Nepal lies nearly on the opposite side of the planet from Manitoba, sandwiched between the Asian super powers of India and China. This landlocked country is one quarter the size of Manitoba but has a similar population to all of Canada. It is one of Asia’s poorest countries with salaries of $1 - $3 / day for many laborers. Yet this country is very well known to westerners; the charm of Nepal emanates not only from the mountain scenery but also the traditional culture and hospitality.

It is also known to the Canadian Anesthesia community because of over 30 years of collaboration in anesthesia training programs. April 25th, a major earthquake measuring 7.9 on the Richter scale rocked the region with widespread damage and loss of life from northwest of Kathmandu to the eastern Everest region. Tremors were felt 1100 km away in New Delhi. There was an immediate global outpouring of support that included the Canadian Red Cross decision to deploy a mobile field hospital. Planning and training are critical to an optimal emergency response; I had spent considerable time over the previous two years attending courses, doing online assignments and getting immunizations etc. to qualify as an Emergency Response Unit delegate. When the alert came out I did not hesitate for a moment, but with hundreds of delegates on the roster, I was not very optimistic. To my astonishment, the day following the earthquake I received an email with instructions to be in Ottawa the following day for debriefing and...
embarkation on a 1-month rotation to an undetermined destination in the earthquake region. The email cautioned “Do you have approval and support from your employer?” That proved to be an understatement, there was direct and strong support from Eric, Scott, Chris and Prakashen and good wishes from a host of colleagues who also picked-up my 9 abandoned calls. The “Team” totaled 22 delegates including 2 surgeons, an obstetrician, 4 medical doctors, 7 nurses plus communications and logistics delegates and team leaders. Our “kit” included everything; some 43 tonnes of tents, medications, generators, complete OR and a 50 bed ward. The emotional scene in airports and flights enroute to Nepal was fascinating as relief volunteers encountered Norwegians or Swiss that they had last seen in Haiti or Chad or Sierra Leone or some disaster elsewhere. There were additional emotions of excitement and apprehension, as no one really knew what we would encounter or what we would be assigned to do and no one had slept.

The Foreign Medical Team Coordination committee in conjunction with the Ministry of Health, the International Federation of Red Cross and WHO all participated in the assessment and assignment of medical team to affected districts. The Canadian delegation was split and I was included with the first wave of volunteers to travel by Indian Military Helicopter to Dhunche, the administrative center for the district of Rasuwa, located at 2100 m, 117 km north of the capital. The District Hospital was a collection of fine stone buildings constructed on a terraced mountainside. While still standing, most of the buildings were missing a wall or more and unsafe for occupancy. We erected a tent hospital to support the local doctors and nurses with the acute disaster related injuries and the ongoing health needs of the community, with particular emphasis on maternal health. There were 126,000 pregnant women in the affected area at the time of the quake. Flat land to erect a large hospital tent is scarce in this mountain landscape. Existing damaged buildings had to be dismantled by hand to create space for replacement tents to be established. These rugged tents are expected to remain in use...
at this site for the next 2 years and possibly longer. The CRC will send a third and forth rotation of staff with the later group handing off responsibilities to Nepalese staff. Ongoing support but not a full compliment of delegates is expected to have a multi-year horizon with the goal of strengthening the health services to the district. In addition to medical needs, we also established programs aimed at the psychosocial needs of this traumatized community. A child safe play area was established and tent accommodations for a boarding school was provided. Teachers and elders were engaged in sessions on dealing with loss and fear.

The scope of medical conditions was not complex. Serious earthquake related injuries had been evacuated by military helicopter in the first two days. Several ward patients had wounds requiring debridement and daily wound care. Mobile clinics to even more remote communities were in demand; childhood pneumonia and diarrhea outbreaks were encountered. The OR cases were largely non-earthquake related such as appendicitis, I & D, cholecystectomy and caesarian section being the most common procedure. Isoflurane was available with a draw over vaporizer and up to 5 liters oxygen from an oxygen concentrator. No muscle relaxants were available, but the anesthesia kit included 175,000 mg of ketamine. There were ample antibiotics including Bestocef, obviously the best cephalosporin. Sterilization of instruments proved to be very challenging with the simple pressure cooker devices that we had.

A thirty-minute walk from our hospital compound would take you from the dust and noise of construction and into a lush Fir and Rhododendron forest with abundant birds, waterfalls and snow covered peaks. It became a morning ritual for me to lead a small group on a two-hour forest walk and be back for 8:00 rounds.

A real highlight was to spend some time on my way back through Kathmandu with former residents from 1999-2000. They had harrowing stories to tell of their experience during the major quake and the second quake of May 12. They operated for days on a parking lot and in a cargo container as no one dared venture to the 6th floor operating rooms with daily aftershocks. On a ward round they proudly detoured to show me their pre-admission clinic and block facilities for ultra-sound guided regional anesthesia. They used “advanced spinal anesthesia” effectively for procedures that I would not have even thought feasible. Amazing, as 15 years ago I had to strongly encourage spinal techniques.

In closing, I am truly grateful to my family, the Red Cross and the UM Anesthesia Department who have enabled me to participate in such a unique response in a country that I am so fond of.

Dr. Doug Maguire
As the current academic year comes to an end, it is a pleasure for me to reflect on our achievements over the last year.

It is fitting to start with accolades for our residency program. We are extremely proud of the caliber of residents and the quality of resident education in our program. During the Royal College review this year, our program was identified as having many strengths, including the diversity of clinical exposure, excellent teaching faculty, and a commitment of support from the University and the Region. Our CaRMS match again this year reflects popularity and excellence of our specialty in Winnipeg. Our residency program will face challenges over the next few years as the Royal College moves ahead with the concept of competency-based education (CBE). This RCPSC ‘experiment’ involves a tremendous commitment of resources, both in the management of the curriculum and for the evaluation of trainees. Our Department is currently heading a national study of the 17 Departments of Anesthesiology, and the 17 Postgraduate Deans, to establish levels of involvement across the country. This study is effectively a repeat of the 2001 study, but also solicits the input from the various deaneries regarding the role and contributions of anesthesiologists within their UGME curricula. The anesthesiology community has found it increasingly difficult to compete for national research funding; as a result I believe it is even more important to make our mark in the medical school through our educational endeavors. Our role in teaching the Clinical Reasoning Course is a testament to this. I would like to thank the faculty who are committed to the UGME curriculum and encourage those who are not yet involved, to please take up these opportunities. I am aware of the tremendous appreciation that our Dean(s) have for our contributions! I wish to thank the site leaders, schedulers and other staff who have made this possible, despite the huge challenges in having this effort not affect clinical service delivery.

Our Fellowship Program remains robust. However, because of the relative large number of opportunities for consultant anesthetists in Canada at present, applications to our programs, and to other programs nationally, have decreased this year. Fellows are significant contributors to the academic and clinical missions of the Department, and we are pleased that applications for the 2016-2017 academic year are already strong.

The Department continues to perform relatively well in the research domain. We are involved in several seminal international multicentre trials. We have published...
extensively and have presented abstracts around the world. Many of any of our faculty are invited to speak nationally and internationally. The Academic Oversight Committee awarded many excellent grants. The AOC grants are the single most important mechanism that the Department has had to stimulate and facilitate research productivity. We have attracted many summer students that are contributing to research projects. This summer 6 students are in the employ of the Department and working on important projects. We have two faculty research projects that are competing for the national Richard Knill Competition at the CAS meeting in Ottawa. As well, two resident projects are competing in the Resident Research Competition. Our research activities are supported by an excellent team of anesthesia research technicians at Health Sciences Centre and St. Boniface Hospital, and our in-house statistical consultation service from our PhD candidate, Mr. Alex Villafranca, remains an excellent resource. The Department has also been fortunate to collaborate with the Department of Clinical Health Psychology to recruit a career research scientist, Dr. Renee El-Gabalawy. Dr. El-Gabalawy is currently completing her PhD in the Department of Anesthesia at the University of South Carolina. Upon completion she will be returning to Department of Clinical Health Psychology here in Winnipeg, but have an important collaborative research role with the Department of Anesthesia. Her research is based in many aspects of perioperative psychological outcomes, including PTSD, trauma of surgery, anxiety in the perioperative period and other related areas. We anticipate excellent collaborative opportunities for our Department, and are hopeful that through these collaborative efforts that we will become very competitive at national funding agencies.

The creation of the Faculty of Health Sciences has created significant management challenges for the finances and running of the Department. Through the excellent leadership provided by Reid McMurchy and the business office, we have managed to navigate the 4% reduction in budget for this year without dramatically affecting service delivery. However, with another anticipated 4% reduction next year, our ability to maintain academic productivity will be seriously challenged.

Finally, the Department is as strong as it is because of the individual commitment that each of you makes. We look forward to your ongoing contributions and welcome those members who want to step up and lead the Department to even bigger and even better things. I would like to invite all members of the Department to participate in a half-day Academic Retreat, to be held on October 3, 2015. This will be an opportunity to reassess our various roles in the Faculty of Health Sciences and how to accomplish these.

I wish you all a happy, healthy and enjoyable summer.

Dr. Eric Jacobsohn

From The Editor: Dr. Amit Chopra

On behalf of Sean Jardine, Bruce Knoll and myself, the editorial team at Gasline would like to welcome readers to our Spring/Summer 2015 edition of the department newsletter.

We have been fortunate to have Dr. Doug Maguire provide an excellent article about his first hand experiences in Nepal following the disastrous earthquake. It is a fascinating read about coordinating health care services in Nepal and the challenges faced. His experiences are an excellent example of the humanitarian outreach possible in anesthesia and the meaningful effect and impact in a global health crisis. Dr. Maguire’s article also reflects that humanitarian efforts can be achieved not only with medical care, but also through education and academic efforts. There must be an immense source of pride to watch the Department of Anesthesia in Nepal grow to such an extent academically and clinically from fifteen years ago.

The newsletter also has contributions from Dr. Bhangu with his article outlining ERAS or Enhanced Recovery After Surgery and his goals to start a program with Colorectal surgery. It is a program in its infancy with lots of opportunities for residents and faculty to be involved in development of guidelines, participate in research and helping champion ERAS in the region. While Dr. Bhangu’s article explains what ERAS is, Dr. Aragola has written an article about ERAS in action in orthopedics at the Concordia Hospital. His article serves as our community site spotlight on Concordia Hospital, nicely summarizing the ERAS elements in the program, faculty accomplishments and ongoing research.

The spring/summer edition of Gasline acknowledges the turnovers that happen in residency at this time. We want to congratulate all PGY-5s and those that wrote this year for joining the Ranks of Royal College Fellows in Anesthesiology. As well, we want to welcome our new incoming PGY-1s.

Finally, our newsletter outlines the many academic accomplishments of our residents and faculty as reflected in the teaching awards, publications, posters and presentations in national and international meetings. Our department is well represented for the upcoming Canadian Anesthesia Society meeting in 2015.

The Gasline team hopes you enjoy our latest edition and wish you all a safe and enjoyable summer.
Every once in a while, healthcare creates an opportunity to “disrupt” traditional care models and explore new opportunities to improve patient access to quality care. The Anesthesia Clinical Assistant (ACA) program is one such program that is now into its 8th year since graduating its first group of clinical assistants in 2007. Initially there were many challenges in the integration of this novel program as it expanded into various areas within the tertiary hospitals and then eventually to the multiple surgical sites within our region. Today the ACA program supports 8 WRHA facilities: The Health Sciences Center, St Boniface, Grace, Victoria, Concordia, Seven Oaks, Misericordia, and Pan Am. Within the tertiary sites the program is developing subspecialty areas in pediatrics, cardiac, women's health and numerous off-site specialty areas for complex bronchoscopy, urology, MRI, and endoscopy. As more procedures continue to be performed in off-site areas, there will be more potential opportunities for the ACA program to grow to meet the demand.

The ACAs have facilitated massive changes in how we deliver care, as they did early on in helping to transition the Misericordia to a 2 Anesthesiologist model (from a 6 Anesthesiologist model). They have more recently helped improve patient access to the electrophysiology lab at St Boniface, just as they continue to do at HSC for complex sedation in urology, endoscopy, and bronchoscopy. The community sites have benefited considerably as well in accommodating to the extra efficiencies and safety gained by having an ACA present to help troubleshoot in the various perioperative areas. There is now almost always a second set of hands to help with vascular access, airway management, nerve blocks, help in the recovery room, assist with consults, etc. There is not only that extra layer of safety but slates are now less interrupted and able to be used more efficiently.

More recently there has been an increasing reliance on the program to assist in the considerable volume of after-hours work. It is hard to believe that for a city the size of Winnipeg, we have 7 surgical sites to cover in the evening! This means there is a large number of Anesthesiologists on call every night, and puts huge demands on us as a sustainable resource. There are 2 ACAs on call on any given night to support all of them! And with the growing number of uncovered days and evenings in the resident call schedules at the tertiary sites (hopefully a short-term issue) there has at times been an increasing reliance on the ACAs to assist in evening work. With 13 ACAs and 8 sites to cover, and with the tertiary sites each needing 2 to 3 per day, there is not a lot of wiggle room for daytime coverage when the nights get busy. We are following this trend closely and are preparing ways to flex up if the clinical needs dictate.

It has been almost a year since our last group of ACAs graduated from the program. Sarah, Grant and Will have transitioned rapidly into their new roles. We will be updating the teaching program this year with their input and assistance to ensure the teaching modules and curriculum are up to date and ready for a new group of ACAs for when the time arises.

Finally, this will be a busy next couple of months for the program as it sees some significant changes.
Contract negotiations are moving quickly to have all the clinical assistants and physician assistants in the region under the same collective agreement by the end of the summer. This may result in changes to the ACA terms and conditions of employment.

Bela Gyurik will be leaving the Clinical Assistant program after 7 years. He will be returning to Montreal to pursue personal interests.

Dr Heather MacDonald will be taking over as the Medical Manager of the ACA program on July 1/2015. She will be supported with an excellent structure through Bruce Knoll as Program Manager, Mark Ratz as lead ACA, and Corina Garant as administrative assistant, along with support from Reid McMurchy, and of course Dr Jacobsohn who has been instrumental in guiding and creating opportunities for the program from the very beginning.

It goes without saying that one of the greatest strengths of the program has been its ability to attract the quality of individuals we now have as ACAs. Our lives, and the lives of our patients, are much better served because of them.

The program is in great hands to continue to “disrupt” traditional health care models, assist us in the many ways they currently do, and look for opportunities to improve access to quality care in the future.
Many changes have occurred since the last UGME article appeared in Gasline.

For starters, I became the new Program Director in April 2014. I would like to thank Dr. Raj Rajamohan for all the hard work he put into the program over the past several years. The Anesthesia Rotation has always been rated extremely highly by medical students thanks to Raj and his predecessors. Of course, our program would not be the success it is without the support of the faculty at large. The quality of instruction at all 6 hospitals in our region through which medical students rotate is our biggest asset.

Another big change is the organization of our rotation within the new clerkship curriculum. The previous MSR (Multiple Specialties Rotation) has been retired. Now, at any given time, 25% of 3rd year medical students are in a 12 week long Perioperative block. Of these 12 weeks, 2 weeks are spent in the operating room learning the fundamentals of Anesthesia. This OR component is spent at one of Concordia, Grace, Seven Oaks, or Victoria hospitals. Another 2 weeks is the so-called perioperative component where students spend time at either HSC or St. Boniface rotating through PAC, APS, PACU, Chronic Pain Clinic (HSC or Pan Am), SSCU, Cardiac OR, Labour Floor, and ICCS. In addition, they spend time in Cardiac, Thoracic, and Vascular Surgery clinics with our colleagues in surgery. Students also follow a patient through the entire surgery experience during this period, and write a short report beginning with the PAC assessment and concluding with discharge from PACU. The remaining 8 weeks is spent on surgery services (General Surgery 3 weeks, Orthopedics 2 weeks, and 1 week each of neurosurgery, plastics, and urology).

Lastly, another significant change in our undergrad program is the involvement of our residents in teaching. Way back when I was a resident, we had very little involvement in medical student teaching. Now, residents are responsible for most of the instruction in the weekly student academic half days. During the 12-week block, the Anesthesia Department has stepped up to provide instruction for 6 of the 12 sessions. Two of these sessions (Airway and Vascular Access) are simulation based. Our remaining 4 sessions are lecture based and include topics such as obesity, OSA, perioperative evaluation, pain management, and perioperative management of anticoagulants. Each topic has a faculty mentor who residents consult with when planning the presentation.

During clinical practice, many of us precept many trainees, and I appreciate that sometimes it is difficult to keep track of all the different groups of learners. In the case of medical students, they have Anesthesia exposure at many stages of training. You may see 1st or 2nd year students doing a voluntary “early exposure” during summer vacation. You will see 3rd year students in their required 2 week OR block (community hospital), or doing their perioperative case report (tertiary hospital). We recently had four, 4th year students rotate with us during the newly formed “Transition to Residency” period this past February/March. This period contained 2 tracks; pain management and perioperative medicine. These were designed for medical students entering residencies other than Anesthesia. I don’t expect everyone to memorize the Undergrad Curriculum, but I would suggest to engage medical students, ask them what they are doing (and recruit the good ones to our specialty). You will find that many students have interesting stories to tell.

There are many ways for faculty to get more involved in undergrad education. For instance, the half day curriculum is new and will shortly be reviewed. We are always looking for suggestions of topics for teaching. The goal is not to educate future Anesthesiologists, but to teach topics of importance to future primary care providers who will be performing pre-op H&P’s or to future surgery residents who will be managing the wards. Consultants who have gotten a taste of simulation through the ACLS course can get more involved by participating in the Medical Emergencies Course during the Transition to Clerkship period. This course is taught yearly in late August/early September. We run medical students through simulations focusing on the early assessment and management of unstable patients.

As a Department, we have traditionally excelled in teaching during the clerkship years, and have recently expanded our involvement during the pre-clerkship period, especially in problem-based learning sessions. By having a strong presence during all 4 years of medical school, we can continue to recruit the best and the brightest to our specialty.
Department Announcements

New Fellows:

Sethu Madhavan Jayakumar - from Chandigarh India Starting July 1, 2015

Gordon Li - coming from Saskatoon, Saskatchewan Starting July 1, 2015

Yaryna Bychkivska – University of Manitoba starting August 27-2015

New Staff:

January 1: Waiel Al-Moustadi, Eiman Rahimi

July 1: Erika Bock, Jag Gill, Genevieve Lalonde, Roshan Raban, Mehdi Sefidgar

August 27: Vasudha Misra

September 24 – Nitin Ahuja

July 1 - Adam Andreiw

Births:

Reagan Cleven welcomed her little Alexander James Mykichuk into the world on (April 22, 2015)

Greg Klar & Marta Cenkowski baby boy Gabriel (February 2015)

Tara de Castro baby boy Jadyss Martel (February 2015)

Nitin Ahuja twin sons Karan & Rohan (November 2014)

Chris Hoban baby girl Lyra

Michelle (November 2014)

Andrew Reda baby boy Joseph (October 2014)

Ryan Pauls baby boy Ethan Ryan (August 2014)

Brian Gregson baby girl Sylvie Marie (May 4 2015)

Notable Achievement:

Dr. Eric Jacobsohn – Has been selected as the recipient of the Canadian Anesthesiologists’ Society, CAS 2015 “Clinical Teacher Award” to “recognize excellence in the teaching of clinical anesthesia”. Dr. Jacobsohn will receive this award at the Awards Ceremony on Monday, June 22, 2015 during the 2015 CAS Conference taking place June 19-22 in Ottawa.

Faculty/Resident Awards:

Douglas B. Craig - Resident of the Year - Dr. Brian Gregson

Y.K. Poon Teacher of the Year - Johann Strumpher

Undergraduate Teacher of the Year – Dr. Raj Rajamohan

8 summer students (Med 1, Med 2 and BSc) working on various research projects at SBH and HSC:

Kanwar Bhangu

Mark Collister

Tyler Denisuiuk

Stephanie Enns

Jay Gorman

Evan Hildahl

Montana Johnston

Nick Miller

2015 William Webster Award Winner

Inderveer Mahal

Congratulations Inderveer on receiving this award. The William Webster award was created to showcase medical students who show all-around excellence during their anesthesia rotation.
As we look forward to the start of a new academic year we are very excited to welcome Luke Vanerhooft, Inderveer Malhal, Piotr Wortek, Peter Benoit & Margot Klemmer to the residency program. Congratulations to each of them on matching to Anesthesia at the University of Manitoba. We are excited that Peter Benoit will be the first anesthesia resident in the University of Manitoba, Brandon stream. As such Peter will spend much of his first year in Brandon and then another 12 – 18 months of training there over the next four years. The first years will also be a part of our first “Boot camp” rotation in period 3 to take the place of their elective. This rotation will feature a number of different key learning elements including but not limited to simulation sessions, ATLS, a large focus on ultrasound and introductory TTE as well as elements of physician wellness.

With a new academic year around the corner that means another academic year draws to a close. With that we want to take the opportunity to thank the 5th year residents for all of their hard work and dedication over the last five years. Congratulations on a job well done! Dr. Yara Bychkivska is staying at the University of Manitoba to complete a Simulation fellowship, Dr. Andrea Petropolis is going to Toronto to complete a Neuro-trauma fellowship and Drs. Plester and Cenkowski will begin locum work while awaiting finalization of fellowship plans.

In April, we had a great time celebrating with the 5th years and faculty at the annual Department Gala. At the Gala we also recognized a couple of other very important PGME award recipients. I would like to congratulate Dr. Johann Strumphfer on winning the YK Poon Teacher of the Year award – well deserved! This year’s recipient of the Douglas Craig Resident of the Year award was Dr. Brian Gregson – congratulations Brian! It was my distinct pleasure to be able to present this award to Brian alongside Dr. Craig at the Gala.

We continue to learn about and work toward the implementation of Competency Based Education for PGME. Dr. Sutherland, as a member of the Specialty Committee, and Dr. Rajamohan, as associate Program Director, recently attended a workshop in Ottawa to begin the national initiative to start work on this curriculum for anesthesia. There will be much work to be done over the next number of months to get things ready for roll out in 2017. Likewise I would encourage everyone to look at the Royal College website for a description of the changes for CaNMEDS 2015. It is still in the draft phase, but close to being ready to be put out as final. There are a number of new changes with more emphasis on patient safety and physician health and well-being. The Manager role will now be called the Leader role. It is also written in such a way that it can easily be incorporated into a competency based curriculum with milestones and enabling competencies for each role for both training and practice.

As this academic year draws to a close I would like to thank the faculty for all of the time and effort you put into postgraduate education. We are fortunate to have such an engaged and enthusiastic group for our residents to work with and learn from. Thanks also to the residents for all of their hard work and dedication, we appreciate your work.

For those of you attending CAS this year I would encourage you to check out the department website to find out when the residents will be presenting their work. A number of residents from the program have been selected to present and it would be fantastic to have a good turn out to support them. Have a great summer everyone.

All About the Residents : Dr. Craig Haberman
Welcome to our New Residents

Peter Benoit: completed his BSc. degree at the University of Manitoba with areas of focus in botany and zoology. Being a lifetime ‘Winnipegger,’ he enjoys having the extremes in weather/temperature. He is a musician (cellist) with previous performances in youth orchestras, solo competitions, and quartets. His other favorite activities include spending time at the lake, cooking, and working out. He is passionate about exercise physiology and its application to preventative medicine. Ironically, he used to have a needle phobia which quickly resolved after donating blood a couple of times.

Inderveer Mahal: was born and raised in Winnipeg, Manitoba. She received her undergraduate science degree and medical degree from the University of Manitoba. Outside of medicine Inderveer enjoys running, yoga and learning to cook. Occasionally she will play the odd game of basketball to remind herself of her younger, more athletic days. Inderveer is excited to be a part of the Department of Anesthesia and is looking forward to starting residency!

Piotr (Peter) Wtorek: was born in southern Poland and moved with his family to Canada at the age of four. He grew up in Winnipeg and received a Bachelor of Science degree in Computer Engineering from the University of Manitoba. Following graduation, Piotr worked as an Electrical Engineer at Bristol Aerospace Limited in their Space Engineering department. This work included the design and development of several integrated circuits for use in the CASSIOPE and RADARSAT small satellites. Following an eight year career, Piotr decided to return back to school and complete his medical degree at the University of Manitoba. Outside of medicine, he enjoys renovating his character home and spending time with his family (wife Amy and son Atticus). They are expecting another child this fall.

Margot Klemmer: completed both her Bachelor of Science and medical degree at the University of Saskatchewan. In her life outside of medicine, her time is spent in the dance studio, outdoors, or dreaming up her next vacation. Born, raised, and educated in Saskatoon, she is eager to embark on the next phase of her training in Winnipeg and excited begin exploring a new city.

Luke Vanderhooft: A lifelong Winnipegger, Luke graduated from the University of Winnipeg with a degree in biology before attending medical school at the University of Manitoba. In keeping with his prairie upbringing he enjoys spending time on the outdoor rinks in winter and paddling into the backwoods to camp in the summer. One of his lifelong passions is soccer and, between disappointments watching the Oranje at the World Cup, he plays “competitively” in the Manitoba Major Soccer League. He looks forward to the opportunity to get to know and work with the department in the coming years.

Margot Klemmer: completed both her Bachelor of Science and medical degree at the University of Saskatchewan. In her life outside of medicine, her time is spent in the dance studio, outdoors, or dreaming up her next vacation. Born, raised, and educated in Saskatoon, she is eager to embark on the next phase of her training in Winnipeg and excited begin exploring a new city.
Welcome to our New Fellows

Cardiac Anesthesia Fellowship

Dr. Sethu Madhavan Jayakumar is joining us from Chandigarh India. He completed his Anesthesia training at the Postgraduate Institute of Medical Education and Research (PGIMER). He focused mainly on Perioperative Cardiac Anesthesia for both Adult and Pediatric Patients. Dr. Jayakumar will commence a Cardiac Anesthesia Fellowship July 2, 2015. Fellowship Director: Dr. Scott MacKenzie.

Cardiac Anesthesia Fellowship

Dr. Gordon Li completed his undergraduate training here at the University of Manitoba and completed his Anesthesia training at the University of Saskatchewan in Saskatoon in June 2015. We are very happy to have Dr. Li back in Winnipeg to commence a Cardiac Anesthesia Fellowship July 2, 2015. Fellowship Director: Dr. Scott MacKenzie.

Simulation Fellowship

Dr. Yaryna Bychkivska studied Life Sciences at Lviv State Medical University in Lviv, Ukraine. Yaryna then completed her undergraduate training at the University of British Columbia, in Vancouver and then completed her postgraduate training at the University of Manitoba. Dr. Bychkivska will be commencing a Medical Simulation Fellowship July 30, 2015. Fellowship Director: Dr. Rob Brown.
As most of you are likely peripherally aware, the College of Medicine is nearing the end of the process of implementing a new UGME curriculum. Overall the guiding principles are an integrated, spiral curriculum with a greater emphasis on small group interactive learning.

Structurally, the curriculum is still divided into the preclinical (Years 1 - 2) and clinical (years 3-4) phases. The two preclinical years are now divided into Modules 0 through 3. Module 0 - Foundation of Medicine provides basic science foundation relevant to the study & practice of medicine. Module 1 is organized around systems and provides an overview of normal function and physiology. Module 2 is again organized around systems but reviewed at a level that introduces specific diseases and pathophysiology. Module 3 integrates the knowledge from the first two modules into increasingly complex and multi-dimensional issues.

Running in the background through these years are the longitudinal courses, which deal with issues that evolve in parallel but separate from systems. These courses make particularly heavy use of small group interactive and experiential learning. They are linked to the underlying modular material as much as possible and progress from simple through to complex issues.

Our skills and knowledge as clinical generalists and applied physiologists give us a great deal to contribute in clinical reasoning, clinical skills, professionalism, physiology, informatics and any other area that spans the breadth of medical practice. This is being increasingly recognized in the College, and we have been very successful in accessing new opportunities. This is an exciting time, as it offers enormously rewarding teaching experiences to us as physicians, while elevating our profile and a profession in the eyes of the students and the College alike. I invite everyone to explore the world of UGME education. I guarantee that you will find the connection with the eager young minds of our medical students invigorating and deeply satisfying.

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### UGME CURRICULUM FRAMEWORK

**Principle:** “Fully Integrated spiral scaffold curriculum through 4 years”

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<td>M1: Human Biology &amp; Health</td>
<td>M3: Consolidation</td>
<td>M6: Electives</td>
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**Longitudinal Courses**
- Clinical Reasoning (CR)
- Clinical Skills (CS)
- Indigenous Health (IH)
- Professionalism (PF)
- Population Health (PH)
- Themes/Disciplines

**Composite Clinical Presentations (CP4)**
Department of Anesthesia Annual Gala 2015
Fairmont Hotel

1. Dr. Erica Bock, Pediatric Fellowship Completion
2. Dr. Mehdi Sefidgar, Pain Management Fellowship Completion
3. Dr. Marta Cenkowski, Residency Completion
4. 5th Year Residents
5. Dr. Vasudha Misra, Obstetrical Anesthesia Fellowship Completion
6. Dr. Raja Rajamohan, Undergrad Teacher of the Year
7. Dr. Yaryna Bychkivska, Residency Completion
8. Dr. & Mrs. Bill Pope  
9. Dr. Nitin Ahuja, Neuro Anesthesia Fellowship Completion  
10. Dr. Jennifer Plester, Residency Completion  
11. Dr. Andrea Petropolis, Residency Completion  
12. Dr. Daniel Dubois, Perioperative Medicine Fellowship Completion  
13. Dr. Brian Gregson, Douglas B. Craig Resident of the Year  
14. Dr. Genevieve Lalonde, Cardiac Anesthesia Fellowship Completion
ERAS: Enhanced Recovery After Surgery: Dr. Manny Bhangu

ERAS a new era in Peri-operative surgical care What is it?
Enhanced recovery after surgery, as the name implies, is executing a practice pattern that leads to better recovery for our patients. The roots of this phenomenon started in the early 1990’s with Professor Henrik Kehlet. A GI surgeon based out of Copenhagen – he published the first articles demonstrating what he called the “multi-modal approach” to perioperative care. In these studies he showed faster patient recoveries with no change in complication rate and speedier discharge, using a combination of interventions aimed at improving overall patient care. Since his original studies, many physicians from around the world became interested in this idea, and eventually in 2001 formed the ERAS study group to look at these protocols through clinical trials. Over the next 9 years the group would publish protocols for the management of patients coming for colorectal surgeries. In 2010 the ERAS society was founded, and the idea of enhanced surgery started to spread to domains outside of colorectal surgery, into areas like Orthopedics and Obstetrics and Gynecology. One of the reasons ERAS programs have grown so fast is that they don’t trumpet new and novel techniques for care givers, but rather try to integrate that which is already known. As Dr. David Urbach [University of Toronto] had stated regarding ERAS “The immediate challenge to improving the quality of surgical care is not discovering new knowledge, but rather how to integrate what we
already know into practice”.

So what kind of things do we already know that can “enhance” recovery? The answer may surprise some.

In the pre-op period

- patient education with respect to what to expect regarding their post-operative care, and setting realistic expectations regarding mobilizing, feeding, and pain control.
- Reducing the fasting time prior to coming to the OR, carbohydrate loading pre-op also contributes to improved recovery.

Intra-op interventions

- goal directed fluid therapy
- multimodal analgesia
- minimizing drain placement.

Post-op care

- early mobilization and feeding
- even something as simple as having patients chew gum post-op are all part of ERAS guidelines.

If we consider these interventions as “knowns” in our practice, then the challenge becomes how to get mass adoption. As with any change, the two options to introduce change are always the carrot or the stick. As most of us know, the carrot is always the better option. A number of the early groups that introduced ERAS into their programs looked at addressing this. What they found, and what is now a cornerstone of any ERAS program is the normalization of auditing. These programs found that, by starting with early adopters, and then auditing practice before and after an ERAS program, they were able to demonstrate to care givers the improved results seen with an ERAS program employed. This in turn garnered more support for the program and allowed it to grow.

Why is it important?

ERAS programs are becoming the standard of care among surgery programs across the first world. Not only do they provide a framework directed at improvements in patient care which leads to improved system utilization, they also encourage a culture of change. That is to say, at present introducing any change in our health care system has been fraught with resistance and red tape along every step. One of the cornerstones of any strong ERAS program is regular auditing of practice and outcomes. When this becomes the norm, the resistance to change fades – as any change introduced is audited and its merits are either seen or not seen and as such, the change is either maintained or abandoned. With this type of practice pattern, ERAS guidelines are able to mature and grow into something unique for every center, catering to the needs of the populations within that center.

How will it roll out?

In the coming months a multidisciplinary team from the departments of Surgery, Anesthesia, Nursing, Pharmacy, Physiotherapy, Occupational therapy, and Dietary will be meeting to discuss and agree on a set of “Manitoba Guidelines” and a process to audit the system. After a document is drafted, we will look to rolling it out. To start, the goal is to have a small successful launch within a segment of the colorectal programs at St. Boniface Hospital and Health Sciences Center. To do this we will need extensive education of all care givers involved in patient care, from all aspects of allied health. Part of a successful roll out requires buy in from the people providing care, as the system is only as good as its weakest link. To that end we are currently looking for champions from each site to know and understand the program. These champions would then spread that idea among their colleagues as well as be a resource for them. Assuming a successful initial audit and roll out, the program would progress to other areas, with the goal that one day our region would be an ERAS practicing group throughout.

How will it affect our practice?

As with any change, the first question that comes to mind for most is, how will this change affect me and my practice? The good news is most ERAS guidelines suggest a type of practice that the majority of us already follow. That is for anesthesia, Enhanced recovery equals goal directed fluid therapy and multimodal analgesia. How these goals are met is definitely an area for discussion and I welcome all interested parties to weigh in prior to the development of the Manitoba ERAS Guidelines.

When should we expect it?

As stated earlier, once the guidelines have been drafted we will then look at a small scale roll out hopefully within the year. The goal here is to ensure a successful roll out and as such take the time early on to ensure adequate education on all levels prior to any roll out.

This sounds like something I would like to help shape, how can I get involved?

As the development of this system is still in its infancy, the more input we have now the better. If you would like to be involved in the development of the guidelines, or helping champion ERAS at your site, please feel free to contact me, or your site head with your interest.

Where can I find more information regarding ERAS?

ERAS Society homepage
www.erassociety.org
Concordia Hospital Site Spotlight: Teaching, Research and ERAS

Once you get to the place, you will encounter probably the most stream lined process for surgery and recovery in the city. Indeed, the lower limb arthroplasty program at Concordia has had all the major components of “ERAS” for several years, albeit with little publicity. It is not surprising that people outside Concordia and even some of my newer colleagues at Concordia do not know about it. For people with complex history as above, the same principles are applied perioperatively but with the understanding that goals may be achieved/expected at a slower pace appropriate to their condition.

Before we go any further, I have to tell you that we can rid you of any troublesome lumps, bumps, hernias and gallbladders also at Concordia, again very efficiently.

Evidence for certain elements is bound

Concordia Site Spotlight: Teaching, Research and ERAS at Concordia General Hospital

Are your limb joints in need of major repair or replacement? Have these joints been replaced or worked on before? Do you tip the weighing scales near the high end? Does your shopping list pale in comparison to your prescription list? Is your medical record thicker than the latest New York Times best seller? If you answer yes to the first AND any one of the subsequent questions, then Concordia Hospital is where you go to in Winnipeg. Getting there can be a bit of a challenge though as you wade through waiting lists and budget constraints. Geographically also it is no less of a challenge, being in the northeast corner of the city, with numerous train crossings and possibly the highest density of potholes per square kilometre in the city. If you have a queasy stomach or a dodgy back, you would be well advised to avoid the stretch of Archibald Street between Provencher & Nairn.

The specific ERAS elements we have are summarized in the following table:

<table>
<thead>
<tr>
<th>PREOPERATIVE</th>
<th>INTRAOPERATIVE</th>
<th>POSTOPERATIVE</th>
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<td>Standardized care pathways</td>
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<td>Standardized physician order sets</td>
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<td>Preoperative oral multimodal analgesia</td>
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<td>Early mobilization. Active physiotherapy.</td>
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<td>Early oral diet. Early d/c of IV fluids with IV saline lock while on antibiotics.</td>
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<td>Functional discharge criteria, evaluated daily: For eg: Pts should be independent regarding personal care, able to walk the length of the hallway with crutches or better, able to get in and out of bed and into and up from a chair/toilet, NRS 4 or less on PRN oral analgesia, accepting of discharge.</td>
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to change with time and there is also variation in the type of elements constituting ERAS at different centres. It is important therefore to identify the core principles that really make a difference to patient care and be consistent in their implementation. At the end of the day, results are what matter and in this regard it is particularly satisfying and encouraging that the length of stay, morbidity and mortality stats for elective arthroplasty at Concordia have consistently been among the best in the country.

In order to keep pace with evidence based good practice and its implementation, and to proactively adopt technological advances that can enhance patient safety, we need among our staff a good mix of the eclectic and the conventional. The common ground should be a passion for orthopedic and regional anesthesia not in a narrow sense, but in a wider perioperative one. I believe we have a decent group of people at Concordia and we are all working towards achieving the wider objective.

All my colleagues work at more than one site. A practice restricted to orthopedics and day case general surgery is in my opinion not conducive to maintaining all the clinical skills necessary to be a safe anesthesiologist. Dr.Pravin Patel, Dr.Subash Sethi, Dr.John Friesen and Dr.Frank Shiffman split their time between Concordia and VGH, Dr.Kelvin Williamson, Dr.Stephen Booth, Dr.James Bohn, and Dr.Jamit Dhaliwal between HSC and Concordia, Dr.Johann Strumphers, Dr.Wimpee Vandenheever, Dr.Amit Chopra, Dr.Virendra Arya and myself between SBH and Concordia, and Dr.Jassie Pretorius between Childrens, Concordia and Penticton.

Dr.Amir Esmail and I share leadership responsibilities currently. Dr.Williamson is our Undergraduate Coordinator and Dr. Chopra is our WRHA Anesthesia Standards Committee representative. I double up as the Postgraduate Coordinator but I haven’t had much to do in the last few years in this regard! Dr.Patel used to be in this role prior to me.

The desire, passion and intent to teach is very much there at Concordia with this year’s YK Poon teaching award winner Dr. Strumphers leading the way. We did not have an undergraduate program until 2011. Now we have a well-established program with good feedback from medical students. I wish our anesthesia residents would take advantage of the place as well. In the last 2 years we have had only 3 residents rotating through Concordia. I find this quite surprising given that all revision/complex joint replacements in the province are done only at Concordia. I do hope that the new competency based training system would make it mandatory to obtain exposure in all subspecialties and that the current “community rotation” system would become a thing of the past.

Research has been another area we are trying to build on. We completed one RCT and one retrospective study in the last 6 years and we are currently starting work on our second RCT in collaboration with the orthopedic group. There are plenty of clinical areas where we need to find answers to important questions but we are lacking in infrastructure and perhaps in intent as well. Our University Dept under Dr.Jacobsohn’s initiative, has plans to hire research associates who have a PhD background in order to provide the kind of support that we currently lack. When this happens, I am sure productivity will improve. Collaboration between the larger and smaller centres is also an area yet to be explored.

Inspired by the Childrens Hospital initiative, we also would like to run locally relevant simulation scenarios at our site in the near future with the involvement of the entire OR team. A specific high fidelity simulation site, with dedicated qualified instructors, is no doubt necessary for undergraduate and postgraduate training but this model does not lend itself well to site specific team building. For this purpose, I feel the only way forward is for each site to invest in low cost simulation equipment and to develop and run relevant scenarios locally. The development of scenarios and initial implementation could be done with the oversight of our simulation specialists.

I wish to acknowledge Dr.Jacobsohn’s immense support and involvement in addressing our site specific needs. Dr.Trevor Lee has been another huge source of help. Thanks also to June Kaptein, who ohen works miracles in coordination with Dianna Erwin and Evelyn Hofer to keep our slates going.

Dr. Sanjay Aragola
The University of Manitoba will be very well represented at this year’s upcoming meeting of the Canadian Anesthesiologists’ Society in Ottawa in June. There will be a total of 17 abstracts presented at the meeting. This will be the largest number of papers presented from the University of Manitoba at the CAS ever.

Of note, two residents will be presenting at the Resident Research Competition:

Dr. Jennifer Plester and her paper “Periarticular Ketorolac Injection and Estimated Blood Loss”.

Dr. Caleb Zelenitz and his paper “Prediction of Blood Pressure Response in Surgical Patients”.

There will also be two presenters at the Richard Knill Research competition:

Thomas Mutter and his paper “Effect of a Regional Guideline on Unnecessary Preoperative Lab Tests”.

Alexander Villafranca and his paper “Agreement of Risk Disclosure from 5 Anesthesiology Associations”.

Also of note, Dr. Andrea Petropolis has been short listed for the CVT Raymond Martineau Prize for Best Paper in Cardiovascular and Thoracic Anesthesia for her paper “High Spinal Anesthesia and Delirium Incidence after Cardiac Surgery”.

Congratulations to all residents and staff for their time and efforts in conducting clinically relevant research.

Another indicator of the ongoing research activity within the department is that there will be a total of 8 medical or university students working on various research projects this summer. Please be supportive and welcoming to these students.

Congratulations to Dr. Thomas Mutter, who has received the New Investigator Research Award from the Canadian Anesthesiologists’ Society for his proposed study, “Effect of Dexamethasone Dose and Route on Duration of Interscalene Brachial Plexus Block for Outpatient Arthroscopic Shoulder Surgery – A Randomized Controlled Trial”.

From the Research Department : Dr. Stephen Kowalski
CAS Abstract Presentations

Saturday June 20th

Analgesia for Primary Total Knee Arthroplasty
Sanjay Aragola, Benjamin Arenson, Thomas Turgeon, Eric Bohm, Marshall Tenenbein, Eric Jacobsohn, Amit Esmaeil
Saturday June 20, 2015 1015-1200

Sonographic evaluation of urinary catheter placement in a newborn
Eiman Rahimi
Saturday June 20, 2015 1130-1230

A Case of Malignant Hypertension in Kasai Portoenterostomy
Erika Bock, David Lambert, Karthik Sabapathi
Saturday June 20, 2015 1200-1300

Effect of Desflurane on MEP Monitoring: Hemifacial Spasm Vs Control
Tumul Chowdhury
Saturday June 20, 2015 1200-1300

The Role of Anesthesia Simulation in fMRI Guided Neurosurgery
Tumul Chowdhury
Saturday June 20, 2015 1200-1300

Cardiovascular Perturbations in DBS Surgery - A Detailed Analysis
Tumul Chowdhury
Saturday June 20, 2015 1200-1300

Sonographic evaluation of urinary catheter placement in a newborn
Eiman Rahimi
Saturday June 20, 2015 1130-1230

Sunday June 21st

Hemodynamic Effects of Low Dose Spinal Anesthesia in Cesarean Section
Marta Cenkowski, Doug Maguire, Duane Funk, Fahd Al-Gurashi, Stephen Kowalski
Sunday June 21, 2015 1130-1230

Intraoperative Anaphylactoid Reaction to Midazolam: A Case Report
Daniel Dubois
Sunday June 21, 2015 1130-1230

Unanticipated Post Partum Right Ventricular Heart Failure
Vasudha Misra, Jag Gill
Sunday June 21, 2015 1130-1230

Obstructive Sleep Apnea and Hypoxemia in Postpartum Women
Bill Ong, Christopher Parr, Fahd Al-Gurashi, Eleni Giannouli, Linda Girling, Margaret Morris, Eric Jacobsohn
Sunday June 21, 2015 1230-1415

Monday June 22nd

Periarticular Ketorolac Injection and Estimated Blood Loss
Jennifer Plester, Sanjay Aragola, Eric Bohm
Residents’ Competition
Monday June 22, 2015 0830-1015 Shaw Centre

Postoperative Visual Loss May Commonly Occur Post Hospital Discharge
Cameron Goldie, Fangyuan Luo, Frank Stokli, Thomas C. Mutter
Monday June 22, 2015 1030-1215

Prediction of Blood Pressure Response in Surgical Patients
Caleb Zelenietz, Duane J. Funk
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Effect of a Regional Guideline on Unnecessary Preoperative Lab Tests
Thomas C. Mutter
Richard Knill Research Competition
Monday June 22, 2015 1030-1215 Shaw Centre

Agreement of Risk Disclosure from 5 Anesthesiology Associations
Alexander Villafranca, Divya Parveen, Eric Jacobsohn, Raj Rajamohan
Richard Knill Research Competition
Monday June 22, 2015 1400 Shaw Centre
AOC Awards 2015

We are pleased to announce the following research awards following adjudication of the Academic Oversight Committee.

1. Dr. Mani Bhangu The role of anesthesia departments in undergraduate medical education. Awarded $10,000.


3. Dr. Eric Jacobsohn Electroencephalography guidance of anesthesia to alleviate geriatric syndromes (ENGAGES) study: A pragmatic, randomized clinical trial. Awarded $10,000.

4. Dr. Stephen Kowalski Assessment of cough strength in patients with tracheostomies. Awarded $1,800.

5. Dr. Tom Mutter Relationships between clinical characteristics and the oxygen desaturation index before and after bariatric surgery: A cohort study to improve the perioperative management of obstructive sleep apnea patients. Awarded $10,000.

Hail To The Chief: Dr. Brian Gregson

Another academic year is coming to a close and we are all getting ready to congratulate the current fifth year residents. They are getting so close to the end! Dr. Johann Strümpher was also recognized at the annual department gala as winner of the Y. K. Poon award for teacher of the year – thank you again for your teaching and mentorship Dr. Strümpher.

The new academic year also means we are looking forward to welcoming the incoming group of residents, and plans continue for the development of an anesthesia “boot camp” for the residents early in first year, with teaching help from both faculty members and residents.

I would also like to extend congratulations to the many residents presenting research at the upcoming CAS meeting in June. It will be great to see so much U of M research on display.
Welcome Royal College Fellows in Anesthesiology

Dr. Yara Bychkivska
Dr. Andrea Petropolis
Dr. Jen Plester
Dr. Marta Cenkowski
Dr. Tumul Chowdhury
Dr. Vasudha Misra
Dr. Roshan Raban
Dr. Samantha Russell

DR. ERIC JACOBSOHN
Professor and Head
Department of Anesthesia and Perioperative Medicine
University of Manitoba
Invites You and Your Guest

ALUMNI RECEPTION

Sunday June 21, 2015
6:00 p.m. to 8:00 p.m.
The Westin Ottawa
Ottawa Ontario
New Brunswick Room
All Other Alumni receptions will take place
in Contiguous Rooms

Complimentary drink and hors-d’oeuvre followed by cash bar

Please RSVP to Corina Garant at cgarant@wrha.mb.ca before June 17, 2015