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Research Award Applications Due

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General Surgery
Philippe Allen
Scott Livingstone
Lindsay McDonald
Tracy Meyer
Mark Oppenheimer
Matthew Smith

Orthopaedics
Venkat Ganapathy
Andrew Hayward
Alex Soroceanu
Nathan Urquhart

Plastic Surgery
Bryan Churg
Kevin Calder

ENT
Maha Al-Gilani
Ricky Jaggi

Neurosurgery
Sirajeddin Belkhair

**THE UPDATE**

This is a publication of DAL SURGERY. This will be published by the DAL SURGERY Research Office.

Please forward any comments and ideas for contributions to:

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**Message From the Department Head**

Dr. Jaap Bonjer

DAL SURGERY presented “Keeping the Promise,” a strategic planning document, to the Minister of Health, Chris d’Entremont on Thursday November 15, 2007 during a public press release. The document revolves around working differently to achieve better outcomes. Working as a team, thinking as a system and realizing that anything is possible when it comes to taking care of our patients are go forward principles of Dal Surgery. Minister d’Entremont committed the support of the Department of Health to Dal Surgery. Bruce Quigley, CEO of Cumberland Health Authority, reported positively on referring patients with inguinal hernias living in Capital District to Amherst for surgery. This pilot project started in September 2007 and underlines unused capacity in the other Districts in Nova Scotia.

Chris Power, President and CEO of CDHA, has formally approved a Surgery Program with co-leadership and joint budget authority. Dal Surgery is developing, in collaboration with CDHA, a management structure which enables integrated surgical teams tracking budget parameters, generating cost savings and reinvesting these savings in their programs.

The Department of Anesthesiology has established a full complement of anesthesiologists thanks to very successful recruitment by Dr. Mike Murphy and colleagues. As a result, the number of OR starts at the QEII has increased from 22 to 30. Sixty percent of the rooms have been turned into 8 hour rooms. Wait times for cardiac surgery and for oncological surgery in general and thoracic surgery have been reduced significantly. The waitlist for orthopedic surgical services remains daunting and requires more operating time and establishment of an assessment clinic. The Division of Orthopedic Surgery under the leadership of Dr. David Amirault is collaborating with Bone and Joint Canada, Department of Health and CDHA to open an assessment clinic in the coming months which will improve access greatly.

Dal Surgery had a very successful Research Information Day on October 19, 2007 followed by an elegant dinner at the waterfront. The calibre of the research and the growing partnerships were impressive. I want to thank Dr. Greg Hirsch and Elaine Marsh for their outstanding organization of the event.

Research Information Day was preceded by the sod turning ceremony for the Life Science Research Institute (LSRI). Dr. Ivar Mendez and his team were congratulated by provincial and national dignitaries. The shiny stainless steel shovel which was operated smoothly by the Honorable Rodney MacDonald and the Honorable Peter MacKay was last used for the Tupper Building in 1963. Dr. Mendez and his team deserve great recognition for their tremendous work in making the LSRI a reality.

I wish you and those who are close to you a wonderful celebration of the Holidays. It is a great honour to serve you as Department Head. I am looking forward to continuing our exciting clinical and academic journey in 2008.

Jaap Bonjer, M.D., Ph.D., FRCSC  
Professor and Head Dal Surgery
Message from the Director of Education
Dr. Brock Vair

DAL SURGERY WELCOMES DR. BROCK VAIR as the Director of Education for the Department of Surgery. Dr. Vair accepted this position in July 2007 with a strong vision and dedication to surgical education for both medical students and residents.

Dr. Vair is a graduate of Acadia University. He received his medical and General Surgery Residency Training at Dalhousie University. He also completed a Fellowship at the University of Florida. Dr. Vair’s clinical interests focus on pancreatic and biliary surgery. His educational interests have been well exercised since his Faculty appointment at Dal Surgery, actively being a Royal College Examiner and the Vice-Chair of the Examination Board in General Surgery. He was the Program Director for the General Surgery Residency Training Program from 1996-2001 and his dossier for both undergraduate and postgraduate surgical teaching is very impressive. He has been awarded numerous teaching awards by medical students and residents.

Since becoming the Director of Education, Dr. Vair has proposed changes in the existing curriculum. In undergraduate education, Dr. Vair is determined to improve the feedback, assessment, and evaluation of clinical clerks with timely round-table evaluations. He is also revamping the surgery multiple choice examination for this current academic year, and is hopeful that with the class of 2010 the National Board of Medical Examiners (NBME) exam will be in use at Dalhousie University.

His immediate focus for postgraduate training is in regards to the CanMEDS competencies, with special attention being given to the Communicator and Collaborator proficiencies. All of the CanMEDS competencies will be embedded in the curriculum and mechanisms will be in place for teaching, assessing and evaluating each of the competencies. The implementation of a two year lecture series for the core residents academic half day, and an improved collaboration with the Surgical Postgraduate Education Committee are also goals set by Dr. Vair in his new position.

Dr. Vair’s dedication and leadership in the surgical education arena will serve us well as Director of Education.

Welcome Dr. Vair!

Message from the Director of Research
Dr. Greg Hirsch

We are very fortunate here at Dal Surgery in that we have a talented research community and departmental leadership with a strong vision for academic surgery. The accomplishments of the Dal Surgery Research Community are a source of pride for all of us. It has been amply demonstrated that clinical care is best when it is provided in a robust academic environment. Elaine Marsh is compiling the first annual Dal Surgery Research Report, and I am pleased to be able to say that our accomplishments in grant capture, publication track record, and graduate student training will stand up to any North American Academic Medical Centre. We are seeing continued growth of our multidisciplinary research teams. Examples include opening of the Lab for Transplantation on the 10th floor Tupper Building and ground breaking for the new LSRI. New teams are taking shape as well, like the Cardiovascular Research Group and in Dr. Manohar Bance’s EAR Program embracing new technology developments. This is truly a threshold moment for Dal Surgery Research!
“Dr. Sigurdson is a role model when it comes to patient care, patient interaction, research and teaching. We are very fortunate to have him in our program, especially as program director”

**Phil Barnsley, PGY 5 Plastic Surgery Resident**

THE DIVISION OF PLASTIC SURGERY is home to the respected and well liked physician, Dr. Leif Sigurdson. Dr. Sigurdson was born in Vancouver British Columbia, he completed his undergrad in Biochemistry at Queen’s University and graduated with his Doctor of Medicine from Queens in 1992.

Dr. Sigurdson first came to Dalhousie to do his Plastic Surgery Residency resulting in his membership into the Royal College of Physicians and Surgeon of Canada in 1997. He has completed two Fellowships: The first from 1997-1998 here at Dalhousie and the second at Emory University in Atlanta from 1998-1999. Dr. Sigurdson has been the Resident Program Director in the Division of Plastic Surgery for the past 5 years, and during this time he has completed both his MSc in Epidemiology (2004) from Dalhousie and his Executive MBA (2007) from St. Mary’s University. This desire of personal continued education is mirrored in his dedication and mentorship of the Plastic Surgery Residents, as Dr. Phil Barnsley, PGY 5 Plastic Surgery Resident shares, “During the Royal College evaluation of the Plastic Surgery Program, the evaluators suggested that he had put more time and effort into his position of Program Director than any other in the country. He has always been very supportive of resident research, enabling many to take time away from the program, with no clinical responsibilities, in order to pursue advanced research training. He is an excellent teacher one on one, and takes much of his own time giving oral exams to senior residents as they prepare for their final exams”

Beginning in 1996, as a resident in Plastic Surgery, Dr. Sigurdson began volunteering a few weeks a year for the international organization, Operation Smile. In this organization cleft lip and palate corrective surgery is undertaken in the most desolate medically equipped countries. Dr. Sigurdson has traveled yearly on a mission for this organization performing craniofacial surgeries in countries in South America, Asia and as of this November will have taken Dr. Mike Bezhuly, a Plastic Surgery Resident on his 11th excursion to Novosibirsk, Russia. Dr. Sigurdson’s ability to lead by example has prompted and encouraged many to follow the good work being done by Operation Smile. This has become an important component in the overall residency program in Plastic Surgery, as Dr. Sigurdson provides the opportunity for any senior resident to participate in Operation Smile, bridging one’s training with a passionate cause.

Dr. Sigurdson successfully balances his professional and personal life. Dr. Sigurdson is married to Dr. Leanne van Amstel, who is completing her Radiology Residency this year. They have two young children, Eric and Kate, and Dr. Sigurdson is fortunate and proud to take an active role in their upbringing.

He and his family enjoy sailing, hiking, running, and the great outdoors, in general.

Dr. Sigurdson’s family originally is from Iceland, and he is rightly proud of his heritage. His quiet confidence, determination, and exceptional work ethic have been part of his family history for generations.

**Dr. Sigurdson with Operation Smile Patient, Russia 2007.**

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**Faculty Profile**

Dr. Leif Sigurdson
We are focused on identifying the critical proteins necessary for the generation of an axon and synapse. Determining how proteins communicate with one another in these processes is critical for repairing the nervous system following damage.

Dr. James Fawcett was recruited to Dalhousie University in 2006. Dr. Fawcett holds a joint appointment with the Department of Surgery (Neurosurgery) and the Department of Pharmacology. Dr. Fawcett obtained his PhD in Developmental Neurobiology from McGill and did his Postdoctoral Training with Dr. Tony Pawson at the Samuel Lunenfeld Research Institute in Toronto (U of T). Dr. Fawcett holds a Canadian Research Chair (Tier 2) in Brain Repair and is actively working in a collaborative setting with other distinguished researchers at the Brain Repair Centre.

Dr. Fawcett’s Lab is located on the 6th floor of the Tupper Building. His laboratory is equipped through a CFI award. Current funding for the lab includes a number of local awards including an equipment award and a New Investigator award from the Dalhousie Medical Research Foundation (DMRF), a grant from the Faculty of Medicine and a grant from Capital Health. Nationally, Dr. Fawcett holds operating grants from the CIHR (2007) and an NSERC discovery grant (2006). His lab is newly renovated and contains a tissue culture facility, microscopy suite for live cell imaging and a molecular biology unit. In addition Dr. Fawcett is part of the recently awarded $15 million dollar CFI team lead by Dr. Robert Brownstone.

One area of focus in Dr. Fawcett’s lab involves identifying the mechanisms that underlie the development of a neuron. A neuron, the fundamental unit of the nervous system contains an axon that is responsible for transmitting signals from one neuron to a target cell. A neuron also contains multiple dendrites that are designed to receive information from other cells. In CNS injuries, including spinal cord injuries, the axon is damaged or severed. Dr. Fawcett’s research focuses on protein-protein interactions and utilizes mass spectrometry based screens to identify signaling molecules and complexes that are underlying the development of the axon.

The Fawcett lab also concentrates on the development of spinal cord circuits that control locomotion. Using mouse models and genetic engineering Dr. Fawcett has been able to identify important signaling pathways and neuronal circuits that are necessary for the development of the central pattern generator, an intrinsic spinal circuit that controls walking. His lab is now pursuing these pathways in collaboration with other researchers at Dalhousie including Dr. Robert Brownstone and Dr. Victor Rafuse to better define the neuronal circuitry and signaling mechanisms involved in walking.

Recent Publications:


The Division of Cardiac Surgery provides tertiary cardiac care to the Maritime Provinces. Under the leadership of Dr. Greg Hirsch, Cardiac Surgery continues to be a very busy service with more than 1100 open heart procedures per year. Cardiac Surgery, at Dalhousie is committed firstly, to delivering the very best service in cardiac care to the Maritime Provinces, secondly, holding the education and training of its residents and medical students to the highest standards, and thirdly, promoting on-going research by its faculty and trainees with the hopes that all new findings will ultimately promote the care of their patients.

In addition to general adult cardiac surgical care:

- Pediatric Cardiac Surgery
- Heart Failure and Transplant
- Rhythm Surgery
- Minimally Invasive Surgery
- Thoracic Vascular
- Mechanical Heart

Cardiac Surgery Residency Training Program:

There are presently 5 Residents enrolled in the Cardiac Residency Training Program. Dr. Roger Baskett is the current Residency Training Director overseeing the many facets of education and training. All residents are exposed to all areas of surgery and have an excellent clinical based training component. Cardiac Surgery residents are required to engage in a 12-month research-exclusive component during their training. The most recent graduating resident in Cardiac Surgery, Dr. Ansar Hassan received his PhD during his training, while Dr. Dimitri Kalavrouziotis has recently completed his Master’s degree within the CIP program here at Dalhousie. Dr. Maral Ouzounian, is presently pursing her research interests at the University of Toronto and will return to Dalhousie to continue clinical education after the completion of her PhD.
This past year saw the sad loss of Mr. Richard Leadon. Richard was a pioneer in the field of Cardiovascular Perfusion here in Halifax. He retired from the IWK Health Centre and the Capital District Health Authority after 31 years of dedicated service as the Chief of Cardiovascular Perfusion. Richard was the recipient of the D.A. Gillis Award for Clinical Excellence and an inductee into the American Board of Cardiovascular Perfusion Hall of Fame. During his career, he was also an executive member of the Children’s International Medical Society. This is a group of dedicated professionals who worked with surgical teams in India, China and Russia. There are numerous Perfusionists around the world who have had the benefit of Richard’s leadership and guidance during their careers. His love for his family was only matched by his love for travel and sharing his knowledge of a profession he so dearly cared for.

2007 marked the inauguration of The Richard Leardon Memorial Lecture. Through a generous donation from family and friends, and the Faculty of Cardiac Surgery, a legacy for Mr. Leardon has been established to promote and encourage continued education.
FOR THE PAST 35 YEARS DR. WINSTON S. PARKHILL has been the constant face of Plastic Surgery in Halifax. His reputation spreads much farther abroad than that however. Mention his name to others in this field nationally and internationally and it is greeted with a smile, sometimes a “knowing wink”, and often a story of some grand adventure or escapade from the past.

It was with heavy hearts that we said farewell to Dr. Parkhill in the Spring of 2007 as he continued on into retirement. While he certainly deserves a break after all this time, he is truly missed by his students, colleagues, nurses, and most of all his patients. He is a man with a huge heart. He taught his students and residents how to become excellent surgeons and he was an exemplary role model for all in his patient care. He truly loved his patients. This was apparent from the many hugs he received during clinics, from the bounty of baked bread and preserves he would carry home after clinic, how he would often get a tear in his eye when discussing bad news and how he phoned each of his patients the day after surgery, just to let them know he was thinking about them. His former patients remember him as being like a father- no matter if they were 17 or 70!

This quotation is from the introduction to Dr. Parkhill’s teaching dossier: “I have attempted to develop my field of expertise to give good patient care. This must start with self. There are three A’s that are essential - ability, availability, and affability. I have worked diligently to foster these essentials in my clinical practice, in my academic career, and in my community.” Well, Dr. Parkhill, you have certainly met and exceeded these goals!

Dr. Parkhill was born in Chipman, New Brunswick, and worked in his father’s forestry business in the early years. He went on to Dalhousie Medical School in 1963 where he excelled and received, among other honours, the top prize in Anatomy- the plaque still hangs on the 14th floor of the Tupper Building. His knowledge and love for anatomy was clear if you ever operated with him- he knew every detail, and expected his students to know no less! He did his General Surgery residency at the Victoria General Hospital, then his Plastic Surgery training at University of Toronto, returning to Halifax in 1972 to begin his long and illustrious career.

Dr. Parkhill is by no means slowing down in his retirement! Along with his wife Mary, his 5 children, and 7 grandchildren he has carried on a very busy schedule. From entertaining at the cottage in Grand Lake, New Brunswick, to traveling, to golfing, to starting a book club- there is rarely a dull moment!

While Dr. Parkhill is deeply missed, we wish him and Mary good health and a long life in this, their most deserved retirement!
**New Faculty**
Dr Lucy Helyer

**Dr. Lucy Helyer** joined the Division of General Surgery in July 2007. She will be joining Drs. Carman Giacomantonio and Geoff Porter as a member of the Surgical Oncology Team. Dr. Helyer is a graduate of Dalhousie Medical School and finished both a Family Medicine (Fredericton) and General Surgery residency here. Dr. Heyler has spent the past three years in Toronto completing a Fellowship in Surgical Oncology, as well as completing a MSc in Clinical Epidemiology at the University of Toronto. She is interested in quality assurance parameters pertaining to breast, melanoma, and rectal cancer in Atlantic Canada. Lucy is happy to be back in Nova Scotia joining a dynamic and progressive department.

*Welcome Dr. Helyer!*

**New Faculty**
Dr James Ellsmere

**Dalhousie Surgery welcomes Dr. James Ellsmere** as an Assistant Professor in the Division of General Surgery. Dr. Ellsmere completed his undergraduate training in Electrical Engineering at the Technical University of Nova Scotia. He then completed his MD and BSc(Med) at Dalhousie, working closely with Dr. Micheal Lee in the Tissue Mechanics Laboratory. A successful graduate of the Clinical Investigator Program saw Dr. Ellsmere spend two years of his residency time in full time research at the Massachusetts General Hospital under Dr David Rattner. His research in the Surgical Planning Laboratory focused on developing an intraoperative navigation method that enabled surgeons to optimally use laparoscopic ultrasonography. The system he developed has been adopted to enable endoscopists to perform endoscopic ultrasonography, and is currently being evaluated in a multi-center prospective trial. He completed a Masters in Medical Informatics at the Massachusetts Institute of Technology during this time in the laboratory. Following completion of his residency, he returned to Boston and completed the Harvard Fellowship in Advanced Laparoscopic Surgery. He then did an additional Fellowship in Therapeutic Endoscopy through Harvard Medical School at the Beth Israel Deaconess Medical Center. Dr. Ellsmere’s clinical interests are in minimally invasive gastrointestinal surgery, including therapeutic endoscopy and advanced laparoscopy.
**Health Science Skills Centre:**

**JANUARY 2008** is fast approaching and with that comes the much-anticipated opening of the Skills Centre for Health Sciences.

Under the leadership of Dr. Jaap Bonjer, the Director of the Skills Centre, students and staff of all health sciences will be able to use the center. This center will alleviate the constraints put on surgical training which are challenged by a variety of factors such as patient availability, the loss of OR time, financial and efficiency pressures, rapid advancement of technology as well as ethical and legal concerns for patient safety. Having a dedicated facility like this makes medical education easily accessible for teaching and practicing basic and advanced skills. It also provides a safe environment for students to learn from their mistakes without ethical or legal consequences.

Located in the basement of the Bethune Building, a space of 4000 square feet has been secured. Start up funding for the center have been provided by Ethicon Endosurgery, Storz, The Department of Surgery and private donations. Equipment donations have also been given by Olympus, Stryker, Linvatec and Alcon.

As all specialty curriculums are developed by Resident Program Directors and Educators, the Skills Centre will be available for core lectures and training. This will be an excellent resource center for one-on-one teaching and the center will have a sign-up procedure implemented for booking specialized teaching segments. Outside of this fixed booked time, the centre will remain committed to having an open door policy, for students and staff to use the facility for practice or teaching.

The technical aspects of the center are quite impressive. There are 5 hydraulic lab benches, 5 laparoscopic towers and trainers and a dedicated ophthalmology simulator room. Manual skills training can be done using mechanical models, virtual reality simulation and cadaver human and animal tissues. The creative possibilities for teaching are endless, and all faculty are encouraged to embrace this new learning tool to enhance their residents’ skill development. The standard progression of the medical student to the resident to surgeons using the “see one, do one, teach one” model can be challenged directly. This new adaptation of pilot training and simulation skill development in conjunction with live patient training, will allow our residents to have the potential to be successfully trained over and beyond many of their counterparts across Canada.

The other major component of the skills center is the teleconferencing and audiovisual room. Telehealth and telementoring will eventually connect all health care sites in and outside the Atlantic provinces providing a continuous environment of education and consultation.

The center is to be used by all healthcare disciplines, and the coordination of these diverse groups will be managed by Michelle Murray. Michelle is an RN with 13 years experience in the VG OR. Michelle is geared for the exciting challenge of managing the Skills Centre and is looking forward to working with everyone!

**Michelle Murray can be reached at 473-1963.**
THE DIVISON OF NEUROSURGERY is the first Canadian centre to own an RP7 robot (Robotic Remote Presence). Remote presence should be considered a new medium of communication, and a new way to interact with patients. It allows physicians to see and examine patients remotely, in real time. With the ability to visually assess patients, the clinician can make a much more informed and timely decision, and determine if the patient will require transfer to a tertiary care centre. Specialist advice can now be given with much greater precision and clinical accuracy. The robot can be controlled from anywhere in the world with access to high speed internet. The robot itself operates using a wireless connection, with a battery life of over 8 hours. It’s dimensions approximate that of an adult human, and it has a flat screen display showing the operator’s face as captured on a digital webcam.

The greatest attribute of the RP7 however is its ability to become innocuous. Within days of its arrival on our neurosurgery ward, the robot simply became part of the surroundings. Nurses and patients interact with the robot as if the operator were there in person. Verbal orders are given, wounds are checked, concerns addressed. Studies have shown that patients would rather be seen by their own surgeon remotely, than be seen in person by a physician unknown to them. Our RP7 unit is now being used in the emergency department at the QEII. In our pilot study we are evaluating the robot’s ability to increase the efficiency of neurosurgical consultations. In addition, there is now a functional robot in the emergency department in Sydney, NS. A parallel study is underway at that centre evaluating its impact on referral and transfer patterns for neurosurgical patients in Cape Breton. A new robot will soon be installed in Yarmouth NS, further adding to our ability to provide expertise to centres remote to our academic institution.

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**Departmental News**

Dr. Chris Murphy was awarded Resident Teacher of the Year by the graduating class of 2007.

Dr. Michael Dunbar received the Young Alumnus Award from DMAA.

Dr. William Stanish received the Order of Nova Scotia.

Sheila Reid, Education Coordinator received her Master’s in Education.

Julie Jordan from the Department of Pathology was a winner at this year’s Dal Research day.

Dr. Lara Williams, won a DMAA Award at this year’s Faculty of Medicine Resident Research Day.

Dr. Darren Costain won the NSHRF Best Poster Award at this year’s Faculty of Medicine Resident Research Day.

Dr. Camille Hancock Friesen received a Junior Clinical Scholar Award from the Faculty of Medicine.

The following Orthopaedic Residents were awarded prizes in Orthopaedic’s Annual Yablsey Day: Dr. Venkat Ganapathy, Dr. Ben Smith, Dr. Tracey Wentzell and Dr. Ben Orlk.

**Promotions:**

Dr. Idris Ali - Promoted to Professor

Dr. Carman Giacomantonio - Promoted to Associate Professor

Dr. Chris Cook - Promoted to Associate Professor

Dr. S. Mark Taylor - Promoted to Associate Professor

Dr. L. Sigurdson - Promoted to Associate Professor
Dr. Mike Bezhuly and Dr. Jane Watson are 2007-2008 Surgical Residents enrolled in the Clinical Investigator Program (CIP).

Dr. Bezhuly is a PGY 4 Plastic Surgery Resident working on his MSc in the Department of Anatomy and Neurobiology. His research study project is entitled, “The role of endothelial protein C receptor in ischemia-reperfusion injury and allograft vasculopathy”.

Dr. Jane Watson is a PGY 3 General Surgery Resident presently working on her MSc in Medical Sciences. She is working with Drs. Carman Giacomantonio and David Hoskin on her thesis project, “Chemosensitization of ovarian and breast cancer cells by prior exposure to curcumin”.

Funding application guidelines and due date information can be found on the DAL SURGERY Research Web page: http://surgeryresearch.medicine.dal.ca