



**DALHOUSIE
UNIVERSITY**

Inspiring Minds

DAL Surgery

August 2014

THE UPDATE



Janice Fleming and Marilla Speller, daughters of Dr. John Merritt on hand at graduation for the J.W. Merritt Prize.



The Halifax contingent of Broken Earth made it's way to Haiti this spring. Read about it on page 7.

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**DAL SURGERY
RESEARCH DAY**

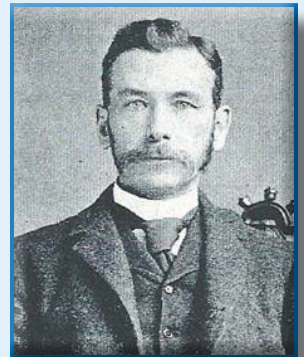
*April 24, 2015
Atlantica Hotel*

Message from the Head, Dr. David Kirkpatrick



IT WAS MY PRIVILEGE to participate in the recent medical school convocation. It is refreshing to see competent, bright and eager new doctors set their sights on chosen disciplines, and leap into their futures. At the ceremony I was graciously asked to hand out endowed awards to graduates excelling in surgical studies. I thought how fortunate we are to have generous members in our community provide bursaries and awards in the names of Dalhousie Medical School Alumni. Four awards were handed out for surgical excellence.

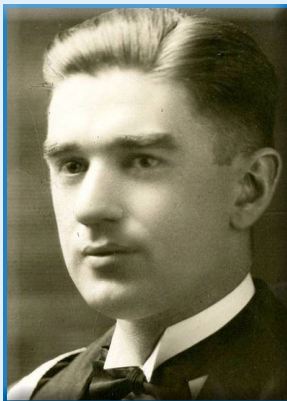
The Dr. John F. Black Prize: Awarded to a student on completion of the fourth year, who reaches the highest standing in surgery. 2014 Recipient: Dr. Alexandra Legge.



Dr. John Ferguson Black was one of Nova Scotia's leading practitioners of his time. He received his medical degree from the College of Physicians and Surgeons in New York, 1868. Dr. Black was a Professor of Surgery at the Halifax Medical College, attending surgeon at

the VG Hospital and member of the Provincial Medical Board. The Department of Surgery established this award in his memory.

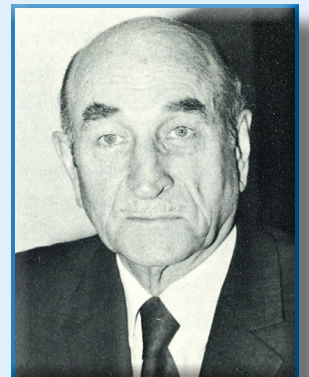
The Dr. John W. Merritt Prize: Awarded to a fourth-year student who has attained the highest standing in surgery over four years of the medical course. 2014 Recipient: Dr. Leila Sloss. Dr. Merritt's daughters, Marilla and Janice were on hand for the ceremony (see picture on cover page).



Dr. John Merritt was a graduate of the class of 1928 where he received the gold medal for the highest aggregate upon graduation. Dr. Merritt set up practice in Halifax, and spearheaded the cardiothoracic speciality in Halifax.

The Dr. Edwin Ross Prize in Pediatric Surgery: Awarded to the medical student or resident who demonstrates an aptitude and interest in pediatric surgical care. 2014 Recipient: Dr. Ashley Drohan.

Dr. Edwin Ross was a graduate of the class of 1931. After graduation Dr. Ross trained at the Montreal General Hospital and the Johns Hopkins Hospital. Returning to Halifax Dr. Ross joined the Department of Surgery and was appointed Chief of Surgery in 1957. Dr. Ross was President of Dalhousie Medical Alumni Association and in 1972 was named Alumnus of the year.



The Albert A. Schwartz Prize in Orthopedics: Awarded to the graduating medical student who demonstrated aptitude and excellence in orthopaedics. 2014 Recipient: Dr. Melanie Matheson (pictured above with Dr. Kirkpatrick).



Dr. Albert Schwartz was a graduate of the class of 1940. He trained at the Permanente Foundation in California and Sea View Hospital in New York City. His career lead him to become chief of orthopedic surgery at the JFK Medical Centre in New Jersey. He received several accolades throughout his career including the Golden Merit Award from the Medical Society of New Jersey. This award, in his name, is made to pay tribute to his training and education here at Dalhousie.

Director of Education, Dr. Brock Vair



AT THE BEGINNING OF THE ACADEMIC YEAR in September the various educational committees within the Department of Surgery were restructured with provision of appropriate financial support from the AFP for the various committee chairs. The Surgery Postgraduate Education Committee is now chaired by Dr. Emad Massoud from Otolaryngology/Head and Neck Surgery. Dr. David Tang from Plastic Surgery is chair of the newly formed Surgical Foundations Committee. The Fellowship Committee is chaired by Dr. Mark Glazebrook from Orthopedic Surgery with the ultimate goal of achieving Royal College accreditation for the various fellowship training programs within the Department. The Undergraduate Education Committee is chaired by Dr. Chad Coles from Orthopedics and Dr. Marius Hoogerboord from General Surgery is the chair of the Global Health Committee.

The establishment of a coordinated Simulation Education Network within the Dalhousie medical community has achieved considerable progress toward reality over the past year. Agreement to fund the network in a collaborative fashion was reached in April following a meeting involving the Dean of Medicine, the Dean of Health Professions and the CEO's of the IWK and QEII hospitals. The QEII Foundation has agreed to embark on fund raising for a new Simulation Centre to be constructed adjacent to the Skills Centre in the Bethune building. Before the project goes forward agreements for funding for human resources within the two major teaching hospitals will need to be achieved.

An important component of simulation training which is unique to Dalhousie is the Clinical Cadaver program. A new process of cadaver preservation results in lifelike tissue qualities allowing learning and practice of operative and technical skills in a realistic setting. Dr. George Kovacs, Emergency Medicine has recently been appointed as Director of the Cadaver Program by Dean Marrie.

Congratulations to Dr. Danny French, PGY5 in General Surgery, and Dr. Paul Yaffe a recent general surgery graduate who were co-awarded the Faculty of Medicine award as the outstanding resident teacher for the undergraduate students.

Congratulations and best wishes for continued success to our senior residents in Surgery who completed their Royal College examinations this spring.

Graduating Residents

*L-R; Danny French,
Scott Livingstone,
Matthew Smith,
Aniedi Dear,
Elaine Fung,
Simon Frank,
Dougie McPherson,
Bryan Flynn and
Matthew Lewington.
Absent: Peter Davidson*



Surgical Foundations Program Boot Camp

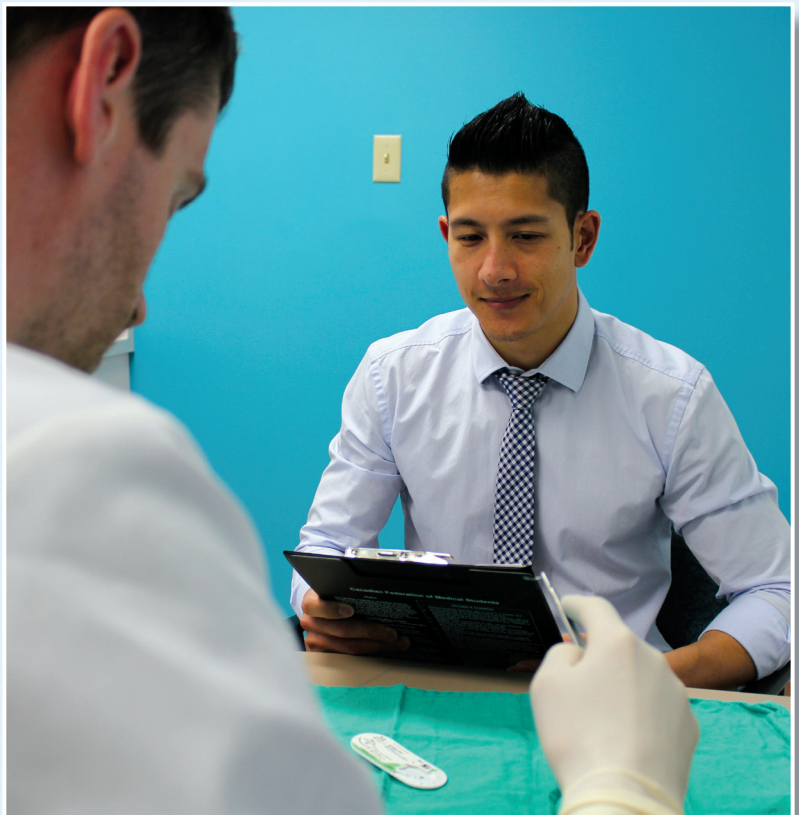
Submitted by Nadim Joukhadar, Dal Medical Student with Dr. David Tang

DR. DAVID TANG, PROGRAM DIRECTOR for Dalhousie Surgical Foundations, introduced an innovative program for surgical residents into the curriculum last July. The Surgical Foundations Boot Camp was the first comprehensive introductory course of its kind in Canada. It is an intensive, high-yield program targeted to incoming PGY1 surgical residents. It has been designed to foster medical competence, empower inexperienced junior physicians, and ultimately improve patient safety. It runs each afternoon for the entire first clinical rotation, offering a combination of interactive lectures, hands-on skills sessions, and OSCE style assessments. The broad curriculum covers critical topics in surgery from patient position in the OR to vascular access, transfusion medicine, and suturing skills labs. In short, it is everything that a junior resident is expected to know, but was never formally taught!

The need for this type of program has existed for many years. The 2005 adoption of the CanMEDs competencies led to higher expectations of more well-rounded surgical residents. This, along with limited time availability to be dedicated to competency development in residency, has increased pressure for innovation. The impending CanMEDS 2015 framework has introduced a new “Competency Continuum” which creates an even greater demand for programs to facilitate physician transition to their discipline. This represents an additional phase to residency medical education, emphasizing the orientation and assessment of new trainees arriving from different medical schools and programs, including those outside of Canada. This Boot Camp was specifically devised to meet these criteria.

July 2014 will bring with it another group of PGY1 surgical residents, the second such group to go through the Surgical Foundations Boot Camp. Last year was met with considerable success, and this year is anticipated to be even better. There have been several improvements made to the curriculum, and a new skills lab has been added to teach chest tube insertion. This year will also focus more on auditing the program from a medical education research perspective. At present, there is no known research evaluating such an expansive general surgical boot camp program that seeks to train the residents from all surgical sub-specialties.

For this reason, a new project has been initiated by Dr. Tang, Nadim Joukhadar (Dalhousie Medical Student), Dr. Kim Blake, Dr. Andrew Warren, Dr. Cindy Shearer, and Dr. Jill Hatchette. The purpose of this study is to describe and formally evaluate the Dalhousie University Surgical Foundations Boot Camp. A thorough, multi-faceted OSCE has been designed to test candidates before and after the program, assessing performance in clinical, procedural, and communication-based skills. With the information gleaned from this work, not only will medical education within the Department of Surgery improve, but postgraduate centres worldwide could learn from this experience. With assistance from the Dalhousie Surgical Skills and Learning Resource Centres, pilot evaluation work is slated to begin this July, with larger follow up studies planned for 2015.



Dr. David Tang putting medical student through the “paces”

Director of Research, Dr. Greg Hirsch



THIS YEAR'S RESEARCH DAY was held on April 4th at the Weston Hotel. We employed a shorter format with three presentation sessions and a cocktail hour preceding the awards presentation. This was well received and attendance improved both for the scientific session and the awards segment. Our speaker, Dr. James Wright, a pediatric orthopaedist at Hospital for Sick Kids, gave a stimulating talk on the confluence of hospital administration; outcomes research; quality and health policy. The judges had a challenging time as the presentations were excellent throughout the day. Winners are posted below. Congratulations to all who participated. Next year's research day is April 24th, 2015 and will be held in the Commons Room at the Atlantica Hotel. We are hopeful that proximity to the hospitals will make attendance easier.

Join me in congratulating Dr. Robert Brownstone in earning the highest ranking in latest CIHR Operating Grant competition in Movement and Exercise. He, along with co-investigator Dr. Ying Zhang are bringing in over \$1.7 million to the Faculty of Medicine. Congratulations to Drs. Jeremy Brown, Aaron Newman and Manohar Bance for the development of a pioneering a miniaturized ultrasound probe for use in the imaging the inner and middle ear. Calibri Technologies will be going forward in a collaboration with Dalhousie to commercialize the product.

2014 Dal Surgery Research Day Awards

First Place Resident

Winner of the Dr. Robert Stone Traveling Fellowship

Dr. Amanda Murphy, Division of Plastic Surgery
Angiotensin Receptor Blockade is associated with Decreased Cutaneous Scar Formation in a Rat Model: A Preclinical Study

2nd Place Resident

Dr. Joshua Gillis, Division of Plastic Surgery
N-Acetylcysteine (NAC) Improves Autologous Fat Graft Survival: A Preclinical Trial

3rd Place Resident

Dr. Hani Mufti, Division of Cardiac Surgery
Predictors of Post-Operative Delirium in Cardiac Surgery Patients, A Machine Learning Approach

First Place Student

Michael Hart Matyas, Microbiology and Immunology
Delayed Calcineurin Inhibitor Immunosuppression Permits the Development of Allo-Reactive Memory CD8+ T Cells Post-Challenge

Second Place Student

Alec Falkenham, Pathology
Liposomal Therapies: What Your Heart and 'I ♥ Mom' Tattoo Might Have in Common

Third Place Student

Laurence Madera, Microbiology and Immunology
Targeted Delivery of Pleurocodin-Family Peptide NRC-03 to Breast Carcinoma Cells



*Dr. James Wright
2014 Dr. Bethune
Visiting Professor*



*Dr. Amanda Murphy
with Supervisor
Dr. Mike Bezubly*



*Dr. Wright
with mentor,
Dal Surg's
Dr. Hyndman*



The QE2 Foundation has partnered with GET UP THERE (GUT),



a Nova Scotia organization dedicated to increasing public awareness about colorectal cancer, to purchase new Transanal Endoscopic Microsurgery (TEM) equipment for the Division of General Surgery at Dal. In a fundraising event coined “GUT VI: Quest for the GUT Scope” this past February, participants climbed Mount Wentworth and raised over \$70,000 towards the purchase of the new machine which costs approximately \$130,000. Dr. Lara Williams, Colorectal Surgeon and GUT campaign participant, attended a recognition event this Spring in

which the QE2 Foundation announced that it would match the funds raised by GET UP THERE, facilitating purchase of a new TEM system.

TEM is a minimally invasive surgery technique that allows excision of advanced rectal polyps and early rectal cancers with out the need for major abdominopelvic surgery and its associated complications. It is also evolving as a potential therapy for more advanced rectal cancers. The purchase of this equipment will greatly enhance

access of this innovative procedure to patients in the Maritimes and keep DAL SURGERY on the leading edge of rectal cancer surgical care.



Emily Rendell (L) and Dr. Lara Williams (R) at the most recent GUT event.

Michael Dunbar, MD, PhD, FRCSC was named a top 22 Knee Surgeon in North America.

Dr. Dunbar was named a Top Knee Surgeon in North America. This prestigious accolade was published in the January issue of *Orthopedics this Week*:

Michael Dunbar, M.D., Ph.D., F.R.C.S.C. is professor of surgery in the Division of Orthopaedics at Dalhousie University and Director of Research for Orthopaedics at that institution. “He is an innovator who is helping to usher in a new way of thinking about total joint replacement. He challenges the norm, and continues to push for advancement and understanding of our field for the betterment of our patients.”

Kudos Dr. Dunbar!



Submitted by Dr. Chad Coles

AS PART OF THE 'HALIFAX TEAM' for Team Broken Earth, Drs. David Amirault, Chad Coles and Marty Leblanc travelled to Haiti in November. Team Broken Earth is committed to a sustained medical relief effort in Haiti to help rebuild and reinforce the healthcare system in one of the poorest countries in the western world.

Even prior to the devastating earthquake of January 12, 2010, healthcare in Haiti was extremely limited. As the poorest nation in the Western Hemisphere, medical resources were already scarce. Within seconds, between 100,000 and 250,000 lives were lost. With the loss of hospital infrastructure and medical personnel as a result of the quake, the need for medical assistance became greater than ever.



In response to this need, Team Broken Earth was formed. Led by Dr. Andrew Furey, an Orthopaedic surgeon from St. John's, Newfoundland, this charitable organization has sent over a dozen teams of volunteer doctors and nurses to provide much needed medical care, supplies, and medical education to the people of Haiti.

Teams travel to the Bernard Mevs Hospital in Port au Prince, which is supported by Project Medishare (affiliated with the University of Miami School of Medicine). This is a small, makeshift hospital with a two bed emergency department, two OR rooms, and a four bed intensive care unit. This is the only ICU in the entire country! In addition they have a small paediatric ward and neonatal intensive care unit.

As knowledge of the project spread, the initial teams from Newfoundland were joined in the spring of 2013 by a team from Calgary. In November of 2013, the first team from Halifax joined the effort. During the week-long journey, our 18 member team of doctors and nurses provided care in Emergency Medicine, Intensive Care, and Paediatrics as well as providing much needed surgical services in Orthopaedic and Plastic surgery. Team members treated conditions we would rarely or never see here including tuberculosis, malaria, and typhoid fever. While it was a long and tiring week, everyone pulled together as a team, and the bonding experience was truly unique. Overall it was felt that the trip was a huge success!

The second Halifax team returned to Haiti in April of 2014, this time a group of 20, again providing medical care to those in need, as well as having a more focused emphasis on teaching for the local medical students, residents, and nurses. We fully believe that the key to the long-term success of this effort is the education and training of the next generation of Haitian doctors and nurses that are going to be providing ongoing care to the local population. Department of Surgery members on these first two teams have included Drs. David Amirault and Chad Coles (Ortho) and Drs. Martin Leblanc and John Stein (Plastics) as well as Dr. David McCartney (Ortho fellow) and Drs. Keith Neufeld and Megan Gillis (Ortho residents). This has been a unique learning and teaching opportunity for these surgical trainees.

Team Broken Earth members from across Canada organized an Orthopaedic Trauma Symposium in May of this year. Attendance was well beyond our expectations with over 90 Haitian medical students, residents, and practicing Orthopaedic surgeons from various centers and several cities travelling for the two day course.

Funding these trips remains a significant hurdle. To date, we have relied on personal contributions from the physicians as well as numerous raffles and fundraising events. Contributions from friends and family, as well as grateful patients have also poured in. The local Lions Clubs have been very supportive. We have also had generous support from our Industry partners in donating supplies and equipment to expand the care that we are able to offer. We remain dependent on the generous support of the local community to continue this humanitarian effort.

We are currently planning for our next trip in January of 2015. For more information about this upcoming trip please contact Mr. Marc Butler Marc.Butler@cdha.nshealth.ca. For more information about Team Broken Earth, or to contribute to this worthwhile cause, go to www.brokenearth.ca.

New Faculty



DR. DAFYDD DAVIES is a Dartmouth native who received his medical degree from Dalhousie Medical School. During his residency training in the Division of General Surgery at Dalhousie, Dr. Davies took two years to complete a fellowship in pediatric trauma and a Masters in Epidemiology at Cambridge University. Following residency, he embarked on a fellowship at the University of Toronto in pediatric surgery. During his fellowship his clinical concentration was pediatric general and thoracic surgery and upon completion of this he obtained further experience in bariatric and minimally invasive surgery. Dr. Davies returned to

Halifax in November to join the other three pediatric surgeons at the IWK Children's Hospital and is presently an Assistant Professor in Surgery. Welcome home Dr. Davies!

DR. SEAN BARRY is a new recruit in the Department, and is presently an assistant professor of Neurosurgery. Dr. Barry both graduated from Dalhousie School of Medicine, and completed his residency training in the Division of Neurosurgery. After his residency training, Dr. Barry did a fellowship in Complex Spine Surgery at the University of Toronto. His present area of clinical expertise is in complex and minimal invasive spine surgery, spinal oncology and neurotrauma. Welcome Dr. Barry!



DR. STANISH – PROFESSOR EMERITUS

We are delighted to announce that the Board of Governors of Dalhousie University have appointed Dr. William Stanish Professor Emeritus in the Department of Surgery. This honour reflects the many years of extraordinary service to teaching and research in the Department of Surgery. Congratulations Dr. Stanish.

This is a publication of the **DAL Surgery Research Office**

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