

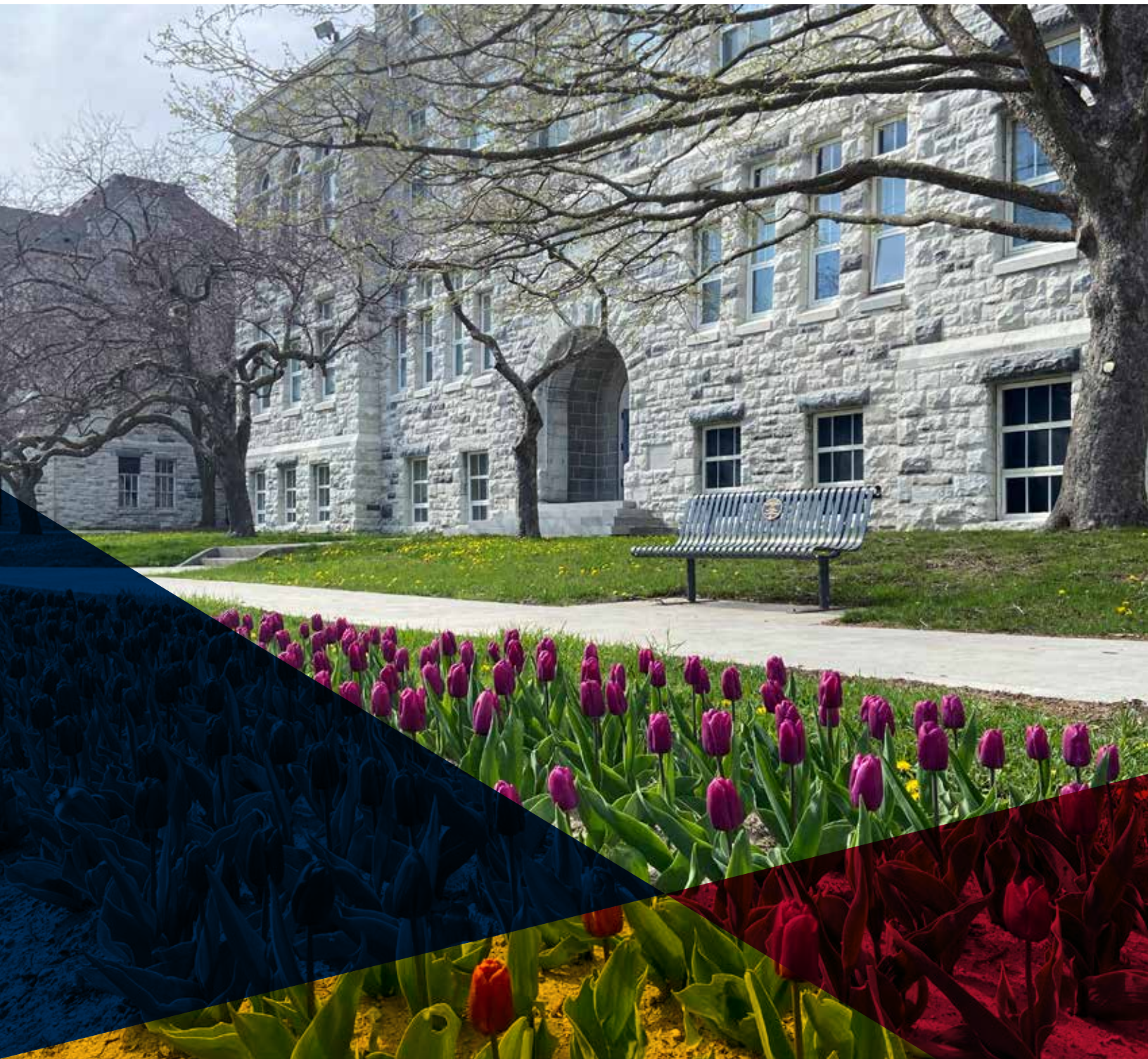
Faculty Of Health Sciences | School of Medicine

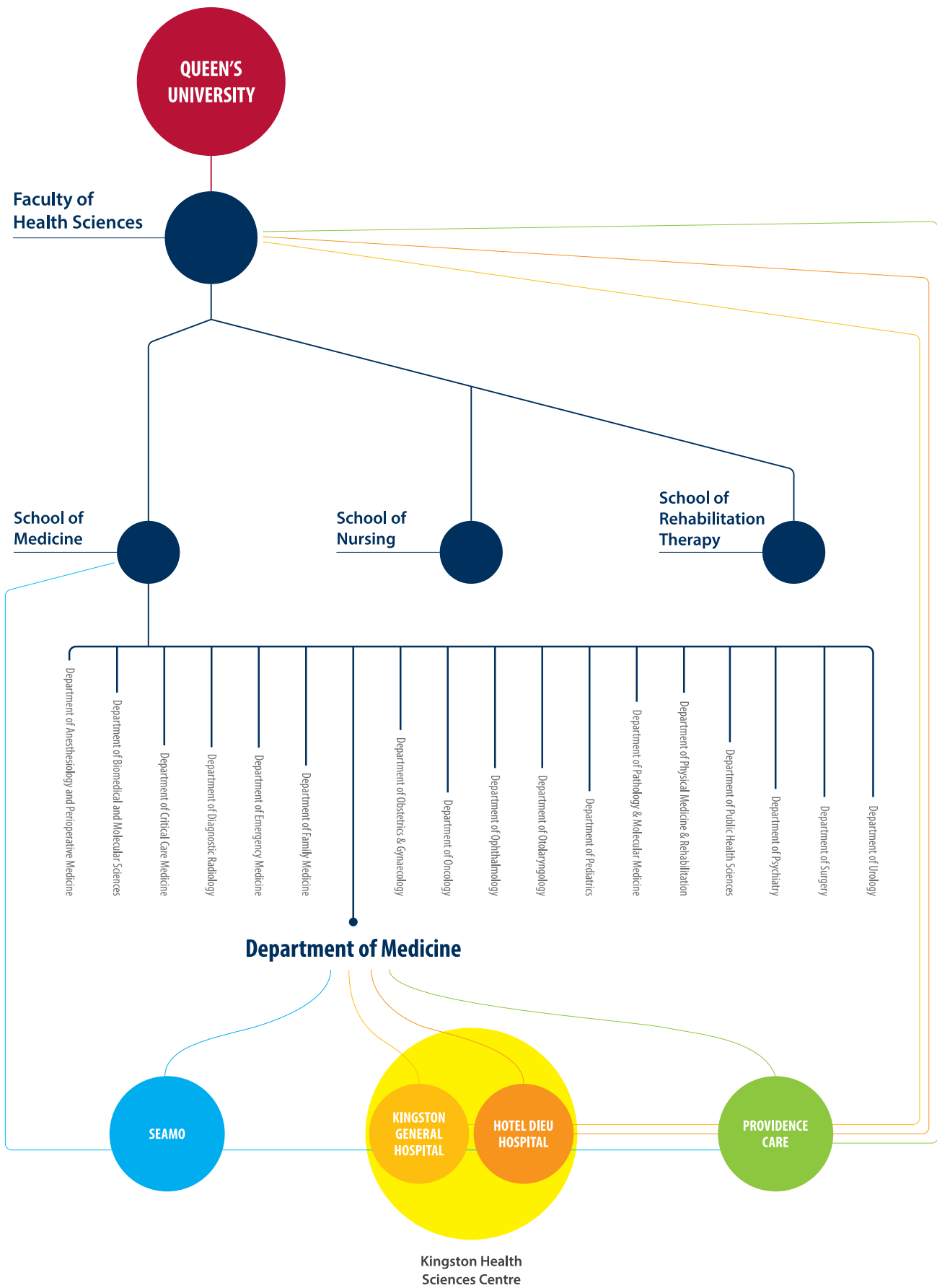


Queen's  
UNIVERSITY

DEPARTMENT OF

# Medicine 2019





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## Message From The Department Head



I am extremely proud to present our 2019 Department of Medicine Annual Report. While this annual report highlights the hard work of our Department in the year of 2019, I am writing in the middle of the 2020 global COVID-19 pandemic. It is only natural that my reflections on the year that was are influenced by our shared experiences during this unparalleled crisis.

It is a privilege, to lead the Department of Medicine and serve alongside its members. Although the Department of Medicine is the largest Department in the Faculty of Health Sciences at Queen's University, I have always felt we are a family, sharing a mission to achieve excellence in health care, education and research and nurturing each other as we do so. I thus take immense pride in the collective dedication, hard work, integrity, purpose and sense of community our DOM family displayed in 2019. Reflecting on the growth of the Department since my first term began in November 2012, it feels (in retrospect) that we were laying the foundations so that we could not only survive but could thrive when the challenges of 2020 arrived.

The achievements and accomplishments presented in our 2019 annual report speak for themselves, so I will not reiterate them here. Instead, I offer my thoughts on how principle-based leadership combined with the stellar citizenship and collegiality by all members of the Department of Medicine, have served us so well in preparing for the unexpected.

We had no way of anticipating the stress generated by a pandemic, but over the years we have worked together to build a Department whose faculty are resilient, adaptable, collegial and cohesive. This *esprit de corps* would prove essential and allowed us to pull together as we calmly dealt with the pandemic.

We did not build our robust research platforms in anticipation of fighting a virus; but our long commitment to fostering research and to the development of clinician scientists, combined with new research infrastructure and connectivity platforms, have enabled our researchers to pivot quickly and tackle COVID-19 research head on.

We did not create our physician wellness agenda with knowledge that our faculty would have to be physically or socially distant; but it turns out this culture served to ground us during a crisis. Continuing

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our traditions of collegial assembly, our virtual Department meetings and Medical Grand Rounds would bring us together at a time when we needed it the most.

We grew the Department of Medicine from approximately 60 faculty in 2012 to the 125 faculty we have today so that we could provide better care for our patients, better education for our learners and better research for the world. We intended to shorten wait times, create clinical programs of distinction and enable increased disease specialization. It turns out that this growth would serve us well during the pandemic, alternating schedules to ensure delivery of care while preventing spread of the virus. It would transpire that in 2020, the Department would never be busier and never more in need of its talented faculty.

We created a robust and thoughtful network of educators in the Department to lead our top-notch training programs and translational medicine graduate program, especially as Queen's led the way in the implementation of Competency-Based Medical Education. What we did not expect was how the innovative spirit and steadfast leadership of our educators would be so essential in steering our residents and students through a pandemic.

Our culture of communicating frequently via our e-news, blogs and tweets was geared towards celebrating accomplishments and discoveries, but it turns out that good communication was pivotal as the Department became a source of trusted and up-to-date information on COVID-19.

Over the years we have always tried our best to treat our faculty well, often through simple acts like providing coffee at rounds and lunch at Department meetings. This culture of kindness would morph during the pandemic to include ensuring our attendings and staff had the tools they needed, like hand sanitizer, scrubs and virtual care equipment.

Our progressive and proactive thinking on offering eHealth and telehealth access to care was not done in anticipation of a virus that would prevent patients from coming to clinics. Rather, it was done with the view that patients' time was valuable and in recognition that clinic space would always be in short supply. As it turns out, being "ahead of the game" in virtual care allowed us to take a lead throughout the pandemic as we sought to provide care in alternate ways.

We had no way of knowing that the income stability of our physicians could one day be impacted by a global virus. It turns out that the sound financial stewardship we established over the years was not only essential for Departmental operations and supporting innovation, but also for ensuring we were able to be there for our doctors when they needed us to be.

We have always valued our partners in nursing and allied health, building relationships with them in new ways and inviting them to our Departmental special events and professional development opportunities. It turns out that these strong relationships were integral to our hospital ward planning and ward morale as we worked together to navigate these unprecedented times.

We have worked hard over the years to foster a sense of trust and transparency in the Department, and we have elevated and empowered our many leaders within. I believe these practices helped our faculty feel that the Department was a good place to work. During the pandemic, trust and transparency were to prove absolutely crucial as antidotes to fear and misinformation. I am grateful that we had the confidence of our faculty as we lead them through strange and stressful times.

We have always invested in our people, supporting and acknowledging their professional development and their accomplishments. We did this in order to retain the best and the brightest and to elevate our team members. In 2020, many Department members would become leaders in our pandemic response. Our faculty would soon be tapped to serve on institutional, provincial, and national pandemic-related committees.

In a Department with 125 faculty and 14 subspecialties, the only way to run a well-functioning Department was to build a well-respected, effective, senior executive team which included our Division Chairs, our Deputy Head of Medicine, our leads in clinical care, medical education and equity diversity and inclusiveness. It turns out that this highly engaged team of leaders would be absolutely critical for navigating the host of challenges that would be posed by the pandemic.

I could go on, but I digress. And so, my friends, this too long introduction to the annual report is really just me saying thank you and reminding us all that our commitment to growth and excellence will continue to serve us well in the future, whatever it may bring. Thank you for being a part of our Department. Thank you for being good citizens, good doctors, good educators and good researchers. Thank you for your trust in us. Thank you for your daily hard work, enthusiasm, creativity, your dedication and your care for our colleagues and patients alike. Thank you to my Departmental central administrative team and the senior Departmental leadership, for keeping all of us on track and for telling me the unvarnished truth.

I am proud of you all. I am grateful for you all. Congratulations to the entire Department of Medicine for a #awesome year in 2019!

**Dr. Stephen Archer**  
*Department Head*

# The Department of Medicine Welcomed 12 New Faculty in 2019



**Dr. Sanoj Chacko**  
*Cardiology*



**Dr. Majid Iqbal**  
*Palliative Care*



**Dr. Shirin Jalini**  
*Neurology*



**Dr. Christina Liak**  
*Respirology & Sleep Medicine*



**Dr. Sarah Moran**  
*Nephrology*



**Dr. Juan Pablo de Torres**  
*Respirology & Sleep Medicine*



**Dr. Santiago Perez**  
*Infectious Diseases*



**Dr. Natasha Satkunam**  
*Hematology*



**Dr. Bikram Sidhu**  
*Endocrinology & Metabolism*



**Dr. Matthew Strauss**  
*General Internal Medicine*



**Dr. Gavin Winston**  
*Neurology*



**Dr. Zijong Wu**  
*General Internal Medicine*





# Education

SECTION I

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## Translational Medicine Graduate Program

In September 2019, the Department of Medicine launched the second year of their new and innovative Master of Science (MSc) and Doctor of Philosophy (PhD) in Translational Medicine. These programs are the first research-based graduate programs focused on translational medicine at both the master's and doctoral levels in Canada. The programs are entirely unique by offering a curriculum interweaving graduate level research with authentic clinical experiences in a multidisciplinary environment across departments at Queen's University. As the first of its kind, the programs link graduate level research skills with a variety of clinical experiences including patient interactions, clinical observerships and medical rounds to enhance professional thinking and action.

### AWARDS

#### Ruaa Al-Qazazi

Pulmonary Heart Association Canada –  
Mohammed Family PH Research Scholarship  
*Supervisor: Dr. Stephen Archer*

#### Matthew James

Ontario Graduate Scholarship  
*Supervisor: Dr. Denis O'Donnell*

#### Devon Cole

Canada Graduate Scholarship – Master's  
*Supervisor: Dr. Mark Ormiston*

#### Marty VandenBroek

Canadian Vascular Network Scholar Award  
*Supervisor: Dr. Mark Ormiston*

### DOM Faculty Supporters

**Dr. Paula James** Graduate Program Director

**Ms. Julie Heagle,  
Mr. Wei Yan** Program Staff

Faculty	Program Involvement
<b>Dr. Paula James</b>	Graduate Program Director/Course Chair/ Supervisor/TMED 800 Lecturer/ Observerships
<b>Dr. Rachel Holden</b>	Graduate Committee Member/Course Chair/ TMED 800 Lecturer
<b>Dr. Gord Boyd</b>	Graduate Committee Member/ TMED 800 Lecturer
<b>Dr. Don Maurice</b>	Graduate Committee Member/ Supervisor/ TMED 800 Lecturer
<b>Dr. Mark Ormiston</b>	Graduate Committee Member/Course Chair/ Supervisor
<b>Dr. Anne Ellis</b>	Graduate Committee Member/Course Chair/ Supervisor/TMED 800 Lecturer/ Observerships
<b>Dr. Charlie Hindmarch</b>	Course Chair/ Supervisor
<b>Dr. Stephen Archer</b>	Course Chair/ Supervisor/ TMED 800 Lecturer/ Observerships
<b>Dr. Jennifer Flemming</b>	Supervisor/Observerships

### Number of MSc. Students

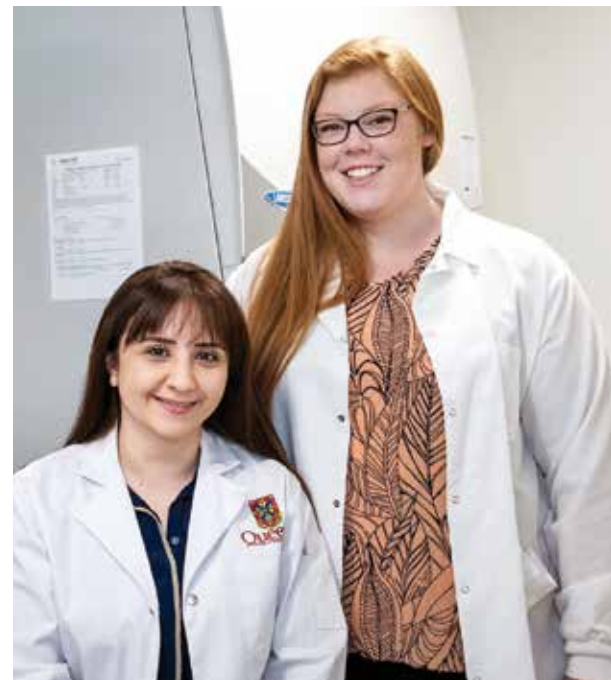
15

### Number of PhD Students

2

### TMED Faculty

31



(top) TMED Students Ruaa Al-Qazazi  
and Kali De Repentigny



(top) TMED students at the Annual DOM Holiday Party  
(above) TMED students orientation, September 2019

Faculty	Program Involvement
Dr. Denis O'Donnell	Supervisor/Observerships
Dr. Annette Hay	Supervisor/Observerships
Dr. Joe Pater	Supervisor
Dr. Stephen Vanner	Supervisor/ TMED 800 Lecturer/Observerships
Dr. David Reed	Supervisor
Dr. DJ Cook	Supervisor
Dr. Amer Johri	Supervisor/ TMED 800 Lecturer/Observerships
Dr. Diane Loughheed	Supervisor/Observerships
Dr. Damian Redfearn	Supervisor/Observerships
Dr. Jeanna Healey	TMED 800 Lecturer
Dr. David Lillicrap	TMED 800 Lecturer
Dr. Tara Baetz	TMED 800 Lecturer
Dr. David Lee	TMED 800 Lecturer
Dr. Yuka Asai	TMED 800 Lecturer
Dr. John Puxty	TMED 801 Speaker
Dr. Jessica Noelting	TMED 801 Speaker
Dr. Rasika Wijeratne	TMED 801 Speaker/ Observerships
Dr. Lawrence Hookey	TMED 801 Speaker/ Observerships
Dr. Geneviève Digby	Observerships
Dr. Ramana Appireddy	Observerships
Dr. Moogeh Baharnoori	Observerships
Dr. David Taylor	TMED Research Project

## Core Internal Medicine

The Core Internal Medicine residency program at Queen's University is nationally respected for its collegial atmosphere, high faculty-to-resident ratio, research opportunities, and strong focus on teaching in all of the major subspecialties as well as General Internal Medicine. It is fully accredited by the Royal College of Physicians and Surgeons of Canada.

*Number of Residents*

68

### NOTABLE HIGHLIGHTS

In 2019, we had to say goodbye to integral program leaders including Dr. Barry Chan and Dr. Ben Thomson. We had changes to our office team and although we faced challenges it brought out some of the best in our program. This year, the Core Internal Medicine residency program reached a record in resident success presenting and publishing research and obtaining external grants and awards and international recognition for on-going advances in residency training. We had the first internal medicine resident in Canada advancing to subspecialty training on an accelerated timeline in CBME. And most importantly, a community of learners and learning that continues to set us apart.

*(right) Annual Resident Research Day  
(below) Last Call Ball 2019*







# Medical Grand Rounds

SECTION II

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## Medical Grand Rounds

Medical Grand Rounds (MGR) is a well-attended traditional medical education venue whereby faculty in the Department of Medicine and visiting guest speakers share discoveries and advances in their field of expertise. The Department of Medicine Medical Grand Rounds experience is robust and engaging and provides an excellent learning opportunity for all in attendance.

Highlights of Medical Grand Rounds at Queen's University include the welcoming of numerous guest speakers hosted by the various divisions. With MGR as the key presentation for guest speakers, visiting professors often stay to meet with faculty and teach residents and students during their visit. Another very special aspect of MGR at Queen's is the series of Chief Medical Resident Presentations, enjoyed by residents and faculty alike.

### NOTABLE HIGHLIGHTS

2019 has seen a number of great presentations on a range of hot topics including, but not limited to:

- Traumatic Encephalopathy Syndrome (TES) in non-athletic older adults – Dr. John Puxty
- The tragic story of the global cancer DIVIDE in women's cancers and how mHealth may reduce disparities in care. (*and*, How did a nephrologist become a mHealth researcher studying cervical cancer in Africa?) – Dr. Karen Yeates
- CAR T-cell therapy: what you need to know and why – Dr. Annette Hay
- Changing the End Game: How can a palliative approach to care benefit the patient with frailty or dementia...or just dying of old age? – Dr. Danielle Kain & Dr. Chris Frank
- Worked to Death: Resident Duty Hours, Patient Outcomes, and the Future of Medical Education (A brief review of the evidence) – Dr. Samir Hazra
- Reference Letters for Resident Selection: Frustrations and Future Directions – Dr. Lawrence Hookey & Dr. Mala Joneja

The 2018-2019 Case of the Year was presented by Dr. Peggy DeJong and was entitled 'Just another peri-partum cardiomyopathy?'

At the end of the year, Dr. David Maslove was awarded Best Grand Rounds on his presentation titled 'Fraud, forgery, and fake news: Why today's medical literature is different from yesterday's ( $P < 0.05$ ).'

On October 10th, 2019 we had the honour of hosting Nobel laureate, Dr. Arthur McDonald. Dr. McDonald presented on Understanding your Universe from Deep Underground.

### 2018-2019 Distinguished Lectures

- **Dr. Peter W. Munt Distinguished Lecture:** Dr. Richard Leigh (University of Calgary)
- **Dr. Bruce L. Cronk Distinguished Lecture:** Dr. Joseph Hill (UT Southwestern)
- **Dr. Henry B. Dinsdale Distinguished Lecture:** Dr. Doug Arnold (McGill University)
- **Dr. John O. Parker Distinguished Lecture:** Dr. Anthony Tang (University of Western Ontario)

### New This Year

We hosted the first **Dr. M. Nancy Tatham & Donna Henderson Lecture**. Dr. James Makokis presented a talk entitled 'Making Medicines Equal Again: The Two Row Wampum and Rebuilding the Indigenous Medical System.' Dr. Makokis and his partner were also the winners of the *Amazing Race Canada* in 2019!



(above) Dr. Lawrence Hookey presenting at Medical Grand Rounds



# Research

SECTION III

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## TIME (Translational Institute Of Medicine)

### Translational Institute of Medicine Approval by Senate!

The full proposal requesting formal Institute status for TIME was submitted to the Faculty of Health Sciences (FHS) in October 2018, for review by the FHS Faculty Board, Queen's Senate Advisory Research Committee (SARC), the Queen's University Planning Committee (QUPC) and Queen's Senate. The proposal has since been approved by Queen's Senate (March 2019) to officially grant TIME with Institute status, as a Faculty of Health Sciences Research Institute. We are proud to be formally recognized by the University as an Institute.



### The TIME Team

**Dr. Stephen Vanner**      *Director, TIME*

**Dr. Charlie Hindmarch**      *Scientific Operations Director, TIME*

**Dr. Salwa Nihal**      *Manager, TIME*

This year, we have been fortunate to recruit Dr. Nihal as our manager. Dr. Nihal is a diligent and hardworking addition to our team, and we welcome her.

### Ms. Whitney Montgomery, Manager, TIME and QCPU

In 2019, we were sad to say goodbye to Whitney who had worked for the DOM for several years before joining the TIME initiative. Whitney was instrumental in the creation of the TIME constitution and the TIME Network and was a familiar face in the department. Whitney also worked hard to ensure that the application for Institute status was complete and we can't thank her enough for the successful outcome there. Whitney has now moved East and she is pursuing a career in Physiotherapy and TIME wishes her the very best.

### TIME Inaugural Symposia 2019

In November 2019, we held our first annual Symposium. The event was a great success with over 100 faculty, staff and students from the Faculty of Health Sciences in attendance. A highlight of the event was the presentation by Dr. Collins on the 'Challenges and Rewards of Translational Medicine', where he laid out a roadmap for success that placed collaboration between basic scientists and clinicians at the heart of translational research.



*Dr. Stephen Vanner*



*Dr. Charlie Hindmarch*



*Dr. Salwa Nihal*



(right) **TMED students** at the **TIME Inaugural Symposia 2019**

We also enjoyed talks from the five faculty members who were successful TIME grant awardees, who introduced their teams, their big idea and their preliminary data. Lastly, we were particularly proud of the TMED students who were invited to present their research. The students really demonstrated both the calibre and diversity of the TMED program, each giving outstanding presentations of their work. Much of the feedback we received from the event focused on the quality of the talks and the research being performed by these students. We would like to thank each student for participating in this showcase event!

The TIME Symposium was well attended by students, staff, faculty and senior management.

#### **TIME -Research Platform for DOM and Their Collaborators**

In 2019, TIME became a research platform for all the internal research for the Department of Medicine and researchers in the University that they collaborate with. TIME's new website has a research pillar which provides all the important links for internal and external grants, latest news and updates for the Department of Medicine clinicians and researchers.

#### **TIME Incubator Grant Competition 2019**

This year TIME announced our first internal incubator grants which were designed to enable its members to form multidisciplinary teams that can challenge old hypothesis with new technologies and new partners. With a focus on collaboration, we hosted a 'Scientists Speed Dating' event that was well attended by teams of translational researchers who crossed departmental, faculty and discipline barriers in order to address the most pressing

translational challenges. With \$300K in funds provided by the members of the DOM, PI's from DOM assembled teams spanning 10 different departments. Ten applications went forward for external review by experts from the University of Ottawa and the University of Alberta.

Based on external review recommendations, the following five teams were awarded funding.

- **Dr. David Maslove**, Co-PIs: **Dr. Patricia Lima** (DOM), **Dr. Gord Boyd** (DOM)
- **Dr. David Reed**, Co-PI: **Dr. Andrew Craig** (DBMS, CRI)
- **Dr. Jennifer Flemming**, Co-PIs: **Dr. Mohit Kehar** (Pediatrics), **Dr. Prameet Sheth** (DPMM)
- **Dr. Amer Johri**, Co-PIs: **Dr. Charlie Hindmarch** (DOM), **Dr. DJ Cook** (Surgery) and **Dr. Stephen Pang** (DBMS)
- **Dr. Paula James**, Co-PI: **Dr. Neil Renwick** (DPMM)

### **NOTABLE RESEARCH NEWS & HIGHLIGHTS**

#### **DOM Research Awards**

Besides the TIME Incubator grants, in 2019 the Department of Medicine held its annual grant competitions for DOM Research Award and John Alexander Stewart (JAS) Fellowship to support research opportunities within the Department.

A total of \$124,646 was awarded across the three categories for the 2019 competition. Five faculty members: **Dr. Garima Shukla**,

**Dr. Wael Abuzeid & Dr. Gord Boyd** received DOM research award in CIHR Pillars category while **Dr. Ramana Appireddy** in Clinical Innovation and **Dr. Geneviève Digby** received DOM research award in the category of Quality Improvement.

The John Alexander Fellowship Award 2019 was awarded to Post-Doctoral Fellow, **Sean Bennet**, supervised by Dr. David Reed.

### SEAMO Innovation Fund Show Case 2019

In the year 2018-2019, SEAMO Innovation Fund awards were received by the following 4 DOM members. These 4 unique projects aim to transform healthcare delivery in Ontario in several domains.

- **Dr. Lawrence Hookey** – ‘Is Needle Knife Fistulotomy an Effective First Step Strategy for All ERCPs?’
- **Dr. Amer Johri** – ‘Canada’s First Centre of Excellence for the Cardiovascular Screening and Care of the Athlete Program’
- **Dr. Alberto Neder** – ‘Improving Neuromuscular Fatigue with Supplemental Oxygen to Enhance Exercise Tolerance in Pulmonary Fibrosis: a Randomized, Placebo-Controlled Trial’

A total of \$124,646 was awarded across the three categories for the DOM Research Awards 2019 competition.



(above) **Dr. Collins**, guest speaker at the TIME Inaugural Symposium 2019 with, **Dr. Vanner**, **Dr. Nihal**, and **Dr. Hindmarch**

- **Dr. David Reed** – ‘Metabolomics: Moving Beyond Symptoms to Phenotype Irritable Bowel Syndrome.’

It provides short-term seed funding to support innovative projects and to enable academic physicians to develop programs sufficiently to qualify for additional support and evaluate novel strategies to transform health care delivery in Ontario.

### 2018/2019 External Research Grants

During the 2019 academic year, DOM faculty members were awarded a number of external grants. A few examples include:

- **Dr. Gord Boyd**, Division of Neurology, Queen’s Department of Medicine, received funding for his CONFOCAL-2 program of research in the CIHR project grant competition. The CONFOCAL-2 study is an international multicentre prospective observational study designed to assess the relationship between cerebral oxygenation, delirium, and long-term cognitive impairment in critically ill patients. It is currently running at 4 sites in Ontario, and this grant will allow the expansion to 10 sites across Canada and the US.
- **Dr. Alan Lomax**, Division of Gastroenterology, Queen’s Department of Medicine and DBMS, received CIHR funding for his project Modulation of pain in Irritable Bowel Disease (IBD) by microbial proteases. This proposal takes a different approach to the study of how to treat pain in IBD by examining whether the microbes that reside in the gut modulate pain. His study will investigate what changes in the microbiota of IBD patients leads to worsening pain and lay the groundwork for a novel microbial therapy that is more effective and safer than existing opioid pain medications.

### SEAMO Endowed Education and Scholarship Fund 2019

Four of our faculty members received the 2019 SEAMO Endowed Education and Scholarship Fund award in May 2019, which supports projects intended to add value to the continuum of medical education offered through Queen’s School of Medicine, e.g. undergraduate medical education, postgraduate training programs or continuing professional development.

- **Dr. Geneviève Digby**, Department of Medicine – Evaluation of a Formal Patient Safety Curriculum and Informal Experiential Learning on Internal Medicine Residents’ Knowledge, Skills and Attitudes Related to Quality Improvement and Patient Safety: Informing a Curriculum and Competency-based Assessment
- **Dr. Stephen Gauthier**, Department of Medicine – Investigating the Factors that Impact Quantity of Workplace-based Assessments and Performance in Residency Training
- **Dr. Paula James**, Department of Medicine – Learning in Translational Medicine Graduate Program: A Developmental Evaluation Approach
- **Dr. Amer Johri**, Department of Medicine – Integrating Cardiac and Lung POCUS into the Medical School Curriculum: Didactic Methods compared to E-Learning





# Events & Awards

SECTION IV

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## Events & Awards

### Lunch & Learn Series

The DOM runs a series of Lunch & Learn workshops for our administrative support staff. The sessions are educational and rotate between informational & wellness themed sessions. Not only are these sessions educational but they provide networking opportunities for our staff. Our instructors are from both Queen's University and Kingston Health Sciences Center. To date these have been well attended and we are looking forward to our third year of this offering!

In 2019 we ran 4 Lunch & Learn sessions:

- Time management including tips/strategies re Outlook and organizing your work space
- Wellness Beginner Yoga
- Privacy and Information Security
- Creating a Customized Self-Care Plan

### Staff Appreciation Lunch

We hosted our annual Staff Appreciation Lunch at The Grizzly Grill on June 27th. This event recognizes and shows the department's appreciation for all of our hardworking administrative staff!

### Women in Medicine

**Spring Event:** The 2019 Women in Medicine Spring Event was hosted on April 25 at The Donald Gordon Conference Centre. It was a great evening of networking with our female colleagues and listening to two great keynote talks from Dr. Christopher Simpson and Dr. Annette Hay.

**Journal Club:** Our Women in Medicine Journal Club continued in 2019 with two meetings to discuss academic articles on the topic of women in academic medicine.

### Family Fun Day

On July 14, the Department of Medicine hosted our annual Faculty Family Fun Day at the Fort Henry Discovery Centre. It was an afternoon of FUN in the SUN with our amazing faculty and their families!

### DOM Retreat

On October 10, over 100 DOM members came together to brainstorm and discuss topics such as: Accountability, eHealth and offsite clinic space.

### Professional Development Day

In November 2019, the DOM hosted our first ever professional development course on Enhancing Interpersonal Effectiveness to a selection of new faculty, emerging leaders and allied health professionals. This course was intended to kick-off our plans to create a Departmental in-house suite of professional development opportunities tailored specifically for our physicians. The course was a huge success! We are looking forward to offering more programs over the next year.



(top) Water balloon fun

(above) Dr. Leonie Herx and family



It is a night where we all have a chance to come together as a Department and reflect on everything that we have accomplished throughout the year – it is a night that should not be missed!

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(top) Dr. Molin chatting with colleagues  
(above) Party entertainment – ODNT  
(top right) DOM DAY 2019 Participants



### Department of Medicine CME Day

The 6th Annual Department of Medicine CME day was held on May 29th, 2019, and was a tremendous success. With a variety of informative and educational seminars presented throughout the day, the audience was provided with top quality education on a wide range of topics. The day consisted of a morning plenary with talks from Dr. Ramana Appireddy, Dr. David Holland, Dr. Robyn Houlden and Ms. Danielle Claus. This was followed by breakout sessions covering cases from the Divisions of Gastroenterology, Dermatology, Neurology & Palliative Medicine. Our afternoon plenary talk was given by Dr. Geneviève Digby on Quality Improvement. This year we were pleased to have invited some of our nursing and allied health colleagues!

### Annual Awards Ceremony Overview

The Annual Awards Ceremony is a memorable event hosted by the Department of Medicine to celebrate the outstanding contributions our faculty members have made to the Department and to their fields. Winners in the following award categories, including those deserving a special mention, are announced at the Annual Awards Ceremony. It is a night where we all have a chance to come together as a Department and reflect on everything that we have accomplished throughout the year – it is a night that should not be missed!



## The 2019 Department of Medicine Annual Award Winners

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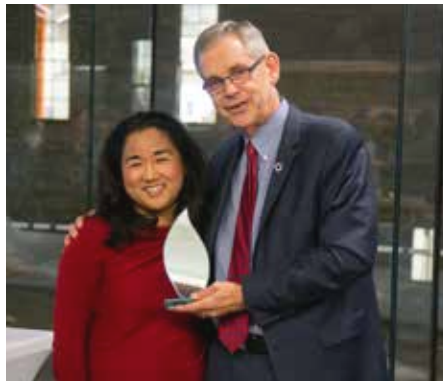
We would like to  
recognize all of the  
nominees:

- Dr. Hoshiar Abdollah
- Dr. Adrian Baranchuk
- Dr. Jocelyn Garland
- Dr. Stephen Gauthier
- Dr. Thomas Herzinger
- Dr. David Holland
- Dr. Robyn Houlden
- Dr. Paula James
- Dr. Al Jin
- Dr. Amer Johri
- Dr. Mala Joneja
- Dr. David Maslove
- Dr. Leah Nemiroff
- Dr. Denis O'Donnell
- Dr. Khaled Shamseddin
- Dr. David Taylor
- Dr. Sean Taylor



### Department of Medicine Distinguished Service Award

Dr. Cathy McLellan & Dr. David Holland



### Department of Medicine David Ginsburg Mentorship Award

Dr. Yuka Asai



### Bill Depew & Ron Wigle Master Clinician Award

Dr. Sue Moffatt



### Department of Medicine Research Achievement Award

Dr. Anne Ellis



### Department of Medicine Young Clinician Award

Dr. Moogeh Baharnoori



### Department of Medicine Master Educator Award

Dr. Chris Smith



# Quality

SECTION V

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# The Medicine Quality Improvement and Patient Safety Committee (MQIPSC)

The MQIPSC is a multi-disciplinary representation of the Department of Medicine and Medicine Program with a focus on patient safety (PS) and quality improvement (QI). The committee is co-chaired by Dr. Geneviève Digby & Dr. Joseph Abunassar. In 2019, the MQIPSC continued to make great strides towards achieving its 3 main mandates as described below.

## *MQIPSC Mission Statement*

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***Improving healthcare  
quality and patient  
safety in the DOM***

### **MQIPSC 2019 HIGHLIGHTS**

#### **Strengthen the Delivery of High-Quality and Safe Care for Patients**

- The MQIPSC has been working more closely with the Medicine Program in order to increase alignment of quality improvement priorities between academic and organizational initiatives.
- The DOM QIP has become more streamlined and better aligned with KHSC organizational priorities.
- Divisional Quality Liaisons have been identified from each Division to improve dissemination of information pertaining to Quality and encourage leadership in each Division.

#### **Advance QI Initiatives within the DOM and Promote Scholarly Activity in QI**

- The MQIPSC has supported and provided advice for over 10 different improvement projects across the Department and Program.
- The Physician Quality Committee, chaired by Dr. Digby from the DOM, facilitated a Workshop on 'How to Get Academic QI Work Published.' This included a panel discussion with Queen's Health Quality Program leaders and educators.
- Many DOM members are forming collaborative working relationships with the Queen's Health Quality Programs to help develop and advance improvement initiatives with a scholarly focus.

#### **Support Departmental and Program Education in QI**

- A new Patient Safety Rounds working group was created, which includes several members from the MQIPSC (Dr. Digby, Dr. Murphy, Dr. Wilkinson (resident representative), as well as Dr. Awad in her role as Assistant Program Director. This working group oversees the education of PS/QI to Internal Medicine Residents.
- The Patient Safety Rounds working group was awarded the SEAMO Endowed Scholarship and Education Fund to support curriculum development and evaluation in PS/QI.
- MQIPSC members continue to support the Resident Research Day Quality Improvement category by helping with judging presentations and selecting a Resident winner for the QI research award.





# Division Reports

SECTION VI

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## Allergy and Immunology



**Division Chair**  
DR. ANNE ELLIS

Dr. Anne Ellis is a clinician scientist with 70% protected time for research. She has served as the Chair of the Division of Allergy & Immunology since May 2010, and is the Director of the Allergy Research Unit at the Kingston Health Sciences Centre. The flagship of this research program being the Environmental Exposure Unit (EEU), an internationally recognized and validated controlled allergen challenge model of allergic rhinitis. She also has gained considerable expertise in direct nasal allergen challenge and is a Principal Investigator within AllerGen NCE.

### Faculty Members & Rank

**Professor** *Dr. Anne Ellis*

**Associate Professor** *Dr. Rozita Borici-Mazi*

### Education/ Training Program Update

The Division contributes broadly to the education of Undergraduate Medical Students through lectures and the facilitation of small group learning (SGL) sessions in the 1st year of training. In addition to the pre-clerkship course, the Division contributes to the Licentiate of the Medical Council of Canada (LMCC) review program. The Division hosts a rotating Allergy/Immunology combined with Endocrinology in the clerkship year and contributes to clerkship subspecialty teaching seminars as well as Undergraduate Medical Education observerships. They contribute to postgraduate education through participation in Academic Half Days, and Allergy/Immunology rotation, and both members contribute to teaching on the Internal Medicine CTUs.

### DIVISIONAL OVERVIEW

The Division of Allergy & Immunology is comprised of Dr. Anne K. Ellis, Professor and Chair, a Clinician Scientist with a 70% research portfolio, Dr. Rozita Borici-Mazi, Associate Professor, a Clinician Scholar with 80% clinical activity and 10% educational commitment, and Dr. Ellie Tsai, an Adjunct Assistant Professor who is in Community Private Practice. Drs. Ellis and Borici-Mazi collectively run 8 to 9 half-day clinics per week at Hotel Dieu Hospital and provide year round in-patient consult coverage at Kingston General Hospital and Providence Care. In their outpatient Allergy/Immunology clinics, a full spectrum of allergic and immunologic disorders are evaluated and treated, including (but not limited to) allergic rhinitis, asthma, atopic dermatitis (eczema), urticaria, angioedema, food allergy, anaphylaxis, drug allergy, stinging insect allergy and immunodeficiency.

### Mission Statement

**To provide high quality care to patients suffering from allergic conditions and immunodeficiency in the Southeastern Ontario region while enhancing our global reputation for excellence in research into the allergic condition**

### Number of Publications

**11**

### Number/Value of Grants

**\$4M<sup>+</sup>**

Dr. Ellis additionally heads up the Kingston Allergy Birth Cohort, which allows for the study of potential predictors of the future development of allergy at birth, and has led to new findings with respect to risk factors for asthmatic symptoms early in life.

The research activities within the Division are tremendous and are highlighted by the clinical trials conducted by the Allergy Research Unit led by Dr. Ellis. The flagship of this research program is the Environmental Exposure Unit (EEU), an internationally recognized and validated controlled allergen challenge model of allergic rhinitis. The Division also participates in studies of direct nasal allergen challenge facilitated by the Allergic Rhinitis – Clinical Investigator Collaborative, an AllerGen NCE funded program with Dr. Ellis as Principal Investigator. The Allergy Research Unit also participates in multi-centre clinical trials over a wide spectrum of allergic and immunologic conditions, including moderate to severe asthma, urticarial, immunodeficiency (IVIG), and nasal polyposis. Dr. Borici-Mazi contributes materially to the academic reporting of interesting clinical cases via case report publication and abstract submissions to the national meeting.

Dr. Ellis additionally heads up the Kingston Allergy Birth Cohort, a cohort of approximately 400 mother-child pairs from whom cord blood was collected at birth. This important cohort allows for the study of potential predictors of the future development of allergy at birth, and has led to new findings with respect to risk factors for asthmatic symptoms early in life. Her predominant interest lies in epigenetic modifications that predispose to atopy and develop in response to allergic challenge.





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## NOTABLE HIGHLIGHTS

### Accomplishments in Clinical Medicine

The Queen's University Allergy and Immunology clinic at Hotel Dieu Hospital is extremely efficient, busy and productive. Over the past year, just over 5000 patients were seen in this clinic.

Ongoing contributions to the Antimicrobial Stewardship program ensure that the results of our penicillin skin testing clinic evaluations are updated in the KGH/HDH patient care system and accurately reflect the true drug allergy status of patients seen at both hospitals. Our ongoing ability to test for and successfully desensitize patients with stinging insect allergy dramatically improves quality of life and reduces the risk of anaphylaxis in the affected patients.

### Community Outreach

Members of the Division are active within the Canadian Society of Allergy and Clinical Immunology (CSACI), as well as the American College of Allergy, Asthma and Immunology (ACAAI) and the American Academy of Allergy, Asthma and Immunology (AAAAI). Dr. Ellis is on the Executive of the Board of Directors for the CSACI (Secretary/Treasurer) and is the Chair of the Anaphylaxis committee for the ACAAI. Dr. Borici-Mazi sits on the Royal College Subspecialty Training committee for Clinical Immunology & Allergy.

## RESEARCH HIGHLIGHTS

In 2019 the Allergy Research Unit conducted several industry funded clinical trials and self-funded studies.

The Environmental Exposure Unit was used for one large industry study and one self-funded validation study. The industry study was an observational study comparing allergic responses to birch allergen during the natural season and during Environmental Exposure Unit challenges. This study enrolled 129 participants and the results were presented this past month at EACCI.

We clinically validated the House Dust Mite – Environmental Exposure Unit (HDM-EEU) in a study that enrolled 68 human participants. We were able to safely show a clinically significant

allergic response in participants with house dust mite allergies. This allows us to execute large scale clinical trials for novel HDM medications when the opportunities present. Blood and nasal samples were collected and analyzed to gain a broader understanding of the underlying disease mechanisms.

Our research group also completed an additional two industry funded clinical trials involving novel therapeutics. These international multi-centre clinical trials were in chronic spontaneous urticaria and birch pollen allergies.

The Division's collaborative research program with Dermatology examining the genetic basis of peanut allergy and how it relates to allergic rhinitis has enrolled 123 to date. This project is funded by the Canadian Allergy, Asthma and Immunology Foundation.

Currently, our research group is carrying out clinical trials of novel therapies for allergic rhinitis, and chronic spontaneous urticaria. We are also conducting two COVID-19 related research studies: one examining anxiety during the pandemic and the other is testing health professional students and residents to see if there are asymptomatic individuals as well as measuring antibody levels.

The Kingston Allergy Birth Cohort has over 400 participants, the oldest being about 7 years of age. The health and environment of these participants is being followed annually via mailed surveys. We recently published findings on the two and six-year outcomes of our cohort in *Annals of Allergy, Asthma and Immunology*. This publication consisted of a detected association between in-home use of scented products and parental report of childhood wheeze.

Utilizing our previously established Nasal Allergen Challenge (NAC) protocols we investigated the clinical symptoms and biomarkers of Bermuda grass-induced allergic rhinitis (AR) as well as the nasal ILC2 production in response to Birch NAC. With the completion of these trials we have now successfully validated the NAC model to study Ragweed, Timothy and Bermuda grass, Birch and Cat allergen induced AR.

Diesel Exhaust Particles (DEP) collected onto rotorrods during an industry sponsored EEU trial were investigated using electron microscopy to determine the size ranges captured with this methodology.

## Cardiology

### Mission Statement

**To improve the heart health of residents in Southeastern Ontario and beyond, through a focus on timely delivery of quality care, innovation, discovery, teaching, and learning**

### Number of Publications

130

### Number of Learners

2<sup>PGY5</sup>

3<sup>PGY6</sup>

### Number/Value of Grants

\$1.9M<sup>+</sup>



**Division Chair**  
DR. CATHY MCLELLAN

Dr. Cathy McLellan is an interventional Cardiologist and is the clinical lead for Percutaneous Coronary Interventions

She is a respected leader and mentor, not only in the division, but also with her colleagues outside of cardiology and women in medicine, as she is 1 of 7 female chairs in the DOM.

### Faculty Members & Rank

Assistant Professor	<u>Dr. Cathy McLellan</u>	
Professor	Dr. Hoshir Abdollah	Dr. Stephen Archer
	Dr. Adrian Baranchuk	Dr. John McCans
	Dr. Damian Redfearn	Dr. Tony Sanfillipo
	Dr. Chris Simpson	
Assistant Professors	Dr. Joe Abunassar	Dr. Wael Abuzeid
	Dr. Gerald Adams	Dr. Sanoj Chacko
	Dr. Peggy DeJong	Dr. Andres Enriquez
	Dr. Samir Hazra	Dr. Zardasht Jaff
	Dr. Henry Kafka, PhD	Dr. Stephen LaHaye
	Dr. Paul Malik	Dr. Michael O'Reilly
	Dr. Raveen Pal	Dr. Amar Thakrar

### Education/ Training Program Update

The cardiology subspecialty program has remained stable for 2019-2020 with 3 PGY-6s slated to complete their entire training under the competency by design (CBD) curriculum, 2 PGY-5s, 3 PGY-4s and 2 off-cycle residents for a total of 10 trainees. We had a very successful CARMS match and will be welcoming 3 new incoming residents in July 2020 for the 2020-2021 academic year. Key initiatives within the past academic year and planned for the incoming academic year include a pan-provincial PGY-4 boot camp, enabling remote reading of diagnostic testing which has been invaluable in the COVID era, monthly funded journal clubs, generous conference support which can be used for electronic learning resources during the pandemic, and a series of academic rounds (half-day, imaging rounds, national trainee review program etc.) delivered over web-based platforms to allow appropriate social distancing. All our current (including graduating) and incoming trainees are fully integrated into CBD far in advance of the national cardiology CBD launch originally scheduled for July 2020.

## Awards

**Dr. Adrian Baranchuk** *Ron Wigle Mentorship Award  
Department of Emergency  
Medicine Consulting Service  
Teacher of the Year Award*

## NOTABLE HIGHLIGHTS

- This year we opened two satellite echo labs, one in Perth and the other in Kingston at the QCPU site. This allowed for patients to be seen with a reduced wait time!
- The division continued to collaborate with Cardiac Surgery on Structural heart diseases such as the minimally invasive mitral



(top) Dr. Adrian Baranchuk  
(above) Dr. Raveen S. Pal

valve program. Dr. Abuzeid and Dr. Bisleri received funding from the SEAMO Innovation award for the development of a mitral valve assessment clinic.

- The TAVI program's volume increase to approximately 70 per year and is expecting further growth in the upcoming years.
- The division is collaborating with Neurology on the PFO closure.
- Ongoing regional care projects include the Emergency MI program, urgent inpatient, same-day cath/PCI/devices and regional access to cardiac EP consultation/ablations.
- The division acknowledged the retirement of Dr. John McCans in December 2019. Dr. McCans contributed to the department in many ways including as Division chair, Department head, the Heart failure clinic, the Urgent cardiology clinic, countless patients and endless mentoring. The division wishes him all the best and is very grateful for his willingness to help in the urgent clinic!

## PROGRAM HIGHLIGHT

### Cardio Oncology

The Cardiac Oncology Program at Queen's University, KHSC (CardoOncQ) was established in 2015 by a multidisciplinary team consisting of cardiologist Dr. Raveen S. Pal and medical oncologist Dr. Mihaela Mates. This program now encompasses the fields of Radiation Oncology, Surgical Oncology, Pharmacy, and Diagnostic Imaging. This program has three broad mandates: Clinical Service, Research, and Education.

**But wait – what exactly is Cardio-Oncology?** Cardio-Oncology is a new field that is focused on preventing and/or treating patients with cancer who develop heart conditions caused by cancer treatments.

The Cardio-Oncology Clinic, run by Dr. Raveen Pal, provides rapid access to cancer patients who are at risk of or have experienced cardiac toxicities from their cancer therapy. The clinic provides assessment and treatment to patients diagnosed with Herceptin mediated Cardiomyopathy, 5-FU related Vasospasm and Immune checkpoint related Myocarditis. This subspecialty clinic occurs weekly and to date over 500 patients have been evaluated.

The goals of the research program are to expand existing knowledge of Cardiac toxicities, optimal imaging protocols and to establish a local node for participation in National cardio-oncology patient registries and research programs. CardoOncQ is engaged in the development of evidenced based guidelines for diagnosis and treatment of cardiac toxicity in cancer patients.

The goal of the educational component of the program is to educate patients, practitioners, and health care professionals at various stages of training. The educational needs of trainees are currently met through clinical rotations, dedicated teaching sessions and case rounds discussions. We have also established a quarterly multidisciplinary cardiac oncology rounds to foster education of our staff, residents and fellows.



# Dermatology

## Mission Statement

**To provide specialist-level medical and surgical care for individuals with skin disease**

**To educate undergraduate and postgraduate learners and health professionals on the diagnosis, prevention and treatment of skin disease**

**To educate the public and promote awareness of the causes, prevention and impact of skin disease**

**To advocate for patients**

**To advance knowledge of skin disease through research**

## Number of Publications Peer Reviewed Articles

7

## Number/Value of Grants

\$121K+



**Division Chair**  
DR. SONJA MOLIN

Sonja Molin is an academic Dermatologist with all her heart, committed to high-quality patient care, innovative treatments, research and passionate teaching. She has more than 10 years of experience in the field. She is principal investigator of several ongoing research projects. The main focus of her clinical expertise and research are inflammatory skin diseases, mainly hand eczema and psoriasis, contact allergy and occupational dermatology.

### Faculty Members & Rank:

Associate Professor [Dr. Sonja Molin](#)

Professor [Dr. Thomas Herzinger](#)

Associate Professor [Dr. Yuka Asai](#)

Assistant Professor [Dr. Benvon Moran](#)

### Education Update

The Division of Dermatology is teaching residents, medical students and clinical observers. All of our faculty are involved in undergraduate medical teaching with clinical skills course and postgraduate education through participation, e.g. in Academic Half Days. The feedback received from the dermatology rotation has been very positive. Residents in training have come from internal medicine, ophthalmology and family medicine.

All faculty members were invited to speak at national and international meetings and conferences. In 2019, Dr. Herzinger was invited to speak at the Congress of the European Academy of Dermatology and Venereology in Madrid, Spain. His talk about 'Lice, scabies and fleas' gained lots of attention, showing the relevance of this very classical dermatological topic. Dr. Asai served as co-chair for the Basics of Skin Science (BoSS) program at the Annual Meeting of the Canadian Dermatology Association in Calgary 2019, where she also was invited to give a plenary lecture about complex dermatological cases. Dr. Molin was invited to present an update on hand eczema at the University of Toronto and also presented about hand eczema, smoking and contact allergies at the Annual Meeting of the Canadian Dermatology Association in Calgary. She is member of the Executive committee of the German Society of Occupational Dermatology and chaired a session at the society's bi-annual congress in Osnabrueck, Germany in 2019.

### DIVISIONAL HIGHLIGHTS

Dermatology is one of the newer divisions within the Department of Medicine. The team consists of four dermatologists: Dr. Yuka Asai, who is the research

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lead of the division, Dr. Benvon Moran, who is Kingston's Mohs Micrographic Surgeon, Dr. Sonja Molin, who also is an allergist by training, is the chair of the dermatology division and Dr. Thomas Herzinger, who is the educational lead within the dermatology division and also has a strong background in basic research. Dr. Erin Dahlke from Toronto has joined the team and provides locum coverage for the Mohs Micrographic Surgery Clinic.

Though being a small division, the depth of knowledge and experience together with a broad spectrum of services helps to serve Kingston's patients with skin diseases. Dermatology holds clinics at Hotel Dieu Hospital, where the Mohs Clinics for the removal of skin tumors in the face and neck region is located, as well as at the Cancer Centre of Kingston General Hospital.

## RESEARCH

The division has an innovative and growing research portfolio.

An important part of Dr. Asai's research focuses on peanut allergies and atopic diseases. In February 2019, she was the lead of the International Food Allergy Consortium, Vancouver, BC, where she brought together 33 stakeholders including clinician-scientists, faculty researchers, community stakeholders, research staff and trainees, as well as industry representatives from 18 different organizations in Canada, Australia, the United States, Germany, and the Netherlands. With the Multi-Disciplinary Clinic for Atopic Diseases (MDCAD), Dr. Asai has started an important initiative ensuring multi-disciplinary care for patients with atopic

diseases. This approach is unique in Canada and brings together three divisions for the best of the patients: Allergy, Dermatology and Respiriology. Her research is supported by various grants, among them a grant from the Eczema Society of Canada for her project 'Impact of dermatology clinic establishment on health-care utilization of eczema patients,' which was awarded in 2019.

In December 2019, Dr. Asai received the *Department of Medicine David Ginsburg Mentorship Award* for her excellent mentoring skills.

Dr. Molin's research focuses on the pathogenesis and classification of hand eczema as well as psoriasis. She also is studying potential biomarkers to differentiate between these diseases. In 2019, she co-authored an article about phase 2 trial results of an innovative treatment approach for hand eczema in the *British Journal of Dermatology*, one of the top-dermatological journals. This article was among the top 10% most downloaded papers in the 12 months following online publication. Dr. Molin is member of an international initiative on Hand Eczema Core Outcome Sets. The first publication from this initiative in 2019 in the journal *Contact Dermatitis*, 'Which outcomes have been measured in hand eczema trials? A systematic review,' also was among the top 10% most downloaded papers in the 12 months following online publication.

Together all faculty members serve as peer-reviewers for the top-journals in the field including the *British Journal of Dermatology*, the *Journal of the American Academy of Dermatology*, the *Journal of the European Academy of Dermatology and Venereology*, the *Journal of Investigative Dermatology*, *Allergy, Asthma & Clinical Immunology* and the *Journal of Cutaneous Medicine and Surgery*.

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## Faculty Profile Dr. Yuka Asai



**Dr. Yuka Asai**

Meet Dr. Yuka Asai, an Associate Professor in the Division of Dermatology. Although Dr. Asai does not remember what exactly influenced her decision to pursue a career in medicine she believed it had percolated for a long time. Before attending medical school at the University of Saskatchewan, she completed an Undergraduate Degree in Zoology at the University of Alberta. It was there that she worked in a lab on snail neurons and took a parasite course that become very useful later on in life. Dr. Asai decided to pursue dermatology after working with her mentor, who is now the Division Head of Dermatology

at Dalhousie University – his passion for dermatology and research was infectious!

Dr. Asai's clinical practice consists of a general dermatology clinic. Her research interests include identifying where the skin can help

to diagnose or prevent other diseases. She has an MSc in epidemiology and a PhD in experimental medicine. Her interests are in atopic diseases and skin cancer. She does a lot of collaborative work; for example, her MSc and PhD work were in the genetics of peanut allergy. Dr. Asai has organized an international food allergy consortium and has come up with a consensus statement of food allergy phenotypes in genetic research, which was recently accepted to the journal *Allergy*.

When not practicing medicine and researching, Dr. Asai enjoys practicing yoga and karate, cooking, crafts and she has recently started to play the piano again. She enjoys living and working in Kingston as it is a city that is big enough to have the amenities that she wants, but still has the benefits of a small-town feel!

If she were to be asked for advice from a student considering a medicine/research career it would be this: don't neglect your English class – being able to write well is key to grants, papers, and communicating with your colleagues!

# Endocrinology & Metabolism

## Mission Statement

**To provide the best possible care for patients with endocrine disease in Southeastern Ontario;**

**To teach undergraduate students and postgraduate trainees at Queen's University, and regional healthcare providers about optimal management of endocrine disease;**

**To educate patients and the public about endocrine disease and advocate for the best endocrine care; and**

**To conduct research in clinical care and education related to endocrine disease**

## Number of Publications

12

## Number/Value of Grants

\$54K<sup>+</sup>



**Division Chair**  
DR. ROBYN HOULDEN

Dr. Robyn Houlden is a consultant in adult endocrinology at the Kingston General and Hotel Dieu Hospitals. She is the Medical Advisor for the Diabetes Education and Management Centre at the Hotel Dieu Hospital in Kingston, and Specialist Lead for the Southeast Ontario Diabetes Regional Coordination Centre. She serves as the lead for undergraduate medical education in Endocrinology and Metabolism, as well as the clinical programs. She has an interest in diabetes; diabetes and pregnancy; insulin pumps and continuous glucose monitoring; as well as inpatient management of diabetes.

### Highlight from the Chair

A dynamic and growing Division developing innovative clinical programs to meet the rapidly expanding needs for patients with endocrine disease in Southeastern Ontario.

### Faculty Members & Rank

Professor Dr. Robyn Houlden

Assistant Professors Dr. Sara Awad Dr. Katherine Kovacs  
Dr. Joshua Lakoff Dr. Bikrampal Sidhu

### Education/ Training Program Update

The Division continues to innovate in undergraduate medical education in Endocrinology with the development of new online learning modules.

A new residency program in Endocrinology and Metabolism at Queen's University was recently approved by the Royal College of Physicians and Surgeons of Canada. The first resident will be entering the program in September 2020. Endocrinology is amongst the most highly competitive training programs in Canada and there is a need to expand the number of endocrinologists in Canada to meet the growing population of individuals with endocrine disease particularly in the rapidly expanding number of people with diabetes and obesity.

### DIVISIONAL HIGHLIGHTS

#### Administration Highlights

- Dr. Houlden continues to serve as Past Chair of the 2018 Diabetes Canada Clinical Practice Guidelines. She recently assisted with several reviews for the Canadian Agency for Drugs and Technology in Health (CADTH) including use of hybrid closed-loop insulin delivery systems, flash glucose monitoring and economic models in diabetes.



- Dr. Houlden also serves as Medical Advisor to the Lawson Foundation of Canada that provides \$2.6 million in funding to research projects related to delivery of diabetes prevention, treatment and management programs and services through innovation, translational research, knowledge mobilization and quality improvement.

## RESEARCH HIGHLIGHTS

- Dr. Houlden and Sarah Moore assisted with the development of Canadian Standards for Perioperative/Periprocedure Glycemic Management.
- Drs. Awad and Houlden completed an investigator led study examining the prevalence and clinical characteristics of adults presenting with SGLT-2 inhibitor associated DKA at the KHSC.
- Drs. Houlden and Awad participated in a clinical trial 'Dapagliflozin CKD Outcome Study'
- Dr. Houlden collaborated with the Bariatric Centre on a study Exploring barriers for access to weight management care for morbidly obese patients with type 2 diabetes within SELHIN

## CLINICAL OVERVIEW

**Nurse Practitioner Clinic for Adults with Diabetes without access to Primary Care:** The majority of medical management for diabetes takes place in primary care. In Ontario, 8.8% of the population does not have a primary care provider and this can result in delays accessing guideline-recommended diabetes care. A Nurse Practitioner led ambulatory clinic located within the HDH Diabetes Education and Management Centre has been developed for adults with diabetes and no primary care provider to address these disparities. The clinic is held once weekly and sees a large volume of patients. Many have poorly controlled diabetes and multiple comorbidities. Data is being collected to assess impact on glycemic control, self-management, patient satisfaction, and types of referrals made for this vulnerable population living with diabetes.

**Multidisciplinary Thyroid Cancer and Thyroid Nodule Clinic:** This clinic is held weekly in the Cancer Centre of Southeastern Ontario. It is a multidisciplinary endeavour that enhances the flow of care for patients with thyroid nodules with clinical and ultrasonographic risk factors for malignancy. With the availability of rapid access to onsite ultrasound guided fine needle aspiration (FNA) biopsy, patients can be easily streamlined for surveillance or surgery. Patients with thyroid cancer also receive care in the clinic and have access to a team of providers including head and neck surgeons, endocrinologists and radiation oncologists. The clinic has been successful in achieving its goal of facilitating access to multidisciplinary thyroid cancer care and teaching medical trainees about management of thyroid disease and the technique of ultrasound guided FNA biopsy.

**Multidisciplinary Pituitary Clinic:** Dr. Awad holds a joint clinic with Dr. Ryan Alkins from the Division of Neurosurgery in which patients with pituitary tumors are seen allowing effective coordination of care by Neurosurgery and Endocrinology. Order sets were recently introduced to standardize endocrine perioperative care for patients undergoing pituitary surgery.

**Insulin Pumps Clinic:** The Division of Endocrinology cares for one of the largest insulin pump patient populations worldwide with over 700 adults and 100 children on insulin pumps. Patients are seen in the HDH Diabetes Education and Management Centre by a multidisciplinary team of diabetes nurses, dietitians and 3 of the endocrinologists (Houlden, Awad, Sidhu). Patients are trained and supported for the use of increasingly complex insulin pump and continuous glucose monitoring systems.



(top) The Division of Endocrinology team  
(above) Dr. Sarah Awad

**Inpatient Management of Diabetes:** Together with two advanced practice nurses and a certified diabetes nurse educator, members of the Division of Endocrinology assess, manage and educate inpatients and dialysis patients with diabetes. The Diabetes Consult Service also promotes best diabetes-related practice to nursing and medical staff, and develops related order sets and policies. Demand for services increases annually as the number of inpatients with diabetes rises and inpatient diabetes care becomes increasingly complex. New order sets are being evaluated to assess management of Hyperosmolar Nonketotic state.

**Diabetes and Pregnancy Clinic:** This clinic provides care to women with pregnancies complicated by diabetes and other endocrine problems in a multidisciplinary clinic in collaboration with the Department of Obstetrics and Gynecology. A significant portion of pregnant women serviced are from the James Bay region.

**Diabetes and Bariatric Surgery:** Dr. Houlden holds a weekly Glycemic Optimization Clinic in the Bariatric Centre in which patients undergoing preparation for bariatric surgery undergo optimization of their diabetes care.

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Dr. Josh Lakoff

## Faculty Profile Dr. Josh Lakoff

Meet Dr. Josh Lakoff, an Assistant Professor in the Division of Endocrinology & Metabolism. Before completing medical school at the University of Toronto, Dr. Lakoff was thinking about a career in chemistry or aerospace engineering. He studied biochemistry at the University of Ottawa and worked as a research assistant studying endocrine disruptions in goldfish. He may not have known it at the time but this research ended up sparking an interest that would flourish later on as he completed both Internal Medicine and subspecialty training in Endocrinology at Dalhousie University in Halifax.

Dr. Lakoff has a clinical interest in the management of thyroid disease and cancer, and endocrine-related complications in Oncology patients. He runs the Thyroid Nodule Clinic, a multidisciplinary clinic that enhances the flow of care for patients with thyroid nodules with clinical and ultrasonographic risk factors for malignancy. With the availability of rapid access to onsite ultrasound guided fine needle aspiration (FNA) biopsy, patients can be easily streamlined for surveillance or surgery. What previously could take up to three appointments over weeks/months is now streamlined to expedite the process.

In addition to his clinical duties, Dr. Lakoff has a strong interest in medical education. He is currently working towards his Masters of Health Professionals Education at Maastricht University. He is also a career advisor for medical students and is involved with the CaRMS process. He is the Program Director for the new residency program in Endocrinology and Metabolism launching in Fall 2020. Dr. Lakoff's Masters project in medical education was recently published. He performed a cross-sectional study of anonymous data on Canadian medical graduates from the Canadian Residency Matching Service (CaRMS) database from 2013 to 2019 and examined factors influencing likelihood of matching. (Lakoff, J., Howse, K., Cofie, N., Heeneman, S., & Dalgarno, N. (2020). Analysis of factors affecting Canadian medical students' success in the residency match. *Canadian Medical Education Journal*. [doi.org/10.36834/cmej.68981](https://doi.org/10.36834/cmej.68981).)

When not practicing medicine, Dr. Lakoff enjoys playing squash on his team 'The Village People' and spending time with his family and two dogs – including a new bernedoodle puppy! He enjoys living and working in Kingston, finding a good sense of community, a super supportive workplace and a good environment for mentorship. He enjoys cycling to work and has even taken a mountain bike lesson with the infamous mountain biker Dr. Chris Frank. His go-to restaurant in #YGK is Sima Sushi!

## Gastroenterology



**Division Chair**  
DR. LAWRENCE HOOKEY

Dr. Lawrence Hookey is a Gastroenterologist and the Medical Director of the Endoscopy Units at Kingston Health Sciences Centre. His practice includes general GI with a focus on therapeutic endoscopy and pancreatic and biliary disease. His research program includes investigating optimizing bowel preparation for colonoscopy, quality assurance in endoscopy, and education for colonoscopy.

### Faculty Members & Rank

Professor	<u>Dr. Lawrence Hookey</u>	
Professor	Dr. Michael Blennerhasset, PhD	
	Dr. Jacob Louw	Dr. Stephen Vanner
Associate Professor	Dr. Alan Lomax, PhD	Dr. Mark Ropeleski
Assistant Professor	Dr. Robert Bechara	
	Dr. Jennifer Flemming	Dr. Michael Beyak
	Dr. Catherine Lowe	Dr. David Reed

### Education/ Training Program Update

The Division of Gastroenterology continues to be a leader in the country in competency-based education in gastroenterology. Recruitment to the program has been extremely competitive and our trainees have been successful in landing highly sought-after postgraduate fellowships and jobs in a sparse market. Residents continue to engage in research due to the robust support and opportunities available.

The division is also proud of the mentoring and supervision provided to many research students each year.

In undergraduate education Dr. Catherine Lowe has assumed the role of Subspecialty Clerkship director.

### Awards

Dr. Mark Ropeleski	Royal College of Physicians and Surgeons of Canada GI CBD Innovator Award
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### NOTABLE HIGHLIGHTS:

- Dr. Melissa Kelley is spearheading a project investigating clinical pathways for enhancing care of our patients, in partnership with our family medicine colleagues. Dr. Mark Swain from the University of Calgary came for a week to share his experience and lead a working group exploring opportunities

### Mission Statement

**To create a culture  
of excellence in the  
integrated care and  
study of patients with  
digestive diseases**

### Number of Publications

**40**

### Number of Learners

**2 PGY4**

**2 PGY5**

### Number/Value of Grants

**\$1.8M+**



for pathways. There is incredible enthusiasm for these from all sides of the project which we plan to roll out in 2020.

- 2019 saw the growth of the Home Parenteral Nutrition program, with a team spearheaded by Dr. Mark Ropeleski and Angela Hollett, dietician. This program provides continuity of comprehensive care for patients receiving TPN at home, and it continues to have funding from the LHIN in recognition of the team's incredible success with the pilot project. The team currently cares for 10 patients and has become an invaluable source of care for them.
- Dr. Bechara continues to be a national and international leader in per oral endoscopic myotomy and endoscopic submucosal dissection. In 2019, more than 60 patients from Kingston and across the country have been spared more significant surgery and recovery times through the expertise of Dr. Bechara in these procedures and we continue to work towards a sustainable funding model for these innovations.
- Dr. Melissa Kelley has recently taken over as the Clinical Trials Director for the GI Division and has been supported by Dr. Hookey and Dr. Ropeleski in this new venture. She is also currently working on her MSc in Evidence Based Health Care through Oxford University and looks forward to starting her own research ventures in the near future.
- The GI division sees over 4000 patients annually in the outpatient clinic and conducts 3000 endoscopic procedures. The Gastrointestinal Diseases Research Unit (GIDRU) is much more than a building; it is a collaborative collective of clinical, translational, and basic science researchers, working together to improve understanding and care of GI conditions, and our research coordinators are imbedded in these activities. Currently, they are overseeing 14 industry sponsored trials, 12 GIDRU investigator trials and 2 collaborative trials with PIs at other centres.
- The CFI/OIT-funded 'Human Laboratory for the Study and Treatment of Gastrointestinal Disorders' has greatly facilitated the potential for mechanistic clinical trials, in part through the development of a GIDRU-based biobank. Consequently, our translational research component continues to proceed at an active pace. A dedicated research assistant has played a pivotal role in our success thus far in acquiring tissue, blood and bio-specimens at a highly effective pace. This has translated into the development of seamless mechanisms that are functioning both at the ambulatory clinic, the endoscopy centres at both hospitals, as well as in the operating room.
- GIDRU co-leads the Irritable Bowel Syndrome (IBS) cohort enrolment in our National multi-center CIHR funded \$25M SPOR (patient-oriented research) grant called IMAGINE, charged with enrolling a total of 8000 IBS, IBD patients or healthy controls. The goal is to understand how the intestinal microbiome interacts with diet and psychological factors to modify symptoms and disease activity. Subjects complete detailed questionnaires annually and submit samples for analysis over the next 5 years. Blood, urine and stool samples will be analyzed, correlated with the large questionnaire dataset, and ultimately analyzed by machine learning. GIDRU has enrolled more IBS patients than any other center and biobanked the most samples. With our collaborators at McMaster, we are also designing multiple diet studies to understand the impact of specific food nutrients on the microbiome and how one's personal microbiome influences how specific foods can induce symptoms.
- We continue to have success in investigator-initiated trials, with recruitment ongoing or completed in 8 prospective studies in areas ranging from ERCP to hepatitis C point of care testing with several internal grants being leveraged for external grant support.



(left) Annual GIDRU photo



Dr. Robert Bechara

The POEM had me improved immensely, with 1-night hospitalization and I was back to work in days.

DR. IAN W. K. FELTHAM, a patient of Dr. Robert Bechara

## Feature Patient Story Dr. Robert Bechara

Dr. Ian W. K. Feltham, a patient of Dr. Robert Bechara, wrote in to commend the work of Dr. Bechara, his team (special shout out to his receptionist, Rhonda!), and to the system that appreciates and supports his excellent and ground-breaking work!

"In my case, with achalasia, I was told by many gastroenterologists that I had a 'terminal' esophagus and most sites only had esophagectomy as a remaining option. Dr. Bechara's Peroral Endoscopic Myotomy (POEM) has given me a 'new lease', where I can eat and have a good quality of life. I now enjoy eating again and have a more normal quality of life. My last surgery required 3 days hospitalization, then home care and two weeks off work. The POEM had me improved immensely, with 1-night hospitalization and I was back to work in days.

I found Dr. Bechara to be exceptionally good with respect to clinical care, empathy, communication, expertise and follow-up, but it is his extra training and introduction of huge advances in endoscopic surgery that is most impressive.

Dr. Bechara's care of me, for achalasia, and a friend for esophageal cancer, was impressive and demonstrated huge advances with respect to treatment, hospital stay, side effects and effectiveness."

## NOTABLE PUBLICATIONS:

- Flemming JA, Dewit Y, Mah JM, Saperia J, Groome PA, Booth CM, Incidence of Cirrhosis in Young Birth Cohorts in Canada from 1997 to 2016: A Retrospective Population-Based Stud., 3- 2019, *The Lancet. Gastroenterology & Hepatology*, Vol. 4(3):217-226
- Tuck CJ, Reed DE, Muir JG, Vanner SJ, Implementation of the Low FODMAP Diet in Functional Gastrointestinal Symptoms: A Real-World Experience, 9-2019, *Neurogastroenterology and Motility: the official journal of the European Gastrointestinal Motility Society*, Vol. N/A, e13730
- M. Lemke , A. Banwell , N. Rubinger , M. Wiepjes , M. Ropeleski , S. Vanner , L. Hookey, Colonoscopy Trainers Experience Greater Stress During Insertion than Withdrawal: Implications for Endoscopic Curricula, 11-2019, *Journal of the Canadian Association of Gastroenterology*, Vol. XX, 1-6
- Yang Yu, Sung Jin Park and Michael J. Beyak, Inducible Nitric Oxide Synthase-Derived Nitric Oxide Reduces Vagal Satiety Signaling in Obese Mice, 11-2018, *Journal of Physiology*, Vol. na, na
- Mandip Rai, HonBSc, MD, FRCPC, Matthew Woo, BSc, MD, FRCPC, Robert Bechara, HonBSc, MD, FRCPC, The Canadian POEM Experience: The First 50 Patients, *Journal of the Canadian Association of Gastroenterology*, , gwaa018

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## General Internal Medicine

### Mission Statement

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**To provide excellence  
in patient care, research  
and teaching of internal  
medicine**

### Number of Publications

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**20**

### Number of Learners

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**5 PGY4**

**5 PGY5**

### Number/Value of Grants

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**\$160K+**



**Division Chair**  
DR. CHRISTOPHER SMITH

Dr. Christopher Smith is an Internist. He performs most of his clinical duties on the clinical teaching units (CTU's) and on the GIM consult service. His main interests are in medical education, evidence-based medicine and clinical skills.

### Faculty Members & Rank

**Associate Professor** *Dr. Christopher Smith*

**Associate Professor** *Dr. David Maslove* *Dr. David Taylor*

**Assistant Professor** *Dr. Stephen Gauthier* *Dr. Laura Marcotte*  
*Dr. Kristen Marosi* *Dr. Laura Milne*  
*Dr. Steven Montague* *Dr. Johanna Murphy*  
*Dr. Lisa Nguyen* *Dr. Siddhartha Srivastava*  
*Dr. Matthew Strauss* *Dr. Don Thiwanka Wijeratne*  
*Dr. Rasika Wijeratne* *Dr. Zijong Wu*

### Education/ Training Program Update

#### Update from Training Program Director Dr. Laura Marcotte:

The General Internal Medicine subspecialty program continues to grow, with five PGY-4s and five PGY-5s in 2019, and another very successful CaRMS match. New PoCUS and Obstetric Medicine curricula were introduced, and the GIM residents have been able to participate in the growth of the GIM Obstetric Medicine clinic at Queen's. We had excellent turnout at CSIM, the annual GIM conference, with almost all residents, a substantial group of our GIM faculty, and many of our GIM program alumni in attendance, now one of the academic and social highlights of the year. As a specialty, GIM started Competence by Design (CBD) in July 2019, and this has rolled out very smoothly in the GIM program at Queen's, given the program's history of years of successful CBME implementation prior to the formal Royal College launch of CBD.

### Awards

Clinical teaching and education continue to be a strength in the Division. Several members have again been recognized for their teaching and clinical skills: Dr. Steven Montague received the Clinical Teaching Award for inpatient teaching, Dr. Sidd Srivastava received the Department of Medicine Young Clinician of the Year Award and Dr. Smith accepted Department of Medicine Master Educator Award.



## OVERVIEW

The Division of GIM currently consists of 13 FTE Division members. Our newest members are Dr. Zijing Wu and Dr. Matt Strauss. Dr. Wu is a graduate of our GIM program, and has rejoined our division as faculty following a year at the University of Toronto pursuing further studies in Obstetric Medicine. Dr. Strauss is critical care / internal medicine trained and has joined our Division as a 0.5 FTE internist and continues to practice critical care at Guelph General Hospital where he was previously the medical director.

The Division's work is focused on the Clinical Teaching Units (CTUs), the GIM Consult service and in the outpatient general, urgent, bariatric, perioperative and obstetric medicine clinics.

## CLINICAL ACCOMPLISHMENTS

### Excellence in Clinical Care and Teaching

The GIM division provides approximately 70% of the coverage for the patients admitted to CTUs and the Medical Short Stay unit – these services account for 40% of the total hospital admissions to KHSC. The CTUs are a core component of the residency program and the hub for team-based learning. Volumes have remained high but efficiencies have been maintained with no increase in the length of stay or readmission rates. The GIM Consult Service provides medical consultations 7 days a week for non-medical services at KGH.

### Obstetric Medicine

Drs. Lisa Nguyen and Zijing Wu continue to develop the Obstetric Medicine program at KHSC. They have established a shared clinic with our Obstetric colleagues and provide an enhanced consultative service for Ob/Gyn. They were one of the first adoptees in our

division of OTN/telehealth which has been particularly helpful for this patient population.

### Point-of-Care Ultrasound (POCUS)

Dr. Steven Montague is Queen's University's representative on the Canadian Internal Medicine Ultrasound (CIMUS) group advancing POCUS knowledge and education across Canada. He has also been a leader teaching a POCUS curriculum to our GIM fellows and designed and supervised a 2-week elective rotation.

## INVESTING IN THE FUTURE

Dr. Sidd Srivastava is enrolled in a Masters Program in Clinical Informatics at the Oregon Health Science University (OHSU) and Dr. Stephen Gauthier is completing his Masters of Health Professions Education (MHPE) program at the University of Illinois at Chicago.

## RESEARCH AND SCHOLARSHIP

- This was another successful year for the Division in terms of academic scholarship. Dr. David Maslove continues his successfully funded research program and as an editor of *Critical Care Medicine*. He had 6 peer-reviewed publications in 2019 including with the Canadian Critical Care Trials group [doi: 10.1136/bmjopen-2019-029189] and insights into a 'negative' ICU trial [Crit Care Med. 2019; 47 (12):e941-47. Doi:10.1097/CCM.0000000000003693].
- Dr. Thiwanka Wijeratne published a meta-analysis on the effect of bisphosphonates on bone health of renal transplant patients [Canadian Journal of Kidney Health and Disease doi: 10.1177/2054358119858014.] and deprescribing inappropriate medications [Canadian Journal of General Internal Medicine 2019. 14:30-35].
- Dr. Laura Marcotte published in medical education journals about the role of Educational consultants [Med Educ. 2019. 53(5):524-25 doi: 10.1111/medu.13868. Epub 2019 Mar 28.] and provision of feedback and assessment strategies [Can Med Educ J 2019. 10(3):e110-112 and Can Med Educ J 2019. 10(4):e32-47]. Dr. Stephen Gauthier also published on aligning direct observation and assessment [Med Educ. 2019. 53(7):642-44 doi: 10.1111/medu.13903. Epub 2019 May 20].
- Dr. Steven Montague contributed to a consensus statement regarding educational indicators for internal medicine POCUS [J Gen Intern Med 2019 34(10):2123-29 doi: 10.1007/s11606-017-4071-5. Epub 2017 May 11].
- Drs. Srivastava and Smith contributed to an article that explored risk factors, costs and complications of delayed hospital discharge [BMC health services research 2019 19(1):935 doi: 10.1186/s12913-019-4760-3].



(above) Dr. Zijing Wu and Dr. Lisa Nguyen

## Feature OB/MED Clinic (Dr. Nguyen & Dr. Wu)

The obstetric medicine program in the Division of General Internal Medicine was initiated in January of 2019 under the leadership of Dr. Lisa Nguyen in collaboration with colleagues in the Department of Obstetrics and Gynaecology. After completing a fellowship in obstetric medicine in 2019 at the University of Toronto, Dr. Zijiang Wu joined the team and brought back additional experience.

Obstetric medicine is a discipline within general medicine that is dedicated to the medical care of pregnant women. Obstetric medicine physicians work together with family physicians, obstetricians, midwives, MFMs and other medical subspecialists to provide care to women in a truly multidisciplinary fashion.

Since its establishment, the program has seen a steady growth in the number of referrals and it is now running a weekly clinic in parallel with the high-risk obstetrics clinic. The consults that we see range from preconception counselling and optimization of chronic medical conditions, to the management of acute medical issues that arise during pregnancy, such as preeclampsia and

venous thromboembolism. The clinic follows these women closely during pregnancy, peripartum and postpartum, to ensure the best possible care. In addition to outpatient clinics, the program has also seen a significant rise in the number of inpatient consults from our obstetric colleagues.

Providing training in obstetric medicine for our trainees is also a core part of our mission and this year we have invited the general internal medicine fellows to attend our clinics and developed academic half-day curriculum for our residents in the core training program and fellows in both the GIM and Cardiology subspecialty training programs. We will continue to expand on the education portfolio, to ensure that our trainees will get varied exposure to obstetric medicine during their training, locally.

Other highlights of the year include the embracement of virtual care in the clinic. The concept of a virtual visit is well received by our patients and the feedback has been excellent! Currently, around 80% of all follow ups are done through virtual visits.



Dr. Kristen Marosi

## Feature CTU Update from Dr. Kristen Marosi

CTU Medicine continues to be the busiest service in the hospital. For the 2019 fiscal year, CTU discharged 5,488 patients. In order to meet these increasing demands, we have transitioned CTU-G to a full size CTU team, and converted to a 'drip' admission system to manage the high volume of daily admissions. This means that patient admissions are now distributed among five main CTU teams, as well as the MSSU (Medical short stay unit). This transition is better for patient safety and helps improve continuity of care. The five main CTU teams generally average twenty-five patients each, with MSSU averaging fifteen patients. With CTU patients spilling over to other patient care areas, CTU hopes to acquire more medicine beds in the upcoming bed map changes expected in 2020.

Our CTU Attendings, trainees and allied health teams work very hard to deliver patient-centered care in a timely manner. The KHSC internal medicine average acute LOS for 2019 was 6.4 days while the provincial average for patients matched for age and comorbidities is 6.8 days. For the 2020 fiscal year thus far, the average acute LOS is even lower at 6.2 days as compared with an expected LOS of 6.8 days.

The KHSC Medicine CTUs are an important care delivery system that aims to administer the highest standard of patient care, that is both safe and efficient. As well, this care delivery model serves as an important learning environment for Queen's medical students and residents through virtual visits.

## Geriatric Medicine



**Division Chair**  
DR. JOHN PUXTY

Dr. John Puxty is an experienced Geriatrician and the co-Director of the Centre for Studies in Aging and Health at Providence Care.

He has special interests in the development of eldercare services, distance-education and the use of information technology both as an aid to learning and strategies for effective Knowledge and Information transfer.

### Faculty Members & Rank

Associate Professor *Dr. John Puxty*

Professor *Dr. Chris Frank*

Associate Professor *Dr. Sudeep Gill*

Assistant Professor *Dr. Michelle Gibson* *Dr. Leah Nemiroff*  
*Dr. Agata Szlanta* *Dr. Erica Weir*

### Awards

Dr. Michelle Gibson *W. Ford Connell Award for Excellence in Teaching and Mentorship*

Dr. Michelle Gibson *Aesculapian Society's Lectureship Award – Term 2B*

### SAGE WEBINAR SERIES

In partnership with the Centre for Studies in Aging and Health, members of the Division of Geriatrics contribute to regular webinar continuing learning opportunities, which are archived and accessible at [sagelink.ca](http://sagelink.ca). A few of the 2019 Collaborative Education Webinar sessions included:

- A Pragmatists Approach to Frailty and Aging: Why, Who and What to do, Dr. John Puxty
- Advance Care Planning, Goals of Care, etc.: Strategies for End-of-Life Conversations, Dr. Chris Frank
- Serial Killers in Healthcare, Dr. Chris Frank
- These Fragile Bones, Dr. John Puxty

### SELECTED PUBLICATIONS

Gill SS. All, Some or None? Statin Prescribing for Frail Older Adults. CMAJ. 2019;191(2): E30-E31. doi:10.1503/cmaj.181671

Molnar F, Frank CC. Optimizing Geriatric Care with the GERIATRIC 5Ms. Can Fam Physician. 2019;65(1):39.

### Mission Statement

**To promote excellence in clinical service, education, research and innovation intended to improve health care out-comes for frail seniors throughout Southeastern Ontario**

### Number of Publications

**12**

### Number/Value of Grants

**\$163K+**





*Dr. Leah Nemiroff*

Although it is a tough choice, Namaste is her favourite local & go-to restaurant in Kingston!

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## Faculty Profile Dr. Leah Nemiroff

Dr. Nemiroff joined the Department of Medicine in 2018 at the rank of Assistant Professor in the Division of Geriatric Medicine. Before medicine, she was a marine biologist in Nova Scotia. She loved the sailboats, the whales and fresh air in the summer but she got restless studying spectrograms indoors during the other 9 months of the year. She had always loved volunteering in hospitals so medicine seemed like a natural next step. Like so many people, she had a beloved grandmother with Alzheimer's disease. In clerkship, she saw people like her everywhere – on medicine, surgery, in emergency and she witnessed huge variability in clinician comfort with geriatric patients. Dr. Nemiroff's experience highlighted how valuable this specialty is within medicine. To her, geriatrics is the perfect combination of complex medicine and whole-person care.

Dr. Nemiroff completed her subspecialty training at Dalhousie University in Halifax. She notes that their program is very robust, but they are saturated with Geriatricians. She had to look around for jobs (turns out they are abundant – we need more geriatricians!) and visited Queen's during her job hunt. The Department of Medicine, the Division of Geriatric Medicine, and beautiful Kingston all won her over. Her spouse was also happy with the location, and the move brought them a lot closer to family. It was a win-win situation!

Dr. Nemiroff's favourite thing is to be near water – on it, in it, under it, near it! Her idea of fun involves hiking, swimming, snorkeling, scuba diving, and boating. Dr. Nemiroff has only started tapping into the amazing nature around Kingston and she looks forward to exploring more!

She currently works as an attending on the inpatient specialized geriatrics unit at Providence Care Hospital with patients who need specific geriatrics care and/or rehabilitation. She's see a lot of patients with complex medical conditions, frailty, polypharmacy, falls, and cognitive impairment. Her and her team's goal is to get people home, and they have a talented and determined allied health team helping them do that.

Her research interests are in frailty, polypharmacy, and advance care planning. She is currently working towards her Masters of Medical Education (through Dundee University). She started the program in September 2019 and has found it very interesting. She has already found that it is making her a better educator. She is the course director for the Med 1 Principles of Geriatrics, Oncology, and Palliative care course.

One of the goals of her MMed is to build the skill set necessary to develop a subspecialty program for Geriatric Medicine at Queen's. They are growing as a division and building capacity for that as well. She is also looking forward to ongoing collaboration and research opportunities with her colleagues to integrate concepts like Clinical Frailty into routine medical care.

Dr. Nemiroff thinks Kingston is a beautiful city, surrounded by water (important!), and full of friendly and welcoming people. She stated that it has been a pleasure to work here so far and that the Division of Geriatric Medicine and the Department of Medicine are supportive and responsive to new faculty, and she feels very happy with her choice to practice here.

Although it is a tough choice, Namaste is her favourite local & go-to restaurant in Kingston!

## Hematology



**Division Chair**  
DR. DAVID LEE

Dr. David Lee is a Hematologist, the Chair of the Department of Medicine Morbidity and Mortality Rounds, and Director of the Anticoagulation Management Service. His practice and teaching encompasses benign and malignant conditions across ambulatory and inpatient settings. He is an excellent educator and has been recognized on numerous occasions by his learners.

### Faculty Members & Rank

Associate Professor *Dr. David Lee*

Professor *Dr. Paula James*

Associate Professor *Dr. Annette Hay*

Assistant Professor *Dr. Janet Lui* *Dr. Natasha Satkunam*

### Education/ Training Program Update:

The fully accredited Hematology training program continues to provide exceptional and innovative training for our residents, led by Dr. Lui and Dr. Dubeabout. Successful programs breed successful residents: our residents continue to garner awards for research presentations and have been awarded prestigious fellowships (e.g. M.D. Anderson Cancer Center).

The hemostasis research program led by Dr. James continues its tradition of training graduate students, post-docs, and clinical fellows across laboratory and clinical domains. In 2019, there were three graduate students in hemostasis (Dr. James) and one CCTG fellow/CIP trainee (supervised by Dr. Hay).

The Blood and Coagulation Course continues its dynastic run as a model course in undergraduate medical education, under the helm of course chair Dr. James. The course consistently garners high ratings by students, while the teaching faculty are honored by teaching awards, year after year, including 2019.

### Awards

Dr. David Lee *Aesculapian Society Lectureship Award*

### DIVISIONAL HIGHLIGHTS

- The Division of Hematology welcomed one new faculty members in 2019: Dr. Natasha Satkunam. Dr. Satkunam's academic focus will be in healthcare quality, and she will be assuming the directorship of the Blood and Coagulation course.

### Mission Statement

**To ensure excellence in the care of patients with blood disorders**

**To provide the highest standards of undergraduate and postgraduate Hematology education**

**To advance knowledge in diseases of the blood to the benefit of patients and society**

### Number of Publications

**25**

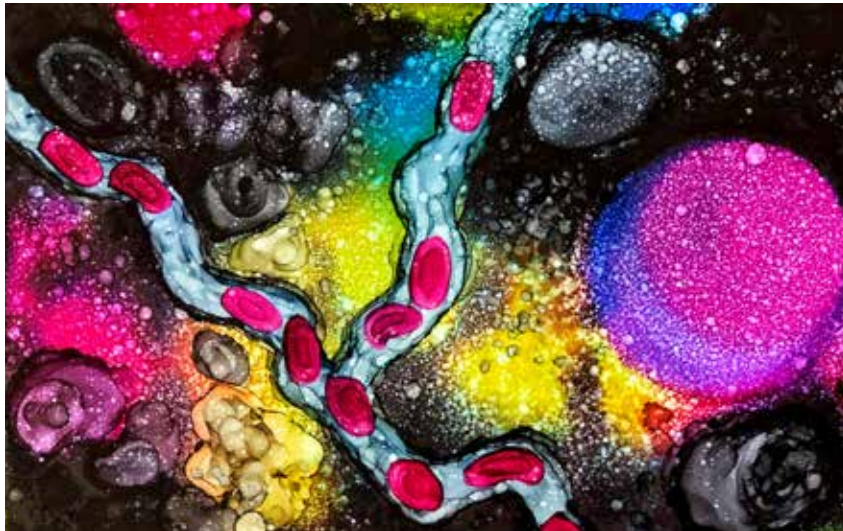
### Number of Learners

**2 PGY4**

**3 PGY5**

### Number/Value of Grants

**\$229K+**



(left) Hematology Art by David Lee

- The Division and its members continue to develop clinical and academic synergy with the Department of Oncology, Department of Pathology and Molecular Medicine, Translational Institute of Medicine, and Canadian Cancer Trials Group. Its members contribute to a variety of external organizations and institutions including Cancer Care Ontario, American Society of Hematology, Thrombosis Canada, and the International Society on Thrombosis and Hemostasis.
- In 2019-2020, Dr. James' internationally recognized hemostasis research program published 11 papers. Dr. James has also secured grants from SEAMO to investigate the coagulopathy associated with COVID-19 (\$195K) and from the Canadian Hemophilia Society to study hemophilia carriers (\$150K).
- As Senior Investigator in the Canadian Clinical Trials Group, Dr. Hay continues to provide important leadership in advancing a national CAR-T cell translational initiative, and aligning data linkage across multiple large national cancer databases. The outcome of a 2020 CFI infrastructure grant application for CAR-T cell therapy is eagerly awaited.

#### CLINICAL UPDATE

The Division provides care to patients with benign and malignant hematologic disorders across traditional ambulatory and inpatient settings, as well as leveraging eConsult, video, and telephone platforms. Clinical highlights from 2019-2020 include the initiation of entirely outpatient autologous stem cell transplant.



Dr. Janet Lui

#### Faculty Profile Dr. Janet Lui

A native Calgarian, Dr. Janet Lui completed an honours bachelor's degree in Cellular, Molecular, and Microbial Biology at the University of Calgary prior to completing her undergraduate medical studies and Core Internal Medicine training at the University of Alberta. She subsequently completed her fellowship in Hematology at the University of Ottawa.

Dr. Lui is an Assistant Professor in the Department of Medicine, cross-appointed to the Department of Oncology. She maintains a large General Hematology practice at the Kingston General Hospital, the Hotel Dieu Hospital, and the Cancer Centre of South Eastern Ontario.

Dr. Lui's chief academic interest is in medical education. She is the Competency Based Medical Education (CBME) lead for the Division of Hematology, and is currently enrolled in the renowned Masters of Health Professions Education program at the University of Illinois at Chicago. In 2016, she was awarded the Queen's University Internal Medicine Sub-Specialty Teaching Award.



## Infectious Diseases



**Division Chair**  
DR. GERALD EVANS

Dr. Gerald Evans is a Professor in the Departments of Medicine, Biomedical & Molecular Sciences, and Pathology & Molecular Medicine at Queen's University. He is a former President of the Association of Medical Microbiology and Infectious Disease (AMMI) Canada, the professional society for Medical Microbiologists and Infectious Disease physicians in Canada. He is a member of the Ontario Anti-infective Review Panel, and Chair of the Guidelines Committee of AMMI Canada. His research interests include clinical guideline development, antimicrobial pharmacology, and health technology assessment for optimal drug utilization.

### Faculty Members & Rank:

**Professor** *Dr. Gerald Evans*

**Associate Professor** *Dr. Elaine Petrof*

**Assistant Professor** *Dr. Jorge Martinez-Cajas* *Dr. Santiago Perez-Patrigueon*  
*Dr. Evan Wilson*

### DIVISIONAL HIGHLIGHTS

- The Division of Infectious Diseases welcomed Dr. Santiago Perez-Patrigueon to the Department of Medicine at Queen's University. He arrived in September 2019 from the Instituto Nacional de Ciencias Medicas y Nutricion Salvador Zurbiran (INCMNSZ). Dr. Perez-Patrigueon has a specific interest in HIV infection but has a broad clinical experience in general infectious diseases. His arrival continues to expand the person-power capacity within the Division and has the added advantage of adding to the linguistic power of our group as he is fluent in Spanish and French as well as English.
- The Division also acknowledged the retirement of Dr. Elaine Petrof in October 2019. While a member of the Division of Infectious Diseases here at Queen's University, Dr. Petrof was an integral part to the advancement of research in gastrointestinal infections and in particular the management and treatment of *Clostridioides difficile* infections in humans. The Division gratefully acknowledges her work while a member of our group and wishes her the best in the future.
- The Division is completing the required documentation necessary to establish a subspecialty Fellowship Program in Infectious Diseases at Queen's University and KHSC. Dr. Evan Wilson is leading this effort with the able help of Lindsay Crawford, the Department of Medicine Education Consultant and as well as the Faculty Office of Postgraduate Medical

### Number of Publications

5

### Number/Value of Grants

\$11K+

## The Division continues to expand its health services research with piloting an expansion of our outpatient ambulatory antibiotic therapy.

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Education and the Associate Dean of PGME, Dr. G. Ross Walker. We hope to have our first fellowship trainee in place in July 2022.

- The Division continues to expand its health services research with piloting an expansion of our outpatient ambulatory antibiotic therapy under the guidance of the Director of the Infection and Immunity clinic, Dr. Martinez-Cajas. Dr. Martinez continues to work on our capacity to deal with increasing requests for consultation on patients with Lyme disease and those with complex infectious disease issues requiring close follow up in the outpatient environment. The Division is looking to improve its ability to provide outpatient care for patients in an attempt to reduce the use of hospital beds through both the OPAT program and HIV patient care. Research continues within the HIV program as our Centre continues to be involved with the Ontario HIV Treatment Network (OHTN), and the Canadian HIV trials group. Led by Dr. Perez-Patrigeon, we have an application in for a CIHR grant to study radical cure strategies for persons living with HIV.
- The Division continues to look at regional expansion of programs in Antibiotic Stewardship throughout the region, at KHSC and regional partner hospitals, as well as the provision of Infection Prevention & Control (IPAC) expertise across the Southeast Ontario region.
- Lastly, the announcement on the last day of 2019 of the emergence of a novel coronavirus in Wuhan, China is likely to have a significant impact on the activities within the Division of Infectious Diseases as they will be spearheading the provision of IPAC services, as well as clinical care for patients who become infected as this virus emerges as a global pandemic. There continues to be efforts to increase divisional faculty by filling a current open slot for an Infectious Diseases physician and to recruit other members in future recruitment planning over the next 5 years.



*Dr. Santiago Perez-Patrigeon*

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### **Faculty Profile** Dr. Santiago Perez-Patrigeon

Meet Dr. Santiago Perez-Patrigeon, an Assistant Professor in the Division of Infectious Disease. Dr. Perez-Patrigeon's decision to become a physician was influenced by his father, who double majored in Medicine and Acting. Although his father decided to pursue acting, his knowledge of medicine was evident throughout Dr. Perez-Patrigeon's childhood. Dr. Perez-Patrigeon completed a clinical fellowship in HIV/AIDS and a PhD in HIV-Immunology at Institut Pasteur in Paris, France. He worked as a clinician-researcher at Instituto Nacional de Ciencias Médicas y Nutrición 'Salvador Zubirán' in Mexico City for 10 years where he established several collaborations both nationally and internationally. Getting a highly competitive faculty position at Instituto Nacional de Ciencias Médicas y Nutrición is one of his proudest accomplishments!

His main interest is translational research on infectious immune-pathogenesis, mainly HIV, as well as clinical trials. In Mexico he led an observational Acute HIV Cohort and he plans to pursue HIV cure clinical trials as well as translational research strengthening the collaboration between Canada and Mexico. He has always been interested in academics and has a passion for teaching undergrad and postgrad students as well as residents.

When not practicing medicine and conducting research, Dr. Perez-Patrigeon enjoys acting and training for marathons and triathlons. He enjoys living in Kingston and is getting climatized to the Canadian winters. He enjoys the tranquility of the city, lack of traffic and the ability to bike and walk to work. Even on the cold -30 winter days, Dr. Perez-Patrigeon would be spotted biking to work! Dr. Perez-Patrigeon's go-to local restaurant is Chez-Piggy!

## Nephrology



**Division Chair**  
DR. DAVID HOLLAND

Dr. David Holland is a Nephrologist with a busy clinical practice in general nephrology and kidney transplantation. His research interests include outcome-based studies in chronic kidney disease and kidney transplantation. Dr. Holland has been extensively involved in undergraduate and postgraduate medical education and has been the recipient of numerous Aesculapian Society Teaching Awards and the Faculty of Health Sciences Education Award.

### Faculty Members & Rank

Associate Professor	<i>Dr. David Holland</i>	
Professor	<i>Dr. Rachel Holden</i>	<i>Dr. Karen Yeates</i>
Associate Professor	<i>Dr. Jocelyn Garland</i> <i>Dr. M. Khaled Shamseddin</i> <i>Dr. Christine White</i>	<i>Dr. Eduard Illiescu</i>
Assistant Professor	<i>Dr. Sarah Moran</i> <i>Dr. Hasitha Welihinda</i>	<i>Dr. Samuel Silver</i>

### Education/ Training Program Update

The Adult Nephrology Training Program at Queen's University was again fully accredited by the Royal College of Physicians and Surgeons of Canada in 2019. Since adopting an innovative competency based medical education (CBME) curriculum, the CBME model has allowed our Nephrology trainees to achieve their academic and training milestones and enhanced their performance as competent Nephrologists serving their societies. In July 2019, the role of Program Director transitioned from Dr. Khaled Shamseddin to Dr. Hasitha Welihinda.

### Awards

Dr. David Holland	<i>Aesculapian Society Undergraduate Teaching Award – Term 3</i>
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### NOTABLE HIGHLIGHTS

- The Division of Nephrology welcomed Dr. Sarah Moran to the Department of Medicine at Queen's University. Dr. Moran's research focuses on the development of novel urinary biomarkers of renal inflammation and fibrosis. She is the South Eastern Ontario member of the Ontario Renal Network provincial pregnancy priority panel driving strategies to optimize care of these complex patients.

### Mission Statement

**The Nephrology Division in the Department of Medicine at Queen's University strives to provide:**

**Excellent clinical care throughout the Kidney Disease continuum.**

**Comprehensive training in adult nephrology to undergraduate, postgraduate, established physicians, allied health care professionals and education in preventative strategies to family practitioners and the general public.**

**New scientific information to the medical community in general and the nephrology community specifically.**

**Leadership in clinical care delivery, research and education in underserved areas recognized to be at high risk for chronic kidney disease.**

### Number of Publications

39

### Number of Learners

4 PGY4

3 PGY5

### Number/Value of Grants

\$717K+



(above) *Live Donor Event*

- The transplant program continued to grow in 2019 with the addition of our live donor program on top of the existing deceased donor program. These donors were celebrated at the second annual Living Kidney Donor event in April 2019. At the time of this event, over 15 individuals have donated a kidney through the live donor program!
- The division continues to place a major emphasis on patient centred care, with a push for home dialysis and transplantation, as well as a very active PFAC committee.

### NOTABLE PUBLICATIONS

Silver SA, Alaryni A, Alghamdi A, Digby G, Wald R, Iliescu E. Routine laboratory testing every 4 versus every 6 weeks for patients on maintenance hemodialysis: a quality improvement project. *American Journal of Kidney Diseases* 2019 (73): 496-503.

**Journal Impact Factor: 6.618**

Lamarche MC, Hopman WM, Garland JS, Holden RM. Relationship of coronary artery calcification with renal function decline and mortality in predialysis chronic kidney disease patients. *Nephrology Dialysis Transplantation* 2019 34(10): 1175-1722.

**Journal Impact Factor: 4.531**

Gaillard F, Legendre C, White CA. GFR Assessment of Living Kidney Donors Candidates. *Transplantation* 2019 103(6): 1086-1093.

**Journal Impact Factor: 4.264**



*Dr. Hasitha Welihinda*

In his clinical practice, he has started a Conservative Care Renal Clinic to educate patients on the conservative management option and goals of care conversations.

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### Faculty Profile Dr. Hasitha Welihinda

Meet Dr. Welihinda – a Nephrologist and a palliative medicine physician in the Department of Medicine. Dr. Welihinda obtained his doctorate of medicine at the University of Manitoba, completed his internal medicine residency with the University of Saskatchewan, and has a bachelor's degree in computer science and mathematics from Brandon University. He is a member of the Ontario Renal Network and the Chair of the Palliative Care Pathway Task Group. In his clinical practice, he has started a Conservative Care Renal Clinic to educate patients on the conservative management option and goals of care conversations. He has integrated Conservative Care into the MCKC clinic to longitudinally follow patients and aid with symptom management. He also does dialysis withdrawal consultations and liaises with family physicians & hospice to provide end of life care support.

His unique computer science background and interest in data analytics resulted in the development his *Nephrology Monthly Review Report and Templated Letter* project. This software project takes live query Nephrology Patient data from HIS and provides a summary form (pulling and consolidating clinically relevant data from different areas of the database) with trends and interpretations based on current guidelines to make the review process more efficient. The program also provides warning flags when dangerous interactions may be present or high-risk medications in use which may otherwise be missed in review. Another bonus feature of this program is that it automatically generates English language letters to family physicians based on new orders entered into HIS!

His tech skills go beyond benefiting the Division of Nephrology, Dr. Welihinda has also developed an *Academic Advisor Template*, which takes query data from the CBME system (Elentra) and provides reports of progress, including EPA progress including contextual variables, statistical information such as breakdown of EPAs submitted by week/progress and is resident on track to graduate.



## Neurology



**Division Chair**  
DR. MICHEL MELANSON

Dr. Michel Melanson is a Neurologist and is currently the Director of the KHSC EMG laboratories. His research focus is in neuromuscular diseases and has collaborations with basic science researchers at the Queen's Center for Neurosciences. He studies clinical aspects of disorders such as ALS, Multiple Sclerosis and the Muscular Dystrophies. Additionally, he is lead investigator in several clinical trials in ALS and Inflammatory Neuropathies.

### Faculty Members & Rank

**Associate Professor** *Dr. Michel Melanson*

**Professor** *Dr. Garima Shukla*

**Associate Professor** *Dr. J. Gord Boyd* *Dr. Albert Jin*  
*Dr. Lysa Lomax* *Dr. Gavin Winston*

**Assistant Professor** *Dr. Ramana Appireddy* *Dr. Moogeh Baharnoori*  
*Dr. Shirin Jalini* *Dr. Giovanna Pari*  
*Dr. Stuart Reid* *Dr. Sean Taylor*

### Education/ Training Program Update

The Neurology Residency Training program has 2 residents in every PG year except for PGY5, where we have 3 residents. Our CaRMS match was very successful this year, and we will be welcoming 2 new Canadian grads this year, as well as 2 Visa Trainees. We also graduated our first EEG fellow in many years, and hope to continue an EEG Fellowship as well as build a new Stroke Fellowship program. Our residents participated in their yearly retreat, with invited speakers discussing topics such as investments, billing and community neurology. As a specialty, Neurology started Competence by Design (CBD) in July 2019, which has rolled out smoothly in the Neurology program at Queen's – given the program's history of years of successful CBME implementation prior to the formal Royal College launch of CBD.

### Awards

**KHSC Stroke Team** *Stroke Distinction Award*

### NOTABLE HIGHLIGHTS

#### Movement Disorders

In collaboration with the Division of Neurosurgery, we have been offering deep brain stimulation surgery for patients with Parkinson's disease. This novel treatment offers improved quality of life in patients with a variety of movement disorders and already 4 patients with Parkinson's disease have been implanted through our program.

### Number of Publications

41

### Number of Learners

2 PGY1

2 PGY2

2 PGY3

2 PGY4

3 PGY5

### Number/Value of Grants

\$166K+



**Dr. Al Jin**  
Stroke Team



**Dr. Shirin Jalini**  
Stroke Team



**Dr. Ramana Appireddy**  
Stroke Team

The stroke program had a busy and productive 2019.

#### NOTABLE HIGHLIGHTS – STROKE

- The Stroke program had a busy and productive 2019. Major innovations included the introduction of virtual care in the Stroke Prevention Clinic with up to a third of patient visits being conducted by secure videoconferencing. This initiative was led by Dr. Ramana Appireddy, who has continued to develop virtual care strategies as part of his research program.
- The Stroke Program also maintains a strong academic tradition with several conference presentations in 2019, and a dozen publications including a groundbreaking study on atrial cardiopathy in cryptogenic stroke led by Dr. Shirin Jalini. She is continuing to explore this fascinating and difficult area of research which remains a clinical priority throughout the international stroke community.
- The experiences and expertise of Queen's Neurology Stroke Program was shared throughout Canada at several invited lectures and educational series. In October, Dr. Albert Jin was invited to present a two hour training workshop, 'Stroke School for Internists: Developing Competency in Hyperacute Stroke Management' at the Canadian Society of Internal Medicine Annual Meeting in Halifax NS. In December, Drs. Jin and Alex Menard (Interventional Radiology) were invited by the Heart and Stroke Foundation of Canada, the Department of Health and Community Services, Government of Newfoundland, and Memorial University to present the Queen's and KHSC experience on starting and maintaining an EVT program.



**Dr. Lysa Lomax**  
Epilepsy Team



**Dr. Garima Shukla**  
Epilepsy Team



**Dr. Gavin Winston**  
Epilepsy Team

#### NOTABLE HIGHLIGHTS – EPILEPSY

- This year the EMU monitored 92 patients and we offered epilepsy surgery to 3 candidates.
- The First Seizure Clinic offered rapid assessment for approximately 250 patients with a presentation of new onset epilepsy.
- The Epilepsy Team continues to grow, and now offers neuropsychological testing for epilepsy patients, as well as social work support and a clinic nurse. In the future, we hope to add nutritionist support for an adult Ketogenic Diet Clinic, and the capacity to insert vagal nerve stimulators (VNS).

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## Feature Epilepsy Surgery

Prior to 2018 Kingston Health Sciences Centre (KHSC) lacked the designation and resources to perform epilepsy surgery. Over the past several years, with support from the Department of Medicine and KHSC leadership, with Dr. Lysa Lomax serving as a champion, we applied for and were designated as a District Epilepsy Centre (DEC). We then recruited faculty (in neurology, neurosurgery and radiology) and staff (in the EEG lab and neurology service-including nurses, technicians, neuropsychologists and community epilepsy agency liaison personnel) to perform the diagnostics that precede and guide epilepsy surgery. Our program is currently working towards being reclassified as a Regional Epilepsy Centre, the province's highest designation.

The most common target of epilepsy surgery is the temporal lobe (including the amygdala), however, epilepsy surgery can be used for removing lesions in other parts of the brain too. Temporal lobe surgery results are excellent, with 75-80% of patients becoming seizure free 1-year post-operation. Benefits are usually sustained, with half these people seizure free at 20-year follow-up. Results are not quite as good for surgeries on other parts of the brain.

So, what does the patient gain by undergoing the procedure? Reduced seizure severity of course. However, equally important reduction/elimination of seizures prevents the decline in the patient's mental capacity which would otherwise occur (and may even result in cognitive gains). Interestingly there is also a reduction in the incidence of unexplained sudden death, which is a rare, but substantial concern for people with epilepsy. Successful surgery generally improves the patient's quality of life, and the quality of life for those around them. While there are risks, including a 10% risk of a visual deficit (quadrantanopsia) and a 25% risk of verbal or visuospatial memory deficit, these risks pale compared with the potential benefits of surgery in well selected cases.

Check out a few of our [patient stories](#).



(above) *The Epilepsy Team*

## BY THE NUMBERS

### eVisit to the Home Pilot Study

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*Average Appointment Duration*

**10<sub>MIN</sub>**

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*Average Patient Travel Avoided*

**30.1<sub>KM</sub>**

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*Percentage of Patients that Preferred  
Video Visit to In-Person Visit*

**33%**

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*Patient Cost-Savings Per eVisit*

**\$52.83**

*Source: <https://otn.ca/providers/ohts/video-visits-for-stroke-follow-up/>*

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## Palliative Medicine

### Mission Statement

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**The Division of Palliative Medicine is dedicated to:**

**The development and provision of high quality, accessible palliative care through a regional model of integrated specialist and primary palliative care**

**Building capacity for primary palliative care through advocacy, mentorship, and education for undergraduate and post-graduate medical trainees, practicing physicians, and interdisciplinary team members**

**Providing clinical excellence in specialist palliative care to patients and families with complex palliative care needs**

**Training palliative medicine specialist physicians through the Royal College Subspecialty in Palliative Medicine and the CFPC Enhanced Skills program in Palliative Care**

**Participating in research to improve the quality of care and therapies for patients and families with palliative care needs**

### Number of Learners

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1 PGY5

### Number of Publications

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5



### Division Chair

DR. LEONIE HERX

Dr. Leonie Herx is a Palliative Care specialist and Clinical Director of Palliative Care at Providence Care. Dr. Herx helped to co-found the new RCPSC Subspecialty in Palliative Medicine, serving on the Royal College (RC) Working Group in Palliative Medicine, developing the Pediatric stream of the Subspecialty, and is now the Vice-Chair of the RC Specialty Committee in Palliative Medicine and a member of the RC inaugural examination board for Palliative Medicine. Dr. Herx's areas of interest are medical education, professional development, and advocacy for building palliative care capacity across the health care system.

### Faculty Members & Rank

Associate Professor [Dr. Leonie Herx](#)

Assistant Professor	<a href="#"><u>Dr. Alison Flanagan</u></a>	<a href="#"><u>Dr. Craig Goldie</u></a>
	<a href="#"><u>Dr. Majid Iqbal</u></a>	<a href="#"><u>Dr. Danielle Kain</u></a>
	<a href="#"><u>Dr. Natalie Kondor</u></a>	

### Education/ Training Program Update

The Division of Palliative Medicine has a robust education program aimed at increasing capacity for both specialist and primary palliative care through undergraduate (UGME), postgraduate (PGME) and continuing medical education.

The Palliative Medicine training program supported 1 Royal College subspecialty resident and 2 Enhanced Skills residents. The program graduated a resident in the second-ever cohort of Palliative Medicine subspecialists. Work continued on refreshing the Competency-Based curriculum for the Royal College subspecialty with simplified EPAs and assessments.

We offer a highly sought after biannual 4-day CPD course for family physicians interested in palliative care as well as one- and two-days courses through Pallium Canada's LEAP (Learning Essential Approaches to Palliative care) program. We continue to have a strong presence in the formal UGME curriculum including supporting clinical experiences for clerks.

### Awards

Dr. Leonie Herx	<i>Royal College of Physicians and Surgeons on Canada (RCPSC) Founder in Palliative Medicine</i>
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The Division's priority is to provide consultant-based care for patients with complex palliative care needs, and to focus on building capacity and access to high quality palliative care through education, partnerships and research.

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#### DIVISIONAL HIGHLIGHTS

- Clinical innovations this year include a new palliative care procedures clinic that runs once weekly through the Cancer Centre of South Eastern Ontario and ongoing development of a KHSC Quality Improvement Plan (QIP) for palliative care using an automated tool for early identification of patients admitted to acute care with unmet palliative care needs.
- This QIP initiative is focused on developing an approach for facilitating goals of care conversations and advance care planning using the Serious Illness Conversation Guide tool, basic symptom management and developing a plan of care for the community. This work is part of a multi-site grant through the Canadian Frailty Network.
- The Division's priority is to provide consultant-based care for patients with complex palliative care needs, and to focus on building capacity and access to high quality palliative care through education, partnerships and research.



*Assistant Professors, Dr. Craig Goldie (top) and Dr. Majid Iqbal (above).*



#### Feature Kingston Palliative Care Partnership (KPCP)

The Division is co-leading a new initiative known as the Kingston Palliative Care Partnership (KPCP), a group that brings together stakeholders in the Kingston region involved in the delivery of palliative care in the region, including Kingston Health Sciences Centre, Providence Care, Hospice Kingston, Home and Community Care (South East LHIN), the South East Regional Palliative Care Network, long term care and primary care. Dr. Herx is the Co-Chair of the KPCP. The KPCP is working together to develop a regional, integrated model of palliative care based on national and provincial standards to better serve our patients and families in the KFLA region.

# Respirology & Sleep Medicine

## Mission Statement

**To provide excellence in the care of respiratory patients in our community. To continuously improve the treatment and prevention of respiratory illnesses by conducting and supporting high quality clinical research, and by educating students and caregivers in state-of-the-art clinical practice of respiratory medicine.**

## Number of Learners

**3 PGY4**

**2 PGY5**

## Fellows

**2**

## Number of Publications Peer Reviewed Articles

**85**

## Number/Value of Grants

**\$850K+**



**Division Chair**  
DR. DIANE LOUGHEED

Dr. Diane Lougheed is a Respirologist and the Medical Director for the Asthma Research Unit. Dr. Lougheed is a clinician scientist whose primary clinical interests are asthma and cystic fibrosis in adults. Her research interests include asthma symptom perception, mechanisms of cough in asthma, work-related asthma, asthma health services and outcomes research, and guideline implementation. She has received funding from CIHR, AllerGen NCE, the Ontario Thoracic Society and two Academic Health Sciences Centre AFP Innovation Fund grants. She has had a major role in many aspects of the provincial asthma strategy, including leading the development, evaluation, and implementation of a standardized care map for management of adults with acute asthma in emergency departments.

## Faculty Members & Rank

Professor	<u>Dr. Diane Lougheed</u>	
Professor	Dr. Michael Fitzpatrick	Dr. Alberto Neder
	Dr. Denis O'Donnell	Dr. Juan Pablo de Torres
Associate Professor	Dr. Christine D'Arsigny	Dr. Susan Moffat
	Dr. Onofre Moran-Mendoza	Dr. Christopher Parker
Assistant Professor	Dr. Sophie Crinion	Dr. Geneviève Digby
	Dr. Helen Driver (PhD)	Dr. Paul Heffernan
	Dr. Christina Liak	

## Education/ Training Program Update

This past year was a successful one for the Respirology Training Program. We have gradually started to migrate to the Royal College CBD format. This has resulted in improved evaluation information and increased the value of the feedback for our residents.

The program graduated 2 fellows this year. Both of them were successful with their recent examinations. We had a successful CaRMS/VISA match and are welcoming 3 new residents into the program.

The program hosted a successful annual CanMEDS conference for the five Ontario Respiratory training programs again this year. This year, speakers included topics such as Smoking Cessation, Leadership in Medicine, and Predatory Publishing.

The Division and Program also welcomed new faculty (Dr. de Torres, Dr. Liak and a community affiliate with Dr. Davis ) who have brought their expertise and energy to the Program.



(top) Dr. Susan Moffatt  
(above) Dr. Juan Pablo de Torres

## Awards

<b>Dr. Susan Moffatt</b>	<i>Dept. of Medicine Ron Wigle Bill Depew Master Clinician Award, W. F Connell Award for Excellence in Teaching 2019-2020 Aesculapian Society Lectureship Award - Term 3</i>
<b>Dr. Paul Heffernan</b>	<i>Critical Care Medicine Fellow's Teaching Award</i>
<b>Dr. Mike Fitzpatrick</b>	<i>Dr. D. Laurence Wilson Professionalism Award</i>
<b>Dr. Denis O'Donnell</b>	<i>Honorary Lifetime Achievement Award - ERS</i>

## DIVISIONAL HIGHLIGHTS

This year, we welcomed two new Faculty members to our Division – Dr. Juan Pablo de Torres and Dr. Christina Liak. Dr. de Torres joined us from Spain as a Professor, bringing expertise in COPD epidemiology and lung cancer screening. He will be focusing on general respirology, COPD and supporting the Small Nodule Clinic. Dr. Liak transitioned from a locum position to become an Assistant Professor, specializing in general respirology and sleep medicine.

Division members continued to excel within the clinical, educational and research mandates of our mission. We offer state-of-the art chronic disease management programs for COPD, pulmonary rehabilitation, pulmonary hypertension, sleep disorders, asthma, and cystic fibrosis. Newer procedures such as endobronchial ultrasound (EBUS), indwelling pleural catheters and transbronchial lung cryobiopsy (TBLC) are revolutionizing our care we provide locally for patients with lung cancer and interstitial lung disease, within the with the Lung Diagnostic Assessment Program (LDAP) and ILD Clinic, respectively. Our Respirology Fellowship program, which is flourishing under the leadership of Dr. Paul Heffernan, graduated 2 more fellows this year, while Dr. Chris Parker assumed the helm of the undergraduate respiratory curriculum from Dr. Susan Moffatt. Our world-renowned clinical physiology researchers, Drs. O'Donnell and Neder, became the most prolific researchers in dyspnea and respiratory exercise physiology in the world.

Our Division members were honoured with numerous prestigious awards this year. Notably, Dr. Denis O'Donnell received an Honorary Lifetime Achievement award from the European Respiratory Society for his contributions to clinical physiology and management of dyspnea. Dr. Susan Moffatt added the DOM's Bill Depew/Ron Wigle Master Clinician Award, another F.W. Connell Award for Excellence in Teaching, and the Aesculapian Society Lectureship Award to her dossier. Dr. Geneviève Digby received the SEAMO Endowed Education and Scholarship Fund Award and Dr. Mike Fitzpatrick received the SOM's D. Laurence Wilson Professionalism Award.

## Clinic Profile Sleep Clinic

The Sleep Clinic in KHSC, a 6-bed unit located on Kidd 6, continues to expand and operates as a multi-divisional network to aid patient experience. The team currently consists of six registered sleep technologists, working in the Sleep Lab under the management of Dr. Helen Driver, PhD, as well as one Nurse Practitioner – Ms. Jennifer Olajos-Clow, and a Sleep Educator – Ms. Nancy Farr. The medical team consists of four Respirology trained physicians – Dr. Sophie Crinion, Dr. Michael Fitzpatrick, Dr. Christina Liak and Dr. Nicholas Vizoris, as well as two Neurology trained physicians – Dr. Garima Shukla and Dr. Lysa Lomax. In 2019, there was a total

of 1,111 attended, inpatient polysomnographies completed, as well as over 40 daytime studies (maintenance of wakefulness tests (MWT) and multiple sleep latency tests (MSLT)). The Sleep Clinic received, on average, 160 referrals per month. During 2019, Medical Directorship of the Sleep Clinic was taken over by Dr. Sophie Crinion and the Division of Respirology welcomed Dr. Christina Liak to permanent faculty. Two grant funding applications were successful for research planned within the Sleep Clinic, and the team looks forward to expanding the research opportunities and output in 2020!

# Rheumatology

## Mission Statement

### To Provide:

**Care that is excellent and compassionate for patients with rheumatic diseases in our region**

**Education, at all levels of medical education including undergraduate, postgraduate and continuing education**

**Research that is cutting edge and translational in areas including:**

- **Conditions of bone and cartilage**
- **The epidemiology of osteoporosis**
- **The patient experience**

## Number of Publications

6

## Number of Learners

2 PGY4

2 PGY5



**Division Chair**  
DR. MAJA JONEJA

Dr. Mala Joneja is an Associate Professor and the Division Chair for the Division of Rheumatology. Along with Dr. Stephen Archer, she coordinates Medical Grand Rounds for Queen's University Department of Medicine. Her interests in medical education include role modeling in postgraduate medical education, the hidden curriculum, professionalism and transformative learning.

### Faculty Members & Rank

Associate Professor *Dr. Mala Joneja*

Professor Emeritus *Dr. Tassos Anastassiades*

Professor *Dr. Tanveer Towheed*

Assistant Professor *Dr. Marie Clements-Baker Dr. Tabitha Kung*

### Education/ Training Program Update

The Rheumatology training program had another great year. They introduced the full Royal College version of CBME and the residents are doing very well with this! The residents have worked hard and produced a number of posters at the Canadian Rheumatology Association conference at the end of February. PGY5, Dr. Bailey Dyck received the silver award for her quality improvement project! This reviewed all projects submitted across Canada so this was quite an honour. The new residents started on July 1st with a bang and they look forward to finding creative ways to carry on learning rheumatology through the coming year whether in person or by telemedicine!

### Awards

**Dr. Marie Clements-Baker** *Nominated for the KHSC Exceptional Healer Award*

### DIVISIONAL HIGHLIGHTS

- The Division of Rheumatology continues to expand our horizons with OTN Osteoporosis clinics and E-consults in Rheumatology and Osteoporosis. (Dr. Tanveer Towheed)
- The division continues to run busy outpatient clinics in General Rheumatology, Early Arthritis, Vasculitis and Connective Tissue Diseases.
- The division maintains strong collaboration with both Nephrology and Respiriology in providing care to patients with complex multi-system autoimmune diseases.
- Dr. Mala Joneja in her role as Director, Diversity and Equity in the School of



Medicine participated in the granting of a posthumous medical degree to Dr. Ethelbert Bartholomew, a Black medical student, who had unfairly been excluded from Queen's School of Medicine in 1918. This represented the beginning of the university's efforts to right a past wrong.

- Dr. Tassos Anastassiades continues to be active in research with the following publications:
  1. Adachi, J.D., Berger, C., Barron, R. *et al.* Predictors of imminent non-vertebral fracture in elderly women with osteoporosis, low bone mass, or a history of fracture, based on data from the population-based Canadian Multicentre Osteoporosis Study (CaMos). *Arch Osteoporos* 14, 53 (2019).
  2. Guowei Li, Jerilyn C. Prior, William D. Leslie, Lehana Thabane,

Alexandra Papaioannou, Robert G. Josse, Stephanie M. Kaiser, Christopher S. Kovacs, Tassos Anastassiades, Tanveer Towheed, K. Shawn Davison, Mitchell Levine, David Goltzman, Jonathan D. Adachi. *Diabetes Care* Apr 2019, 42 (4) 507-513;

3. Hopman, W., Berger, C., Joseph, L. *et al.* Longitudinal assessment of health-related quality of life in osteoporosis: data from the population-based Canadian Multicentre Osteoporosis Study. *Osteoporos Int* 30, 1635–1644 (2019).
4. Gao, Y.; Sun, Y.; Yang, H.; Qiu, P.; Cong, Z.; Zou, Y.; Song, L.; Guo, J.; Anastassiades, T.P. A Low Molecular Weight Hyaluronic Acid Derivative Accelerates Excisional Wound Healing by Modulating Pro-Inflammation, Promoting Epithelialization and Neovascularization, and Remodeling Collagen. *Int. J. Mol. Sci.* 2019, 20, 3722.

## Clinic Feature Early Arthritis Clinic

Dr. Tabitha Kung provides early access to diagnosis of Rheumatoid Arthritis through the Early Arthritis Clinic. Referrals of new patients with atraumatic new onset joint effusions are welcome, especially those with a positive Rheumatoid Factor (RF) or Cyclic Citrullinated Peptide (CCP) Antibody.

This bi-monthly specialized clinic at Hotel Dieu Hospital (HDH) aims to detect and diagnose Rheumatoid Arthritis early, the most common chronic inflammatory arthritis affecting approximately 1 out of every 100 Canadian adults. Dr. Kung utilizes point-of-care Musculoskeletal Ultrasound to help detect very early inflammatory arthritis to aid in early diagnosis. This is a teaching clinic that is attended by Rheumatology Fellows, Core Internal Medicine Residents and Clinical Clerks, seeing both new and follow-up patients.

The ultimate goal of the Early Arthritis Clinic is to identify Rheumatoid Arthritis early and provide high quality, evidence-based care. Early identification and management of Rheumatoid Arthritis has been shown to improve outcomes including lessening joint damage and disability, and improving quality of life. Patients diagnosed in the Early Arthritis Clinic continue to be followed by Dr. Kung for their long-term Rheumatoid Arthritis care.



## Feature Multidisciplinary Clinics

Dr. Marie Clements-Baker runs two multidisciplinary clinics alongside colleagues in Nephrology and Respiriology. She finds it very exciting to have multidisciplinary clinics where we 'share care.'

Rheumatologic diseases often affect many organ systems and frequently involve the input of multiple specialists. To help with some of the more challenging cases the division has moved forward with combined care so that they have ongoing dedicated time to review their cases together. This is done in 2 different scenarios. First, the Specialized Kidney Clinic combining Nephrology, Rheumatology and sometimes Respiriology, deals with complex vasculitis and connective tissue disease patients who have a component of glomerulonephritis. This clinic involves Dr. Jocelyn Garland, Dr. Sarah Moran, Dr. Christine D'Arsigny and Dr. Clements-Baker. In this clinic they see approximately 8-10 patients a month. They are able to offer '1 stop shopping' for complex patients who may need treatment changes or investigations of a variety of presentations of disease.

The interstitial lung disease Resp/Rheum combination patients are another group of shared patients. In this scenario, they see the patients in their respective dedicated clinics but they meet monthly to review each of the cases. These meetings usually involve Dr. Moran-Mendoza and his ILD fellow, Dr. Clements-Baker as well as any other learners who have an interest to review labs and imaging and hear the discussion. Generally speaking they see about 3-4 new consults of these patients each week to help rule in or out autoimmune disease. This directs the course of further investigation and treatment for these patients.

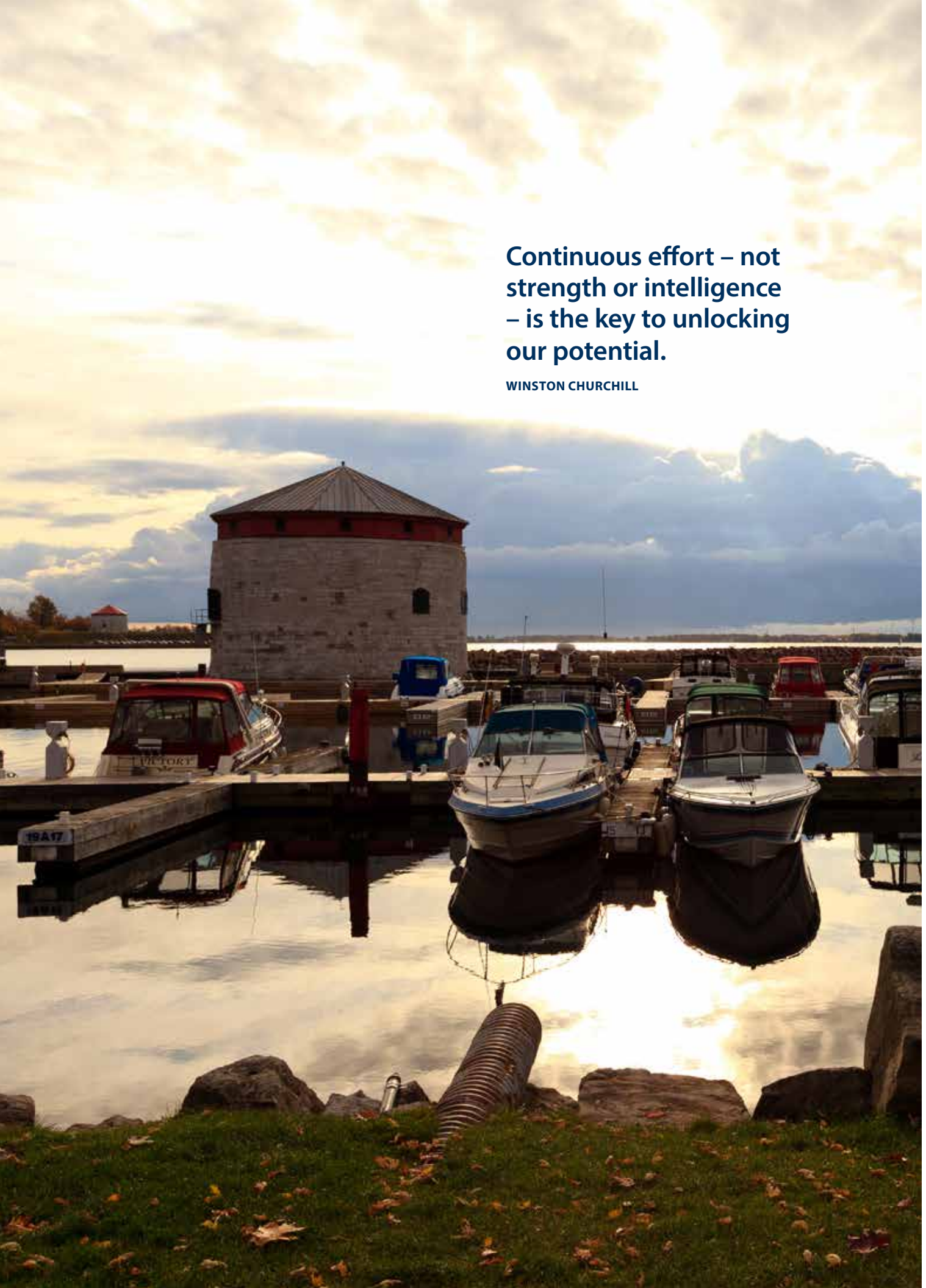
It has taken a bit of time to get some of the bugs ironed out for both of these approaches, however this combined approach appears to be very beneficial to the care of the patients!

(far left) Dr. Tabitha Kung

(left) Dr. Marie Clements-Baker

**Continuous effort – not  
strength or intelligence  
– is the key to unlocking  
our potential.**

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