

A MESSAGE FROM THE President and Vice-Chancellor

“McMaster remains one of only four Canadian universities (and one of only two in Ontario) consistently ranked among the top 100 in the world by major global ranking systems.”

— Patrick Deane

It has been another successful year in McMaster University’s Department of Medicine with many great accomplishments achieved by its faculty members. From prestigious awards and honours to high-quality teaching and ongoing excellence in research and clinical impact, the Department continues to be a driving force in McMaster’s consistent ranking among the top universities in the world.

McMaster remains one of only four Canadian universities (and one of only two in Ontario) consistently ranked among the top 100 in the world by major global ranking systems. Our University was most recently named Canada’s most research-intensive, medical-doctoral university by Research Infosource for the second year in a row, and we were ranked second in Canada for post-secondary institutions offering clinical, pre-clinical and health programs by *Times Higher Education*. In addition, this year McMaster jumped two places to number four in the category for universities with a broad range of research and PhD programs, including medical schools, in the *Maclean’s* annual ranking of Canadian universities.

These noteworthy rankings are only made possible through the efforts of our outstanding faculty members who support research excellence and provide a quality educational experience for our students. Researchers in the Department of Medicine are leading innovative work in a vast array of specialties that advance these goals, and help to foster healthier populations in Hamilton and around the world.

The Department of Medicine’s faculty members consistently achieve extraordinary successes in publishing their work, being cited in the medical field’s most prestigious journals. As a result, this high-calibre work attracts millions of dollars in research grants and support from federal and provincial governments, industry and charitable organizations, and significant funding from private donors. At the same time, your efforts support the next generation of academic and scientific leaders by providing first-rate training

Patrick Deane

President and Vice-Chancellor
McMaster University



and experiential learning opportunities for our students. By shaping the minds of tomorrow’s medical professionals and researchers through exemplary leadership, instruction and mentorship, I’m confident that the tradition of excellence in the Department will continue.

McMaster’s place among the top universities in the world is something in which we should all take great pride. Thank you for your tireless efforts which ensure that the Department of Medicine and the University maintain their position as world-leading centres for research and innovation. I wish each of you much success in the future and look forward to even greater achievements in the years ahead. ■

Patrick Deane, BA (Hons), MA, PhD
President and Vice-Chancellor
McMaster University



BRIGHTER WORLD

A MESSAGE FROM THE Dean and Vice-President

“Many of our research successes across all divisions continue to make headlines in media around the world.”

— Dr. Paul O’Byrne

It gives me tremendous pleasure to offer my warmest congratulations to the faculty and staff of the Department of Medicine on another extraordinarily successful year. Your unwavering commitment to high-quality education, research and clinical care continues to play a vital role in McMaster’s leading position in academic medicine both nationally and internationally.

The Department remains the largest in the Faculty of Health Sciences and the largest single Department at McMaster University. With 710 faculty members spanning 17 divisions, the Department’s broadly-based commitment to excellence is beyond compare.

Research across the Department is having a broad impact. For example, McMaster is growing its commitment to addressing the epidemic of obesity and related health consequences with the establishment of the Centre for Metabolism, Obesity and Diabetes Research. The centre is focused on translating world-leading basic science into clinical practice to improve the diagnosis, prevention and treatment of metabolic diseases in children and adults. Two renowned McMaster researchers, Gregory Steinberg of medicine and Katherine Morrison of pediatrics, are serving as its co-directors.

Many of our research successes across all divisions continue to make headlines in media around the world. For example:

- A large, international clinical trial led by researchers John Eikelboom and Stuart Connolly found that patients with cardiovascular disease who develop major internal bleeding are much more likely to be diagnosed with cancer.
- An international team co-led by researchers Peter Kavsak and Andrew Worster has developed a simple laboratory score that is safer and faster at diagnosing patients who visit the emergency department with heart attack symptoms.

Paul
O’Byrne

Dean and Vice-President
McMaster University



- Parameswaran Nair found that an antibody called dupilumab is effective in treating severe asthma in place of high doses of prednisone.

Members of our department also achieved remarkable recognitions for their research including Sonia Anand and Michael Surette, whose Canada Research Chairs were renewed, and Alfonso Iorio, who was named the inaugural holder of the new Bayer Chair for Clinical Epidemiology Research and Bleeding Disorders at McMaster University. In addition, Jeremy Hirota was awarded infrastructure funding from the Canada Foundation for Innovation to advance his project: The Tissue Engineering for Advanced Medicine (TEAM) Lab: A Platform for Precision Prevention, Diagnosis, and Medicine.

Congratulations to all members of the Department of Medicine for your dedicated approach and impressive achievements. Your continued success is very much appreciated. Collectively, you play an integral role in advancing the mission and vision of McMaster whilst contributing to our Faculty’s impressive ranking among the best universities in the world. ■

Dr. Paul O’Byrne
Dean and Vice-President
Faculty of Health Sciences
Michael G. DeGroot School of Medicine
Distinguished University Professor
McMaster University

A MESSAGE FROM THE Chair of the Department of Medicine

“...Master’s Department of Medicine continues to fundamentally alter the research and clinical landscape through its simply outstanding productivity.”

— Dr. Mark Crowther

2017/18 represented yet another landmark year for the Department of Medicine at McMaster University. Spanning the breadth of excellent clinical care, world leading research and outstanding educational achievement, the Department of Medicine continues to lead the Faculty of Health Sciences and the broader University through its excellence.

In 2017/18 the Department had 269 full-time faculty, 39 professor emeriti, 28 joint and associate members and 13 clinical scholars complemented by a total of 361 part-time faculty located in Hamilton, Kitchener-Waterloo, Niagara and elsewhere in Ontario. We also welcomed 17 new full-time faculty and 29 part-time faculty.

Our excellence in clinical care could only occur through work with our partner hospitals and community groups. At the Hamilton Health Sciences and St. Joseph’s Healthcare Hamilton, Dr. Barry Lumb and Dr. Alistair Ingram, respectively, carry our mission of academic and clinical excellence forward. I would like to personally thank Drs. Lumb and Ingram; their tireless support for the Department ensures that our academic mission is prominently featured to hospital administration on a day-to-day basis. In 2017/18 we continued our development of our Waterloo and Niagara sites by further building our faculty and infrastructure to support undergraduate and graduate medical education and reflecting the regions’ needs. At the Waterloo site we said goodbye to our long-standing regional assistant Dean, Dr. Cathy Morris, and welcomed Dr. Margo Mountjoy. We continue to develop our Clinical Teaching Unit in Kitchener-Waterloo under the leadership of Dr. Rebecca Krusselbrink.

Dr. Lori Whitehead continued in her role as program director for the core Internal Medicine Residency Training Program during 2017/18 and has been leading the Department’s response to various stressors while simultaneously maintaining our position as one of Canada’s most desired training locations. Work on implementing Competency by Design continued, as did work on adapting our coverage model to changing resident educational expectations.

Mark Crowther

Chair, Department of Medicine
McMaster University



Dr Azim Gangji, as Chair of the Subspecialty Program Directors Committee, continued his long-standing work to increase the visibility of our subspecialty training programs and clinical fellowships. Advanced training and clinical fellowships are an area into which we continue to invest significant resources; we see excellence in post-residency subspecialty training as an area of significant growth and opportunity and an area within which we can highlight how McMaster implements its leading-edge research observations into day-to-day clinical practice.

World-leading research remains, however, the fundamental cornerstone of the Department. The Department continued its remarkable track record of publication and grant funding success. It is a rare week when there is not at least one research publication from a McMaster Department



DR. CATHY MORRIS

Former regional assistant dean, Waterloo



DR. MARGO MOUNTJOY

Current regional assistant dean, Waterloo



DR. REBECCA KRUSSELBRINK

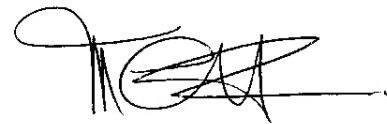
Clinical Teaching Unit, Kitchener-Waterloo

of Medicine researcher featured in one of the leading general internal medicine journals. Critical papers in cardiology, gastroenterology, respirology, hematology and thromboembolism, and many other disciplines have been published by our faculty within the last year. It is not an exaggeration to say that McMaster’s Department of Medicine continues to fundamentally alter the research and clinical

landscape through its simply outstanding productivity.

The success of our faculty is reflected in the awards that they achieved; rather than list these awards here I would suggest that you read through this report where these achievements are highlighted and, in many cases, explored in further depth.

I look forward to contributing to and celebrating our future successes. ■



Mark Crowther MD MSc FRCPC
Chair, Department of Medicine
Leo Pharma Chair in Thromboembolism Research

International Influence

DEPARTMENT OF MEDICINE: INVITED PRESENTATIONS 2017-2018

Locations where Department of Medicine faculty presented during 2017-18, showing the Department's international influence.



PGY1 Welcome gathering



Publication highlights

July 2017

Böhm M, Schumacher H, Teo KK, Lonn EM, Mahfoud F, Mann JFE, Mancina G, Redon J, Schmieder RE, Sliwa K, Weber MA, Williams B, Yusuf S. Achieved blood pressure and cardiovascular outcomes in high-risk patients: results from ONTARGET and TRANSCEND trials. *Lancet*. 2017 Jun 3;389(10085):2226-37. Epub 2017 Apr 5.

August 2017

Pollack CV Jr, Reilly PA, van Ryn J, Eikelboom JW, Glund S, Bernstein RA, Dubiel R, Huisman MV, Hylek EM, Kam CW, Kamphuisen PW, Kreuzer J, Levy JH, Royle G, Sellke FW, Stangier J, Steiner T, Verhamme P, Wang B, Young L, Weitz JI. Idarucizumab for Dabigatran Reversal - Full Cohort Analysis. *N Engl J Med*. 2017 Aug 3;377(5):431-41. Epub 2017 Jul 11.

September 2017

Oczkowski SJW, Au S, des Ordon AR, Gill M, Potestio ML, Smith O, Sinuff T, Stelfox HT, Fox-Robichaud AE. A modified Delphi process to identify clinical and research priorities in patient and family centred critical care. *J Crit Care*. 2017 Dec;42:243-7. Epub 2017 Aug 6.

October 2017

Eikelboom JW, Connolly SJ, Bosch J, Dagenais GR, Hart RG, Shestakovska O, Diaz R, Alings M, Lonn EM, Anand SS, Widimsky P, Hori M, Avezum A, Piegas LS, Branch KRH, Probstfield J, Bhatt DL, Zhu J, Liang Y, Maggioni AP, Lopez-Jaramillo P, O'Donnell M, Kakkor AK, Fox KAA, Parkhomenko AN, Ertl G, Störk S, Keltai M, Ryden L, Pogossova N, Dans AL, Lanan F, Commerford PJ, Torp-Pedersen C, Guzik TJ, Verhamme PB, Vinereanu D, Kim JH, Tonkin AM, Lewis BS, Felix C, Yu-

soff K, Steg PG, Metsarinn KP, Cook Bruns N, Misselwitz F, Chen E, Leong D, Yusuf S; COMPASS Investigators. Rivaroxaban with or without Aspirin in Stable Cardiovascular Disease. *N Engl J Med*. 2017 Oct 5;377(14):1319-30. Epub 2017 Aug 27.

November 2017

Meade MO, Young D, Hanna S, Zhou Q, Bachman TE, Bollen C, Slutsky AS, Lamb SE, Adhikari NKJ, Mentzelopoulos SD, Cook DJ, Sud S, Brower RG, Thompson BT, Shah S, Stenzler A, Guyatt G, Ferguson ND. Severity of Hypoxemia and Effect of High-Frequency Oscillatory Ventilation in Acute Respiratory Distress Syndrome. *Am J Respir Crit Care Med*. 2017 Sep 15;196(6):727-33.

December 2017

Connolly SJ, Eikelboom JW, Bosch J, Dagenais G, Dyal L, Lanan F, Metsarinn K, O'Donnell M, Dans AL, Ha JW, Parkhomenko AN, Avezum AA, Lonn E, Lisheng L, Torp-Pedersen C, Widimsky P, Maggioni AP, Felix C, Keltai K, Hori M, Yusoff K, Guzik TJ, Bhatt DL, Branch KRH, Cook Bruns N, Berkowitz SD, Anand SS, Varigos JD, Fox KAA, Yusuf S; COMPASS investigators. Rivaroxaban with or without aspirin in patients with stable coronary artery disease: an international, randomised, double-blind, placebo-controlled trial. *Lancet*. Epub 2017 Nov 10.

January 2018

Nath S, Koziarz A, Badhiwala JH, Alhazzani W, Jaeschke R, Sharma S, Banfield L, Shoamanesh A, Singh S, Nassiri F, Oczkowski W, Belley-Côté E, Truant R, Reddy K, Meade MO, Farrokhyar F, Bala MM, Alshamsi F, Krag M, Etxeandia-Ikobaltzeta I, Kunz R, Nishida O, Matouk C, Selim M, Rhodes A, Hawryluk G, Almenawer SA. Atraumatic versus conventional lumbar puncture

needs: a systematic review and meta-analysis. *Lancet*. 2018 Mar 24;391(10126):1197-204. Epub 2017 Dec 7.

February 2018

Koleva PT, Tun HM, Konya T, Guttman DS, Becker AB, Mandhane PJ, Turvey SE, Subbarao P, Sears MR, Scott JA, Kozyrskij AL; CHILD Study Investigators. Sex-specific impact of asthma during pregnancy on infant gut microbiota. *Eur Respir J*. 2017 Nov 22;50(5).

March 2018

Hirsh J, Ginsberg JS. Edoxaban for the Treatment of Venous Thromboembolism in Patients with Cancer. *N Engl J Med*. 2018 Feb 15;378(7):673-4.

April 2018

Chu DK, Kim LH, Young PJ, Zamiri N, Almenawer SA, Jaeschke R, Szczeklik W, Schünemann HJ, Neary JD, Alhazzani W. Mortality and morbidity in acutely ill adults treated with liberal versus conservative oxygen therapy (IOTA): a systematic review and meta-analysis. *Lancet*. 2018 Apr 28;391(10131):1693-705. Epub 2018 Apr 26.

May 2018

Chan N, Sager PT, Lawrence J, Ortel T, Reilly P, Berkowitz S, Kubitzka D, Eikelboom J, Florian J, Stockbridge N, Rose M, Temple R, Seltzer JH. Is there a role for pharmacokinetic/pharmacodynamic-guided dosing for novel oral anticoagulants? *Am Heart J*. 2018 May;199:59-67. Epub 2017 Oct 10.

June 2018

O'Byrne PM, FitzGerald JM, Bateman ED, Barnes PJ, Zhong N, Keen C, Jorup C, Lamarca R, Ivanov S, Reddel HK. Inhaled Combined Budesonide-Formoterol as Needed in Mild Asthma. *N Engl J Med*. 2018 May 17;378(20):1865-76. ■

Faculty awards and highlights

BRIGHTER WORLD



Dr. Craig Ainsworth 2018 PARO Excellence in Clinical Teaching Award for McMaster University, Professional Association of Residents of Ontario

Dr. Emilie Belley-Cote Faculty of Health Sciences Graduate Programs Outstanding Achievement Award, 2018
The Garner King Award – Best Clinical or Quality Improvement Study

Dr. Birubi Biman Best Clinical Teacher Internal Medicine 2017-18
Best Academic Teacher Internal Medicine 2017-18

Dr. Teresa Chan 2017 Outstanding Contributions to the McMaster RCPC Emergency Medicine Residency Program.
2017 Publons Peer Review Award Top 1% of peer reviewers in Medicine
2018 *Journal of Graduate Medical Education* 2017 Top Reviewer
2018 Young Alumni of Distinction Award, Western University
2018 Publons Peer Review Award Top 1% of peer reviewers in Category (assorted)

Dr. David Conen Mid-Career Research Award, Department of Medicine, McMaster University

Dr. P.J. Devereaux 2017 Canadian Association for Medical Education Certificate of Merit Award for Contributions to Medical Education 2017.

Dr. James Douketis 2018 Polish Society of Internal Medicine Achievement Award
2018 Honourary Doctor of Medicine, University of Thessaly, Greece
2017 Canadian Society of Internal Medicine David Sackett Senior Investigator Award

Dr. Alison Fox-Robichaud Global Sepsis Alliance Individual Award

Dr. Shariq Haider Appointed to Canadian Foundation of Infectious Diseases CFID Board of Directors
Reappointed Board of Directors, Canadian Association of HIV Research CAHR

Dr. Jeff Healey CANET (Canadian Arrhythmia Network - NCE) 2018 Mentoring Award

Dr. Anne Holbrook Department of Medicine Graduate Teaching Award, McMaster University

Dr. Dale Kalina DeGroot Scholarship for Leadership in Healthcare for the Executive Master's in Business Administration in Digital Transformation at DeGroot School of Business, McMaster University
Hamilton Health Sciences Scholarship for the Executive Master's in Business Administration in Digital Transformation at DeGroot School of Business, McMaster University

Dr. John Kelton Honourary Doctorate of Science from Western University

Dr. Khurram Khan Mentoring Award 2018, Postgraduate Medical Education, McMaster University
Gastroenterology Teaching Award 2018, GI Residents, McMaster University

Dr. Om Kurmi E.J. Moran Campbell Internal Career Research Award, Department of Medicine, McMaster University

Dr. Kim Legault Best Abstract for Young Investigator Award, Canadian Rheumatology Association, 2018

Dr. Akbar Panju Teaching Award for Internal Medicine, Michael G. DeGroot School of Medicine Class of 2018.

Dr. Maria Ines Pinto Sanchez CIHR Fellowship Nutrition Award, declined
Internal Medicine Career Research Award, Department of Medicine, McMaster University
Farncombe Family Digestive Health Research Institute Award
Cochrane Collaboration Award
Crohn's and Colitis Canada Innovations in IBD Award

Dr. P.K. Rangachari IUPHAR Education Section's Teaching Excellence Award, World Congress of Pharmacology, Kyoto, Japan

Dr. Omid Salehian 2017-18 Ernest Fallen Teaching Award, Division of Cardiology, Department of Medicine, McMaster University

Dr. Sam Schulman Harold R. Roberts Medal, International Society on Thrombosis and Haemostasis

Dr. Matt Sibbald Faculty Award for Excellence & Innovation in Residency Education, Postgraduate Medical Education, McMaster University

Dr. Greg Steinberg 2018 Endocrine Society Richard E. Weitzman Outstanding Early Career Investigator Award
2017 Diabetes Canada Young Scientist Award
2017 American Diabetes Association Outstanding Scientific Achievement Award

Dr. Michael Surette 2018 Canadian Society of Clinical Chemists Traveling Lectureship
Elected Fellow of the American Academy of Microbiology, 2018

Dr. Koon Teo Invited to give 2017 Irish Cardiac Society Stokes Lecture and recipient of Stokes Medal

Dr. Salim Yusuf Elected Fellow of the Islamic World Academy of Sciences (FIAS), 2017
Honorary Doctorate in Medical Sciences, Charles University, Prague, Czech Republic, 2018
CADECI Career Achievement Award, Guadalajara, Mexico, 2018
Knox-Hagley Memorial Lecture, Heart Foundation of Jamaica, Kingston, Jamaica, 2018 ■

A PASSION FOR RESEARCH

Groundbreaking research

Innovative findings by McMaster educators continue to pave the way for better care the world over.

It seems like almost every year there's some major life-saving discovery by McMaster educators that literally changes practice. And there's certainly dozens of hugely promising studies underway that are inspired by a culture of evidence-based and learning practice. "Where others may say, 'It's an impossible endeavour', we say, 'We must try'," says Mark Crowther, Chair of the Department of Medicine. "That's why we have so many projects that are 'first ever' or 'world's largest'. We like a challenge but we also pride ourselves on having the capacity and growing the human resources needed to have positive outcomes when we do try. Because even failure is adding a critical piece to often complex knowledge puzzles." Here are some of the many positives McMaster educators have achieved over the past year.

FINDINGS THAT HAVE CHANGED PATIENT CARE

Patients with heart problems who are in need of surgery have to take blood-thinners to prevent clots, and wait a dangerously long time for it to leave their system. Dr. Jeff Weitz, director of the Thrombosis & Atherosclerosis Research Institute, co-authored a paper that showed idarucizumab is a novel therapy that acts as an antidote to the blood thinners. "Before this study, we had no way of reversing the effects, forcing patients to wait for surgeries," he says. Now, thanks to the New England Journal of Medicine study, idarucizumab is licensed in Canada, and routinely used, he added. "It worked out tremendously well. It's now the standard of care."

Another game-changer for care recently is rivaroxaban, a blood thinner, which showed in a McMaster-led massive trial of 27,395 patients in 33 countries that rivaroxaban taken in combination with aspirin is more effective than aspirin alone in reducing cardiovascular death, stroke or myocardial infarction in patients with vascular disease.

"The findings were so profound, a reduced risk of cardiovascular events by 24 per cent and mortality by 18 per cent, that the study was cut short," says professor Dr. John Eikelboom, who compares the scale of discovery to that of statins. "Rivaroxaban was approved in record time by governments around the world including Health Canada. Not very many drugs are approved for use that quickly." Eikelboom and team are currently excited about pursuing another potential cause of cardiovascular events, inflammation, and have several major studies underway looking at the inexpensive drug colchicine.

WORLD'S LARGEST RESEARCH PROJECTS

Dr. Mike Walsh, associate professor, is working on a couple of massive studies in his area of expertise to help guide a clearer treatment path. One is for an extremely rare small blood vessel disease called ANCA-associated vasculitis to find the best ways to use various treatments including plasma exchange and prednisone. It includes 704 patients, which is a lot given the rarity of the illness, and will ideally provide steps

to make treatment safer. "We've never had agreement on treatment," he explains. They are also working on another one of the world's largest studies on end-stage kidney disease and heart failure, and the use of spironolactone to prevent the latter. "There's a long line of people at McMaster who have given little thought to obstacles, and persevered with research because it's the right thing to do. Combine that with an interdisciplinary approach to medicine and you get real breakthroughs," says Walsh.

DEVELOPING A COMMUNITY HOSPITAL-BASED RESEARCH PROGRAM

Community hospitals are in many ways an ideal place to be conducting research, as long as there isn't an extra burden on staff or a decline in quality of care. This was the mission Dr. Jennifer Tsang, assistant professor, was tasked with four and a half years ago by Crowther. "One of my deliverables at Niagara Health was to develop a formal ICU research program." Why did it take so long? In order to put a formal infrastructure and plan in place many challenges had to be overcome. Eventually,

the program kicked off and there have been exciting research projects, such as on Legionella and Lactate in Sepsis, and "many other benefits," notes Tsang. "From a scientist's view, we're able to run more multi-centre clinical trials. From a patient's view, we're able to get more trials, do them faster and cost less. From a clinician's view, we're keeping physicians engaged and recruiting bright, young staff. Finally, of course, we're improving patient's care."

MOVING TOWARD REFINED MEDICINE

Dr. Jeremy Hirota, assistant professor, is working on a cool new tool that supports an important avenue for medicine; precision medicine, or the tailoring of a medical treatment to the individual characteristics of each patient. Combining his expertise in biomedical science with innovation in mechanical engineering from researchers in the Faculty of Engineering, Hirota has a new tool for cystic fibrosis that will monitor how a gene named cystic fibrosis

transmembrane conductance regulator (CFTR) is working. "New drugs become available for CF but we don't know which ones will work in patients because the gene has over 2,000 mutations," says Hirota. "If we can find a way to further show how cystic fibrosis is different in each person by understanding how airflow impacts the transport of molecules in lung immune function in individual patients, or CFTR, and tailor the doses or the combination of drugs they take, then hopefully their medication will be optimized and their care will be improved," he says.

Just another path McMaster educators are willing to at least try, not only because they can and should, but because it's the right research to do." ■



A PASSION FOR CARE

Excellence in care

Change is an exciting, exhilarating and sometimes exasperating in health care, but McMaster educators manage it all in stride, especially with such high standards of patient care at stake.

Change is the only constant in health care these days. Leaders and managers face key issues, such as understaffing, in a perpetually shifting landscape coupled with an increasing demand for practical approaches to implementing effective change that ensure care quality.

It's a tall order for McMaster educators, who are up for the challenge working away at developing many new initiatives and processes this past year while navigating the constant need to prepare for, implementing, spreading and sustaining change.

"We are working on implications for in-hospital care in a new world of resident hours," says Dr. Barry Lumb, physician-in-chief, HHS. "Over time, the concept of the resident providing after-hours coverage at a teaching hospital from 5 p.m. to 8 a.m. has disappeared." The solution is going to impact greatly how hospitals are run, says Lumb, because it can't be done by physicians who are already working hard and have academic responsibilities.

A first task force reviewed the issue and reported observations, now a second tripartite task force including St. Joseph's Healthcare, Hamilton Health Sciences and McMaster University developed a recommendation to provide care 24/7. "We needed to look at models of care that were as good or better at providing care with less expectations of the medical trainee

being the first line." The solution is to put in place a role for physician extenders and physician assistants like acute care nurse practitioners. "There will be financial implications, and internal, cultural changes, as a full team of professionals provides care rather than just being dependent on the resident," says Lumb, adding that the face of it is different, "but if it is done right, it should provide excellent if not better care."

Lumb mentioned academic responsibilities, and the ushering in of the transformative Royal College of Physicians and Surgeons of Canada's evaluation requirements for Competence by Design (CBD), or ongoing quality improvements to The Boris Clinic, the first-of-its-kind ambulatory treatment environment, at McMaster University Medical Centre. The one-stop out-patient clinic features 14-plus specialists and between 20 to 30 residents, is designed to train future doctors, and currently delivers services to patients coping with more challenging cases with the goal of keep them out-patient. "Our residency program continues to receive excellent reviews and we're recruiting very high calibre trainees," adds Lumb.

In the meantime, processes are a pivotal aspect of changes and Lumb says there are 30 or more underway. "Dr. Crowther and I are interested in developing the faculty who have expertise in patient quality and safety, especially in processes of care, and ensure there are no trouble areas or barriers to patient safety." Another initiative is underway to provide well-organized patient discharge with enhanced safety, says Lumb. The transition from community to hospital and then hospital to community or long-term care, as the case may be, is full of risks, primarily with miscommunication, that can be reduced. "We are not overlooking anything when it comes to improving patient care, safety and outcomes."

The Department of Medicine at St. Joseph's Healthcare Hamilton (SJHH) is working hard to meet the high demand for its general internal medicine services. They implemented a clever change management strategy to deal with a lack of bed capacity. SJHH took on a major redevelopment on levels 4 and 5 of the Mary Grace wing to create more isolation and "flex" bed space to cope with the continual challenge of Alternative Level of Care (ALC) patients

being admitted to hospital only to wait until another program finds them facilities. "It's been hugely effective, with optimized communication between MDs, nursing and therapy staff, and the reduced travel ties between staff and patients are also greatly appreciated."

Among all of these challenges and new initiatives it's hard to take time to stop and celebrate the achievements of last year, "but it's also vital," says Dr. Crowther, "as a spirit of appreciation and gratitude are often just what everyone needs to recharge the passion for working so hard under such unpredictable circumstances." ■

"We are not overlooking anything when it comes to improving patient care, safety and outcomes."

— Dr. Barry Lumb



A PASSION FOR KNOWLEDGE

Leadership in learning

McMaster educators are always pioneering new ways to advance a resident-driven change and the best ways to innovate on leadership in learning with strategic research moves.

McMaster faculty and residents have achieved massive education transformation, ahead of most other schools, in implementing the mandated Royal College of Physicians and Surgeons of Canada's evaluation requirements for Competence by Design (CBD).

The core internal medicine program is among the first to embrace the innovative approach to resident evaluation with a deadline of July 2019, and faculty and students have been working hard to roll out the new, massive educational change with a successful soft launch, says Dr. Lori Whitehead, director of the Internal Medicine Residency Program.

Under CBD, recognition of learning and skill progression is no longer evaluated by academic year, but by competence, depending where each learner is in the curriculum, explains Dr. Ameen Patel, associate chair, education. "This more direct observation supports immediate feedback allowing learners to either improve or tackle problem areas." Because it's a joint process, and McMaster values teamwork, all the committees and subcommittees were co-chaired by educators and residents.

"By far the biggest challenge has been transitioning to a new electronic platform that supports the observation and feedback exchange," said Whitehead. In order to ensure a streamlined shift, a useful, similar web-based evaluation tool was borrowed

from the Emergency team. "The hope is that College's web-based system will be ready in time for us to adopt," added Patel.

"There's no doubt that such a significant change in teaching requires full-scale adoption and we've been fortunate here at McMaster to have a culture of welcoming, progressive learning," he added. In fact, says Whitehead, the tremendous support of clinical educators deserves to be emphasized. "Their hard work and dedication working on a daily basis with residents in clinical teams is truly remarkable. One quote I hear over and over from people visiting program, universally, is that they've never seen such levels of support that are provided by our attending physicians.

"It goes back to the culture at McMaster. McMaster is where attending physicians were once residents, where teamwork and alliance, and sacrifice were and have always been part of good patient care. Where what's taught is mentorship, in a friendly and supportive place, where we value all team members, leaders and non-leaders, because they bring all kinds of

skills that make us strong physicians no matter where we go next."

With a such a big job to still oversee, McMaster educators really have their work cut out for them as they prepare for 2019 accreditation, notes Patel. With quality improvement and patient safety (QIPS) coming to the forefront of patient care and accreditation, McMaster is working on identifying key players on key QIPS pillars, unifying them and providing resources, he says. "We've got a lot faculty implementing clinical education and research, but we lack a mechanism to bring them together and maximize their efforts," says Patel. He adds that this could lead to some exciting systemic changes that could improve care.

To ensure a streamlined evaluation experience between programs, Dr. Helen Neighbour, the undergraduate director, added another interesting tool to last year's development of a new student assessment and evaluation app, Mac DOT, which gives students access to real-time learning and feedback on their smartphones. "

Not only will they have director observational feedback, this year we've added on-demand feedback, which will ensure feedback is provided before the start of a new rotation." They also added a process for on-demand feedback that's both mandatory and confidential for faculty. It would seem desire for top notch quality evaluation is appreciated by both residents and educators who only seek out ways to improve and propel forward McMaster's culture of passing on the torch for lifelong learning. ■

"There's no doubt that such a significant change in teaching requires full-scale adoption and we've been fortunate here at McMaster to have a culture of welcoming, progressive learning."

— Dr. Ameen Patel



A PASSION FOR OTHERS

Global Connections

Check out all of the ways McMaster educators are building bridges around the globe to elevate, share and inspire healthcare knowledge and capacity.

Looking at the tremendous success and expansion of the Department's 15-year-old Global Health Program in Internal Medicine it is easy to see why it is a global best-practice example of international healthcare outreach. What once began in Uganda with one-month exchanges between the McMaster Department of Medicine and Uganda's Makerere University residents (the Fellowship Exchange Program [FEP], and continues today) has spread to other cities, indeed, countries, thanks to educators in McMaster's Department of Medicine and to the staff at St. Joseph's System International Outreach Program (IOP).

Activities include a first ever postgraduate internal medicine curriculum in Namibia, a first year internal medicine program in Guyana, South America, as well as an expansion of FEP there. Finally, the teams have also tailored a one to three-year subspecialty program into just one year for Ugandan candidates who need training in specialties. "The real momentum behind the program is the power of sharing. Once the floodgates were opened and everyone realized the scope and what the rush of benefits could be, the passion has only grown to achieve more," says Mark Crowther, Chair of the Department. Here are just two outcomes of the power of sharing across borders.

PHENOMENAL GROWTH LEADS WORLD-CLASS RECOGNITION.

Assistant professor Dr. Christian Kraeker, who has helped with Namibia's new post-graduate internal medicine curriculum, says it's incredible how the Department's global outreach has grown. "It's done so because we aren't imposing anything, we work close with Namibia staff to give them what they know they need." Lately, that

includes expanding the teaching and the standardized evaluation of the FEP from the capital city of Windhoek into northern Namibia. "That only makes sense since the country is primarily a rural population and quite spread out," says Kraeker. There's no denying we need more bodies on the ground, he adds, noting on the other hand, McMaster and Namibia teams are quite particular about who they partner with. "We need self-sufficient partners, and those who aren't one-sided. What works for our partners abroad typically needs to be tailored." Fortunately, we found a like-minded new partner in Georgetown University in Washington, D.C., he adds. "We're really excited to be working with them."

PASSION THAT'S FUELING SELF-SUFFICIENCY.

Uganda requested subspecialty training and over the past years McMaster, thanks in large part assistant professor Rebecca Kruisselbrink, has wrestled the complicated process and logistics into reality. She arranges sponsored, one-year tailored subspecialty elective exchanges

for hand-picked Ugandan candidates who need training in areas such as cardiology, respirology, and other disciplines. "We're really starting to get recognition from other departments such as Family Medicine and Dermatology that see the benefits of being involved and want to find ways to be involved or involve second trainees." While that kind of momentum is critical to ongoing program advancement, so is what Kruisselbrink is observing on the ground during her visits. "To see what these residents take back with them and how they apply it with a proactive, outside the box thinking, especially working with limited resources, is powerful proof that what we're doing is working," she said. One student who took nephrology training went back to help create a better dialysis unit but also, after being steeped in McMaster's culture of proactive thinking and curiosity to apply knowledge in clinical settings, started a program to begin better palliative care for these patients, which fills in gaps where resources for technology, for example, won't." Kruisselbrink adds that it's heartening to see so many examples like this.



"The real momentum behind the program is the power of sharing. Once the floodgates were opened and everyone realized the scope and what the rush of benefits could be, the passion has only grown to achieve more."

— Dr. Mark Crowther

Back at home, there are also massive international research projects constantly underway, many led by Salim Yusuf, executive director of the Population Health Research Institute, that leverage the same values of the department's Global Health Program. "The work really brings our human resources to countries who wouldn't otherwise gain insight to the source of disease, but the findings are also tell us what kind of environmental roles there are in disease," says assistant

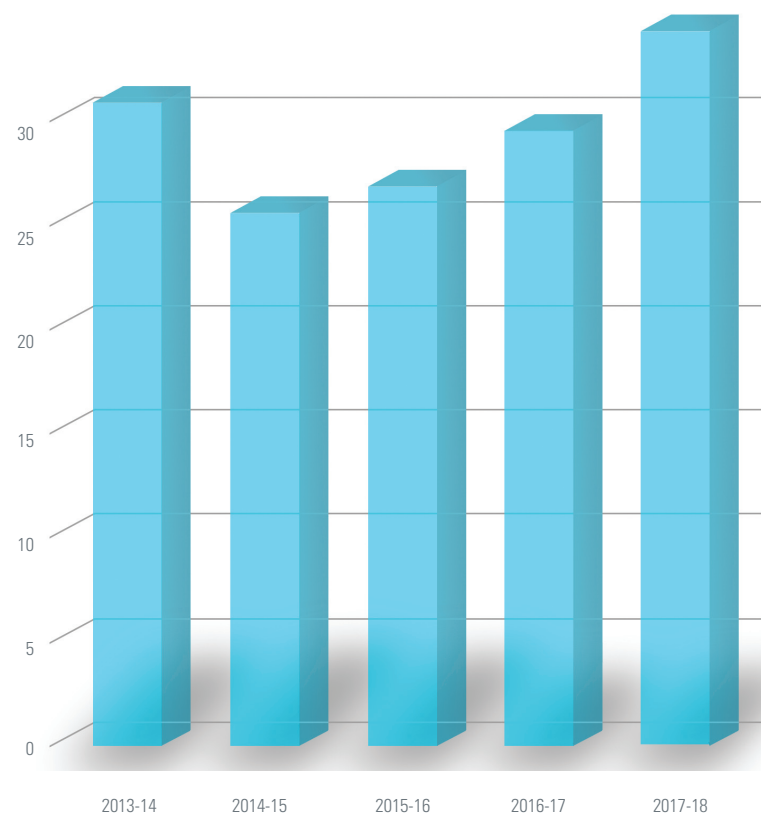
professor Om Kurmi. For example, he's working on the respiratory component of the largest ever global study on congestive failure led by the PHRI which includes 25,000 patients in 42 countries. "To eventually be able to supply the world with a list of risk factors that may vary by region is a huge feat," he says of the many possible study outcomes. Shooting for the stars takes on a whole new meaning at McMaster, where landing one or two or three is a very real possibility. ■

Associate Chair, Research

The mandate of the associate chair, research is to promote and facilitate research within the department. To meet this mandate, the associate chair has focused on the following activities:

- (1) ensuring the success of junior faculty involved in research activities through advice and mentoring,
- (2) updating the scoring system that was implemented to quantify research output of faculty for purposes of remuneration and promotion and tenure,
- (3) ensuring that adequate departmental resources are earmarked for research, and
- (4) coordinating internal peer review of tri-council grant submissions.

RESEARCH FUNDING IN MILLIONS



The associate chair, research meets with all new recruits and provides feedback to the department chair regarding their research potential. Those selected for faculty appointments in the research stream meet with the associate chair on a regular basis for mentorship and advice regarding grant applications, funding and career planning. The associate chair also provides advice to department members regarding new funding opportunities and research strategies.

The associate chair, research serves as a member of the Departmental Executive, Research Executive, Tenure and Promotion, Executive Finance, and Alternate Funding Plan Committees. The role of the associate chair on these committees is to advise and advocate for research.

The Department of Medicine offers Internal Career Awards for new faculty members. These awards have tenure for up to three years and are granted on a competitive basis.



Dr. Jeffrey Weitz

MD, FRCP(C), FACP, FCCP
Associate Chair, Research
Professor of Medicine and Biochemistry & Medical Sciences, McMaster University
Director, Thrombosis and Atherosclerosis Research Institute
HSFO/J. Fraser Mustard Chair in Cardiovascular Research
Canada Research Chair in Thrombosis (Tier 1)

“...Canada’s most research-intensive, medical-doctoral university by Research Infosource for the second year in a row.”

— Dr. Patrick Deane

RESEARCH FUNDING BY SOURCE
\$33,708,385

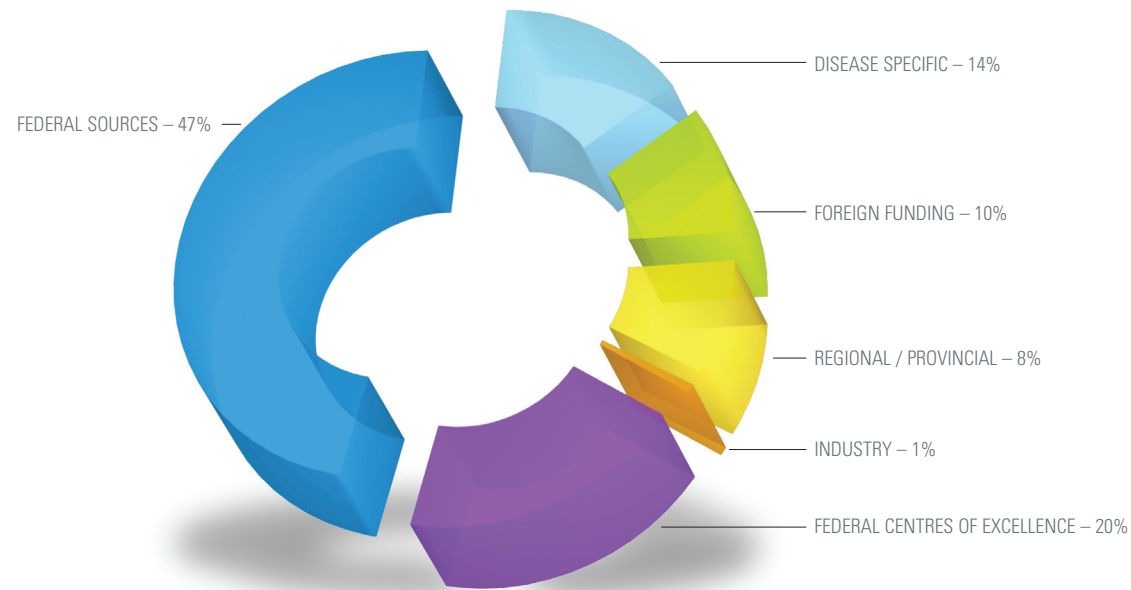


Figure 1

RESEARCH FUNDING BY TYPE
\$33,708,385

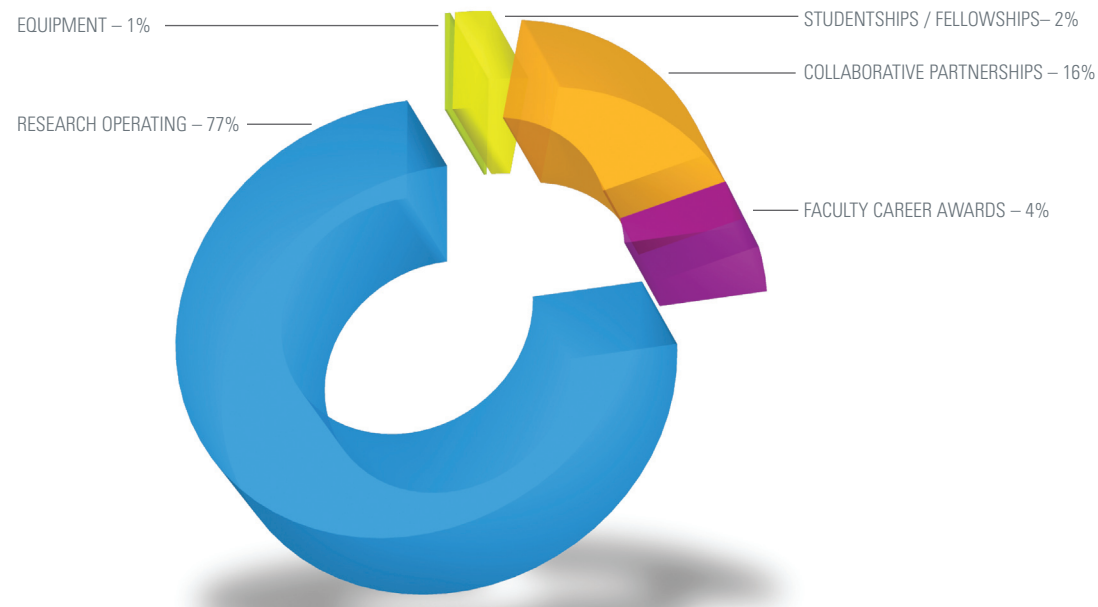


Figure 2

Awards are available for both research and education and are aimed at fostering the next generation of researchers and educators. Funding from this source can be used to offset clinical expenses, thereby increasing protected time for research. The associate chair, research is a member of the committee that reviews and prioritizes the application for Internal Career Awards.

The Department of Medicine continues to be a major contributor to the research productivity of the Faculty of Health Sciences, McMaster University. The amount of research funding for 2017-18 was almost \$34 million, a significant increase from the previous year. The majority of this funding came from peer-reviewed sources with 47% from tri-council, 20% from National Centres of Excellence (see Figure 1), and 14% from disease-specific funding agencies. The remainder was derived from regional/provincial sources and industry. Research funding has increased by almost \$5 million from last year (see Figure 2). This is a particularly noteworthy accomplishment given the increasing emphasis on clinical productivity and the competitive nature of the current grant review process. ■



Millions of dollars increase in Research funding from previous year

“There’s a long line of people at McMaster who have given little thought to obstacles, and persevered with research because it’s the right thing to do. Combine that with an interdisciplinary approach to medicine, and you get real breakthroughs.”

— Dr. Mike Walsh

COORDINATOR REPORT

Associate Chair, Education

The associate chair, education is tasked with fostering all aspects of teaching and education scholarship within the Department. To fulfill this mandate, the associate chair plays an integral role in recruitment, mentoring of faculty, reappointment and promotion and administrating and monitoring the education scoring system used for AFP remuneration.

The associate chair, education meets with all new full-time and part-time recruits to review teaching and education expectations and to explore and promote education scholarship and research. They meet with potential recruits for both the main and distributed campuses as well as all new full-time recruits based at the main campus who are also new to McMaster at least once in their first year on faculty to provide guidance on their education and career goals.

They also meet with all full-time members undergoing academic review for reappointment, promotion from assistant to associate, associate to professor and those undergoing CAWAR review. This meeting is mandatory and culminates in a formal Departmental Teaching Evaluation Report that is a part of the academic review package submitted to all reviewing bodies. As part of this process, the associate chair, education also undertakes an independent review of each member's teaching, education scholarship, faculty performance evaluations and MacFACTS CV.

A key duty in this role is to facilitate mentorship for all clinician educators. At the initial recruitment meeting, one-year follow-up meeting and reappointment meeting, they will review potential mentors and facilitate introductions. The discussion includes how to choose a mentor, expectations of a mentor and encouragement to formalize any mentor/mentee relationships.

The associate chair, education plays an integral role in the assessment of education contributions through the Department of Medicine education contribution forms. All full-time members and part-time members, who participate in the AFP, are required to

complete these forms annually. The contributions are vetted and merit payments are dispersed based on contributions. The data is shared with the Council of Medicine and division directors are provided with rankings for their members and all members in the Department. The members receive only their hours of education and percentile ranking. Division directors are able to share a member's ranking within the Department compared to colleagues at the same level and in the same academic stream. The education contribution forms allow members to identify education and administrative opportunities for enhanced teaching and education scholarship that can be reviewed at annual performance meetings with division directors. The education contribution forms are modified on an annual basis based on feedback. Members have an opportunity to utilize an arm's length Ombuds Committee in situations where there is disagreement on eligibility of a specific activity or hours of credit for an activity.

The associate chair, education sits on the department career and teaching awards committees. Their role is to encourage members to apply for education and quality improvement and safety internal career awards and to recognize those who have made exceptional contributions to undergraduate, postgraduate and graduate teaching. The education and quality safety & patient improvement awards are critical in promoting education and quality improvement scholarship and research. The awards are granted for a three-year term and offer financial support allowing successful candidates to reduce clinical activities and dedicate the protected time to scholarship. The chair of the Internal Career Awards Committee and the associate chair, education communicate with all unsuccessful candidates on

how to strengthen their proposals and to suggest mentors who can facilitate successful funding with future applications.

More than two-thirds of the members of the Department of Medicine are clinician educators. Although the focus of these individuals is teaching and education scholarship, many also participate in research and are co-applicants on research grants. The associate chair, education, is tasked with encouraging clinician educators to participate in clinical research through collaboration and contribution as co-investigators, site leads, patient recruiters, adjudicators, etc. This role promotes clinical and education scholarship through ensuring that adequate resources and mentorship are available for the development of new curriculum, evaluation tools and education research.

The Department of Medicine excels at teaching and education scholarship locally and nationally. Members hold key education leadership positions at the Royal College of Physicians and Surgeons of Canada and subspecialty societies. Additionally, a number of members contribute to the promotion of continuing education nationally and internationally.

6 MEMBERS PROMOTED TO FULL PROFESSOR

14 MEMBER PROMOTED TO ASSOCIATE PROFESSOR



Dr. Ameen Patel

MB, FRCP(C), MACP, FRCP(Edin), FRCP (Glasg)
Professor, Department of Medicine
Associate Chair, Education

It is a testament to members that the demand for growing proportions of time to meet healthcare delivery coupled with limited funding for education scholarship has not translated to a reduction in teaching and education scholarship.

In 2017-18, the Department of Medicine continued its tradition of delivering a high quantity and quality of education with over 22,000 total weighted hours of education in the Undergraduate Medical Program and over 14,000 total weighted hours in the Undergraduate Medical Clerkship Program. Department members contributed over 1,500 hours of education in the Physician Assistant Program. In Internal Medicine and its subspecialties, department members contributed over 34,000 total weighted hours. Members also made significant contributions towards continuing Education (over 4,000 hours), Bachelor of Health Sciences Honours (over 2,000 hours), Undergraduate and Graduate Biochemistry (over 2,000 hours), Health Research Methodology (over 2,500 hours) and Masters of Health Science in Health Science Education (over 1,500 hours).

The 2017-18 academic year was successful for promotion of department members. Effective July 01, 2017, Drs. Hisham Dokainish, Alison Fox-Robichaud, Jeffrey

14,000

Total number of weighted teaching hours that Department of Medicine faculty contributed to the Faculty of Health Sciences in 2017-18 in undergraduate Medical Clerkship programs

Healey, Joan Krepinsky, Michelle Welsford and Geoffrey Werstuck were promoted to full professor. Drs. Kjetil Ask, Karen Beattie, Kelly Dore, Juan Guzman, Smita Halder, Christian Kraeker, Ishac Nazi, John Neary, Mohamed Panju, Karen To, Marcel Tunks, Brian Van Adel, Madeleine Verhovsek and Natalia McInnes were promoted to associate professor with CAWAR. Dr. Guy Amit successfully acquired CAWAR. The following part-time faculty were successfully promoted: Dr. Kevin Smith (Professor), Dr. Nicole Didyk (Associate Clinical Professor), Dr. George Ioannidis (Associate Professor) and Dr. Paul Miller (Associate Clinical Professor).

RECIPIENTS OF THE 2017 DEPARTMENT OF MEDICINE TEACHING AWARDS

Drs. Margaret Ackerman, Wendy Lim and Joye St. Onge
(Postgraduate Medical Education)

Dr. Kjetil Ask
(Undergraduate Medical Education)

Dr. Anne Holbrook
(Graduate Education)

“In 2017/18 we continued our development of our Waterloo and Niagara sites by further building our faculty and infrastructure to support undergraduate and graduate medical education and reflecting the regions’ needs.”

— Dr. Mark Crowther

RECIPIENTS OF THE DEPARTMENT OF MEDICINE INTERNAL CAREER AWARDS

Dr. Paul Kim and Dr. Ines Pinto Sanchez
(Medicine Internal Career Research Award)

Dr. Siwar Albashir
(Quality Care and Patient Safety Award)

Dr. Mohammed Yaghoobi
(AFP Internal Career Research Award)

Dr. Michael Tsang
(AFP Clinician Educator Award)

Dr. Noel Chan
(E. J. Moran Campbell AFP Internal Career Research Award)

Dr. Richard Sztramko
(W. Watson Buchanan AFP Clinician Educator Award)

OTHER MAJOR ACHIEVEMENTS

Dr. John Eikelboom
Recipient of the Jack Hirsh Award for Outstanding Academic Achievement

Dr. Stephen Collins
Appointed the Farncombe Family Chair in Digestive Research

Dr. Alexander Hynes
Appointed the Farncombe Family Chair in Phage Biology

Total number of weighted teaching hours that Department of Medicine faculty contributed to the Faculty of Health Sciences in 2017-18 in undergraduate Medical programs

22,000



COORDINATOR REPORT

Internal Medicine Residency Training Program

The McMaster Internal Medicine Residency Program has a central campus located in Hamilton and a distributive site in Waterloo. Internal Medicine training continues to be a popular choice. In 2017, approximately 1,200 applicants, including Canadian or International Medical Graduates and sponsored medical graduates, applied to our program. Each year, we are privileged to accept bright, enthusiastic residents from diverse backgrounds who are the heart of our program.

Two terms to describe our residents and faculty have emerged during the 2017-18 academic year, resilient and adaptable. Residency training programs are currently facing many challenges and internal medicine is no exception. Our program supports learning activities for 116 of our own residents and for approximately another 120 residents from other specialty programs who rotate on our CTUs. Internal medicine rotations provide a rich learning environment for many residents. It is therefore imperative for our program to seek modifications that convert challenges into opportunities. I have been impressed with the willingness of all players to develop and implement solutions to address current concerns and potential issues on the horizon. It has been a rewarding experience to see the teamwork between residents, the Department of Medicine, faculty educators and hospital administrators. Each group has worked towards a common goal to raise the bar for residency education and for patient care.

The official “go live” date for internal medicine to convert to Competency Based Medical Education (CBME) is July 1, 2019. Preparations have been underway for two years with structured committees tasked to develop educational resources to teach residents and faculty about the principles of CBME. Implementation of Work Based Assessments on the CTU was initially hindered by the lack of a robust IT platform. Our soft launch found traction after introducing an interim technical solution that is mobile friendly. Building the infrastructure for CBME has included the formation of a Competence Committee and defining the new role of the academic coach.

The Royal College announced the internal medicine examination is to be shifted from the fourth year to the third year of training in spring 2019. Our program responded by convening a PGY3 Exam Impact Committee to seek adjustments to accommodate the change. Over 10 modifications were recommended and successfully implemented including: dedicated time for study groups during academic half-day for the SMRs, development of an Examination Preparation Lecture Series, and pre-exam call reduction. A supplementary on call nocturnist team providing resident call relief is comprised of attending staff physicians and senior licensed residents who cover every Tuesday after-hours shift at each of the three acute care hospital sites.

“Resident workforce shortfalls are a recognized threat...in most teaching hospitals”

Resident workforce shortfalls are a recognized threat for several specialties in most teaching hospitals across the country. The added stress of CBME combined with the advanced timeline for the Internal Medicine Royal College exam into the core training years have heightened this concern. A collaborative effort from the Department of Medicine, hospital administration and residency program resulted in a number of interim measures that have stabilized the workforce. Restructuring of the call rosters, including the use of the nocturnists, and developing new policies and procedures to improve efficiencies has had a major positive impact.

“Preparations have been underway for two years... to convert to Competency Based Medical Education (CBME).”

Our program prepares residents to develop strong clinical skills early in their training. A robust curriculum in PGY1 lays a solid foundation in the CanMEDS role of the medical expert using a combination of bedside teaching and simulation training.

There is also an early focus on building skills as a leader, communicator, and scholar. Internal medicine residents can choose from a rich variety of learning experiences across 14 medical subspecialty rotations. A formal research curriculum, supplemented by a lecture series on evidence based medicine and principles of research, continues to be one of the strongest in the country. In a recent *Lancet* publication, *Mortality and morbidity in acutely ill adults treated with liberal versus conservative oxygen therapy (IOTA): a systematic review and meta-analysis* by residents, the authors were honoured by the Canadian Society of Internal Medicine when their paper was stated to be one the top 5 worldwide practice-changing papers in GIM in 2018. Congratulations to Drs. Derek Chu and Lisa Kim.



Dr. Lori Whitehead

MD, FRCPC
Director, Internal Medicine Residency Program

Strong ties with undergraduate medicine and other postgraduate specialties/subspecialties have been maintained in order to provide the best educational experience for any McMaster resident. These associations will be even more important as each program adapts to CBME and other changes in educational structure.

Our residents independently identify potential areas for program improvement and then create innovative solutions to fill a gap. The Wellness Committee gained new energy and created a Sub Committee for the Gulf State residents. Several PGY1s planned a scholarly project to revitalize our orientation process with a structured Boot Camp for incoming trainees. Another group submitted a proposal to the Residency Education Committee for a new Social Medicine selective rotation. A PGY3 resident who was concerned about missed opportunities for education while on Night Float developed a Night Float debrief teaching session that delivers an advanced level of teaching to the Senior Medical Residents.

1,200

Approximate number of applicants to our program in 2017.

“Our residents independently identify potential areas for program improvement and then create innovative solutions to fill a gap.”



What is new for the 2017 to 2018 academic year? Dr. Mark Crowther became the chair, Department of Medicine. He is a tenacious supporter of residency education and has been instrumental in facilitating changes resulting in positive outcomes for our program. He has set in motion a process to ensure the program is ideally positioned to accommodate anticipated trends in our changing health culture. With this support, the Internal Medicine Training Program will continue to be a national leader in residency education.

What has not changed? Ongoing support from multiple partnerships has resulted in another successful year. The true champions are the Clinician Educators who provide exemplary support to the residents through their teaching at the bedside and in non-clinical settings.

A special thanks is also to be extended to:

Department leaders - Dr. Mark Crowther, Dr. Alistair Ingram, Dr. Barry Lumb

Associate dean, postgraduate medicine – Dr. Parveen Wasi

Deputies, Internal Medicine Residency Program - Dr. John Neary, Dr. Mohamed Panju

Sub-program director, R4 internal medicine residents – Dr. Ameen Patel

Regional education lead, Waterloo regional campus – Dr. Rebecca Kruisselbrink

Internal medicine residency administrative support – Jan Taylor, Sharlene Honaizer, Christine Knight, Susan Serro

CTU directors – Dr. Jason Cheung, Dr. Samir Raza, Dr. Marianne Talman

Ambulatory CTU director – Dr. Mohamed Panju

Chair of research – Dr. Christine Ribic (Deputy – Dr. Kim Legault)

Chair of assessment - Dr. Meera Luthra (Assistant – Dr. Zain Chagla)

Chair of simulation – Dr. Zahira Khalid

Chair of global health – Dr. Ally Prebtani

Chair, subspecialty medicine programs – Dr. Azim Gangji

Undergraduate clerkship medicine program director - Dr. Helen Neighbour

CBME executive team - Dr. Daniel Brandt Vegas, Dr. Zahira Khalid, Dr. Rebecca Kruisselbrink, Dr. Leslie Martin, Dr. Mark Matsos, Dr. Meera Luthra, Dr. Mohamed Panju

Department of Medicine – Annette Rosati, Graeme Matheson

All faculty educators. ■

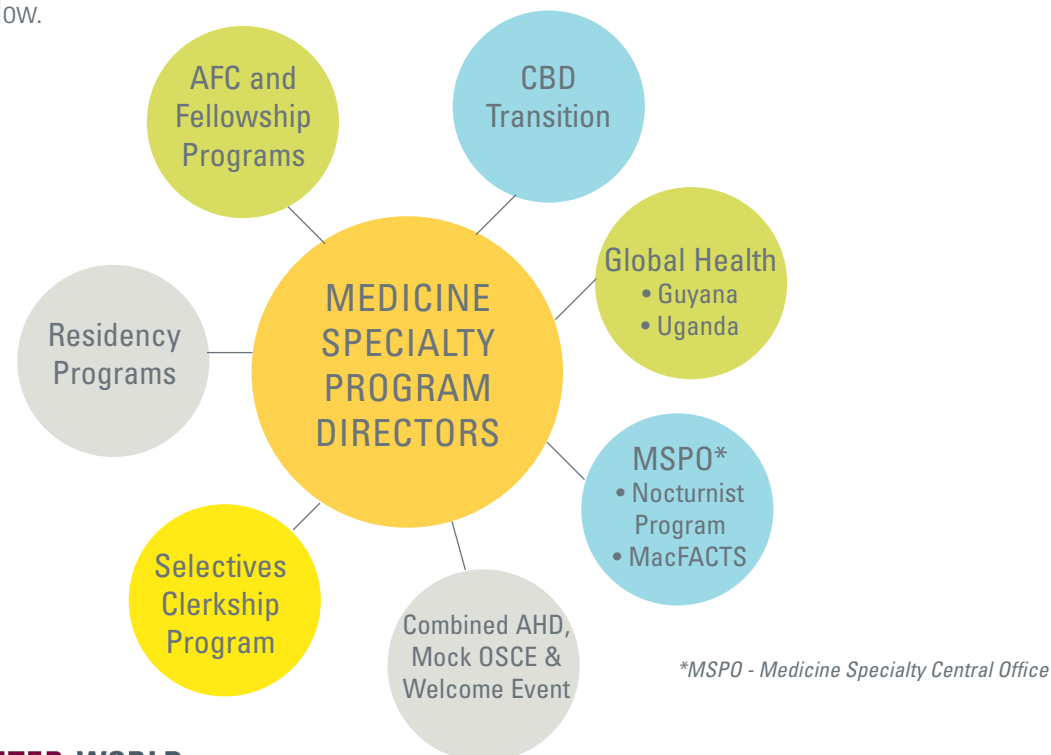
In a recent *Lancet* publication, *Mortality and morbidity in acutely ill adults treated with liberal versus conservative oxygen therapy (IOTA): a systematic review and meta-analysis* by residents, the authors were honoured by the Canadian Society of Internal Medicine when their paper was stated to be one of the top 5 worldwide practice-changing papers in GIM in 2018. Congratulations to Drs. Derek Chu and Lisa Kim.

COORDINATOR REPORT

Medical Specialties Residency Programs

It is a pleasure to provide a report pertaining to the Medical Specialties residency programs. The 14 Department of Medicine programs collaborate with three other departments including Oncology (Medical Oncology), Anesthesia (Critical Care Medicine), and Pathology (Biochemistry) to form this collaboration.

Over the last three years, the committee has provided strong leadership and has made significant contributions in enhancing education and ensuring financial stability of all programs, including providing support for fellowship programs and development of RCPSC's Area of Focus Diploma fellowship programs. A close collaboration has also been formed with the undergraduate Medical Subspecialty Selectives Clerkship program. Our unique and unified approach has led to the development of various subcommittees and the development of a central office which has been pivotal in delivering the mandates of the Medical Specialties Program Directors' (MSPD) committee. A diagram of our structure is identified below.



Dr. Azim Gangji

MD MSC FRCPC FACP
Associate Professor of Medicine,
Chair, Medical Specialties Program Directors

GLOBAL HEALTH

The MSPD committee, in association with the SJH International Outreach Program, is highly involved in Global Health. Drs. Zara Khalid, Arthur Wong and Azim Gangji have developed a close collaboration with the Internal Medicine Training Program at Georgetown Public Hospital Corporation (GPHC) and the Doobay Medical and Research Centre (DMRC). As a result of the McMaster-GPHC/DMRC partnership, opportunities have been created for the GPHC medicine PGY3 residents to complete a two-month elective rotation at McMaster through Nephrology and other subspecialty rotations. In addition, a one-year fellowship program in subspecialty training has also been developed. Our first graduate from this program was Dr. Grace White in General Internal Medicine. She is now leading clinical reform in the GPHC medicine clinic to improve standard of care for chronic disease management. In a similar manner, the Ugandan fellowship program, led by Drs. Kruiesselbrink and Prebtani, continues to offer

fellowship programs through the MSPD central office. Last year, Ugandan fellows from various medical subspecialties graduated leading to enhanced patient care in Uganda.

COMPETENCY BY DESIGN (CBD) IMPLEMENTATION: UPDATE

The CBD model was rolled out and as of July 2018 in General Internal Medicine and Nephrology. The Medical Specialties CBD committee has been pivotal in providing faculty development sessions and sharing information for the programs in transition. The committee has representation from each specialty and has conducted a number of training sessions on EPA assessments. The MSPD central office has been crucial in training and providing support to program coordinators as they transition to CBD. I would like to acknowledge Dr. Khalid for her leadership in CBD transition and investing her time and efforts in working with the MSPD central office.

MEDICAL SPECIALTY PROGRAM DIRECTORS



DR. WENDY LIM
HEMATOLOGY



DR. PETER VAREY
PM&R



DR. GRAEME FRASER
HEMATOLOGY



DR. AGNES CHMIEL
PM&R



DR. GUILLAUME PARE
BIOCHEMISTRY

MEDICINE SPECIALTY PROGRAM COORDINATORS

A restructuring of the roles of the program administrators has been necessary in order to meet the demands and expertise in leading and managing programs transitioning into CBD. Due to this, the program administrator roles were evaluated and it was determined that administrators require expertise in education and are essential for the success of residency and fellowship programs. This has led to a mandate that all medicine specialty program administrators transition to become fully academic and meet the expectations of the program coordinator. At the recent International Conference on Residency Education (ICRE), this was recognized as being progressive and innovative as this is now becoming a royal college standard.

MEDICAL SPECIALTY PROGRAM DIRECTORS

I would like to recognize and thank our outgoing Program Directors (PD), Dr. Wendy Lim (Hematology) and Dr. Peter Varey (PM&R) for their outstanding leadership and commitment to residency education. At the same time, I would like to welcome Dr. Graeme Fraser (Hematology) and Dr. Agnes Chmiel (PM&R) as our new PDs and we look forward to working with them to enhance residency education in the medical specialties at McMaster. I would also like to welcome Dr. Guillaume Paré who is the PD of the Medical Biochemistry program, which is now recognized as a Medical Subspecialty of Internal Medicine.

FELLOWSHIP PROGRAMS

AFC fellowships

The following fellowships are now Royal College accredited Areas of Focused Competence (AFC) programs at McMaster:

FELLOWSHIP	AFC DIRECTOR	YEAR OF INCEPTION
Solid Organ Transplantation	Dr. Azim Gangji	2015
Adult Thrombosis	Dr. Vinai Bhagirath	2017
Adult Echocardiography	Dr. Omid Salehian	2018
Adult Interventional Cardiology	Dr. Shamir Mehta	2018

ACCREDITATION 2022: A NEW CHALLENGE

With the transition to CBME, the Medicine Specialty Program Directors are getting ready for the nuances of accreditation under the new CanERA general standards of accreditation. The program director's committee and the program coordinators committee will play key roles in ensuring programs are ready for the internal accreditation in 2019 and the external accreditation in 2022.

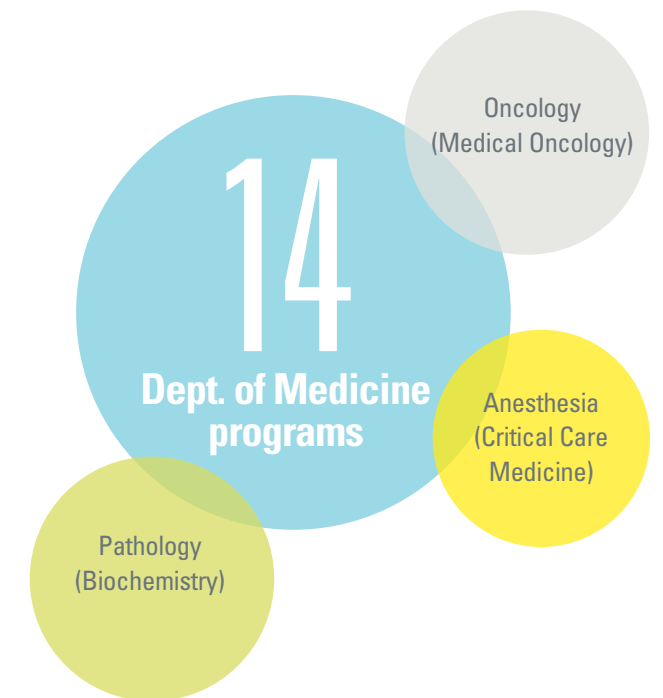
FUTURE DEVELOPMENTS:

1. New fellowship programs: the medicine specialty central office will implement a centralized and electronic application process that will provide more structure and support to fellowship programs in the Department.
2. Telemedicine: In collaboration with Drs. Khalid and Wong, the MSPD committee will be participating in the provision of specialized care to patients in Guyana through the telemedicine project.
3. Faculty contributions: In association with Graeme Matheson, Ali Ariaeinejad and the medicine specialties central office, a format to capture faculty educational contributions is being developed. This will be key in capturing data for promotion and tenure.

ACKNOWLEDGEMENTS

As a united group, the program directors have grown and supported each other in numerous ways. We have developed innovative ways to deliver education, ensured financial and administrative program stability, supported the development of AFC programs, developed unique opportunities for our trainees, and have provided a sense of community for all of our residents. On behalf of the medicine program directors, I would like to acknowledge and thank Dr. Akbar Panju and Dr. Mark Crowther for providing us a voice in the Department of Medicine and for being so supportive of our education initiatives. In addition, I would like to acknowledge Dr. Lori Whitehead whose collaborative and collegial manner has allowed all of the program directors in the Department of Medicine to function as one strong unit. Lastly, on behalf of all of the program directors, I would like to acknowledge all of the division directors in the Department who have always provided us support in so many ways and the independence in order for us to achieve our goals in education. ■

COLLABORATION OF DEPARTMENTS IN THE MEDICINE SPECIALTIES RESIDENCY PROGRAM



COORDINATOR REPORT

Faculty Undergraduate Director

The Medicine Clerkship Program is mandatory for all McMaster medical students and consists of a 6-week core rotation and a 2-week Medical Subspecialty Selective (MSS) rotation. The Internal Medicine Clerkship Program has had a productive year in 2017-18. The Department of Medicine faculty within the Hamilton, Niagara, and Waterloo campuses show great enthusiasm to ensure that our students have the best educational experience during their internal medicine clerkship rotation. The collaboration between the sites is a genuine strength of the program. Monthly meetings of all regional education leads (RELs) and site coordinators are held where difficulties within the program and suggestions for innovation in teaching are discussed. Student representatives from each site also join these committee meetings to give feedback on the student experience of the rotation. Sharing experiences and ideas allows for innovation in education at all of our clinical sites. The high quality of teaching during this rotation is a reflection of the dedication to medical education shown by the faculty.

CAMPUS UPDATES

At Waterloo Regional Campus, 2017 saw the 8th year of graduating students and the course has evolved and developed based on feedback to offer an excellent learning environment for the students. The clinical teaching unit has continued to grow and has recruited more faculty and has garnered a reputation within the hospital for taking on and managing complex cases. This enhances the learning environment for the students. There are increasing numbers of residents assigned to the clinical teaching unit (CTU), allowing for “tiered” learning for the clerks. Dr. Rebecca Kruisselbrink continues to support medical education in her role as CTU Director. Students have also had the opportunity to do overnight call which increases their clinical exposure, in particular, management of emergencies. This year has also seen several administrative changes at the Waterloo campus. The regional dean, Dr. Cathy Morris, retired after

two energetic and imaginative terms. Dr. Margo Mountjoy has now taken over that role. She has an extensive background in academia and we know that she will champion excellence in all ways. Valerie Mueller passed the baton of clinical education coordinator to Carla Edwards who has had significant experience as regional education lead for psychiatry. Mary Jackson continues to work tirelessly to provide a supportive and exceptional learning environment for students.

Undergraduate medical education at the Niagara campus now includes weekly morning report rounds with the attending physicians. Weekly physical examination rounds with attending physicians are also now a feature and have been well received by the students. Assignment of students to patients has also been revised so that students can follow them throughout their inpatient stay

“The collaboration between the sites is a genuine strength of the program.”

from admission to discharge. The call schedule has also been updated to include overnight call and as at the Waterloo campus this increases exposure to acutely unwell and undifferentiated cases.

Dr. Helen Neighbour

MB BS MRCP(UK) PhD
Faculty Undergraduate Director,
Internal Medicine Clerkship Programs

Within the Hamilton campus, the students participate in their core rotations on the CTUs at the Hamilton General Hospital, the Juravinski Hospital and St. Joseph’s Healthcare. Dr. Juan Guzman, Dr. Ahraaz Wyne, and Dr. Daniel Brandt Vegas continue in their roles as site coordinators. They provide orientation, support and guidance to the students throughout their rotation. The CTUs continue to provide an excellent and innovative teaching environment for the clerks. This is due to the support from the CTU directors: Dr. Marianne Talman, Dr. Samir Raza and Dr. Jason Cheung. Dr. Lori Whitehead, internal medicine residency program director, continues to work closely with the Undergraduate Medicine Program to ensure that the teaching environment is advantageous to all levels of learners. We are particularly grateful to the chief medical residents who provide valuable teaching to the clerks, and act as mentors as the students prepare for residency.

AWARDS

The Medicine Clerkship Program has been privileged to offer a number of awards to students and faculty since 2011. The awards are presented at the annual awards dinner every spring. One medical student from each of the five training sites are chosen to receive the Dr. Paul O’Byrne Award for Outstanding Clinical and Academic Achievement. Dr. O’Byrne’s dedication, enthusiasm and passion for medical education and its learners has inspired and inspired many students to specialize in this field and has helped to strengthen our Medicine Clerkship Program. This year was the first year the Dr. Akbar Panju Award for Professionalism was awarded. This is awarded to a student from each of the five training sites; HGH, JH, SJH, Niagara, and Waterloo. This award is given to a student who exemplifies the practice of medicine in the areas of compassion, service, altruism, and trustworthiness. At this dinner faculty from the Department of Medicine are also recognized for their excellence in teaching during our medicine clerkship rotations.



DR. PAUL O'BYRNE AWARD FOR ACADEMIC ACHIEVEMENT

For the Class of 2018 the **Dr. Paul O'Byrne Award for Academic Achievement** during the internal medicine core clerkship rotation was awarded to the following students:

Hamilton Campus - Sites

HGH – Anthony Sandre
 JH – Spencer Sample
 SJH – Ian Downie

Waterloo Regional Campus

Yuming Wang

Niagara Regional Campus

Carolyn Tan

Dr. O'Byrne's dedication, enthusiasm and passion for medical education and its learners has inspired and inspired many students to specialize in this field.

DR. AKBAR PANJU AWARD FOR PROFESSIONALISM

For the Class of 2018, the **Dr. Akbar Panju Award for Professionalism** during the internal medicine core clerkship rotation was awarded to the following students:

Hamilton Campus - Sites

HGH – Alexander Freibauer
 JH – Stephen Humphreys-Mahaffey
 SJH – Melissa Weidman

Waterloo Regional Campus

Eric To

Niagara Regional Campus

Mo (Isabelle) Moore

This award is given to a student who exemplifies the practice of medicine in the areas of compassion, service, altruism, and trustworthiness.

TEACHING EXCELLENCE AWARDS

The Medicine Clerkship Program awarded **Teaching Excellence Awards** to the following faculty:

Hamilton Campus

HGH – Dr. Naufal Mohammed
 JH– Dr. Ahraaz Wyne
 SJH – Dr. Joe McMullin

Waterloo Regional Campus

Dr. Stephen Giilck

Niagara Regional Campus

Dr. Shlok Gupta

“...students have timely access to feedback throughout their rotation.”

PROGRAM UPDATES

This year has two main changes within internal medicine clerkship. Medical education is undergoing transition in both the undergraduate and postgraduate domains. There is an increasing focus on direct observations. The introduction of MacDOTS means that students have direct observation of their interactions with patients. This allows for effective feedback and discussion of clinical interactions. The students find these very helpful and they are now included in all of the clerkships. They are constantly under review and updates are made based on feedback from students and faculty.

“it will increase the amount of feedback that our faculty receive and will be able to help guide faculty development.”

Evaluations have now been updated to utilize the “on demand” system within MedSIS. Students now sit down and complete their evaluations with their preceptors during the rotation. This means that students have timely access to feedback throughout their rotation. This is compared to the old system when evaluations could be completed following the end of the rotation. This new way of completing evaluations also includes a mandatory evaluation of faculty members that has to be completed by the student before they can proceed with their evaluation. Student anonymity will be preserved as previously, but it will increase the amount of feedback that our faculty receive and will be able to help guide faculty development.

The Internal Medicine Clerkship Committee, with representation from faculty within the regional and Hamilton campuses, second and third year medical students, internal medicine residents, and administrative staff, continues to be an integral part of our program. There is an annual retreat that allows everyone to meet in person, review developments from the previous year and plan curriculum updates for the following year. The annual retreat and faculty development session was held in November 2017. This year we have a very informative session of continuing medical education led by Cindy Pinkus on “Boomers, Xers, & Yers - Understanding the Different Generation Groups”. This was an enlightening presentation that really highlighted how understanding generational differences can lead to enhanced communication and positive feedback was received from all generational groups!

ACKNOWLEDGEMENTS

On behalf of the Internal Medicine Clerkship Program and the students, I would like thank the following people and groups without whom these programs would not be possible: Ms. Tina Laporte, internal medicine clerkship administrative program coordinator; Medicine Clerkship Committee members; RELs, site coordinators, and their assistants; Dr. Mark Crowther; Ms. Annette Rosati; Department of Medicine division directors, their faculty and

assistants; Dr. Ameen Patel, associate chair, education; Dr. Barry Lumb, physician-in-chief, Department of Medicine, HHS; Dr. Alistair Ingram, chief, Department of Medicine, SJH; the CTU directors and their assistants; Drs. Rob Whyte, Jill Rudkowski, Amanda Bell, and Cathy Morris; Ms. Cathy Oudshoorn, Ms. Fran Geikie, Ms. Tami Everding, and the undergraduate MD office; Dr. Lori Whitehead, Ms. Jan Taylor of the Internal Medicine Residency Program, its residents and administrative staff.

The main focus is delivering excellence in medical education in a student focused way. We appreciate the ongoing enthusiasm of our students and the effect that they have to make us all strive harder for excellent patient care and continually review our practices.

There has been a multitude of changes to the Undergraduate program, and with change comes opportunity. We are all looking forward to the year ahead as an opportunity to review and continue to develop undergraduate medical education. ■

COORDINATOR REPORT

Medical Subspecialty Selectives Clerkship Program

The Medical Subspecialty Selectives (MSS) Clerkship Program at McMaster has had another successful year at all three campuses. On February 05, 2018 the program introduced direct observation tools with the aim of providing formative feedback to clinical clerks. On April 02, 2018, the program introduced on-demand mid-rotation evaluations that are triggered by learners. This was in an effort to provide learners with an opportunity of obtaining contextual feedback from faculty.

With the establishment of a medical specialties office, the MSS program was able to centralize all orientations to one location. This was in an effort to ensure learners receive information regarding rotation objectives, expectations and provide a dedicated time for any questions. In collaboration with the Hamilton campus coordinators, the central office created rotation handbooks, orientation emails and orientation presentations. The team also collated all formative teaching assessments and created tracking documents to ensure learners achieve all rotation objectives.

Recently, medical biochemistry which is now a subspecialty of internal medicine has been introduced as a MSS rotation. This rotation will be available for the Class of 2020 clinical clerks.

The undergraduate medical subspecialties selectives clerkship is now aligned with the postgraduate Medical Specialties Program Directors' Committee. This has now provided a reporting structure to the Council of Medicine.

AWARDS

MSS Outstanding Resident Teaching Award Dr. Ali Alshaqqaq

Dr. Zeeshan Ahmed

FACULTY AWARDS

Hamilton Campus Dr. Robert Spaziani Dr. Simon Oczkowski

Niagara Campus Dr. Ryan D'Sa

Kitchener Waterloo Campus Dr. Natalie Kozij

CAMPUSES

In 2017, the Michael G. DeGroot School of Medicine admitted 207 students with 151 attending the Hamilton campus, 28 attending the Waterloo campus and 28 enrolled at the Niagara campus. I would like to acknowledge Dr. Theresa Liu, regional education lead (REL) of the Waterloo campus; and Dr. Adnan Hameed, REL of the Niagara campus, for their continued efforts in partnering with the MSS committee in faculty recruitment and faculty development.

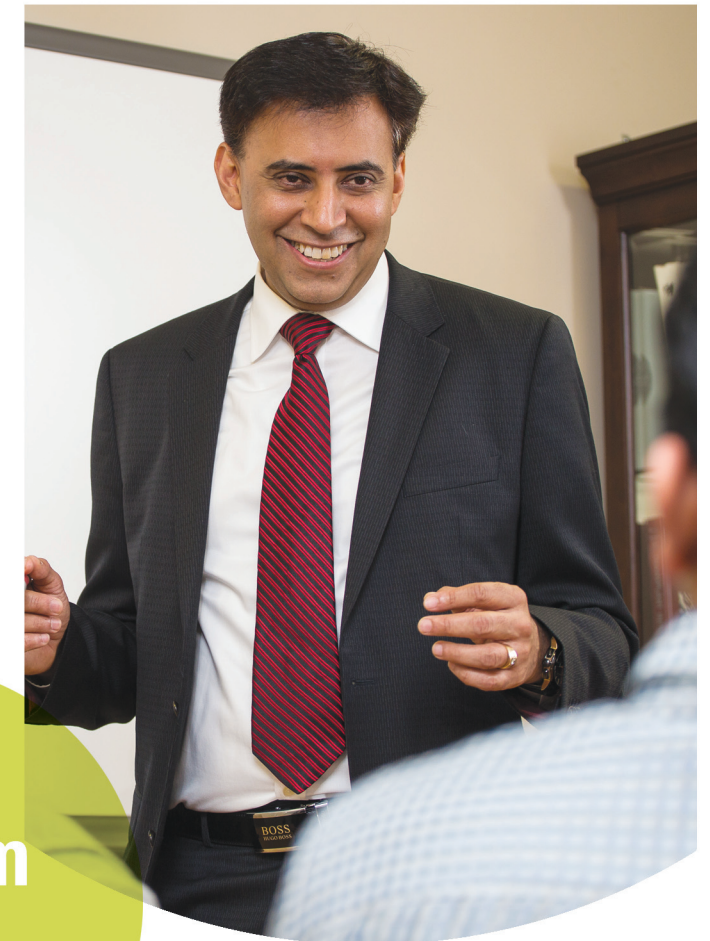
AWARDS

In 2017, the MSS committee established a new award in recognition of an outstanding clerk on the Gastroenterology rotation. The award was named after Dr. Jan Irvine and was presented by Dr. John Marshall. The following clinical clerks were recipients of MSS awards:

ACKNOWLEDGEMENTS

I would like to acknowledge numerous individuals who have been extremely supportive of the Medical Selectives Program. It has been a pleasure to collaborate with the internal medicine clerkship director, Dr. Helen Neighbour. I would like to thank the RELs, Drs. Adnan Hameed and Theresa Liu, for helping engage faculty at the distributive campuses and their support in curriculum implementation; the selective coordinators at the Hamilton campus who have been a major support in assisting with the development of the educational experiences for clinical clerks; the medical specialties central office, led by Joyce Munga, who have implemented the various changes in our assessment tools and curriculum; and Dr. Mark Crowther who has provided the opportunity for MSS to be recognized in the realm of education delivery in the Department of Medicine. ■

Dr. Azim Gangji



MD MSC FRCPC FACP

Associate Professor of Medicine,

Clerkship Director, Medical Subspecialties Selectives

CLERKSHIP AWARDS

Dr. Alan Neville Academic Award for Medicine Subspecialty Selective Award	Dayae Jeong	Hamilton Campus
	Diana De Santis	Kitchener/Waterloo Campus
	Ryan Chadwick	Niagara Campus
Dr. Irene Turpie Academic Achievement Award for Medicine Subspecialty Selective in Geriatrics	Bahar Orang	
Dr. Fred Bianchi Academic Achievement Award for Medicine Subspecialty Selective in Rheumatology	Emily Fejtek	
Dr. David Russell Academic Achievement Award for Medicine Subspecialty Selective in Nephrology	Ambika Tejpal	
Dr. Doug Holder Academic Achievement Award for Medicine Subspecialty Selective in Cardiology	Angela Hu	
Dr. Jan Irvine Academic Achievement Award for Medicine Subspecialty Selective in Gastroenterology	Matthew Jessome	

COORDINATOR REPORT

Director of Administration

The Department of Medicine welcomed a new Chair of Medicine, Dr. Mark Crowther, during the 2017-18 academic year. In addition, the Chair's office moved to the newly renovated HSC-4V area. This was certainly a welcome change as the new surroundings are bright, spacious and provide a more collaborative environment for the Chair's office staff. As Director of Administration for the department of Medicine, I have continued to work closely with many exceptional faculty and staff. The Department of Medicine is continually expanding and recruiting new faculty. In fact, the department initiated a new Division of Education & Innovation with Dr. Ameen Patel as its inaugural Division Director. This new division enables the department to recruit talented faculty specializing in innovation and who provide additional value to our faculty pool. The continued growth of the department due to new faculty recruits during this year has led to an increase in the number of staff to provide support. These dedicated and talented individuals span across all hospital sites including Hamilton Health Sciences (McMaster University Medical Centre, Juravinski Hospital and Cancer Centre, and the Hamilton General Hospital), St. Peter's and St. Joseph's Healthcare Hamilton. The department continued to maintain a healthy financial position in 2017-18 and was able to continue to support important educational initiatives. The department continues to prepare for the Royal College mandated Competence by Design which is scheduled for launch in Medicine in July 2019. Faculty development also remained a key priority as we identify talented faculty to be mentored for leadership positions within the department.

McMaster University continues to be committed to developing its management team and provide the tools required in order that members of The Management Group can be effective and successful during these challenging times of adapting to technological changes. The DeGroote School of Business has developed an advanced executive management program and an executive management program. These courses are developed to further enhance our management skills of our administrative leadership. I am happy to say that many of our department managers took advantage of attending these continuing education courses.

Many strategic decisions are made by the core leadership group within the academic Department of Medicine. This cohesiveness and collegial executive team consists of Dr. Mark Crowther (Chair), Dr. Barry Lumb (Physician-in-Chief, Hamilton Health Sciences), Dr. Alistair Ingram (Chief of Medicine, St. Joseph's Healthcare, Hamilton), Dr. Akbar Panju (Associate Chair, Clinical), Dr. Jeff Weitz (Associate Chair, Research) and Dr. Ameen Patel (Associate Chair, Education). This group continues to provide invaluable insight related to the challenges in clinical service, research and education. Departmental leadership is instrumental in sustaining the academic mission of the department.

The Department of Medicine's management team consists Business Managers at each of our hospital sites. These are: Gail Laforme (Juravinski Hospital), Roberta Petitti (Hamilton General Hospital) and Leslie Steinberg (McMaster University Medical Centre). Zrinka Granic (St. Joseph's Healthcare) has moved on to another position and was replaced by Tanja Petrovic. These dedicated business managers are "hands on" and liaise closely with hospital personnel to ensure an engaged and collegial university-hospital relationship. They are invaluable and a direct link to new faculty recruits as they get settled in their new surroundings. They also serve as our liaison with our administrative and research support in all geographic locations.



Annette Rosati

BA, EMBA (candidate)
Director of Administration
Department of Medicine

Other equally important members of the Department's management team include Lorrie Reurink (Human Resources Manager), Lisa Geer (Finance Manager) and Graeme Matheson (AFP Budget Manager). Graeme continues to work closely with the AFP Executive and Finance Management Committees, including Dr. Ameen Patel (Associate Chair, Education) and Dr. Jeff Weitz (Associate Chair, Research) with regard to the AFP academic merit process. Mr. Matheson is also spearheading advances to the Department's IT systems – creating databases allowing readily accessible information.

The university continues to make essential and necessary changes to its finance, human resources and student services systems. To manage these changes effectively, it is imperative to have effective communication to keep faculty, students and staff informed of proposed changes implemented by the university. The Department of Medicine's leadership and management teams are committed to supporting the university's initiatives and to advocate the merits of change to our faculty, students and staff. ■



Back Row: Gail Campbell, Gabriela Ciofliceanu, Julie Paul, Cathy Stampfli, Andrew Folino, Tanja Petrovic
Front Row: Sara Sellers, Graeme Matheson, Annette Rosati, Leslie Steinberg, Gail Laforme

COORDINATOR REPORT

Department of Medicine at Hamilton Health Sciences

I have now completed my second 5-year term as physician-in-chief. After careful consideration, I have applied and been approved to continue in this role for a further two years ending March 31, 2020. I made this decision based on the number of very significant issues facing the department over the next two years and my strong wish to see these through before handing off to my successor.

I would like to start by acknowledging the senior leaders that I have the privilege to work with every day. Dr. Mark Crowther has settled in as our chair and has been extremely collegial and supportive. His energy is remarkable and his commitment to new, important and innovative initiatives is fantastic. My partner, Dr. Alistair Ingram at St. Joseph's Healthcare continues to be incredibly committed to the city-wide success of the Department of Medicine. Drs. Khalid Azzam, Martha Fulford and Tim Karachi have been extremely helpful and effective in their roles as site chiefs. Drs. Lori Whitehead and Azim Gangji continue to provide superior leadership in the post graduate programs at a time of immense uncertainty and with competency by design looming in front of us.

The chronic issue of resident numbers and work hours has accelerated over the last year and was recently accentuated by the crisis surrounding the role of our off-shore trainees. Through the Hospital University Liaison Committee, a task force has been established, chaired by Mark Crowther to make recommendations around the capacity of residents to provide clinical service, the needs of the hospital in provision of afterhours care and the critical need to maintain our outstanding teaching programs. This will build on the very comprehensive report tabled by Dr. Mark Walton in the fall of 2017. Although this has been a long standing problem, I believe we are truly at a crossroads on this issue. The continued tripartite co-opera-

tion between HHS, SJH and the faculty will be critical in arriving at a durable long term approach to this very important issue.

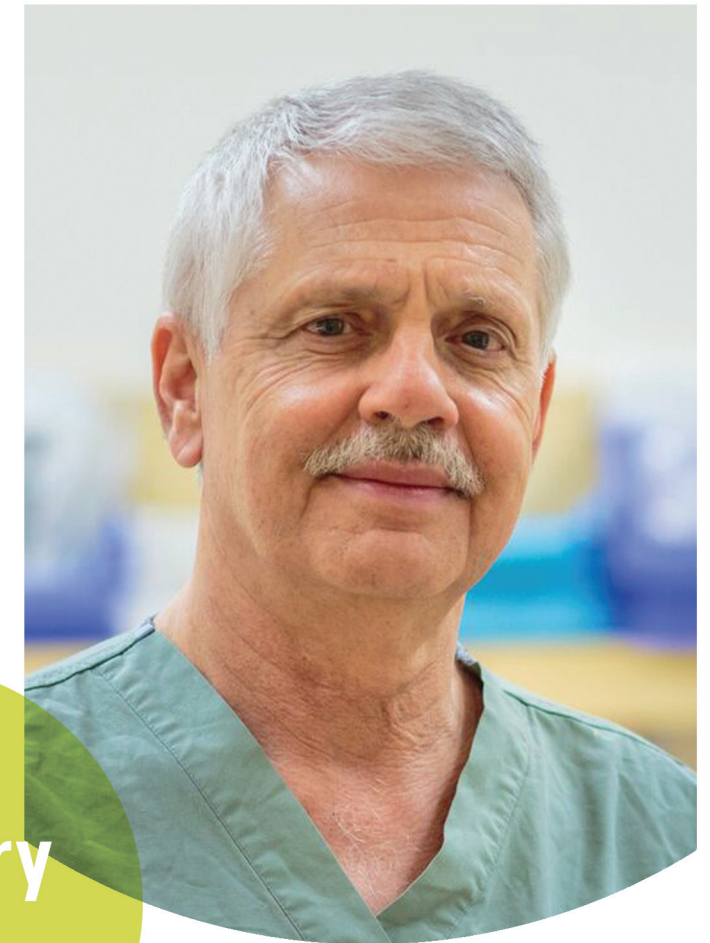
In December 2017, SJH launched MyDovetale as the enterprise-wide electronic medical health record. This was a massive undertaking that has turned out to be extremely positive and with major opportunities for improved patient safety and communication. HHS recognizes the urgency of also moving toward an effective electronic medical record and has established a digital health plan to make this a reality. This will involve a massive capital and time investment over the next few years.

As health care has evolved over the last decade the critical importance of quality improvement and patient's safety has become evident. HHS has committed to a corporate CQI initiative that has rolled out over many clinical care units across the sites. This has been very well received and successful up to now. The need for a commitment to the training and recruitment of physicians in quality and patient safety has become evident as well. This is not unlike the era of understanding and training practitioners in the skills of clinical epidemiology and evidence based medicine over 20 years ago. The academic department and HHS clearly recognize the need to train and recruit academic physicians with these skills. We are working to establish a quality community of practice within the Department of Medicine to help facilitate this important next step.

"The chronic issue of resident numbers and work hours has accelerated over the last year and was recently accentuated by the crisis surrounding the role of our off-shore trainees."

Dr. Barry Lumb

As always, I want to gratefully acknowledge the outstanding care provided by all our faculty during times of immense fiscal constraint. Our hospitals continue to run at well over 100% occupancy with no realistic expectation of improvement in the foreseeable future. ■



MD, FRCP(C)
Physician-in-Chief
Hamilton Health Sciences
Professor of Medicine

I WOULD LIKE TO FORMALLY WELCOME THE FOLLOWING NEW FACULTY MEMBERS:

Dr. Maria Pinto Sanchez	Gastroenterology
Dr. Natalina Pinilla Echeverri	Cardiology
Dr. Mohannad Abu Hilal	Dermatology
Dr. Arthur Wong	General internal medicine
Dr. Steven Wong	General internal medicine
Dr. Kajenny Srivaratharajah	General internal medicine
Dr. Leslie Martin	General internal medicine
Dr. Amna Ahmed	General internal medicine
Dr. Juan Gabriel Acosta	Cardiology
Dr. Sophie Corriveau	Respirology
Dr. Jihong Chen	Gastroenterology
Dr. Devin Hall	Neurology

"SJH launched MyDovetale as the enterprise-wide electronic medical health record. This was a massive undertaking that has turned out to be extremely positive and with major opportunities for improved patient safety and communication."

COORDINATOR REPORT

Department of Medicine at St. Joseph's Healthcare

The Department of Medicine at St. Joseph's Healthcare Hamilton (SJHH) continues to develop its academic mission and institute new clinical initiatives to deal with the very large demand for General internal medicine (GIM) and subspecialty clinical services. SJHH is the busiest GIM site in the city.

The average daily inpatient census for the GIM Service continues to routinely exceed 160 patients. This remarkably busy clinical service is led by Dr. Joe McMullin. SJHH, along with other Ontario hospitals, continues to be challenged by very large numbers of alternate level of care (ALC) patients admitted to the hospital, often with long stays due to a lack of bed capacity in other programs or community facilities. The "admission avoidance team" in the ER continues to help most of the patients they see, who have come to the ER for essentially "social" reasons, access rapid care in the community such that they do not need admission to the hospital. In response to these realities, SJHH undertook a major redevelopment on levels 4 and 5 of the Mary Grace wing to create more isolation and "flex" bed space. In concert with this, the GIM teams transitioned to function in a more "geographic" manner in early July to optimize communication between MDs, nursing and therapy staff. So far we have managed to maintain this model such that the geographic placement of no patient has been compromised since inception. Initial reports show a marked increase in satisfaction among medical staff, trainees, nurses and, most importantly, patients and their families.

The new Epic corporation electronic medical record, "dovetale", took flight on December 2 2017. We were pleased to see the sun rise on December 3. Physicians in medicine and nephrology, particularly, did yeoman service to try and ensure that the hospital had bed capacity for the anticipated severe workflow slowdown. The slowdown didn't really happen; testament to the many hours of training SJHH physicians committed themselves to, and the able IT leadership of our CMIO, Dr. Chris Hayes, as well as his super-users. In this latter

group, I would particularly like to recognize Steven Wong and Bob Yang. We continue to learn about and optimize dovetales. Almost all physician orders are electronic now. We anticipate continued gains as the dovetales system rolls out to all out-patient areas including the Firestone in September.

Speaking of the Firestone, I would like to highlight some remarkable achievements on the academic front. The respiratory group made multiple appearances in the *New England Journal of Medicine* in the past year, including first author papers by Dr. Parameswaran Nair and Dr. Paul O'Byrne, in treatment of asthma- severe and mild respectively. Both works are likely to change practice.

Recruitment within the Department of Medicine continues apace. Those below have come on as assistant professors of Medicine: Dr. Anna Mathew in nephrology, Dr. Reema Shah in endocrinology and Dr. Arthur Wong and Dr. Steve Wong, both in general internal medicine.

Major changes have occurred in the executive suite at SJHH. Kevin Smith, CEO of the St. Joseph's Health System, left to assume the CEO role at UHN. We wish him the best of luck on University Avenue! Tom Stewart, our now former Chief of Staff, was the successful applicant for the St. Joseph's Health System CEO role, and we expect to see his trademark energy brought to bear very quickly. David Russell came out of retirement to assume the role of interim Chief of Staff, to which he is extremely well suited. David Higgins, who many equated with the soul of the hospital, retired as President.



Dr. Alistair Ingram

He will be sorely missed. Winnie Doyle assumed the role of interim President. The search for an individual to fill the role permanently has begun.

I would again like to close by thanking SJHH Medicine physicians for continuing to provide exemplary clinical care in a resource-tight environment with ever-increasing volumes and complexity. They perform at the highest levels clinically and academically despite tectonic change in the hospital, particularly with the introduction of dovetales and all the executive changes recently. ■

160

The average number of daily patients the GIM Service continues to routinely serve.