

# DEPARTMENT OF ANESTHESIA NEWSLETTER

Focus on the History of Anesthesia

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## Upcoming Events

**April 26-30, 2014.** 16<sup>th</sup> Ottawa Conference and the 12<sup>th</sup> Canadian Conference on Medical Education (CCME) will be held conjointly, in Ottawa, Ontario.

**May 3-4, 2014** 32nd Annual CAN-AM Clinical Anesthesia Conference at the Niagara Falls Casino Resort.

**May 7, 2014.** Spring 2014 Anesthesia Research Retreat. Ancaster Old Mill, Ancaster, Ontario.

**May 29-June 1, 2014** Anesthesia for Global Outreach Course. Dalhousie University, Halifax, Nova Scotia.

**May 30, 2014.** Resident Research Exchange Day. Hosted by Western University, London, Ontario.

**May 31, 2014.** 7th Annual Canadian Perioperative Anesthesia and Medicine Meeting (CPAM) at the Sheraton Centre Toronto Hotel.

**June 5-8, 2014.** Bethune Round Table at McMaster University.

**June 26, 2014.** Reach for the Top: Department of Anesthesia's awards evening. Waterfront Banquet and Conference Centre, Hamilton Chamber of Commerce.

## The History of Anesthesia in Hamilton

Part 3 in a series of 3

The Modern Era: The McMaster University Medical Centre

By Dr. Joel Hamstra

McMaster University Medical School was established in 1969. The first dean, Dr. John Evans, had a vision for a unique medical school and looked towards the medical and surgical academic departments to further his vision. Evans' papers, which are housed in the McMaster History of Medicine library archives, detail his discussions with his search committee about potential candidates for the Chair of the McMaster University Anesthesia department. They chose Dr. D.V. Catton, already well known in the city as a respected anesthesiologist, to be the first Chair of the Department of Anesthesia. At that time, only those who had clinical privileges at McMaster were offered academic positions. However, soon after Dr. Catton began his tenure, academic positions were offered to the heads of the other clinical anesthesia departments in the city: Dr. Bota (St Joseph's), Dr. Browne (Hamilton Civics) and Dr. Ashworth (Hamilton Civics) and Dr. Probert.

The past 40 years of the department of anesthesia at McMaster can be examined through 4 different lenses: Education, Research and Innovation, Leadership, and International Outreach. Strength in medical education has existed in the Hamilton anesthesia community for a long time. It predates the establishment of a formal university academic department. However the establishment of a medical school, helped to organize and formalize medical education. From the very beginning of the McMaster Medical School, anesthesiologists

were involved as tutors in the undergraduate medical programme. Dr. R. Lee joined the anesthesia department in 1979 and in addition to his internationally recognized work in the area of vascular physiology and hypertension, played an important role in medical education. He was the Department Education Co-ordinator for over 20 years. He was also extensively involved as a PBL tutor and Unit 2 Chair in the undergraduate medical programme for many years. Dr. A. Wong has succeeded Dr. Lee as the Associate Chair of Education.

In the late 1990's, the anesthesia department pursued a more direct program to expose medical students to anesthesia. The first iteration of this was a physiology and pharmacology elective organized by Drs. Raymer and Kolesar. Drs. Raymer and Kolesar also published a medical student guide to anesthesia. This manual provides an introduction to the fundamental concepts of anesthesiology and since 2001, serves as the text for the anesthesia clerkship program. Recently, it has been extensively updated and revised into the first anesthesia e-book. In 2004, through the efforts of Drs. G. Peachey, F. Baxter and N. Buckley, the anesthesia department purchased its first simulator, Sim-Man. Under the direction of Drs. A. Wong, R. Whyte and G. Peachey, the anesthesia clerkship was extensively revised to be the first at McMaster University to incorporate simulation-based learning in addition to clinical teaching.

In addition to undergraduate medical education, the other main educational focus has been postgraduate training. Dr. D. Morrison was the first anesthesia residency program director. Through the late 1970's and into the 1980's, the program was highly recognized by the Royal College of Physicians and Surgeons of Canada for the strength of its training. Over the years our faculty have won numerous teaching awards. Dr. S. Puchalski (2002) and Dr. E. Ling



McMaster University Medical Centre open house, 1972

(2010) were recognized nationally with the Canadian Anesthesia Society's Clinical Teacher Award for their outstanding teaching skills and educational contributions. Residency education has changed significantly since 1972. Though seminars and clinical teaching are still integral, simulation has also become an important component of residency education. Dr. Dave Musson was recruited to the Department of Anesthesia as the Director of Centre for Simulation Based Learning. In recent years, the simulation component of the residency training program has grown significantly as an integral part of anesthesia education.

A second area of strength in the McMaster University Anesthesia department is research and innovation. Like education, interest in research and innovation in anesthesia predated the development of a university anesthesia department. The organization of an academic department facilitated further publications. Individuals like Drs. Browne and Catton continued to publish seminal papers including "A study of awareness during anesthesia" in *Anesthesia and Analgesia* 1973. Dr. Forrest, who was the chair of the McMaster Anesthesia department (1980-1990), was the lead investigator for a large multi-centre, international trial looking at anesthesia outcomes in over 17,000 patients given general anesthesia in four different regimens. In addition to the valuable clinical data, this trial demonstrated that large-scale multi-centre anesthesia trials were possible. This type of collaborative work was also evident in the POISE trial, which was led from McMaster and enrolled over 8000 patients from 23 countries and 190 hospitals, looking at the outcomes associated with peri-operative beta blockade.



Farewell Party for John Riggs, 1983

Back Row (left to right): Don Catton, David Morison, Geoff Dunn, Ronnie Browne, Girish Moudgil.

Middle Row: John Hewson, Jay Forrest, John Ashworth, John Rigg, Fred Wright, Angie Fargas-Babjak, Bob Lee.

Front Row: Matt Bazoin, Joe Woo, Kari Smedstad, Bill Bota

Dr. J. Paul took over as the Department Research Chair in 2002 and, with the help of Dr. Buckley, has overseen the development of a clinical research team that includes full-time research coordinators, two consultant statisticians, and a number of graduate students. The team is located adjacent to the academic department in a dedicated research office. This infrastructure has helped medical students, anesthesia residents and staff launch and complete a number of clinical trials on many aspects of anesthesia practice. An extensive list of publications as well as ongoing research projects is available on the department website.

A third theme that has characterized the McMaster University Department of Anesthesia is leadership. This leadership can be seen in the aforementioned areas and in clinical excellence at the local, provincial and national levels. Dr. D.V. Catton's tenure as the first Chair (1972-1980) was succeeded by Dr. J.B. Forrest (1980-1990), then Dr. R.A. Browne as the Acting Chair from 1984-1985. Dr. D. Morrison was Chair from 1990-1997, Dr. H. Yang from 1997-2002 and Dr. Buckley became Chair in 2002 to the present. In 1971, Dr. J. R. Hewson joined the Department and quickly led advancements in anesthe-

sia and critical care. He served many years as Chief of the Department of Critical Care at the Hamilton Civic Hospitals and the Director of the Regional Critical Care Program, then later as the Associate Dean of Health Services. Drs. B. Egier and J.R. Hewson were also instrumental in establishing the first Royal College-certified Critical Care training program in Canada, at McMaster. In 1984, Dr. A. Fargas-Babjak launched the first acupuncture clinic at an academic institution as part of a multi-disciplinary pain clinic. It has grown into an internationally recognized clinical, educational and academic program.

The final area of strength is international outreach work. Dr. A. Dauphin, a graduate of the McMaster anesthesia residency program, joined the St Joseph's department of anesthesia in 1991. That same year he began working with clinicians, educators and health administrators to improve anesthesia care and training in Haiti. He has established a program where anesthesia residents from Haiti spend several months of their anesthesia training in Hamilton. In recognition of his international work, he received the John Sibley Award. Dr. Dauphin has also helped to establish a relationship with anesthesiologists in Uganda. Through Dr. Dauphin's influence, ether which had been the mainstay of anesthetic practice in Uganda, was replaced with safer inhalational anesthetics. We currently have a thriving academic relationship with educational training opportunities for Ugandan residents in Hamilton and McMaster anesthesia residents in Uganda. Many other faculty have also been involved in caring for patients in many other parts of the world, sharing their expertise in clinical medicine as well as providing much needed anesthesia education.

An anniversary is a time to look back, but also to look forward. When looking back over the past 40 years, we can see that there has been tremendous progress. The breadth of clinical practice has increased dramatically as has the growth in research and research productivity. The strong emphasis on medical education will continue as the department carries on in its strong Oslerian tradition of clinical teaching, graded responsibility and reflective practice. Our residents who graduate from the program will be among the best anesthesiologists in the country.

There will also be some challenges in the future. The profession of anesthesia, as a whole, is undergoing a shift. Anesthesiologists are beginning to spend more time engaged in peri-operative medicine outside of the operating room as well as taking leadership positions in hospitals, universities and regulatory bodies. We will need to look for safer, novel and more effective ways to deliver peri-operative anesthesia care as well as acute and chronic pain management. In the



Drs. Greg Peachey and Norman Buckley demonstrate how medical students can practice their skills on a computerized mannequin.

167 years since William Morton demonstrated the effects of ether to relieve surgical pain, the specialty of anesthesia has re-invented itself. It has done so by constantly asking, "how can we do this better and safer?" This will continue to be our challenge moving forward.

## A World Without Propofol: Looking Beyond Western Medicine

Dr. David Sussman (PGY3 resident)

The familiar sound of the pulse oximeter provides comfort in an otherwise unfamiliar world. The patient: an 8-day-old female. The case: myelomeningocele repair. If this were the OR at McMaster, it would be relatively straightforward: hook the patient up to appropriate monitors, induce with propofol and rocuronium, intubate and connect to the ventilator. In the operating theatre in Uganda's regional referral hospital: a nightmare. The anesthetic of choice: halothane and thiopental; two drugs I only recall reading about once. As I scanned my monitors, I realized I do not have an EKG monitor, end tidal carbon dioxide gas analysis or any other vital sign monitors to help me with how my patient is doing. Back home, 72 hours ago, I had taken ignorant comfort in these tools.



Assisting with a delivery

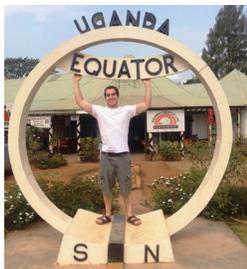
My international elective in Uganda brought me 7,200 kilometers away from home. I arrived at the international airport in Entebbe, then traveled one hour to Kampala, where I would spend the majority of my time. At first glance, Uganda appeared chaotic and impoverished, overrun with people and animals. My first impressions couldn't have

been more wrong.

A country of 40 million, Uganda has endemic diseases and pathologies I have only read about in medical textbooks. I began my journey hesitantly, attempting to find my bearings in unfamiliar territory. I very soon realized that Uganda is a beautiful country, full of people who are quick to embrace and take care of you.

Each day began with a chaotic navigation through the streets of Kampala, to Malaga Hospital (the largest referral center in the country). I competed for space on the dusty sidewalks with people, budda budda (motorcycles) and bicycles. I loved observing this morning rush-hour. Despite the turmoil, Ugandan men sported perfectly pressed shirts with French cuffs, regardless of where they were going, and Ugandan women wore the most colourful fashions.

The hospital was a large, unassuming, well-manicured building of 1960's era. Inside, the chaos of the city streets was left behind only to be taken over by another sort of morning rush. The halls were flooded by people in white coats eager to start their day. As I maneuvered my way to the operating theatre, I passed through the neurosurgical ward, barren except for old steel beds. Holes cut in the cement walls acted as windows. In other parts of the hospital, rooms were filled with patients, tended to by nurses in perfectly starched white uniforms. As I changed into my scrubs, I wondered what the day will bring.



At the Ugandan equator line

As a third year anesthesia resident this was my first international elective; however McMaster University has a longstanding history with the anesthesia program in Malago Hospital. Previous residents mentioned that my role would be part observer, part teacher, and part cultural ambassador. In private, some conveyed to me their sense of powerlessness at the overwhelming needs of hospitalized Ugandan patients. Not knowing what to expect, I approached my elective with as much open mindedness to the experience as I possibly could.

I participated in almost all aspects of patient care; ranging from the ABCs of an acute resuscitation, scrubbing into a cesarean section, performing a rigid bronchoscopy for removal of a foreign object, to teaching other medical students and other residents. The residents at Malago Hospital were extremely well versed in theoretical knowledge. The residents often quoted medical literature and journal articles to support their management decisions. They were even more gifted with their practical skills; able to flawlessly perform tasks with equipment that would make North American doctors cringe. The luxuries of being able to get intraoperative hemoglobin, a blood gas in the ICU, or a chest X-ray for line placement did not exist. One had to rely on purely on clinical decision-making at the bedside. Furthermore, the residents did not have the luxury of a stylet, glidescope or other adjuncts for challenging intubations. Working within their limited means, they performed their tasks in the OR with ease. This effortlessness and confidence in face of so little left me feeling embarrassed.

While I would like to think I was assisting Ugandans with their day-to-day medical systems operations, my motives were not entirely altruistic. While I was eager to assist fellow doctors, I was even more keen to learn from their experiences and practices. I teamed up with residents at every available opportunity, discussing approaches to various diseases. Perhaps most astonishing to me was how two countries, so far apart geographically and economically, shared the same fundamental principles and innate desires to help those in need. My international medical elective was filled with excitement, nervousness, and at times sheer terror; an indescribable cultural, medical, and life experience, which I wouldn't trade for anything. At times, though, I was scared and frustrated, wishing that I could have the comforts of home with me.



Dr. Sussman with the Ugandan team

I also had a chance to explore the country outside of the walls of the Malago Hospital. In the north, I visited the source of the Nile in Jinja, home to the best and most beautiful white water rafting in the world. I cruised through Murchison Falls National Park on a safari, chasing down antelope and observing lions, the day culminating in a hike to a spectacular waterfall. In the west, at the Rwandan border, I literally came face-to-face with the Silverbacks, one of the last remaining gorilla families.

As I reflect on my time in Uganda, my mind is overwhelmed with memories and experiences: the smell of burning garbage on the roadway, the sounds of horns blaring, the heat of the sun on my face. Most of all I will remember the faces of the people I met and worked with. Having learned so much from these people, I wish there was more I could have done for them. My elective in Uganda took me out of my comfort zone and I've been left with one of the most medically and culturally rewarding experiences of my career. I learned more from the past four weeks, than the past four years of residency.

When I asked: "Is there anything I can do to help?" to the residents at Malago, they just looked at me and smiled. As I sit at home now, I smile and reminisce about my experience in Uganda finding myself longing to go back. Scanning my monitors, in the comfort of the Hamilton General Hospital operating room, my attention is drawn to that familiar hum of the pulse oximeter and the many stories it brings.

## Lecture as Performance: Workshop Update

Dr. Anne Wong

Lecture as Performance: Connecting with your Presentation was an innovative faculty development initiative of the Department of Anesthesia held on Nov 30, 2013 at the Courtyard Marriott. The workshop aimed to help faculty develop effective presentation skills. Our guest facilitator, **Colleen Aynn**, brought a unique actor's perspective to communicating to a large audience. Effective communication starts with self-awareness, authenticity and passion for the message. The key is learning how to convey these elements in a manner that connects and resonates with the audience. The workshop was highly interactive and included music, videos, visualization, vocalization, warm-up exercises, audiovisual aids, practice presentations and feedback. Colleen led us through a fascinating and insightful exploration of broad presentation principles and styles, use of body language, space, voice, powerpoint and other visual aids. We were able to view videotapes of our presentations and we received numerous practical tips on how to handle pre-talk anxiety and more effectively communicate our message. It was an excellent and unique opportunity to develop our individual presentation skills with coaching from an expert and have fun in the process!



Colleen Aynn and Dr. Anne Wong at the session

## Contemporary Medical Acupuncture Program

Dr. Alejandro Elorriaga Claraco

The Spring Contemporary Medical Acupuncture Program, sponsored by the Department of Anesthesia since 1998, marks the 16th consecutive year, and the 31st edition of this Continuing Education activity. The Neurofunctional Acupuncture approach to the treatment of pain and dysfunction taught by the Program continues to attract practitioners from different professions and geographic locations, as far as Sweden, Greece and Argentina. Many graduates have continued their training with **Dr. Alejandro Elorriaga Claraco**, Program Director, via Advanced Programs such as the Neurofunctional Sports Performance Practitioner series offered at McMaster University and other programs that take place internationally, such as the recent course in Cologne, Germany, from April 5-6, 2014. The organic and steady growth of Neurofunctional Practitioner graduates of the CMA Program is testimony of the value provided by this innovative training developed under the scientific and academic tutelage of the McMaster Department of Anesthesia.



Dr. Elorriaga in Cologne with Swedish participants Naprapath Kim Rorvik (left picture side) and Physiotherapist Vladimir Egorov (right)

## Awards & Achievements

Congratulations to **Dr. Norman Buckley** who is the 2013 recipient of the **Canadian Pain Society Excellence in Interprofessional Pain Education Award**.

Congratulations to **Dr. Harsha Shanthanna** on his 2014 CAS Research Program, AbbVie New Investigator Award in Anesthesia, for his study entitled "**Most Effective Opioid Analgesia in Ambulatory Surgeries: a randomized control, investigator blinded, parallel group with superiority of Morphine versus Hydromorphone**".

## CaRMS Matches

Please welcome the new PGY1 residents in the new academic year: **Drs. Bosco Law, Craig Ross, Broden Rutherglen, Urooj Siddiqui, Caitlin Vandercappelle, Andrew Syrett, Mohamed Nassef and Abdelaziz Al Kalbani**

## Department News

We would like to thank **Dr. Lori Olivier** for her contributions as **Residency Program Director**, and now welcome **Dr. Karen Raymer** into the role effective January 2014. Many thanks to **Judy Pace** who retired after 40 years of dedicated service to McMaster University. We wish her all the best for a very happy retirement! We now welcome **Candice Stroud** to the role of **Program Coordinator, Anesthesia Residency Program** effective April 2014.

The department also welcomes **Sally Perry** to the one-year career-growth position of Chair's Assistant to **Dr. Norman Buckley** effective April 2014.

Additionally, we welcome **Ann Raback** to the role of Recruitment, Tenure and Promotion Coordinator, supporting **Dr. Anne Wong**. Associate Chair of Education effective March 2014.

## In Memoriam

We are sad to note the passing of **Dr. Fred Wright** on March 24, 2014. He was an esteemed anesthesiologist, professor, educator, former residency program director and researcher in the McMaster University Department of Anesthesia. He will be greatly missed.

## Newsletter Staff

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## Did we miss your news?

Are you interested in submitting an article for the Department's next newsletter? Let us know!

Contact Us

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