across TAHSN hospitals. 2. Division Chairs to identify/catalyze collaborate initiatives that cross hospital sites and departments with a focus on new and potentially practice altering procedures or technologies.	1. Incorporate cross credentialing and potential for interdivisional/interdepartmental collaboration into the search process for new recruits. 2. Identify, lead and define international surgery as an academic track within the Department with infrastructure support. 3. Expand annual Departmental report to include Division Chairs highlighting integration initiatives across TAHSN sites addressing: education, research, quality, and service delivery.	<ul style="list-style-type: none"> • Number of new integration initiatives led by the Department or where Department of Surgery faculty are active collaborators with multi-site partners. • Increased number and funding for collaborative projects with industry and government sponsorship. • Number of faculty engaged in international surgery initiatives.

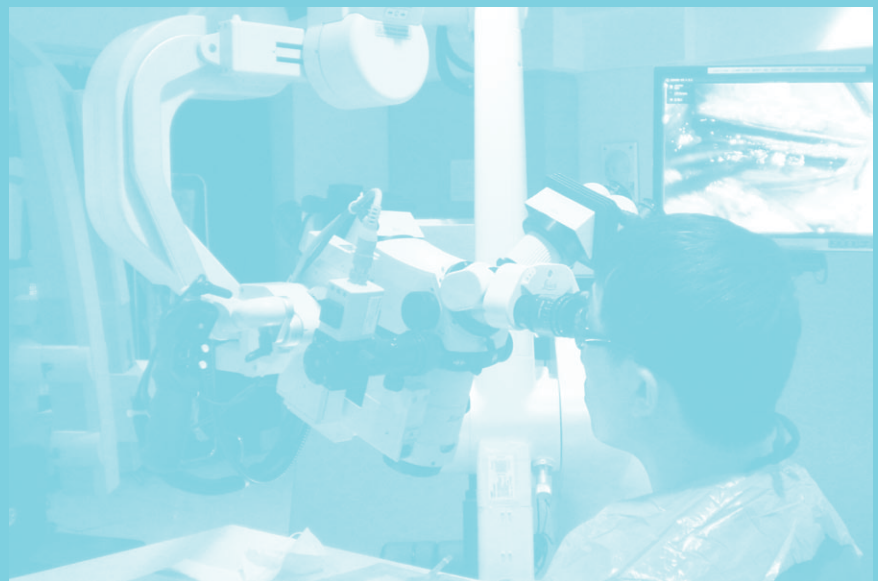
SUPPLEMENTARY APPENDICES

Available on University of Toronto Department of Surgery website
(<http://surgery.utoronto.ca>)

- I. Membership of Strategic Planning Steering Committee
- II. Membership of Working Groups
- III. Participants at Strategic Planning Retreat
- IV. Strategic Directions, Goals, Actions and Measures
- V. White paper proposing creation of Surgeon Scientist Training Program (2011)
- VI. White Paper for Full Time Scientists (2012)
- VII. Undergraduate Medical Education Retreat Summary of Proceedings



“This is an exciting time in the history of the Department of Surgery at the University of Toronto. By following our newly enunciated strategic directions, we shall reach an altogether new station in the delivery of exemplary care to our patients, and in the education of present and future generations of academic surgeons.”



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