Dal Surgery Research Day – April 29, 2011
Division Profile: Division of General Surgery
Resident Update: Dr. Andrew Beckett
Departmental Updates and News

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Congratulations Graduates!

July 2011
GREETINGS ALL, as we come to the end of a busy and productive academic year and prepare to enter a new year full of both promise and challenges.

Through a period of change we have as a department, remained focused on our clinical and academic missions. Each division continues to provide excellent comprehensive clinical care to our local patients as well as providing tertiary and even quaternary care to a much broader referral population. Some of our colleagues have been stretched to their limits this past year because of surgeon manpower challenges. We aim over the next year to recruit the “best and brightest” candidates to fill these identified surgical needs. Recruitment of faculty for a Department of our size is essentially a continual undertaking. It is also one of our most significant opportunities to grow and strategically strengthen our clinical, research and educational efforts. New faculty should bring new ideas and approaches to surgical care and academic pursuits, helping us all “elevate our game”. As one of the newest faculty additions I must express what a pleasure my 1st few months here have been. Changes and big adjustments all around to be sure (!) but I have been the grateful recipient of many warm welcomes and many genuine offers of assistance and support. Recognizing the danger of generalization I have already shared with colleagues and friends (“from away”) how hospitable, generous and capable I have found the good people of Halifax and Nova Scotia! In a similar vein I have been struck by the collegiality and spirit of pulling together I have found in our Department. This has served us well thus far and will be even more important as we move forward.

You will read in Dr. Brock’s report of our growing educational efforts as a department. We are a committed collection of surgical educators from senior faculty to most junior resident. This culture of dedication to surgical education should serve us well as we prepare for our Royal College site visit, in the New Year. On a further educational note congratulations and recognition are in order for 3 of our surgical residents who earned the highest scores nationally in their respective categories on the CAGS in-training examination. They are Jane Watson (PGY6), Aniedi Dear (PGY3) and Stephen Smith (PGY1). Each are recipients of the Dr. Steven Norrell award.

You will hear from Dr. Hirsch of the growing research efforts within the Department. In a difficult and increasingly competitive climate, our grant capture continues apace. Having attended my 1st Surgery Research Day this spring I was struck by the quality and breadth of research work under way in the Department. We have many researchers whose efforts could be recounted here; unfortunately space only permits recognition of the unique accomplishment of one of our faculty members. Dr. Rob Brownstone, Neurosurgery was awarded a very select and prestigious Dalhousie University Research Professorship. This honour clearly recognizes the quality, extent and impact of Dr. Brownstone’s research work.

In summary I return to the theme of change with which I began. As cliché as it sounds change is really the only thing we can count on moving forward. We will be challenged increasingly to do more with less. This is not simply our lot but that of all surgeons across this continent. Those institutions and Departments who are able to embrace such a challenge with imagination, energy and a sense of mission will stand out in such times as these.

I am confident in the experience, commitment and talent we possess in this department to so distinguish ourselves in the year(s) ahead.
THE MEDICAL SCHOOL HAS RECENTLY received notification that the re-accreditation survey related to the undergraduate curriculum has been positive, resulting in the release of probation and a return to full accreditation. This is the result of a major commitment in time and energy from faculty of medicine, including members of the Department of Surgery.

The class of 2011 graduated from Dalhousie Medical School on May 27. Prior to graduation a number of attending staff and residents from the Department of Surgery helped the class prepare for the LMC examinations during the CRAM course in late April. I am happy to report that attending staff from all divisions participated in a formative OSCE examination for the third year clinical clerks in March. We continue to provide tutors for Clinical Skills and case based learning seminars in first year medicine in addition to the final COPS curriculum sessions in second year. Staff from Orthopaedic Surgery, General Surgery and Otolaryngology/Head & Neck Surgery participated in the final Patient-Doctor clinical teaching sessions which will become Clinical Skills II next year.

A variety of web-based learning sources covering a variety of surgical specialties as well as Urology have been made available to the third year clinical clerks. Each student is responsible for completing a log of clinical experiences and procedures before completing the surgical unit.

First and second year students in the Surgical Interest Group have participated in basic surgical skills sessions as well as advice related to lifestyle and career in surgery under the direction of Dr. Min Lee and Dr. Guy Brisseau.

Program Directors from each of the Divisions within the Department of Surgery are completing presurvey questionnaires in preparation for the Royal College accreditation reviews of our residency training programs scheduled for February 2012.

Our congratulations go out to the following senior residents from Surgery who were successful in the final Royal College Examinations which were held in Ottawa: Drs. Ghazi Al-Qahtani, Eric Anderson, Clark Bartlett, Peter Copithorne, Dafydd Davies, Adrienne Kelly, Kristian Macdonald, Alfin Mukhi, David Tang, and Jane Watson.

At the end of this month the Division of General Surgery will mark the retirement of Dr. Bernie McIntyre after a busy and successful career in colorectal surgery. Dr. McIntyre is a respected clinician, teacher and colleague who will be missed by all that have worked with him.

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**Congratulations Dr. Robert Brownstone**

The title of University Research Professor was granted to Dr. Robert Brownstone, a Dal Surgery Faculty member in the Division of Neurosurgery.

This honour used to acknowledge exemplary academic scholarship was awarded to Dr. Brownstone by Dr. Tom Traves, Dalhousie University President, in June 2011. This is a five year appointment.

Dr. Brownstone is a well known clinician scientists, who is cross appointed with the Department of Anatomy and Neurobiology. He Heads the Spinal Cord Research Group in the Brain Repair Centre.

[http://motorcontrol.medicine.dal.ca](http://motorcontrol.medicine.dal.ca)
THE DALHOUSIE SURGERY RESEARCH AWARDS have been finalized for the year 2011. The Surgery Research Office is proud to be sponsoring 3 residents newly enrolled in the Clinical Investigator Program. In addition, we continue to support ongoing research programs of the Transplant, ENT, Orthopaedics and Cardiovascular Multi-Disciplinary Groups, and to facilitate research of individual faculty with grants awarded through a diligent peer review process.

We are in the midst of modifying our research deliverable framework for our faculty with research protected time. It is critically important that we be accountable for the academic component of our AFP agreement. In addition we are currently in the process of evaluating the productivity of our research protected faculty.

The Annual Research and Education Report for Dalhousie Surgery was released and remains an accurate and resounding testament to the great works being done here in our Department. Most importantly, this report is evidence of improved patient care that comes from research and education. By investing in ourselves, we have a great positive impact on our local economy, our patients, and our trainees and guarantee a strong future.

Dr. Lindsay McDonald successfully defended her Master’s Thesis in June entitled, “Using the zebrafish to determine the role of the HACE1 tumour suppressor in normal development and tumourigenesis”. Congratulations Dr. McDonald!

We are looking equally forward to the successful completions of our CIP residents Drs. Christine Herman, Matt Smith and Scott Livingstone.

Resident Salary Awards

**Dr. Richard Liu**, CIP Resident, MSc in Community Health and Epidemiology. “Regionalization of Cancer Surgery in Canada”.

**Dr. Jonathon Bailey**, CIP Resident, MSc in Community Health and Epidemiology. “Does Frailty Predict Healthcare Cost Among Elderly Acute Surgical Patients?”

**Dr. Philip Davis**, CIP Resident, MSc in Community Health and Epidemiology. “Does Frailty Predict Short Term Outcomes in Older Patients Undergoing Emergent Abdominal Surgery?”

Bridge/ Seed Funding: $50,000.00

**Dr. Drew Bethune**, “Biomarkers for Prediction of Lung Cancer Surgery Outcomes”.

**Dr. Michael Dunbar**, “Multivariate Modeling of Functional Outcomes of Severe Osteoarthritis Clinical Management”.
THE 22ND DAL SURGERY RESEARCH DAY was held at the Cunard Centre in downtown Halifax. Dr. Jan Blankensteijn was this year’s Dr. Gordon Bethune Visiting Professor. Dr. Blankensteijn provided the noon-time lecture, “Abdominal Aortic Aneurysm: A DREAM Come True”. Dr. Blankensteijn’s research interests investigate endovascular repair of aortic aneurysms and the genetic and pathophysiologically mechanisms of abdominal aortic aneurysm disease. Dr. Blankensteijn was one of three judges for the day, along with Dr. Ron-El-Hawary and Dr. Paul Johnson.

Dr. Blankensteijn is currently an Associate Professor of Vascular Surgery at the VU University Medical Center in Amsterdam, The Netherlands.

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**2011 Dal Surgery Research Day Winners**

**Resident Award Winners**

1st Place Resident and Winner of the Dr. Robert Stone Traveling Fellowship


2nd Place Resident

**Dr. Christine Herman**, CIP and PGY3 Cardiac Surgery Resident. “Do Intra-Operative Precursor Events Impact Post-Operative Outcomes?”

3rd Place Resident

**Dr. Kevin Calder**, PGY4 Plastic Surgery Resident. “Halifax Pressure Sore Prevention Study”

**Student Award Winners**

1st Place Student

**Lauren Clark**, Medical Student. “Improving and Standardizing Pediatric Cardiac Surgical Morbidity Capture and Classification”

2nd Place Student

**Alec Falkenham**, Graduate Student Immunology and Microbiology. “CD26 Inhibition and CXCR4 Blockade Independently Increase Fibrocyte Migration and Fibrosis in the AngII-Treated Heart.”

3rd Place Student

**Damien Yohn**, Medical Student. “Transcranial Transmission with the BAHA after Graded Temporal Bone Resections on Dry Skulls and Surgically-Fixed Cadaveric Heads”
THE DIVISION OF GENERAL SURGERY is pleased to welcome Dr. Adrian Park as the Dr. Alex Gillis Professor of Surgery and Head of the Department of Surgery. In addition to Dr. Park’s administrative role, he will continue his practice of upper gastrointestinal minimally invasive surgery, and contribute to Resident and Medical Student teaching. Dr. Lara Williams will also be joining the Division in August as a Colorectal Surgeon after completing her fellowship training in Ottawa. It is with regret that the Division will see the departure of Dr. P. Bernard McIntyre (Colorectal Surgery) who is stepping down at the end of June.

From the research standpoint, it has been a very productive year for the Division of General Surgery. Dr. Devon Richardson won the best paper podium prize at the most recent Canadian Association of General Surgeons meeting for her paper entitled, “Self Reported Patterns of Rectal Cancer Care Among General Surgeons in Canada.” Dr. Scott Livingstone won the Faculty of Medicine “Best Overall Award” in addition to winning the Best Oral Presentation in Basic Science Research at the Faculty of Medicine Research Day this May for his paper entitled, “Generation of a Recombinant Heme Oxygenase to Protect Transplanted Seatoic Livers from Reperfusion Injury.” In addition, Dr. Livingstone also won the 1st place Resident and winner of the Dr. Robert Stone Traveling Fellowship for his paper entitled, “The Application of Raman Spectroscopic Analysis for the Evaluation of Hepatic Steatosis” at this year’s Department of Surgery Research Day. Dr. Lindsay MacDonald won the 2nd Place Oral Presentation in Basic Science Research for her paper entitled, “Using the Zebrafish Model to Determine the Role of the HACE1 Tumour Suppressor in Development and Tumourigenesis” at this year’s Faculty of Medicine Research Day.

Dr. Trevor Topp, Associate Professor, Head, Division of General Surgery

Dr. Adrian Park

Dr. Lara Williams

Dr. P. Bernard McIntyre

Dr. Devon Richardson

Dr. Scott Livingstone

Dr. Lindsay MacDonald

The Silver Shovel Award

Dr. Brock Vair received the Silver Shovel Award at the 2011 Dalhousie Medical School convocation dinner. This prestigious award is presented by the graduating medical class to a member of the Faculty of Medicine who demonstrated excellence in teaching in the clinical setting.

The Silver Shovel Award was established in 1965, and is often called the “Professor of the Year Award.” This year marks the second time Dr. Vair has received this honour, the first was in 1997.

Here, Dr. Vair is receiving the award from Andrew Moeller and Nichole Sweeney.

Congratulations Dr. Vair!
The awards continue in the Division of General Surgery, this time in the field of Surgical Teaching. Dr. Brock Vair has received the Silver Shovel Award as well as the Excellence in Undergraduate Teaching Award for the Department of Surgery for 2011. Dr. Danny French has received the Excellence in Undergraduate Teaching Award by a Resident for the Department of Surgery for 2011. Dr. Lucy Helyer received this year’s Silver Deaver Award for Excellence in General Surgery Resident Teaching. Dr. Dafydd Davies received this year’s Canadian Association of General Surgeons Excellence in General Surgery Teaching Award by vote of the Medical Students and Residents.

From the academics perspective, Drs. Scott Livingstone, Lindsay McDonald, and Matt Smith all will complete their Clinical Investigator Programs this year….lots of hard work that has obviously paid off! The Dalhousie Residency Program also snagged half of the top scores for the country in this year’s Canadian Association of General Surgeons in-training examination (Dr. Steve Smith PGY1, Dr. Aniedi Dear PGY3, and Dr. Jane Watson PGY6).

On a lighter note, Dr. Jonathan Bailey will return to this year’s Canadian Association of General Surgeons Annual Meeting to defend Dalhousie in the annual laparoscopic knot tying competition. Dalhousie has held the title since the inception of the competition held annually at the CAGS meeting (2009: Dr. Rene Boisvert, 2010: Dr. Jonathon Bailey). We look forward to defending our title with exuberance!

Finally, the Division of General Surgery is pleased to announce another 100% pass rate at this year’s Royal College Exams. Congratulations to our graduating Residents, Dr. Dafydd Davies, Dr. Alfin Mukhi, and Dr. Jane Watson.

**Promotions were appointed to the following:**

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<th>Name</th>
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<td>Dr. Trevor Topp</td>
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<td>Dr. Michele Molinari</td>
<td>Associate Professor</td>
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<tr>
<td>Dr. Imtiaz Ali</td>
<td>Associate Professor</td>
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<tr>
<td>Dr. Kevin Orrell</td>
<td>Assistant Professor</td>
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$2.5 M AIF Award was granted to a cross multi-disciplinary team which included Dr. Michael Dunbar for their project “Minimally invasive systems for bone augmentation”.

$3.8M AIF Award was granted to Dr. Jerry Brown, Dr. Manohar Bance and Dr. Rob Adamson for their SENSE and EAR Lab. Dr. Bance is also a Co-Applicant on a CREATE in Neurosciences Award for

$1.65 M for the project, “Rehabilitation and Diagnostic Innovation n Advanced Neuro Technologies (RADIANT)”.

Dr. Michael Dunbar was awarded the premier award for Orthopaedic Research in Canada, the 2010 Edouard Samson Award.

Dr. Richard Liu, CIP Resident beginning in July 2011, has won the CIP Scholarship and a CIHR Banting and Best Master’s Award.

**Faculty of Medicine Research Day – May 26, 2011**

**Congratulations to the following Residents**

Dr. Scott Livingstone: Best Overall Award, Best Oral Presentation in Basic Science Research

Dr. Lindsay McDonald: 2nd Place Presentation in Basic Science Research

Dr. Phil Magown, Best Poster
Dalhousie War Surgeons in Kandahar

Dr. Andrew Beckett graduated from the Dalhousie General Surgery Residency Program in 2010. Since that time he has been an active trauma surgeon for The Department of National Defence, and stationed in Kandahar. We thank him for sharing this amazing recap of his experience since graduation.

Injuries seen in war are dramatic and complex wounds, which are not seen in civilian practice. No residency program can totally prepare a surgeon for the scope of injuries seen in war; however, residency programs can teach the surgical principles to manage these complex trauma patients. The general surgery residency program at Dalhousie teaches the surgical principles of trauma management to enable Canadian surgeons to provide care to the complex needs of war casualties.

Dalhousie provided a field surgical hospital to the Canadian Expeditionary Force (CEF) in the First World War and continues to supply highly trained medical personnel to support current CEF operations in Kandahar, Afghanistan.

In Kandahar, Afghanistan, the NATO hospital has one function only, to treat the casualties of war. The daily stream of casualties, from both NATO forces and Afghans is a constant. The casualties often arrive in waves of five or more patients at a time. Therefore, rapid assessment and triage is essential to the flow of wounded through the hospital fresh from the battlefield. War surgeons need to work quickly, as frequently more patients are en route by helicopter as the battles in Afghanistan’s rugged mountains and valleys continue. Surgeons here also have to learn to live and work under the daily threat of rocket attacks from the surrounding hills.

Because of the high prevalence of penetrating injury and acuity of the patients in Kandahar, complex investigations such as computed tomography are unnecessary or contraindicated due to the hemodynamic instability of patients. These patients with multisystem penetrating injury often require massive transfusions using whole blood and rapid surgical control of bleeding and wound contamination. In the operating room, multiple teams working at the same time are required to salvage the IED blast polytrauma patient with penetrating head injury, triple amputation and open pelvic fracture. Orthopedics, general surgery and neurosurgery work in concert to rapidly complete damage control surgery on these patients.

The Dalhousie general surgery program has done its part in training this generation’s Canadian war surgeons, such as Jay Doucet LCol (Ret’d), and myself, who have served in Kandahar caring for the wounded. From the First World War to the present Afghan War, Dalhousie has continued its proud tradition of providing high quality surgical training to those who give surgical care to the casualties of war.