



The SURGICAL Beacon

DEPARTMENT OF SURGERY - DALHOUSIE UNIVERSITY - DECEMBER 2006, VOL. 11, NO.1

Congratulations to the Graduating Surgical Residents 2006



Left to Right: Steven Sohmer, Mohammed Bangash, Freeman Lockheart, Heather Redstone, Jean Luc Ethier, Wesam Abuznadah, Chris Dover, David Kingsley, Brendan McCarthy, Sarah Ortega, Shelly O'Neill, Daniel Wong.



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Surgical Beacon

This is a publication of the Department of Surgery at Dalhousie University. *The Surgical Beacon* will be published annually by the Department of Surgery Research Office.

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Message From the Department Head

Dear Members of the Department of Surgery:

It is my pleasure to contribute to the Surgical Beacon as incoming Department Head. I was inspired by the gathering of clinical and basic scientists during Research Information Day, followed by a dinner to celebrate and acknowledge all of the clinical and academic accomplishments of the Department of Surgery. I would like to take this opportunity to thank Dr. Ivar Mendez for his great accomplishments as Research Director. Dr. Mendez has led surgical research in the Department of Surgery by example; his energy and dedication are contagious. Dr. Mendez had the vision to introduce a transparent and objective process to award research funding to members of the Department of Surgery.



It is with great pleasure that I announce Dr. Greg Hirsch has been appointed Director of Research. Dr. Hirsch has an impressive track record in clinical and basic research. Dr. Hirsch, who is equally comfortable at the OR table as at the lab bench, embodies an outstanding bridge between clinical and basic sciences. I congratulate Dr. Hirsch, and the newly appointed Research Committee, and look forward to their future contributions.

The Department of Surgery welcomes Dr. Craig Hurst and Dr. Jason Williams to the Division of Plastic Surgery, Dr. Sam Minor to the Division of General Surgery, Dr. Rob Hart to the Division of Otolaryngology, Dr. Sean Christie to the Division of Neurosurgery and Dr. James Fawcett as a Basic Scientist in Neurosurgery. These excellent new recruits enhance the strength of the Department and reflect the great recruitment potential in Halifax.

The clinical and academic ambitions of the Department of Surgery are strong in an environment of unlimited opportunities. Functions such as Research Information Day allow us to share and learn from each other, find new inspiration, and build an even stronger Research Program.

Dr. Jaap Bonjer
Professor and Head Department of Surgery

Department of Surgery Research Day

Submitted by: Elaine Marsh

The 17th Annual Resident Research Day was held on April 11, 2006 at the Halifax World Trade and Convention Centre. Thirty abstracts were accepted for presentation by the Department of Surgery Research Committee. Dr. David S. Schrupp, Head of Thoracic Oncology at the National Cancer Institute joined the Department as the 2006 Gordon W. Bethune Visiting Professor in Surgery presenting the noon time lecture entitled, "Epigenetic Therapy for Lung Cancer". The distinguished judges for this year's event were Dr. David S. Schrupp from the National Cancer Institute Bethesda, Maryland, Dr. Alan Cruess, Head, Department of Ophthalmology, Dalhousie University, and Dr. Harold Robertson, Professor, Department of Pharmacology, Dalhousie University.

Department of Surgery Research Day Award Winners

Resident Platform Presentation

1st Prize - Dr. Ansar Hassan, Cardiac Surgery

2nd Prize - Dr. Wojtek Karolak, Cardiac Surgery

Resident Poster Presentation

1st Prize - Dr. Dimitris Kalavrouziotis, Cardiac Surgery

Student Platform Presentation

1st Prize - Mr. Jeremy Murphy, Neurosurgery

Honourable Mention - Ms. Sara Nejat, Surgery

Honourable Mention - Mr. John Haverstock, Surgery

* Dr. Dimitris Kalavrouziotis also won the best overall clinical presentation at the 2006 Faculty of Medicine Resident Research Day, May 2006

**Research Day is April 3, 2007
at the Westin Nova Scotian Hotel**

**Abstracts are due March 1, 2007
to Elaine Marsh, Room 2006, Halifax Infirmary**

Research Committee Report

Submitted by: Dr. Greg Hirsch & Elaine Marsh

2006 was a signal year for the The Department of Surgery Research Office, as it inaugurated the Dr. Robert Stone Traveling Fellowship Award. This is awarded to the first place resident from Resident Research Day. The first Recipient of the Dr. Robert Stone Traveling Fellowship is: Dr. Ansar Hassan from Cardiac Surgery.

The Dr. Robert Stone Traveling Fellowship is an annual award in the amount of \$3,500.00.

The Department of Surgery Research Committee: 2006

A peer reviewed process for allocating Departmental Research Funds was established by Dr. Mendez and his Committee this Year. Awards were given in the areas of Seed Funding, Bridge Funding, Matching Funds and Salary Support for Resident Research Training. The budget for 2006 was for \$400,000.00. This marks the first year financial support research activities have been awarded in an open competition subject to peer review. These efforts will go far to advance the research activities of our Department.

Chair: Ivar Mendez

Members: Drs. Jean-Francois Legare, Mark Walsh, Natalie Yanchar, Manohar Bance, Mike Dunbar, Steve Morris, Tim Lee and Thomas Issekutz.

Administrator: Elaine Marsh

This year funding applications were available to staff and residents in the following categories: Seed Funding, Bridge Funding, Resident Funding, Match Funding.

Awards were granted to the following:

Seed Funding:

Dr. Mark Glazebrook	\$ 50,000.00
Dr. Michele Molinari	\$ 42,000.00
Dr. Ron El-Hawary	\$ 40,000.00
Dr. Stacy O'Blenes	\$ 18,000.00
Dr. Juan Zhou	\$ 24,600.00

Bridge Funding:

Dr. Camille L. Hancock Friesen	\$ 50,000.00
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Match Funding:

Dr. Manohar Bance	\$ 50,000.00
Dr. Carman Giacomantonio	\$ 25,400.00

Resident Funding:

Dr. Dimitris Kalavrousiotis	\$ 50,000.00
Dr. Lara Williams	\$ 50,000.00



The Inauguration of the Dr. Robert Stone Traveling Fellowship



Dr. Ansar Hassan first recipient of the Dr. Robert Stone Traveling Fellowship

The Mechanical Heart Program

Submitted by: Dr. J.F. Legare



Dr. J.F. Légaré, Surgical Director of Cardiac Transplantation

Heart transplantation has been for many years the established treatment of patients with end stage heart failure. In fact more than 175 heart transplants have been performed in Halifax since 1988. However despite these efforts many patients in need of a heart transplant die without receiving an organ in a timely fashion. This in conjunction with the chronic donor shortage has led to the development of mechanical circulatory devices, which could be used to support patients until an appropriate organ can be found. Mechanical circulatory support in the form of ventricular assist devices (VAD) have recently become an important tool in the



Best view of external Thoralec VAD

care for many patients with severe heart failure unresponsive to therapy in which a donor heart for transplantation cannot be obtained in a timely fashion. These devices can provide ventricular support by draining the arterial blood from the ventricular apex, connected to a pump, which then

returns the blood to the rest of the body. The technology is advancing rapidly with better, smaller and more versatile systems allowing patients the chance to recover from their acute illness and maintain physical activity. In fact VAD devices have been approved in the USA for destination therapy i.e. for patients in whom a heart transplant is not possible.

After several years of work initiated by Dr John Sullivan the VAD program in Halifax was established. In May of 2004 we implanted in Halifax our first VAD as bridge to transplant. After 2 years we have implanted VAD's in 10 patients many of which have been able to return home while waiting for a suitable donor. The indications for VAD implantation have been cardiogenic shock and inability to transplant de-novo because of pulmonary hypertension. The mean wait time to transplant post VAD implant has been well above 4 months in these patients. To date the results have been excellent with 7 patients bridged to transplant and 2 currently waiting at home.



Thoralec portable TLC II Driver

A multidisciplinary team of surgeons, nurses, physiotherapists and perfusionists supports the Halifax Ventricular Assist Device Program, which in turn compliments well the Cardiac Transplant Program. Dr's Roger Baskett and Jean-Francois Légaré received fellowship experience in the surgical management of VAD patients.

New Residents:

General Surgery:

Orthopaedics:

ENT:

Neurosurgery:

Cardiac Surgery:

Plastic Surgery:

Erin Cordeiro, Mary MacDonald, Neil Petrie, Devon Richardson, Earle Sears & Paul Yaffe

Ghazi Al-Qahtani, Eric Anderson, Peter Copithorne & Adrienne Kelly

Clark Bartlett & Kristian MacDonald

Sean Barry

Christine Herman & Wojtek Karolak (PGY 3)

David Tang

Postgraduate Education



Dr. Renn Holness, Director of Education, Department of Surgery

Congratulations to the 12 graduating Residents, 10 were successful in their Royal College exams this summer. They were: Drs. Daniel Wong, Cardiac Surgery; Wesam Abuznadah, David Kinsley, Brendan McCarthy, Sarah Ortega, Heather Redstone, General Surgery; Mohammed Bangash, Neurosurgery; Freeman Lockhart, Shelley O'Neill, Stephen Sohmer, Chris Drover, and Jean Luc Ethier, Otolaryngology.

The majority of the graduates are headed for sub-specialty Fellowships.

All of our Programs received excellent candidates in the recent CaRMS Match. We extend a warm welcome to all!

The Royal College of Physicians and Surgeons reviewed all of the Surgical Programs in February 2006; some of the future goals stemming from the review include more CanMeds teaching, and a revamped Core Surgery Program. Dr. Guy Brisseau, Pediatric General Surgeon has been appointed Core Surgery Program Director and we look forward to his involvement in the Core Surgery Program. A good time was had by all at the Annual Department of Surgery Resident Golf Day. Dr. Mark Glazebrook, Orthopedic Surgery and Dr. Steve Pooler, General Surgery had low scores for Staff and Resident. The winner of the Staff draw, a \$200.00 gift certificate to Bish Restaurant, was Dr. Mark Taylor, Otolaryngology. Dr. Mark Sawatzky, General Surgery won the Resident draw for an iPod.

Undergraduate Education

Under Dr. Cathy Coady's direction the Department continues to contribute significantly to the Medical School Curriculum in the first and second years. As usual we were well represented by COPS Tutors this year and have a large number of tutors for the upcoming year. Once again, General Surgeons and Orthopedic Surgeons participated in the Med II Patient/Doctor Sessions.

The Surgery Clerkship has completed its first year under the revised format of nine weeks of Surgery and three weeks of Emergency. Overall the transition was smooth and no further changes to the Clerkship have been made. The Lecture Series has also completed a full year of being teleconferenced to Saint John using the Brigit system and although there were some initial problems with regard to location this seems to have been remedied.

The Department of Surgery was well represented at the Canadian Undergraduate Surgical Education Committee Meeting which took place in Banff, Alberta in December. Dr. Cathy Coady, Clerkship Director, Dr. Renn Holness, Director of Education, and Sheila Reid, Education Coordinator were all in attendance.

There are two Department of Surgery Excellence in Undergraduate Teaching Awards that are presented to a Staff and a Resident each year. These awards are selected by the medical students. This year the students chose Dr. Winston Parkhill, Plastic Surgery for the Staff Award and Dr. Darren Costain, Orthopedic Surgery for the Resident Award. Congratulations!

Atlantic Health Sciences Skills Center

The Skills Center which was initially planned on the main floor of the Victoria General will be established in the basement of the Bethune Building. Construction is expected to start in the near future. The available 3000 square feet will accommodate a telehealth room with seating for 16, a hands-on training space with benches and simulators, and a digital editing facility. The intent is to meet the standards of a "wet lab" to allow training on cadaveric tissues. Capital Health, Dalhousie University, private donors, and industry have provided the means for the Skills Center.

Program Profile Division of Pediatric General Surgery

Submitted by: Dr. Natalie Yanchar

Somewhat hidden from view from the rest of the Dalhousie Department of Surgery, due to all of the recent construction, the Division of Paediatric General and Thoracic Surgery has quietly been growing in depth and breadth over the past few years. The addition of Dr. Guy Brisseau in January, 2005, rounded out the division with his strong interests in minimally invasive surgery and surgical education, to complement those of Dr. Michael Giacomantonio, Division Head and Children's Oncology Group Surgical Liaison and Dr. Natalie Yanchar, Research and Medical Director of the IWK Trauma Care program.

Leading the way with his teaching, laparoscopic and thoracoscopic skills, Dr. Brisseau has broadened the depth of minimally invasive procedures done within the division. This has subsequently fostered collaboration between the division members and those of other surgical subspecialties to keep the IWK at the forefront of tertiary pediatric surgical care in the East. His further contributions to the Dalhousie Surgical Skills Center will continue to enhance this process.

Being one of 35 Approved Specialty Training Programs in Paediatric General Surgery in North America, the Division prides itself on its ability to provide sound clinical and academic teaching to a steady stream of "fellows", medical students and post-graduate trainees from many specialties. Under the auspices of the Program Directorship of Dr. Giacomantonio, nine very successful Paediatric surgeons have come through the program over the past 18 years, now practicing in all parts of North America and Saudi Arabia. This past spring, after a successful review by the Royal College, the Program Directorship has been handed over to Dr. Brisseau to carry on its legacy. To add to this, "Dr. Brisseau's recent appointment as Program Director for the Dalhousie Core Program in Surgery along with the generalized popularity of clinical rotations in Paediatric Surgery, have created a strong educational link of the division to the Department of Surgery.

This past September, the IWK underwent successful re-accreditation as a Paediatric Tertiary Trauma Center by the Trauma Association of Canada. IWK Trauma Care, under the directorship of Dr. Natalie Yanchar, has grown exponentially in the past few years to become a well recognized entity within the health center, with its own funding, part-time office, and (hopefully, soon to be) trauma coordinator. Dr. Yanchar has been active in developing policies for the program (including province-wide cervical-spine clearance guidelines for children), outreach activities to other parts of the

province and collaborative efforts with other pediatric trauma centers across the country. Her position as the Chair of the Pediatric Committee of the Trauma Association of Canada, active accreditor status for that association and leadership positions on several trauma-based national research projects has let the rest of the Canada see what can be done by a little province on the east coast.

Research is a strong focus of the Division. All three surgeons participate in collaborative projects on a variety of clinical pediatric surgical topics, providing fodder for the medical students and residents with case reports and outcomes-type studies. The IWK is also a site participant in CAPSNet (the Canadian Pediatric Surgical Network), a national database looking at surgical outcomes in a variety of congenital anomalies, of which Dr. Yanchar is a Founding and Steering Committee member. Trauma and Injury Prevention is also a major focus of Dr. Yanchar's Research. Some current activities include being a co-applicant and Expert Panel Leader on the Canadian Injury Indicators Development Team (CIHR-funded), a co-PI and Site Investigator for a national Child Safety Seat intervention study funded through Auto21 (a national Network of Centres of Excellence), a co-PI on a project to develop a Canadian-specific Pediatric Trauma Curriculum, and ongoing local studies on child motor vehicle restraint safety practices and motorized recreational trauma in children.

Finally, advocacy for the health and well-being of Maritime children is paramount to our philosophy of care. Recognition of gaps in bowel management and central venous access by the division members has resulted in policy changes and program developments to better manage these needs by our patients. The past year also saw division members highlighted during the political and media debates over the use of off-highway vehicles by children. As the caregivers for injured children in this province, our voices and those of our colleagues across the province were heard strongly and clearly, resulting in a revision of the governments plan in a direction to help protect children from unnecessary injury resultant from all-terrain and other off-highway vehicle trauma.

So, all in all, through strong and progressive clinical care, enthusiasm for education, and ardent advocacy for the health and well-being of our patients, we've remained pretty busy over the past couple of years. In fact, some may say, "We may be small, but we're mighty!"

Recipients of Department of Surgery Funding



Research Profile:
Mark Glazebrook MSc, PhD,
MD, FRCS(C)

Dr. Mark Glazebrook's basic science studies are focused in the field of ligament biology and biomechanics. His clinical studies are focused on the surgical treatment of end stage ankle arthritis.

Basic Science:

Understanding the pathology of human tendon disease: Translation of animal studies to the human - Tendon disease is a health problem

which has substantial societal costs in terms of pain, suffering, lost work time and recreation. Non insertional Achilles tendon disease represents an ideal example of tendon disease since it encompasses a continuum of clinical presentation from mild pain and dysfunction early in the disease process to catastrophic rupture when left untreated. In order to better understand the biology and biochemistry of Achilles tendon disease an animal model using a Rat Achilles Pathology Exercise Device (Rat-A-PED) has previously been developed [10]. The model creates Achilles tendon disease in the rat that is similar to the disease described histologically in humans. Seed funding granted from the Department of Surgery at Dalhousie University will allow a continuation of studies. The objective seeks to establish definitive validation of the Rat-A-PED for the development of targeted interventions in humans. In phase I of the study Achilles tendon samples (that are otherwise discarded) will be harvested from human donors undergoing surgical debridement for Achilles tendon disease that is resistant to non operative treatments. These tendon samples will be subjected to biochemical and histological analysis similar to those of Achilles tendons harvested from rats to provide definitive validation of the Rat-A-PED model for Achilles tendon disease Phase II will then focus on trying to determine the underlying pathophysiology of human Achilles tendon disease. By

assaying for the markers of a true remodeling response, including the relative amounts of collagen type III and matrix metalloproteinases (MMP2 and MMP14). Understanding the Biomechanical properties of Anterior Cruciate ligament Allografts - Collaborative studies with the School of Biomedical Engineering and Dr. William Stanish are focused on determining the biomechanical properties of ACL allografts and clinical outcomes of patients receiving these allografts. **Clinical and Basic Science Studies in Orthopedic Foot and Ankle (Dalhousie Division of Orthopedic Surgery)**

Clinical Studies:

Clinical Outcomes for the surgical treatment of End Stage Ankle Arthritis - Collaborative research with the Division of Orthopedic surgery at Dalhousie University has allowed data centralization of the Canadian Orthopaedic Foot and Ankle Society (COFAS) Prospective Multi-centered Ankle Arthritis Outcome Study: Total Ankle Arthroplasty vs. Ankle Arthrodesis. Currently there are over 500 patients being surgically treated for end stage ankle arthritis that are being prospectively followed. The first publication from this study has demonstrated that patients with end stage ankle arthritis have an equally poor health related quality of life as those with endstage hip arthritis. The long term goal of this study is to provide level 1 evidence of how patients should be surgically treated. Collaborative resident research in the field of endstage ankle arthritis includes an assessment of a new technique for ankle arthrodesis and a new total ankle arthroplasty prosthesis using clinical outcomes, gait analysis (collaboration with Dr. Lorne Leahey), and Roentgen Stereophotogrammetric Analysis (RSA) (collaboration with Dr. Michael Dunbar). Clinical research efforts have been principally funded through an unrestricted industry grant from Depuy Johnson and Johnson. The future research challenges for Foot and Ankle Orthopedics at Dalhousie will include securing personell and peer reviewed grant funding to allow a continuation of the above listed studies and expansion to other areas of interest.



*Dimitris Kalavrouziotis, MD
Recipient of Department of Surgery
Resident Research Grant*

Cardiac Medication Use Following Coronary Artery Bypass Graft Surgery

Approximately 800 Nova Scotians undergo coronary artery bypass graft surgery (CABG) per year. The operation restores blood flow to areas of the heart that have been compromised by atherosclerotic plaques that narrow and occlude coronary arteries. It is an effective operation that provides relief from the disabling symptoms associated with coronary artery disease and prolongs survival. Recent Canadian data have shown that direct hospital costs associated with CABG are approximately \$20 000 per patient on average, depending on the degree of patient illness and the urgency of the operation, and are similar to the overall costs of alternative therapies such as angioplasty and stenting. These costs are due in part to the involvement of a multi-disciplinary team of highly skilled health care professionals that are mobilized not only during the procedure itself but also during the recovery period. Therefore, given the resources used for the provision of CABG, it is critical for researchers and policy-makers to identify strategies that aim to maximize the overall efficiency of CABG. One such strategy focuses on enhancing the long-term health outcomes of patients that undergo CABG after they are discharged from hospital and return to the community.

There is a large body of evidence suggesting that patients who have been admitted to hospital with a heart attack benefit from long-term outpatient use of medications that target cardiovascular risk factors

such as high blood pressure and high cholesterol. These drugs decrease both the rate of subsequent cardiac events and mortality, decrease the use of health care services, and have been shown to be cost-effective. However, one cross-sectional survey from Western Australia suggested that CABG patients may be less likely to be compliant with prescribed medical therapy, given that the CABG operation often dramatically reduces symptoms causing patients to stop taking medications and, in some cases, to stop visiting a physician altogether. Except for this small survey, there are no studies that have examined the utilization of evidence-based cardiac medications in patients that have undergone CABG. The rates of drug prescription, the long-term adherence to available drug therapies, and the impact of these medications on clinical outcomes are unknown in the CABG population.

This study will explore the determinants of the utilization of preventative medical therapies in patients following CABG. The role of socioeconomic status and geographic area of residence in the treatment of post-CABG patients in Nova Scotia will also be examined. In addition, the impact of cardiac medical therapies on the clinical outcomes of a real-world, contemporary cohort of CABG patients will be explored. This study may suggest ways to improve adherence to available pharmacologic therapies and may have important implications for the organization and delivery of health services in Nova Scotia. There is a powerful opportunity here to improve the clinical outcomes associated with CABG and ultimately maximize the overall effectiveness of the procedure.

This research project provides me with the opportunity to both explore a clinical area in which little work has previously been done and gain the epidemiologic and biostatistical expertise to function as an independent researcher in the future. In addition to my clinical residency training in cardiac surgery, I hope that this Master's thesis project and my graduate course work at Dalhousie University's Department of Community Health and Epidemiology will give me the skills not only to be a competent evidence-based clinical surgeon but also a surgeon-scientist specializing in cardiovascular outcomes research.



*Lara Williams, MD
Recipient of the Department of Surgery
Resident Research Grant*

The interaction of the Wnt/ β -catenin signaling pathway and the caudal-related homeobox genes, CDX1 and CDX2, in the molecular pathogenesis of esophageal (Barrett) adenocarcinoma

Over the past three decades, there has been a marked change in the epidemiology of esophageal malignancy, with an increasing incidence of esophageal adenocarcinoma (EADC). Despite advances in multimodality therapy, invasive EADC remains a highly lethal malignancy. To substantially improve outcomes with this disease, future management strategies will need to focus on prevention and early detection based on an improved understanding of esophageal tumour biology.

It is hypothesized that chronic gastroesophageal reflux disease (GERD) results in acute mucosal injury, promotes cellular proliferation, and induces a specialized columnar metaplasia (Barrett esophagus). Progression of Barrett esophagus (BE) to invasive

EADC is reflected histologically by the metaplasia-dysplasia-carcinoma sequence and several molecular alterations have been reported.

The Wnt/ β -catenin signaling pathway is a key regulator of cellular growth and differentiation, and its dysregulation has recently been implicated in the molecular pathogenesis of EADC. Similarly, the caudal-related homologues CDX1 and CDX2 are integral to gastrointestinal proliferation and differentiation, and are transcriptional targets of the Wnt/ β -catenin pathway. Recent studies have described aberrant expression of CDX1 and CDX2 in BE and, although their roles in the progression from BE to EADC have yet to be elucidated, it may be speculated that this transition involves a repression of CDX expression, as seen in colorectal cancer. To date, no published studies have evaluated the interaction of the caudal-related homologues CDX1 and CDX2 and the Wnt/ β -catenin signaling pathway in esophageal malignancy. We hypothesize that the CDX homologues are key modulators of the Wnt/ β -catenin pathway in the molecular pathogenesis of esophageal (Barrett) adenocarcinoma.

Using a clinically-relevant model of human upper gastrointestinal tumour progression, the specific aims of my study are:

1. To characterize the expression of β -catenin, CDX1, and CDX2 in premalignant and malignant human esophageal tissues, and
2. To study interactions between Wnt/ β -catenin, CDX1 and CDX2, in relation to the molecular basis for the development of Barrett metaplasia, and progression from metaplasia to dysplasia and adenocarcinoma in human normal and tumour esophageal cell lines.

Retirees:

- Dr. Robert Stone, Head, Department of Surgery
Dr. H. Bitter-Suermann
Dr. John Curry
Dr. Herman Hugenholtz

Divisional Achievements

Cardiac Surgery

Dr. Camille Hancock Friesen was awarded \$50,000 in bridge funding from the Department of Surgery to support her work on "Immuno-Modulation in Response to Oral Donor Antigen Exposure: Rat Cardiac versus Renal Allografts" in July 2006. In addition, she was awarded an IWK Health Centre Category A Grant for her work entitled "Follow-up of Tetralogy of Fallot Patients: Transition from Pediatric to Adult Care" worth \$3,430 in 2005.

Dr. Greg Hirsch was awarded as a co-investigator two CIHR grants in 2006. The first was as a member of the Canadian Cardiovascular Outcomes Research Team (CCORT) II initiative entitled "CCORT II: Access to Quality Cardiac Care" worth \$1,114,941. The second was for "A Systematic Review of Waiting Times for Cardiac Services and Procedures" worth \$92,974. In 2005 he was awarded a three year Canadian Institutes of Health Research (CIHR) grant for his work entitled "Mechanism of Induction of Allograft Vasculopathy under Conditions of Immunosuppression" worth \$280,620.

Dr. J.F. Legare won a Heart and Stroke Foundation of Canada Operating Grant for his work entitled "Kinetics of Neutrophil Trafficking in Post Ischemic Myocardium" in 2006. The grant is worth \$148,000. As well, he was awarded as a co-investigator a Canadian Foundation for Innovation New Opportunities group grant worth 1,500,000 to establish a "Facility for Innovative Multi-Level Studies on Myocardial Repair" in 2005.

Dr. Stacy O'Blenes returned to active practice here in Halifax in June 2006 and won the Department of Surgery Seed Award the very next month for his work entitled "Skeletal Myoblast Cell Transplantation for the Treatment of Myocardial Infarction." The award is worth \$18,000.

Dr. John Sullivan was honoured by the Faculty of Medicine Community of Scholars with an Award of Excellence in Clinical Practice in April 2006.

Dr. Dimitris Kalavrouziotis won the Dr. Clare B. Baker Prize for Outstanding Presentation on Clinical Cardiac Research at the May 2005 Terrence Donnelly Cardiac Resident Research Day held in Toronto for his presentation "Impact of New-Onset Atrial Fibrillation on In-Hospital Outcomes Following Cardiac Surgery." Dr. Kalavrouziotis was awarded the CCORT Postgraduate Student Fellowship, funded through a CIHR Team Grant in Cardiovascular Outcomes Research worth \$17,500. Just one month later in July 2006, he was awarded the 2006 Dalhousie University Department of Surgery Resident Research Grant worth \$50,000

Dr. Wjotek Karolak joined the division as a resident July 2006 after completing a one year fellowship with us. He won 2nd prize for his oral presentation at the Department of Surgery Research Day in April 2006 entitled "Medium Term Outcomes of CABG Surgery versus Off Pump: Results from an RCT."

General Surgery

The Silver Deaver Teaching Award was presented to **Dr. Mark Walsh**

The Canadian Association of General Surgeons Resident Teaching Award was presented to **Dr. Brendan McCarthy**

The Robert Ginsberg Award in Surgical Oncology (Radiation Therapy Oncology) was presented to **Dr. Geoff Porter**.

Thoracic Surgery

Dr. Alan Casson (Principle Investigator, with Duane Guernsey co-investigator) was awarded an operating grant from CIHR for a study "Nitric Oxide in the Molecular Pathogenesis of Esophageal (Barrett) Adenocarcinoma". Dr. Alan Casson has been appointed Professor and Head, Department of Surgery at the University of Saskatchewan and will assume this position in October 2006.

Orthopaedic Surgery

Professor of the Year Award was awarded to **Dr. Ross Leighton** as elected by the residents.

The Award for undergraduate Teaching by a Resident was awarded to **Dr. Ben Orlik**.

This past summer, **Dr. Mark Glazebrook** was chosen as the North American Foot and Ankle Traveling Fellow. He attended several centres in the United States over a 5-week period.

Neurosurgery

Dr. Ivar Mendez was awarded the Dr. John Savage Memorial Award in International Health for his humanitarian contribution to international health in Bolivia.

Dr. Robert Brownstone and Dr. Ivar Mendez (www.brainrepair.ca) were awarded \$5.5 Million from the Canadian Foundation for Innovation.

Dr. Renn Holness was awarded the CR Walker Memorial Lecturer from the Medical Association of the Bahamas.

Dr. Robert Brownstone has been appointed Professor of Neurosurgery. He was also named Assistant Dean, Research - Clinical Departments for the Faculty of Medicine. Dr. Brownstone successfully obtained funding from CIHR for \$553,088.00 and Project ALS for 93,060.00.

Dr. David Clarke was awarded a NSERC grant for \$132,500.00 and a CIHR grant for \$265,680.00.

Otolaryngology

Dr. Manohar Bance was successful in obtaining an AIF proposal for \$2.6 million for the Hearing & Balance Team Project "Developing New Bone Conduction Hearing Technologies".

Plastic Surgery

Dr. Jason Williams started a 1 year locum on August 1st.

Dr. Winston Parkhill received an undergraduate teaching award.

Dr. Steven Morris published a textbook; "Perforator Flaps: Anatomy Technique, & Clinical Applications".

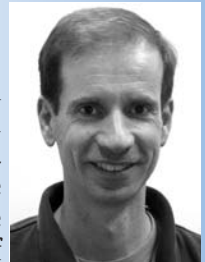
New Appointments



Dr. Sean Christie

Dr. Christie graduated from Dalhousie University and began Resident Training in Neurosurgery in 1996 at Dalhousie. He completed two Fellowships dedicated to the sub specialty of spinal surgery at the University of Calgary and the University of Chicago. Dr. Christie is appointment Assistant Professor in Neurosurgery and his clinical interest concentrates primarily in spinal surgery.

Dr. James Fawcett



Dr. Fawcett obtained his PhD in developmental neurobiology at the Montreal Neurological Institute, McGill University, and did his postdoctoral work in the laboratory of Dr. Tony Pawson at the Samuel Lunenfeld Research Institute in Toronto. Dr. Fawcett's laboratory is interested in developmental neurobiology with an emphasis on intracellular signaling mechanisms underlying axon guidance and repair. His lab studies molecules and signaling mechanisms that underlie the development of a neuron, the fundamental unit of the nervous system. Dr. Fawcett's primary appointment will be in the Department of Pharmacology. He will also hold a secondary appointment in the Department of Surgery. Dr. Fawcett is a member of the Brain Repair Centre.



Dr. Rob Hart

Dr. Hart is originally from New Brunswick. He attended both medical school and an Otolaryngology residency at Dalhousie University. In July of 2006 he completed a fellowship in advanced head and neck oncology, microvascular reconstruction and surgical head and neck endocrinology at the University of Alberta with the assistance of a Killam scholarship. Dr. Hart has research interests in the functional outcomes of head and neck cancer and reconstruction, and will be investigating molecular markers of head and neck and thyroid malignancies. Dr. Hart joins the Department of Surgery as an Assistant Professor in the Division of Otolaryngology.

Dr. Craig Hurst



Dr. Hurst is a native of Nova Scotia. After completing his undergrad at Mount Allison University, Dr. Hurst pursued his MSC at Dalhousie. He is a graduate of Dalhousie Medical School. He completed his first residency in General Surgery at the University of Ottawa and complimented this with a Plastic Surgery Residency at the University of Utah. He went to Indiana University for a Fellowship in Craniofacial & Pediatric Plastic Surgery. Dr. Hurst is appointed at the rank of Assistant Professor with the Department of Plastic Surgery. He treats congenital conditions affecting the craniofacial skeleton of children and adults, cleft lip and palate surgery and the treatment of facial trauma. Welcome Dr. Hurst.



Dr. Sam Minor

Dr. Minor is from Peterborough, Ontario. His undergrad education was completed at the University of Guelph, and he is a graduate of the University of Toronto Medical School. He completed his residency at Queen's University in General Surgery and completed a Fellowship in Critical Care at Queen's University also. He is presently an Assistant Professor in the Division of General Surgery, Critical Care Medicine.

Dr. Jason G. Williams



Dr. Williams returned to Halifax and joined the Division of Plastic Surgery on August 1, 2006 after spending a year in Houston, Texas at the M.D. Anderson Cancer Center in their Microvascular Reconstructive Surgery Fellowship. This Fellowship provided a vast experience in the reconstruction of patients having had ablative surgery for breast, head and neck, extremity and other malignancies. His area of special interest is in post-oncologic and post-traumatic reconstruction. Dr. Williams graduated from Dalhousie Medical School in 2000, and completed his Plastic Surgery residency at Dalhousie in 2005.