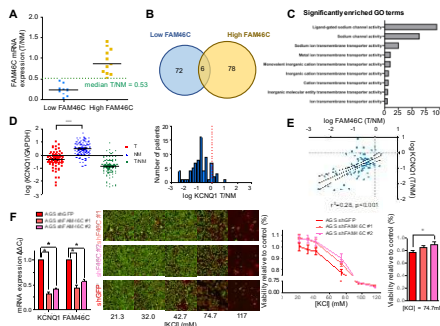


## Gordon Murray Lecturer



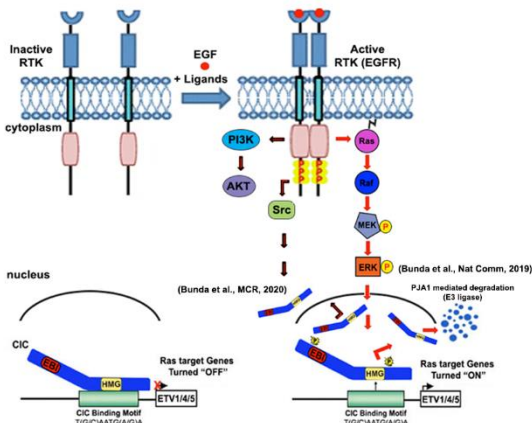
### Dr. Alan B. Lumsden

Walter W. Fondren III Presidential Distinguished Chair, DeBakey Heart & Vascular Center, Chair, Department of Cardiovascular Surgery; Professor of Cardiovascular Surgery, Houston Methodist, Weill Cornell Medical College, Houston, Texas



Shelly Luu (SSTP), et al. [Carol Swallow, Supervisor]: **Loss of FAM46C induces ion channelopathy in gastric adenocarcinoma (GCa).** A-C RNA-seq analysis of 21 patients who underwent curative-intent resection of GCa demonstrates that ion channel-related gene expression is significantly dysregulated in low-FAM46C tumours. D-E *KCNQ1* is underexpressed in GCa and its expression is correlated with *FAM46C* in patients. F FAM46C-depleted AGS GCa cells are better able to tolerate high [KCl].

### Severa Bunda, Gelareh Zadeh [Supervisor]



**Figure 1:** Cartoon depicting unstimulated and RTK stimulated downstream effector pathways and antagonism of gene repression by CIC. Ras/ERK promotes degradation of CIC and Src-mediated nuclear export of DNA unbound CIC relieving CIC gene repression.

## DRIVING THE FUTURE OF SURGERY: ARTIFICIAL INTELLIGENCE AND ADVANCED IMAGING TECHNOLOGIES

Event Chair: Dr. Michael Fehlings, Vice Chair Research  
Session Coordinators: Dr. J. Andrea McCart and Renata Musa

### 7:30 AM BREAKFAST

8:00 AM – Opening Remarks – Dr. Michael G. Fehlings, Dr. Carol Swallow, Vice Dean Justin Nodwell

Gallie-Bateman, McMurrich and Translational Research Presentations

Session Chair: Dr. Amin Madani, Endocrine and Acute Care Surgery, Division of General Surgery University Health Network, Toronto

8:15 AM Justin Z. Wang (SSTP), Vikas Patil, Farshad Nassiri, Gelareh Zadeh: *Comprehensive genomic characterization of CDKN2A alterations in meningiomas*

8:30 AM Hyo Jin Son, Denise W. Gee, David Gomez, James Jung: *The obesity paradox revisited: is obesity still a protective factor for patients with severe comorbidities or in high-risk operations?*

8:45 AM Julia Nomikos, et al, J Ted Gerstle, James M Drake, Rebecca Gladly: *The impact of magnetic resonance guided high intensity focused ultrasound generated hyperthermia and chemotherapy on the immune profile of a murine model of rhabdomyosarcoma*

9:00 AM Dave Mealiea (SSTP), Gary Yu, Lili Li, Jason Fish, Andrea McCart: *In vivo drug screening of tumor, immune, and vascular response within the tumor microenvironment*

9:15 AM Jen Dorsey, et al, Peter Ferguson, Kim Tsoi, Jay Wunder, Rebecca Gladly, David Shultz: *Characterizing hypoxia associated genetic features in extremity soft tissue sarcoma*

9:30 AM Sneha Raju (SSTP), et al, Jason E Fish, Kathryn L Howe: *Endothelial cells communicate with surrounding vascular cells through polarized release of extracellular vesicles containing distinct cargo: implications for atherosclerotic plaque development*

### 9:45 E-Poster Presentations

10:45 AM GORDON MURRAY LECTURE: Dr. Alan B. Lumsden

*"Imaging, Imaging and More Imaging – How Digital Visualization is Revolutionizing Surgical Care"*

### 11:45 AM LUNCH

12:30 PM SYMPOSIUM: *Artificial Intelligence and Advanced Imaging as Drivers of Surgical Innovation*

CHAIR: Dr. Michael G. Fehlings, Vice Chair Research

12:30 PM Dr. Julie Hallet: *Sharper Insight, Better Outcomes: Harnessing the Potential of Advanced Imaging for Performing and Teaching HPB Surgery*

12:45 PM Dr. Mojgan Hodaie: *AI-enhanced decision-making: transforming our approach to the neurosurgical treatment of pain*

1:00 PM Dr. Amin Madani: *Computer Vision for Augmentation of Operative Performance*

1:15 PM Dr. Dale Podolsky: *Towards robotic craniofacial surgery*

1:30 PM Dr. Victor Yang: *Towards an integrated surgical microscopy and robotics platform*

1:45 PM Panel

### 2:00 PM E-Poster Presentations

Gallie-Bateman, McMurrich and Translational Research Presentations

Session Chair: Dr. Chaya Shwaartz, Abdominal Transplant & HPB Surgical Oncology Associate Director, Abdominal Transplant & HPB Fellowship, University Health Network and University of Toronto

3:00 PM Takamasa Koga, et al, Alexander Gregor, Kazuhiro Yasufuku: *Establishment of lung cancer organoids using eb-us-tbna specimens via xenograft tumor*

3:15 PM Malak Elbatarny (SSTP), et al, Bo Wang, Maral Ouzounian, Anthony O Gramolini:

*Integrative phosphoproteomic analysis reveals human thoracic aortic aneurysms differ by anatomic segment: conventional & machine learning analysis*

3:30 PM Hillary Lia, Melanie Hammond Mobilio, Frank Rudicz, Carol-Anne Moulton: *The role of operating room professions in setting the tone for teamwork: a constructivist grounded theory study*

3:45 PM Nebras M. Warsi (SSTP), et al, George M. Ibrahim: *Closed-loop decoding and control of attention in children*

4:00 PM Ananya Gopika Nair, Vasily Giannakeas, John L Semple, Steven A Narod, David W Lim: *Contemporary trends in breast reconstruction use and impact on survival among women with inflammatory breast cancer*

4:15 PM Amine Mazine (SSTP), Alexander A. Mikryukov, Michael A. Laflamme, Terrence M. Yau, Gordon Keller: *Generation of the cardiac valve lineage from human pluripotent stem cells*

### 4:30 Wrap-up/Closing Remarks – Dr. Michael Fehlings & Dr. Carol Swallow

Friday May 5, 2023 – Gordon Murray Lectureship Dinner ♦ Omni King Edward Hotel  
Sovereign Ballroom, 37 King St E. ♦ 7 pm Reception ♦ 8 pm Dinner & Awards Ceremony  
Admission \$125 per person

Gallie Day 2023 is an accredited group learning activity as defined by the Maintenance of Certification Program of The Royal College of Physicians and Surgeons of Canada