Simulation Comes to the OR

Several years ago, as part of a regional mandate, the Children’s Section as a group spent a weekend recertifying in Pediatric Advanced Life Support (PALS), an exercise which included team practice of resuscitation scenarios. The overwhelming feedback was that while it was valuable, it could be far better if practiced for targeted scenarios on location in the OR with the personnel we commonly work with. There has been recent substantial turnover of OR staff, with recruitment of many junior nurses who have never participated in resuscitation, and many have expressed concern about the ability to cope in a critical situation. Additionally, true critical scenarios, such as exsanguinating hemorrhage and cardiac arrest, are uncommon in Children’s OR.

In May 2011, concept became reality, and “Code Blue” practice came to Children’s OR. Anesthesiologists, residents, anesthesia clinical assistants (ACA), nurses, surgeons and multi-skilled workers (MSW) participated after the slate in an empty operating room. The goals were to foster teamwork and communication, identify, teach, and maintain needed competencies, and identify system issues that could hinder patient care.

High fidelity infant and child mannequins were brought from the U of M Faculty of Medicine Clinical Learning and Simulation Facility. Local faculty wrote code blue scenarios and the computer based mannequin’s activity such as vital signs, breath sounds and so forth were manipulated by simulation physician Marshall Tenenbein and simulation technician Ed Walker. “Sim-child” and “Sim-baby” breathe, have pulses, reflexes and make crying, retching and grunting noises, creating life-like scenarios.

For each simulation, the “hot seat” participant was provided with the patient’s age, weight, type of procedure, relevant history and medical findings as well as other participants’ roles. Simulations were 20-25 minutes in length followed by a 30-60 minute debriefing.

Overall staff found the mocks to be invaluable in identifying strengths and weaknesses in resuscitation competency. Opportunities for improvements have been identified in three general areas; individual performance, team performance and system processes.

Individual deficiencies were noted in technical skills such as basic life support, defibrillation, mechanical infusion pump operation and accessing infrequently used equipment and resources. Non-technical skills in leadership declaration and role assignment, closed-loop communication and role responsibilities were also identified as areas to improve upon.

As a team it was identified that closed loop communication, teamwork and leadership needed practice. Debriefings where participants rated the overall performance best were those where the leader declared themselves early, assigned roles and led the code as opposed to “doing it all themselves”.

The exercises have uncovered system problems such as slow access to emergency blood due to its storage location, and absence of diagnostic ECG services.

To date, 14 simulations have been run. Scenarios have included laryngospasm, hyperkalemic arrest, arrest in the prone position, severe bradycardia, and tonsil hemorrhage. Resuscitations with involvement of PICU staff during “Code Blue” practice sessions are currently underway in an attempt to simulate weekend or nighttime arrest situations. Participation has included all of the Pediatric anesthesia staff, 3 ACAs, anesthesia residents at Children’s, greater than 90% of OR nurses, 100% of MSWs and 3 surgeons. More complex scenarios are being planned for the future.

Submitted by: Lisa Gardewine BN Nurse Educator, Child Health Program and Heinz Reimer MD FRCPC
A Word from the Department Head and Medical Director

It is indeed a pleasure for me to report on the activities of our Department and region over the last several months.

I will start by providing an update regarding the development in our Undergraduate portfolio. After several years of excellent service, Dr. Chris Christodoulou completed his term as Undergraduate Program Director for the Department. In addition, he played a seminal role in the University accreditation site visit from the accrediting authorities. We thank Chris for his tremendous service and wish him success in his future endeavors. We are most delighted and pleased that Dr. Rajamohan has taken over the position of Undergraduate Program Director. He inherits an excellent portfolio and I am sure will continue to build on the excellence that Chris has created. I wish Raj well in his new endeavors.

In relation to Undergraduates, it is indeed a pleasure to report that the University of Manitoba Medical School has received notification that they are to be fully accredited. There is a requirement for some issues to be addressed in the first year. However, this is a tremendous accomplishment and many members from our Department contributed to the success of the site visit. I thank all the faculty and staff for these efforts.

The internal review of the Residency Program will occur on Friday, December 2nd. This internal review is in preparation for the next Royal College visit. Preparations are progressing well and I believe the Department is well prepared for the internal review. I also thank all the faculty members and staff who have played an important role preparing for the internal review.

In Continuing Medical Education, the mission of the Department continues to evolve under the directorship of Dr. Joel Loiselle. As you have noticed, the Visiting Professor Program has continued to expand and has been very well received by the faculty and students of the Department and region following. You efforts are appreciated.

Dr. Eric Jacobsohn
Department Head
Medical Director

Anesthesia Equipment and Drug/Supply and Acquisitions Report

- For Fall and Winter 2011, there are a number of ongoing equipment and drug projects that WRHA Anesthesia is involved in:
  - Spinal and epidural trays: The region is continuing to work with WRHA Logistics services on spinal and epidural trays for Anesthesia use within the WRHA. Your participation and feedback via your site leader is appreciated.
  - Central line supplies: WRHA Anesthesia is working in conjunction with other WRHA stakeholders on the renewal of the central line contract. This project is still ongoing.
  - Intravenous supplies and volumetric pumps: WRHA Anesthesia is involved in an integral manner with the provincial project to renew the intravenous supplies and volumetric pump contracts. This is a very large, province-wide initiative for which Anesthesia is taking on a leadership role.

Thank you for your continued support of the Equipment and Drug/Supply and Acquisitions program.

Dr. Trevor Lee

A Few Words From Associate Head, Research

Congratulations to Sophie Davey and her supervisor, Dr. Hilary Grocott for their study "The Impact of Extracranial Contamination on Regional Cerebral Oxygen Saturation: A Comparison of Three Cerebral Oximetry Technologies". Sophie did her BSc med project with Dr. Grocott as her supervisor. She presented this study at the Canadian Anesthesiologists' Society Meeting in June 2011. She was singled out for special mention because she was the first medical student ever to present at the Residents' Competition. In addition, she won the second prize award for this year's CAS Medical Student Essay Competition. She also presented her work at the following conferences:

- Society of Cardiovascular Anesthesiologists 2011 Annual Meeting (May 2011)
- Cardiac Sciences Resident Research Day (May 2011)
- Canadian Anesthesiologists' Society 2011 Annual Meeting (June 2011) – selected for presentation at the Richard Knill Competition (top 6 submitted meeting abstracts)

AWARD: T. Edward Cuddy Summer Student Award
- Award Presented at Institute of Cardiovascular Sciences Awards / Winnipeg Heart International Conference (October 2011)

Congratulations again to Sophie and Dr. Grocott, for their work and their success.

Dr. Grocott is also supervising another BSc med student, Lindsey MacDonald. Her project is entitled "Delirium Following Cardiac Surgery: Incidence and Risk Factors". She received the following award at the University of Manitoba's BSc Medical Student Presentation this year:

AWARD: Allyn Rossen Award for the best project in Cardiovascular research
- Award Presented at B.Sc. (Med) Student Dissertations – 2011
A Few Words From Associate Head, Research

CONTINUED FROM PAGE 3

Dr. Stephen Kowalski

Research activities within the department are quite active, supported in large part by the Academic Oversight Committee. The committee met in the spring approving six new studies and again in September 2011, approving an additional four studies. In addition, the AOC has approved two faculty development grants. The first is for Dr. Al Mutch who will be taking a one year sabatical to the University of Toronto and to the Wolfson Brain Imaging Centre in Cambridge, England. He will be learning the skills to lead a team in neurological research at the Kaysen Institute for Advanced Medicine when he returns.

The second award is to Dr. Fadi Alghazali who has undertaken a number of collaborative studies with Dr. Elin Giannoudi in Respiratory Medicine, studying the prevalence and impact of OSA in the pregnant population. At the recent ACUDA meeting in June, it was mentioned that there are only three other universities in Canada who have a similar support structure like the AOC for research endeavors. The investment from the AOC is already having a substantial impact in terms of the number of active studies (30) and I believe we will be successful in obtaining external funding in the near future. In addition, the Research Office (Linda Girling!) is working on having the Research website up and running in the near future.

Peter Duncan: Where are They Now?

I cannot believe it was a quarter century ago that my family and I left Winnipeg. I had graduated from the University of Manitoba (70), and its anesthesia residency (73). After a year in Seattle at a MRC research fellowship I returned to Winnipeg Children’s Hospital in 1976 as an anesthesiologist and Director of PICU. In 1986 I returned to my home province to chair the Department of Anesthesiology at the University of Saskatchewan. After 7 years our family left to sample Upper Canada and Queen’s University. In 1998 we returned west, to Victoria, British Columbia. I remain doing clinical anesthesiology (emphasis on pediatrics), teaching (UBC residency and the Island Medical Program), and contributing to addiction medicine in Vancouver.

As going Winnipeg I have the honour of being President of both the CAS and ACUDA, and of serving on the editorial boards of CJA and Anesthesia & Analgesia. Personal highlights include completing the West Coast Trail with old friends (and our sons), completing the Victoria marathon (once only), and taking introductory programs in fly-fishing, kayaking, and slower living on “Island time”. Of course, I have also begun “extreme gardening”, Victoria’s year-round pastime. We still keep in touch with our Manitoba friends, and I return annually to Lake of the Woods to control your sultry walleye population.

Through this itinerant journey in anesthesia I have gained a greater respect for Manitoba medicine, the medical school, and its anesthesia residency. Of the five medical schools in which I have been appointed (and in the others I have reviewed), the importance of education has been most honoured in Winnipeg. I believe this stems from the very mode of medical education in the province. Manitoba’s Medical College began when the clinicians of the community petitioned the University to provide a medical education for the province’s students. This relationship led to mutual respect between the clinician and the academic, a critical component of professional training. In contrast, in other Canadian centers the university virtually imposed medical students upon the practicing physicians, giving “town-gown” distrust. That disharmony is less important in times of plenty, but when resources are stretched the basics of cooperation in education often become compromised. No place is perfect, but the University of Manitoba program seems to do it best!

Congratulations on your continuing excellence, and “thank you” for the memories.

Homi HM, Jones WM, de Lange F, Mackensen GB. GROCOT M, GROCOT H. Exacerbation of systemic inflammation and increased cerebral infarct volume with cardiopulmonary bypass after focal cerebral ischemia in the rat. J Thorac Cardiovasc Surg 2010;140:660-6


Every issue, we will be listing all upcoming publications and lectures involving our staff. If you would like to submit your publications or let your fellow members of the Department know when you have been invited to lecture please email us at lbouchard@hsc.mb.ca so we can print it in a future of Gasline.
Riley’s dedication, persistence and compassion has taught him the value of pursuing his goals to the end.
People in the Crowd

Best wishes to Dzana Ismailovic, Anesthesia/Surgery Financial Analyst, who has relocated with her family to Ontario. Congratulations to Dr. C. Rajamohan “Raj” on his appointment to Undergraduate Program Director effective October 1.

Thank you to Dr. Chris Christodoulou as he steps down as Undergraduate Program Director.

Thank you to Dr. DiAnne Lieberman for her term as Site Medical Manager; Grace Hospital effective December 30.

Welcome to Larry Mudge as Anesthesia Technician at St. Boniface Hospital.

Welcome to Juliea Petrelli, who joins the Pain Clinic.

Best wishes to Mark Acala as he leaves Anesthesia and begins a new position at HSC.

Best wishes to Miranda Ma who has left the Anesthesia Lab and taken a position in Internal Medicine.

Congratulations to Faylene Funk and her husband Koby on their marriage held on April 9.

Congratulations to Mani Bhangu who married Jasdeep on July 16.

Congratulations to Ryan Brinkman and his wife Shaunna on the birth of their first child, a daughter Natalie who arrived on July 16.

Congratulations to Bruce Anderson who graduated from Winnipeg Health Services Management Course with honours in June.

Welcome to Marta Cenkowski who joins the Residency Training Program as a PGY2 Anesthesia Resident.

Congratulations to Wimpie van den Heever and his wife Jutien on the birth of their son Johann born on October 6, 2011.

Congratulations to Dr. Jay Daya and Dr. John Mansfield on their appointments as Co-Site Medical Managers at the Grace Hospital effective January 2, 2012.

Long Service Recognition

30 Years

Bruce Anderson

Dr. Laurence Brownell Linda Dalton Evelyn Hofer Judy Timkin

25 Years

Dr. Jack Cannon

20 Years

Glenda Klein

The Researcher’s Corner

Alex Vilafranca

Alex underwent his postgraduate education at the University of Manitoba. He received his Bachelor’s degree in Exercise and Sport Sciences, with a focus on Exercise Physiology. During this time, he appeared multiple times on the Dean’s Honour List. Following this, he was awarded a University of Manitoba Graduate Fellowship to study the neuromechanics of biarticular muscles under Dr. Dean Kriellaars of the School of Medical Rehabilitation. This culminated in a thesis based M.Sc. degree in medical rehabilitation. He has worked with the department of anesthesia and perioperative medicine since March 2009, and locally coordinated as well as contributed intellectually to the “BIS or Anesthesia Gas to Reduce Explicit Recall” clinical trial (BAG-RECALL), recently published in the New England Journal of Medicine. He has a particular expertise in batch processing of large datasets, filtering and processing of physiological signals, and statistical analysis.

When he isn’t writing matlab code or scientific manuscripts, Alex can be found drumming, lifting weights, or reading philosophy (mainly pragmatism and logic).

Recent Publications Published:


In Press:


*Dual primary authorship - contributed equally to manuscript.

Submitted and Currently Under Review:


If you have information that you wish to share with members of the department and alumni, please forward to Laura Lee Bouchard at lbouchard@hs.mb.ca
Manitobans at CAS - June 2011

The 2nd annual alumni function was held at CAS on Saturday, June 25 at the Westin Harbour Front in Toronto. This event will continue to be held annually at CAS. We encourage all current faculty, residents, staff and all alumni to attend.

The Residency Program

The Residency Program is well underway for the 2011/2012 academic year. The residents held their first annual Resident Retreat at the Manitoba Museum on September 16, it was very well received and the residents are very grateful for the opportunity to hold a retreat.

The training program will undergo an internal review on Friday, December 2 in the administrative offices. Internal reviewers for Anesthesia will be Dr. Kinny Limba and Dr. Les Garber; the internal review is not as expansive as the external review and will only include a small number of faculty members. The itinerary has been circulated to those who are required to participate.

We were pleased to welcome Dr. Doug Craig back as the adjudicator for the Resident Research Symposium on November 8 at Bergmann’s on Lombard. Thank you to all the many faculty who were able to attend the event and to all the residents and their preceptors for all their hard work with their research projects.

We are starting to gear up for the CaRMs process which opens on December 1 for file review. I am pleased to welcome Dr. Eric Sutherland as the Chair of the Admissions Committee. Eric will oversee the CaRMs process from December 1 through to our interviews to be held on February 3, 2012. The Education Office will be very shortly putting a call out for volunteers to participate in the interview process in February, I would encourage everyone to consider participating.

I would like to welcome Marta Cenkowski who joined the current PGY2 resident cohort effective October 28, Marta has transferred from the University of Calgary, Obs/Gyne Program.

As we move forward with electronic evaluations, the residency program will be rolling out the daily evaluations (current purple form) for anesthesia residents within the next few weeks. The electronic form is meant to provide the program with more reliable and consistent daily evaluations. I strongly encourage faculty to continue to provide daily face to face constructive feedback to the residents at the end of the OR day.

Residents are currently completing electronic evaluations for seminars and that feedback will be forwarded by the Educational Office to faculty presenters shortly after the seminar presentation. Residents are also required to complete monthly evaluations on all faculty and/or fellows that they are assigned to through the APMSS system, which is collated and forwarded to faculty twice per year.

Dr. Frances Chung

Visiting Professor, Sept 2011

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The first Annual Resident Retreat was held on September 16, 2011. Dr. Ryan Amadeo led a well-rounded discussion on being a resident, preparing for Royal College exams; fellowship planning; and lifestyle as a resident, fellow and faculty member. The “food lady” Carla D-Andreamatteo, Registered Dietitian, provided an interactive session of cooking healthy; making the right choices for a busy life and right choice food supplements for cooking. Dr. Jacobsohn offered time for interactive questions and answers over lunch. Massages were provided by Waterfront Massage Therapy and many of the residents participated in bike rentals at the forks. The day was capped off with an evening BBQ hosted by Craig and Kristine Haberman. Special thanks to David Bergmann and his team for provided refreshments for the day!
Retirement of Paulette Morrison
Anesthesia Technician, HSC

Paulette worked for the anesthesiology department on the 4th floor of Women’s for over 30 years. Even though she was a member of the anesthesiology department she was a much loved and valued member of the Women’s OR/PACU team. Paulette was devoted to making our patients feel safe and comfortable and many knew of her through word of mouth from other patients and requested Paulette by name. She was one of the first staff members patients encountered and she always went out of her way to help ease their fears and worries. Paulette joyfully participated in staff functions and events and we consider her not only a coworker but a dear friend. She will be sorely missed by all.

Respectfully Submitted by, Jean Restall, Women’s OR CRN

The Annual Resident Research Symposium

The Annual Resident Research Symposium was held on Tuesday, November 8 at Bergmann’s on Lombard. The Dr. Jo Lee Visiting Professor – Dr. Doug Craig, Professor Emeritus, University of Manitoba was the guest adjudicator for the symposium. Posters were presented by the PGY4 Anesthesia Residents and 8th year student Lindsay MacDonald. Oral presentations were completed by the PGY5 Anesthesia Residents. Congratulations to Christine Pickering on her poster presentation win and to Ryan Brinkman on his oral presentation win. The annual Ben Shell Award for Overall Best Research Project was awarded to Kristin McCrea.

This year (and for future years) the symposium also included the Joe Lee Award for Humanistic Approach to Patient Care. The Joe Lee Memorial Fund was established in 2002 following the sudden death of Dr. Lee. Dr. Lee’s family established the Joe Lee Award to recognize an Anesthesia Resident and Critical Care Fellow for their humanitarian approach to patient care. This year in keeping with Dr. Lee’s belief that the entire health care team played a role in the care of the patient his family has developed the Joe Lee Allied Health Professional Humanistic Approach to Patient Care award. Dr. Craig provided those in attendance with a glimpse of the man Joe was and Dr. Heather McDonald, Chair of the Selection Committee highlighted what the two award recipients resembled in Joe’s beliefs. Dr. Greg Klar was awarded with the 9th Anesthesia Resident Joe Lee Award and Victor Duarte (Anesthesia Clinical Assistant) received the first Joe Lee Allied Health Professional Humanistic Award for Patient Care. Congratulations to everyone!

In keeping with Dr. Lee’s belief that the entire health care team played a role in the care of the patient, his family has developed the Joe Lee Allied Health Professional Humanistic Approach to Patient Care award.

Photo 1: PGY4 Research Award – Dr. Doug Craig, Dr. Eric Jacobsohn, Dr. Christine Pickering, Dr. Steve Kowalski
Photo 2: Dr. Ben Shell Research Award – Mrs Cal Shell, Dr. Doug Craig, Dr. Kristin McCrea, Dr. Eric Jacobsohn
Photo 3: PGY5 Research Award – Dr. Doug Craig, Dr. Eric Jacobsohn, Dr. Ryan Brinkman, Dr. Steve Kowalski
Photo 4: Dr. Joe Lee Humanistic Awards – Dr. Doug Craig, Dr. Victor Duarte, Dr. Heather McDonald, Dr. Greg Klar, Dr. Eric Jacobsohn
Managing Daily with APMSS  

BY DR. ROB BROWN

I am very pleased that we are now beginning to manage daily evaluations electronically through APMSS. This is an enormous evolution in our critical mission of providing quality evaluation for our trainees. The use of this electronic platform will greatly increase the efficiency of collection, tracking and reporting of this data. It should also simplify the process for the evaluator, as it will come to you in exactly the same way that our Grand Rounds evaluations do. As a result we will be able to provide to our trainees an extremely high quality, timely and accountable evaluation that they can use to direct their development.

However, as good as this system is, the ultimate impact will only be as good as the effort we all individually put into our content. We have gone to great lengths to alleviate as much of the administrative burden as possible, but it does not change the responsibility we all have for thoughtful, constructive and candid feedback. As a teacher, you can be completely confident that whatever feedback you provide will be recognized and included in the final analysis. Please remember that it remains as important as ever to maintain personal communication and give feedback directly to our trainees for their day-to-day development and peace of mind.

APMSS – What You Should Know

- Google Calendar push of clinical schedule available to all faculty, fellows, residents and ACA’s. Please contact Laura-Lee Bouchard or Reid McMurchy for your username.
- Resident daily evaluations go live November 21. When a faculty member is scheduled with a resident they will receive an automated email to complete the daily evaluation for the resident on the day they are slated together in APMSS.

Teaching Overseas

Dr. Alan Mutch began a one year visiting professorship on November 1, 2011 at the Wolfson Brain Imaging Centre at Cambridge University, England and the University of Toronto learning advanced Magnetic Resonance Imaging techniques. This training will be integral to future research at the Kleysen Institute for Advance Medicine (KIAM) Centre in Winnipeg.

Upcoming events in 2011-12

- December 9: 65th Postgraduate Assembly in Anesthesiology (PGA), New York, New York, www.nysaa-pga.org
- January 17: Visiting Professor, Dr. Alexis Turgeon, Laval University, Quebec.
- February 7: Journal Club, Dr. Daniela Goldie and Dr. Erika Bock
- March 13: Journal Club, Dr. Mehdi Sefidgar and Dr. Purnima Rao
- April 3 & 4: Royal College Written Certification Examinations
- April 4: Visiting Professor, Dr. Viren Naik, Department of Anesthesia, Ottawa Hospital Civic Campus
- April 21: Departmental Gala Dinner recognizing PGY5 Completion of Training and Annual Faculty Teaching Awards, Fairmont Hotel.

Editor-in-Chief: Dr. Shawn Young
Co-Editors: Mr. Bruce Anderson
Mrs. Laura-Lee Bouchard

GASLINE published quarterly and posted on our University website at www.umanitoba.ca/faculties/medicine/anesthesia/ Suggestions, comments and story ideas are always welcome. Please forward them to Laura-Lee Bouchard at lbouchard@hsc.mb.ca