QUALITY: DO WE REALLY DELIVER?

Dr. James Martin  
Chair, Department of Medicine

On October 23rd I found myself (by design) in a Surgical Grand Rounds. I was, understandably, the only physician present. The topic was “Safer Health Care; dispelling the shadows” and the lecture was given by Sir Liam Donaldson as the Flanders Family Visiting Professor in Medical Simulation. Dr. Donaldson has an impressive career behind him and has occupied the post of Chief Medical Officer for the National Health Service in the UK. In this role he has surveyed the issues of patient safety and published extensively on the topic. He drew liberally on facts related to air travel and safety and taught us that the risks of dying in a plane crash were 1:10,000,000 whereas the risks of dying in hospital were closer to 1:300. None of us would board that flight willingly. He pointed out that airline safety is constantly improved by reacting to any adverse event and correcting the scenario leading to the event. Medicine has few mechanisms at its disposal to address the near miss. Yes we gather data on adverse events. We reflect on them but often in a local context where few learn from the experience and of course the mistakes are repeated. The hospitals gather statistics but are often hampered by the lack of timeliness of data and the lack of clinically meaningful metrics. The patient experience and the outcome of illness are not necessarily related to sophisticated technology but may be influenced by suboptimal medical practice, poor diagnostic or therapeutic choices. The top complaints at our hospitals in 2012-2013 were poor telephone access, respect (lack of politeness), wait time to obtain an appointment, elective surgery delay/cancellation, technical/professional skill, surprises, lack of continuity of care, etc. Of course patients don't know they have had a CT scan that was not necessary or the wrong antibiotic. However the healing process is just as rooted in the concerns voiced by the patients as in our technology. In a constrained environment we can still take steps to address our deficiencies. We need to listen and respond to the concerns of our medical examiners. There are members of the Department working hard on issues of quality and the area is one of growing interest. We will do what we can to help develop this in-house expertise. I am sure we can do better and we invite our members to join us in reflecting on how to go about doing just that.
THE INFECTIOUS DISEASE SUSCEPTIBILITY PROGRAM:
AT THE NEXUS OF INFECTION, IMMUNITY AND GENETICS IN PATIENTS

A fundamental enigma in Infectious Diseases is why some individuals are unusually prone to infections. Research is demonstrating that such patients may harbor genetic defects in their immune system. These inborn errors of immunity may be familial or spontaneous arising de novo, and they may confer susceptibility to a broad range of microbes or be confined to single, specific pathogen. At the MUHC Division of Infectious Diseases, we have established a translational research program focusing on Primary Immuno-Deficiency Disorders (PIDDs).

The clinical component of the program focuses on the comprehensive evaluation of patients with unusual, severe, recurrent or recalcitrant infections, and their relevant family members, in conjunction with immunophenotyping. The objectives are two-fold: (1) To determine if a patient has a recognized PIDD (for which there are currently >150), so as to provide a diagnosis and to implement standard of care therapy when possible for these rare diseases; and (2) to discover new PIDD’s.

In our research lab, we combine genetic approaches (with Dr. William Foulkes and others in the Department of Human Genetics), microbiological investigations (with Drs. Marcel Behr and Don Sheppard), molecular biology and functional immunology to identify causal genes and to characterize the molecular and cellular mechanisms by which these defective genes cause susceptibility to infections.

During my CIHR-funded post-doctoral fellowship at the NIH, I focused on understanding chronic granulomatous disease, Job’s syndrome, and defects in the interleukin (IL)-12/interferon (IFN)-gamma axis. It culminated in the discovery of a new PIDD, MonoMac syndrome, due to mutations in GATA2. Since my return, our program has been at the forefront of a new disease, CARD9 deficiency, demonstrating that it presents in adulthood with spontaneous fungal infection (Candida) in the central nervous system and that there is a founder mutation for this disease in Québec. By translating in vitro findings to novel therapeutic approaches we are the first to demonstrate that adjunctive cytokine therapy controls disease. This has spawned development of an international clinical trial. I am also studying cohorts with novel phenotypes that likely represent new PIDDs.

By focusing on patients with known and novel PIDDs, this program addresses an unmet clinical need. From rare patients, we plan to decipher the genetic basis by which the human immune system fails, so that novel therapeutic avenues can be developed to make it succeed.

FIFTH MEETING OF THE DIVISION DIRECTORS

Dr. James Martin

The 5th Department of Medicine Division Directors meeting was held at Homes Hall on November 10th. The attendance was, as usual, excellent. Like with Tom Sawyer's fence everyone wants a piece of the action. Dr. Benaroya presented the essentials of Bill 10 and its implications for our network of university teaching hospitals. Although our hospital sites will be distributed within a Centre intégré de Santé et Services sociaux (CISSS) - as JGH and St. Mary's or as freestanding entities as MUHC, it is still not clear what the implications are for the functioning of our sites and our longstanding relationships. Dr. Rubin Becker presented the JGH views on the proposed physician-led ambulatory clinic to be built adjacent to the JGH and its potential impact in pulling physicians off-site. Similar pre-occupations were omnipresent at the MUHC. Dr. Schiffrin referred the directors to the last Departmental Newsletter for a critique of the impact of such clinics on the academic activity within the hospitals. All in all a stimulating two hours flew by. We look forward to the next meeting planned for May 2015.
ABORIGINAL HEALTH: TOWARDS A BETTER UNDERSTANDING

Dr. Paul Brassard
Associate Professor, Divisions of Clinical Epidemiology and Respiratory Diseases

Aboriginal peoples' collectively refers to the original inhabitants of Canada and their descendants, including First Nations, Inuit, and Métis peoples. According to Statistics Canada's National Household Survey in 2011 there were 1,400,685 people in Canada who self-identified as Aboriginal, representing 4.3% of Canada's total population. Many people who self-identify as Aboriginal are not registered under Canada's 1876 Indian Act, which defines who is considered a “status Indian” and thus eligible for a range of programs and services offered by federal and provincial agencies. People who identify as First Nations but who are not a “Registered Indian” according to the federal government are considered “non-status” and three-quarters of this population reside in urban areas, with the largest numbers in metro Toronto, Vancouver, Montreal, Ottawa-Gatineau and Edmonton, respectively. For the majority of Canadians, including Métis, off-reserve status and non-status Indians, health services are administered at the provincial (RAMQ in Quebec) or territorial level. For on-reserve First Nations and Inuit communities, the federal government finances and administers health services through the First Nations and Inuit Health Branch (FNIHB).

Prior to European contact, indigenous peoples of Canada had fully functional systems of health knowledge that were practiced within the contexts of their specific ways of knowing and being. However, the diseases and conflicts of colonization devastated indigenous populations and their systems of indigenous health knowledge. Although the health of Aboriginal populations in Canada has been improving in recent years, First Nations, Inuit, and Métis peoples continue to experience a disproportionate burden of disease or health disparities compared to non-Aboriginal Canadians.

In spite of the challenges outlined above, Aboriginal peoples continue to strive for wellness based on indigenous ways of knowing and being. Aboriginal approaches to health are often rooted in a holistic conception of well-being involving a healthy balance of four elements or aspects of wellness: physical, emotional, mental and spiritual. These four elements are sometimes represented in the image of the medicine wheel.

Although the challenges faced by Aboriginal communities are complex and varied, there is increasing recognition that First Nations, Inuit, and Métis peoples possess the knowledge, determination and resilience rooted in their varied traditions and cultures to meet those challenges. At McGill, health practitioners and researchers through the MUHC and the McGill RUIS seek to improve the health and well-being of Aboriginal populations in Quebec in striving to provide a culturally-safe health care environment (based on relationship, respect, reciprocity and reflection) and by challenging stereotypes and misperceptions about indigenous peoples in Canada. Aboriginal health is now present in the new curriculum for first year medical students and we hope that this initiative will set the basis for the maintenance and enhancement of Aboriginal health and well-being.
MY HALF SABBATICAL

Dr. James Brophy
Professor, Divisions of Cardiology and Clinical Epidemiology

I took my first ever sabbatical, actually half sabbatical, in the first 6 months of this year. Most of my time was spent at the Biostatistics Unit (BSU) of the Medical Research Council in Cambridge England. Although the unit is situated on the large (1,200 beds) and impressive campus of the Addenbrooke’s Hospital in Cambridge, I had absolutely no clinical activities and spent the entire 6 months without entering a hospital ward! Perhaps not what most clinicians aspire to but welcome solace for a missed mathematician.

The BSU is one of the largest groups of biostatisticians in Europe, and a major centre for research, training and knowledge transfer. As specified on its website, the BSU's mission “to advance biomedical science by maintaining an international leading centre for the development, application and dissemination of statistical methods”. In my case this involved primarily studying the application of Bayesian statistics and becoming more familiar with the dedicated statistical software developed at Cambridge for performing these analyses. Quixotically this software is called BUGS! Equally intimidating for some is the official name Bayesian inference Using Gibbs Sampling. Believe it or not, this programming is actually a straightforward way to quantify our pre-existing uncertainties (who in clinical medicine doesn’t have multitudes of these) and logically update them with the best available new evidence. This is the computer analogy of how we intuitively learn. The logic, philosophy and execution of the Bayesian paradigm are directly applicable to coherent evidence synthesis and medical decision making. The BSU also offered several formal learning experiences including short course on analysis of missing data and statistical genetics as well as a 3 day seminar with international speakers celebrating the centenary of its founding.

Cambridge is a charming city to visit and live in, especially for a committed cyclist. Admittedly having extensive bike lanes, roads without potholes and respectful automobile drivers takes much of the thrill of biking out of the heart of a Montreal cyclist. In such an environment, even the most diehard Montreal cyclist learns (eventually) to obey the road signs. Beyond the cycling, Cambridge offers many attractions including the River Cam and the various colleges. Beyond Cambridge, 50 minutes gets you to the center of London and its amazing museums, galleries and theater productions. Beyond England, £60 gets you a return ticket, via the no-frills carriers of Ryanair and Easy Jet, from the local airport to Madrid (or countless other European destinations) where the Prado and Thyssen-Bornemisza museums await.

A final amazing UK fact, £15 / month buys you unlimited voice, data and texts for your smartphone, as well as covering home internet connection via tethering for your iPad and computer!

Having learned a bit more about probabilistic reasoning and uncertainty, I’m looking forward to seeing what the second half of my sabbatical in 2015 will bring.
EMERITUS PROFESSORS

Congratulations to our Faculty members for their achievements!

Dr. John Burgess retired on August 31, 2014 after an illustrious career as a cardiologist at McGill University. Dr. Burgess graduated from McGill with a BSc in 1954 and an M.D. in 1958. He completed residency training here and fellowships at both the University of Birmingham, England and the University of California at San Francisco. He joined McGill in 1966 and was promoted to Full Professor in 1975. Dr. Burgess served as Director of the Division of Cardiology at the MGH from 1973 to 1994 and worked as a Senior Cardiologist at the MGH, the RVH and the JGH. He held officer positions on numerous boards and received many distinctions, including Member of the Order of Canada, the Commemorative Medal for the 125th Anniversary of Confederation and the Queen Elizabeth II Jubilee Medal. He is the author of *Doctor to the North: Thirty Years Treating Heart Disease among the Inuit*, published in 2008.

Dr. Peter McLeod will be retiring on December 31, 2014 after a 43-year career at McGill University. Dr. McLeod earned his M.D. from the University of Manitoba in 1965, interned at Toronto General Hospital and completed residency training in internal medicine and clinical pharmacology at McGill. Subsequently, he pursued two fellowships at Dundee University, Scotland (1985) and at Maastricht University, Netherlands (2001). Dr. McLeod had a very active career at the MGH and was involved in hospital administration until 2008. For over four decades, he has been a member, co-director or director of almost every medical education committee at the University. He won numerous awards, including the Canadian Association for Medical Education Ian Hart Senior Award, the Royal College Duncan Graham Award, the Association of Faculties of Medicine of Canada Award, the McGill Osler Award for outstanding teacher, and was the first faculty member to be named to the Faculty Honour list for Education Excellence.

Dr. Henri Ménard will be retiring on December 31, 2014. Dr. Ménard obtained his M.D. at Université de Montréal and did his clinical training at Maisonneuve-Rosemont Hospital followed by an Arthritis Society Research Fellowship at the University of Texas Southwestern Medical School in Dallas and further research training at Hôpital Lariboisière in Paris. He joined Université de Sherbrooke in 1973 and was recruited to McGill as Full Professor in 2000. Dr. Ménard’s research has focused on the autoimmune pathogenesis of rheumatic disease and as a result of his many scientific contributions, he has been a sought-after speaker for conferences across Canada, the U.S., Latin America and Europe. He served two terms as the McGill and MUHC Director of the Division of Rheumatology in the Department of Medicine and his leadership and enthusiasm in recruiting excellent clinician-scientists have enabled the Division to flourish.

Dr. Coimbatore Srikant retired on September 30, 2014 after a 35-year career at McGill University. Dr. Srikant graduated from the University of Madras, India with a BSc in 1964, an MSc in Chemistry in 1968 and a PhD in Clinical Biochemistry in 1973. He completed a postdoctoral fellowship in internal medicine at the University of Texas Health Sciences Center and Veterans Administration Hospital at Dallas. He joined McGill in 1978 as a research associate in the Fraser Laboratories for Diabetes Research at the RVH and became its Associate Director in 1996, a position he held until 2003. He was appointed to the rank of Faculty Lecturer in 1980 and promoted to Full Professor in 2000. Dr. Srikant has had an excellent career as a scientist, has enjoyed robust funding and has published extensively on somatostatin receptors.
RECRUITMENT

We welcome the following members to our Department.

**Dr. Cecilia Costiniuk**, Assistant Professor to the Division of Infectious Diseases and Attending Staff at the Lachine Campus of the MUHC. She also holds Associé status at the MUHC. Following her M.D. at McMaster University, Dr. Costiniuk completed her postgraduate medical training in Internal Medicine and Infectious Diseases at the University of Ottawa. She then obtained a Masters degree from the University of Ottawa in Microbiology and Immunology. She recently spent a year at the KwaZulu-Natal Research Institute for TB and HIV, Durban, South Africa, to pursue additional research training before returning to Canada. Dr. Costiniuk will work in the Chronic Viral Illness Service (CVIS) and will continue to pursue her research interests. She will be active in the training of medical students and supervision of residents and fellows at various McGill-affiliated teaching sites, including the MUHC.

**Dr. Ruth Sapir-Pichhadze**, Assistant Professor to the Division of Nephrology and Attending Staff at the MUHC and to the MUHC Multi-Organ Transplant Program. Dr. Sapir-Pichhadze received her M.D. from Hadassah Medical School, Hebrew University, Jerusalem, Israel. She completed a residency in general internal medicine and subspeciality training in nephrology and transplantation at the University of Toronto. Dr. Sapir-Pichhadze holds a MSc degree and has completed PhD training in clinical epidemiology and health care research. Her research interests are in the area of HLA matching and allograft survival. She will be pursuing studies into class I and class II epitope load, development of donor-specific antibodies, and antibody-mediated graft rejection. In addition to research, Dr. Sapir-Pichhadze will be taking care of renal transplant patients at the Royal Victoria Hospital site, and will be involved in teaching activities.

APPOINTMENT

**Dr. Regina Husa**, Assistant Professor in the Division of Cardiology, has been appointed as Director of Accreditation, Postgraduate Medical Education, Faculty of Medicine, effective September 1, 2014. In this role, she is charged with managing the accreditation of McGill postgraduate medical education for residents, fellows and international medical graduates. Dr. Husa brings notable education and accreditation experience to this position, including the successful management of McGill’s Adult Cardiology Residency Program, of which she is Co-Director, and as Chief Tutor of the Cardiac Physiology Small Groups in the MDCM program. From 2006 to 2014, Dr. Husa was Director of the Coronary Care Unit at the Jewish General Hospital. We wish her every success in this new role.

CANADA RESEARCH CHAIR

Congratulations to **Dr. Brian Chen**, Assistant Professor in the Departments of Medicine and Neurology and Neurosurgery, for the renewal of his **CRC T2 in Neural Circuit Formation**.
HONOURS

Congratulations to our members for their achievements.

THREE DEPARTMENT OF MEDICINE REPRESENTATIVES RECEIVED PRINCIPAL’S AWARDS

Dr. Nancy Mayo has been awarded the 2014 Principal’s Prize for Excellence in Teaching in the category of Full Professor. Dr. Mayo is James McGill Professor in Medicine (Divisions of Geriatrics and MUHC Clinical Epidemiology) and in the School of Physical and Occupational Therapy.

Dr. Colin Chalk has been awarded the 2014 Principal’s Prize for Excellence in Teaching in the category of Associate Professor. Dr. Chalk is the Division Director of the Neurology Division of the Department of Medicine (his primary appointment is in the Department of Neurology and Neurosurgery) at the MGH and the Director of Curriculum Development, Fundamentals of Clinical Medicine, at the Center for Medical Education.

Ms. Anna Ballarano, who works at the Royal Victoria Hospital as Administrative and Student Affairs Coordinator for the Residency Training Program in Cardiology, won the Principal’s Award for Administrative and Support Staff in the Clerical category.

TWO NEW CANADIAN ACADEMY OF HEALTH SCIENCES FELLOWS

Dr. Howard Chertkow, Professor in the Departments of Medicine and Neurology, has been elected Fellow of the Canadian Academy of Health Sciences. Dr. Chertkow’s laboratory at the Lady Davis Institute has carried out major productive research on the early diagnosis and cognitive changes in Alzheimer’s disease.

Dr. William Foulkes, James McGill Professor of Medicine, Human Genetics and Oncology, has been elected Fellow of the Canadian Academy of Health Sciences. Dr. Foulkes has made seminal contributions to cancer genetics in Canada.

MORE KUDOS...

Hypertension Canada has selected unanimously Dr. Stella Daskalopoulou, Associate Professor in the Division of General Internal Medicine, to receive the 2014 Hypertension Canada Jacques de Champlain New Investigator Award in recognition of her dedication and numerous contributions to both research and health services in Canada.

Dr. Sharon Nessim, Assistant Professor in the Division of Nephrology at the JGH, is the recipient of the Faculty of Medicine 2014 Introduction to Clinical Medicine (ICM) Internal Medicine Teaching Award. This award is given to the physician who has received the most nominations by the students completing ICM.

Dr. Madhukar Pai is among the inaugural members named to the Royal Society of Canada’s College of New Scholars, Artists and Scientists. Dr. Pai is an Associate Member in our Department (Respiratory and Infectious Disease Divisions), Associate Professor in the Department of Epidemiology,

(Continued on page 8)
Dr. Don Vinh, Professor in the Divisions of Infectious Diseases and Allergy & Immunology, is the recipient of the 2013-2014 NIH National Institute of Allergy and Infectious Diseases Merit Group Award for “The GATA2 Discovery Group”, for their outstanding clinical and basic research leading to the discovery and characterization of GATA2 deficiency.

Dr. Mark Wainberg, Professor in the Departments of Medicine, Microbiology and Immunology and Pediatrics and Director of the McGill AIDS Centre at the JGH, has been selected as the 2014 Cubist-ICAAC Award winner for his seminal work in the field of HIV/AIDS research. The Cubist-ICAAC award is the American Society for Microbiology’s premier award honoring outstanding accomplishment in antimicrobial research.

The Department of Medicine’s number of successes is prolific. Although every attempt is made to acknowledge them all at the time we go “to press”, some announcements may be delayed. Do not hesitate to contact us to let us know of your successes.