

# A year for Reflection

DEPARTMENT OF MEDICINE | ANNUAL REPORT 2019/2020 Dalhousie University, Faculty of Medicine | Nova Scotia Health, Central Zone

### VISION

To be leaders in academic medicine providing innovative, collaborative and appropriate care that is sustainable.

### MISSION

We are a diverse group of highly trained professionals dedicated to improving health through education, research and providing exemplary clinical care to our community.



DALHOUSIE UNIVERSITY FACULTY OF MEDICINE Department of Medicine

health



# A year for **Reflection**

### Welcome to our 2019/2020 annual report!

As we close our strategic plan for 2013/2018 and launch our new *Forward Together* 2020/2024 strategic plan, it seemed appropriate to use the theme of reflection to look back on the extraordinary year we have had together.

As I reflect on this past year, I am so proud of the way we have risen, as a department with all of our stakeholders, to the challenges we have faced, continuing to improve, becoming more agile and making health care better for Nova Scotians, particularly as we prepared to respond to a global pandemic at the end of our 2019/2020 year.

While the main impacts of COVID-19 took place in 2020/2021, we spent February and, in particular, March planning and preparing to ensure we were keeping our people safe and slowing the spread of the virus. I can't say enough about the way you, as department and team members, have responded to this crisis. You will see one example of this creativity and resilience in the innovative long-term care solutions; Dr. Searle (Division of Geriatric Medicine) and his colleagues provided to residents of Northwood during the COVID-19 outbreak.

Across the Department, we are collaborating and bringing a strategic focus to our work. In our report, you will read about Dr. Sonja McVeigh's (Division of Physical Medicine & Rehabilitation) work with colleagues across the country to optimize rehabilitation care for spinal cord injury patients.

We continue to lead care through innovation, as Dr. Clark (Division of Nephrology) and his team are doing to improve access to dialysis for all Nova Scotians.

We are doing amazing research. In this annual report you will see how Leah Cahill, Ph.D. continues to drive research excellence through her position as our Howard Webster Department of Medicine Research Chair. We continue to train the best. Dr. Chiasson's (Division of Respirology) End-of-Life Training Program provides an example of the outstanding experience we are delivering to our residents. Dr. Brothers and Dr. Mah, two of our successful CIP applicants, are a tribute to the calibre of residents we have in our Department.

In this past year, we were in high gear putting the finishing touches on our new strategic plan. We wanted the strategy to cover the broad needs of our Department and stakeholders reaching further in our internal and external consultation process than we have ever done before.

It is our hope that this annual report gives you a sense of how hard we are working to make a difference in the lives of patients, learners, professional colleagues and others who benefit from our education, research and clinical care.

We should be proud of our department, and the clinical and academic teams we lead and participate in. Whether in research, education or clinical work, it is coming together in these teams, and as a department, that is making a difference for people throughout our provincial health care system.

In the following pages, I hope you will enjoy reading about our outstanding work in action. Please join me in reflecting on the ways in which we have adapted, been creative and made things better for Nova Scotians in both good and challenging times.

As always, thank you so much for your support, commitment, participation and professionalism.

### CHRISTINE SHORT, MD, FRCP(C), FACP

Head, Department of Medicine, Dalhousie University Chief, Department of Medicine, Central Zone, Nova Scotia Health Associate Professor of Medicine, Dalhousie University

# A year for Reflection

### INTRODUCTION

The 2019/2020 Annual Report provides a window into some of the stories and celebrations that convey the depth and breadth of the great work being done across the Department of Medicine over the past fiscal year. This report also marks the final year of our 2013/2018 strategic plan, and we have showcased our work across the three strategic pillars: Research: Driving research exellence; Education: Attracting and growing the best; Quality Care: Leading quality care through innovation. We look forward to sharing a glimpse into the range of great initiatives being conducted throughout the divisions of the Department of Medicine.



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DEPARTMENT OF MEDICINE

Dalhousie University, Faculty of Medicine – Nova Scotia Health, Central Zone

### DEPARTMENT OF MEDICINE

Dalhousie University, Faculty of Medicine - Nova Scotia Health, Central Zone

### The Department of Medicine is a diverse group of highly trained professionals dedicated to improving health through education, research and providing exemplary clinical care to our community.

### WE ARE\*

180	AFP Subspecialty Physicians and
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- +3 PhD members (DAL and NSH)
- 264 Dalhousie Appointments (Academic)
- 121 Medical Residents (PGY1–PGY6)
- 11 Subspecialty Fellows
- 115 Administrative Staff

### **OUR SPECIALTIES**

Cardiology

Clinical Dermatology & Cutaneous Science Digestive Care & Endoscopy Endocrinology & Metabolism General Internal Medicine Geriatric Medicine Hematology Infectious Diseases Medical Oncology Nephrology Neurology Palliative Medicine Physical Medicine & Rehabilitation Respirology Rheumatology

### **WE PROVIDE CARE\*\***

95%	Inpatient Occupancy
64,154	Daily Inpatient Care Visits
18,512	Inpatient Consults
3,039	Consults by the Senior Internist in the ED
11,695	IMCU/CCU Patients Seen
154,825	Clinic Visits
195,896	Other Services
	(such as ECGs, Echos, chemo injections,
	PFTs, transfusions, Caths, EMG, etc.)
14,705	Patient Chart Checks
25,718	Care Provided by Phone
318	Home Visits
677	Telemedicine Visits

### WE TEACH

131	Postgraduate residents
15	External learners in Core Internal Medicine
	Residency Training program
39	Internal Medicine Residents who rotated to a
	community site for a 4-week rotation
94	Undergraduate medical students doing
	Core rotations (totalling 750 weeks)
143	Undergraduate electives (totalling 370 weeks)
481	Undergraduate tutors for Dalhousie Medical School
	(totalling 3,058 hours)

### WE RESEARCH

265	Peer-reviewed publications (by 368 Department of Medicine authors, including cross-appointed researchers)
164	Published abstracts
	(by 312 Department of Medicine authors,
	including cross-appointed researchers)
16	Non peer-reviewed publications
	(by 20 Department of Medicine authors,
	including cross-appointed researchers)
356	Research presentations
	(by 648 Department of Medicine authors,
	including cross-appointed researchers)
4	Endowed chairs
406	Lectureship activities
	(by 83 DoM members)
3	UIMRF Research Fellowships totalling \$157,875
5	Research In Medicine (RIM) students sponsored
	by UIMRF, totalling \$25,000
1	Clinical Investigator Program Fellow
	sponsored by UIMRF

### **RESEARCH FUNDING-DIVISION TOTALS**

Funds received by NSHA and Dalhousie, fiscal 2019/20

Cardiology	\$2,532,165
Clinical Dermatology & Cutaneous Science	\$ 95,963
Digestive Care & Endoscopy	\$ 440,862
Endocrinology & Metabolism	\$ 699,380
General Internal Medicine	\$ 188,763
Geriatric Medicine	\$ 600,366
Hematology	\$5,669,603
Infectious Diseases	
Medical Oncology	\$1,480,751
Nephrology	
Neurology	
Physical Medicine & Rehabilitation	\$ 116,838
Respirology	
Rheumatology	

\* Data for 2019/2020 fiscal year

We are proud that our work makes positive and impactful differences in the lives of patients, learners, professional colleagues and others who benefit from our education, research and clinical care.



### Moving *Forward Together* The Department of Medicine Strategic Plan, 2020/2024

In June of 2020, the Department of Medicine released its new strategic plan, *Forward Together*.

Built through broad consultation with Department members and key stakeholders, this new strategy will guide activities over the next five years, ensuring that we move forward with a unified mission, collective vision and shared values.

"We are proud that our work makes positive and impactful differences in the lives of patients, learners, professional colleagues and others who benefit from our education, research and clinical care," says Dr. Christine Short, Head of the Department of Medicine. "With this new plan, we will build on our existing strengths while working with all of our partners to address gaps in order to better serve our communities."

Working toward a common vision, the new plan will emphasize measurable goals—updated annually—to guide action through outcomes in education, research and clinical care and by continuing to strengthen the foundations upon which we do this work.

"By moving *Forward Together*, we can optimize our collective potential at the systems-level locally, provincially and across the maritimes," says Dr. Short.

SECTION 1

Education: Attracting and Growing the Best

Making epilepsy surgery safer and more efficient

# Making epilepsy surgery safer and more efficient

The majority of people living with epilepsy can be treated successfully with medication, yet many suffer from medically refactory epilepsy and continue to suffer from seizures despite medications. Dr. Ben Whatley, Assistant Professor in the Division of Neurology at Dalhousie, is actively working to improve the safety and efficiency of surgery that may help to control or even end seizures for these patients.

In 2019, Dr. Whatley was awarded Dalhousie's University Internal Medical Research Foundation fellowship to support the second year of his epilepsy and neurophysiology training and research in London, UK. Dr. Whatley's work centred on clinical and research aspects of epilepsy surgery evaluation, which seeks to identify a focal area in the brain that is producing seizures while identifying the potentially negative consequences of removing that part of the brain.

"If we can improve our ability to plan safe and effective surgeries for these patients, there's a good chance they can obtain significant improvement in seizure control or even become seizure free, leading to incalculable benefits, such as the ability to work and drive, and a reduction in injury and psychosocial burdens," says Dr. Whatley.

On the clinical side, Dr. Whatley participated in evaluations, such as those conducted in the Epilepsy Monitoring Unit, to assess recordings of electrical activity in the brain that capture a patient's seizures. On the research side, his projects focused on improving different aspects of epilepsy surgery evaluation, including EEG recordings and neuroimaging techniques, such as PET (positron emission tomography) and SPECT (single photon emission computed tomography).

"One of the things that most excited me about the project was that these techniques depend on equipment we already have here in Halifax—we have a fantastic PET scanner in the Department of Diagnostic Imaging and we also have a SPECT scanner," says Dr. Whatley. "My hope going into this training was that if I could learn or develop new techniques that use our currently available resources, I could contribute in some way to advancing Halifax's epilepsy surgery program."

Dr. Whatley expresses his thanks to the Department of Medicine for the fellowship and to mentor Dr. Mark Sadler, who developed the Epilepsy Monitoring Unit and the epilepsy program at Dalhousie. "Without his support, I don't think any of this would have been possible."

While in the UK, Dr. Whatley also worked with the team at University College London to develop the epilepsy surgery planning software, EpiNav (Epilepsy Navigator), seeking to improve the efficiency of planning epilepsy surgery investigations and to create an end user manual for clinicians, which will now be available to Dalhousie.

"I was able to work in a completely different environment in London and to forge relationships with epilepsy specialists from both clinical and research perspectives. I am optimistic this will open up broad opportunities for ongoing collaboration," he says.

Now back in Halifax, Dr. Whatley is evaluating patients with epilepsy in clinic and on the Epilepsy Monitoring Unit. He is working with colleagues in nuclear medicine at Dalhousie to implement promising statistical techniques and improvements for people living with medically refractory epilepsy here in our region.

### DR. WHATLEY REFLECTS

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### A new training program for end-of-life care

The discussion of end-of-life care is always a difficult one between doctors, patients and their support systems. When these conversations go well and all parties are aligned, end-of-life care can have a meaningful impact on patients, families and even physicians. When these conversations go poorly, however, the relationship between doctor and patient can become one of distrust, and can impact care planning, delivery and patient satisfaction.

Understanding the importance of care in this area, the Department of Medicine set out to create a new training program for internal medicine residents in 2019 to help transform end-of-life care in Nova Scotia. Launched in the spring of 2019 by Dr. Meredith Chiasson, Sophie Montreuil, former Internal Medicine Education Coordinator, and their colleagues, this program has already proven to be a huge success and a valuable component of the overall curriculum going forward.

"There are so many factors that need to be carefully considered and communicated when it comes to end-of-life care," explains Dr. Chiasson, Associate Professor in the Division of Respirology. "In order to achieve success, it's imperative that physicians help patients and families to understand the diagnosis, prognosis, risks and benefits of advanced care measures, to establish a collaborative plan for a patient's final chapter of life."

Bringing together palliative care physicians, general medicine experts and leveraging Dalhousie's existing Simulated Patient Program, the End-of-Life Training Program was carefully designed to help residents evaluate a patient's prognosis, plan care accordingly and communicate effectively with patients and families to ensure mutual understanding, alignment and trust.

Using a host of tools, including case studies, scripting and simulations, the program provides students with the experience and skills they need to navigate challenging circumstances, reflective of those they will encounter in their careers.

"The conversations our residents were having in our workshops were real and gave them an idea of what to expect when they're dealing with real patients and caregivers," says Dr. Chiasson. "Our residents responded with great feedback, asking for more of these training workshops every year."

Due to COVID-19 restrictions, the End-of-Life Training Program was unfortunately put on hold in 2020 to protect the safety of faculty and trainees. The Department of Medicine is committed to reinstating the program as soon as possible and looks forward to building it out over the coming years to ensure a high degree of success and satisfaction for end-of-life care in Nova Scotia.

"What I love about the Department of Medicine is that we're always asking how we can make things better, and we are committed to making that happen," says Dr. Chiasson. "We're incredibly proud of this program, brought together in under a year, and the value that it will deliver to residents, patients and families."

### Recognizing a career dedicated to education and continuous learning

Dr. Nancy Morrison, Respirologist and Professor in the Division of Respirology, credits her success as an educator to a pursuit of continuous learning, an openness to giving and receiving feedback, and the generosity of mentors. Dr. Morrison was this year's recipient of the Brian M. Chandler Lifetime Achievement Award in Medical Education, presented to senior members of the Department of Medicine who have demonstrated leadership in education beyond their role as a clinician and lecturer throughout their career.

"I didn't have a plan at the beginning," says Dr. Morrison. "When I started teaching, it wasn't common to take a Masters in Medical Education but I found that by being willing to listen and learn from others and committing to my education through a wide variety of workshops, I could pick up a lot and see improvements in my student evaluations."

Early in her career, Dr. Morrison began teaching a second-year medical school course in Respiratory history and physical examination at Dalhousie, focused on bedside teaching. "I was disappointed that my evaluations from students were, let's just say, not stellar," says Dr. Morrison. "We all want to be our best, but some of their comments made me realize that they had different expectations. I took the feedback from learners and others and tried to incorporate that and improve the sessions. As a result, my evaluations from students steadily improved."

In the following years, Dr. Morrison continued teaching at the undergraduate level and at the post-graduate level by teaching residents in clinical settings and teaching in the Respirology subspecialty program. As her career evolved, she played a key role in overhauling departmental curriculums alongside colleagues, including the third- and fourth-year clerkships during her time as Clerkship Director for internal medicine. Subsequently, for over a decade, she was the Director of Undergraduate Medical Education for the Department of Medicine, overseeing all undergraduate education for the department. She also designed a curriculum for the Internal Medicine Intermediate Care Unit (IMCU) in her role as medical director.

By reading, asking questions and examining what other divisions/ departments had accomplished, Dr. Morrison sought out ways to improve the respirology curriculum. "There was a cardiology program that allowed students to listen to heart sounds before seeing a patient and I thought if they can do that, we can listen to lung sounds!" Her innovations paid off, as the clinical skills course introductions she developed and honed over the years became recognized by other teachers as examples of best practice.

"I feel a sense of pride that all my efforts to constantly improve and learn were appreciated," says Dr. Morrison. "It's a sense of personal accomplishment when students, learners, staff and faculty recognize that you're trying to do your best. It's humbling and gratifying as a physician to be seen as a good teacher."

Reflecting on her progress, Dr. Morrison praises the invaluable, often unofficial, mentors who helped her along the way. "I've had some wonderful mentors who were open, friendly and approachable, and I now try to be as helpful to junior colleagues as my senior colleagues have been to me."



DR. CHAISSON REFLECTS ON END-OF-LIFE CARE IN NOVA SCOTIA

In order to achieve success, it's imperative that physicians help patients and families to understand the diagnosis, prognosis, risks and benefits of advanced care measures, to establish a collaborative plan for a patient's final chapter of life.

Recognizing a career dedicated to education and continuous learning

### DR. MORRISON REFLECTS

"I feel a sense of pride that all my efforts to constantly improve and learn were appreciated. It's a sense of personal accomplishment when students, learners, staff and faculty recognize that you're trying to do your best. It's humbling and gratifying as a physician to be seen as a good teacher."



The Department of Medicine is an innovative leader in medical education. To maintain this coveted reputation, and ensure we continue to attract and retain top medical professionals, we continue to foster a culture of excellence and innovation, pursue educational initiatives across the continuum and work to cultivate the best internal medicine experience in the country.

### **FACULTY OF MEDICINE POSITIONS**

**Dr. David Anderson,** Dean of Medicine

**Dr. Evelyn Sutton,** Associate Dean of Undergraduate Medical Education

**Dr. Mary Margaret Keating,** Skilled Clinician Unit Head

**Dr. Darrell White,** Senior Associate Dean

### COMMITTEES

### **Education Committee**

- Internal Medicine Program
   Directors' Committee
- Internal Medicine Residency Program Committee
  - Core Internal Medicine Competence Committee
  - MTU Education Committee
    Point of Care Ultrasound
  - (POCUS) Committee

    Simulation Committee
- Undergraduate Medical Education Committee
- Continuing Professional
   Development Committee

#### **ACTIVITIES/EVENTS**

- Academic Half Days
- Rounds
- Call schedules
- Bedside teaching
- Lectures
- PGY4 Subspecialty Match
- CaRMS PGY1 Match
- Resident Retreat
- NEJM/OSCE Exams

### CONTINUING PROFESSIONAL DEVELOPMENT

### Dr. Trudy Taylor,

Chair, Continuing Professional Development

- Teach the Teachers (annual professional development)
- Medicine Matters (annual professional development)
  Weekly Grand Rounds
- all-year (September to June; faculty members; July and August: Residents)

### UNDERGRADUATE

**Dr. Bakhtiar Kidwai,** Undergraduate Director of Education

Dr. Chris Gallivan, Clerkship Director

**Dr. Tallal Younis,** Assistant Clerkship Director

Nina Nedic, DoM Undergraduate Coordinator

(significant involvement by Department of Medicine)

### Med 1 Core Units (Pre-Clerkship)

- Foundations of MedicineHost Defense
- Host Defense (Hematology, Infectious, Immunity and Inflammation)
   Metabolism 1
- (Gastroenterology, Endocrinology, Nutrition and Oral Medicine)
- Professional Competencies I
- Skilled Clinician 1 Program

### Research in Medicine (RIM)

### ElectivesMed 2 Core Units (Pre-Clerkship)

- Neurosciences
- Metabolism II

(Cardiovascular, Respiratory & Renal)

Musculoskeletal & Dermatology

- Integration
- Professional Competencies II
- Skilled Clinician II
- Research in Medicine (RIM)
- Electives

### Med 3 (Clerkship)

### • Internal Medicine

- (spend 12-weeks in doing A1, A2 and A3 rotations in MTU and subspecialties)
- Electives
- Wednesday Seminar Series
- PIER 1 & 2 Program

### Med 4 (Clerkship)

Electives PIER 3 & 4 Program

### **IMU Link Program**

### Examinations

- Phase 1 OSCE
- Phase 2 OSCE
- Phase 3 OSCE
- Phase 4 OSCE
- MCQ Databank Quality Assurance Project

### POSTGRADUATE **& SUBSPECIALTY**

Dr. lan Epstein, Postgraduate Director of Education

### Dr. Aaron Leblanc

Stepping down is Dr. Magnus McLeod New Associate Program Director for Core Internal Medicine Program

### Dr. Alexa Smith,

Site Director, Saint John Core Internal Medicine Residency Training Program

### **Amanda MacKay**

Starting March 2020 New Regional Coordinator for the **Core Internal Medicine Program** 

### **Training Sites**

- Halifax
- (major site) • Saint John (major site)
- Dartmouth General Hospital
- Fredericton
- Moncton
- Miramichi
- Sydney
- Yarmouth
- Kentville
- Bridgewater
- New Glasgow
- Charlottetown

### Katie Barkhouse,

Education Manager/ **Program Administrator** 

Isha Seth, **Education Coordinator** 

Alicia Mason, Saint John Education Coordinator

### **Chief Residents**

January-December 2019:

Dr. Kabi Thana, Halifax Whitney Faiella, Halifax, Dr. Alex Saunders, Saint John

### January-December 2020:

Dr. Rachel Sullivan, Halifax Dr. Matthew Nunn, Halifax Dr. Nicole Beckett, Saint John

### **Total of Residents**

Halifax (Core IM): 41 Saint John: 12 **Regional:** 3 Subspecialties: 69

### **PROGRAM DIRECTORS**

for Postgraduate (PG) and Undergraduate (UG)

Cardiology Dr. Andrew Moeller (PG) Dr. Ciorsti McIntyre (UG)

### Dermatology

Direct-entry Residency Program Dr. Kerri Purdy (PG) Dr. Peter Green (UG)

### Endocrinology

Dr. Shirl Gee (PG) Dr. Churn Yip (UG)

### **Digestive Care & Endoscopy**

Dr. Stacey Williams (PG) Dr. Kevork Peltekian (UG) Dr. Tasha Kulai (UG)

### **General Internal Medicine**

Dr. Allen Tran (PG) Dr. Steven Workman (UG) Dr. Chinmoy Chowdhury (UG)

### **Geriatric Medicine**

Dr. Glen Ginther (PG) Dr. Kata Koller (UG)

### Hematology

Dr. Mary Margaret Keating (PG) Dr. Nick Forward (UG)

### Infectious Diseases

Dr. Ian Davis (PG) Dr. Lynn Johnston (UG)

### Medical Oncology

Dr. Alwin Jeyakumar (PG) Dr. Stephanie Snow (UG)

Nephrology Dr. Neil Finkle (PG) Dr. Amanda Vinson (UG)

### Neurology

Direct-entry Residency Program Dr. Gord Gubitz (PG) Dr. Stephanie Woodroffe (UG)

### **Palliative Medicine**

Dr. Erin Gorman-Corsten (PG) Dr. Robin Grant (UG) Dr. David Dupere (UG)

### **Physical Medicine & Rehabilitation**

Direct-entry Residency Program Dr. Anita Mountain (PG) Dr. Sonja McVeigh (UG)

Respirology Dr. Simon Houston (PG) Dr. Nancy Morrison (UG)

Rheumatology Dr. Elana Murphy (PG) Dr. Emily Shaw (UG)

#### **PROGRAM ADMINISTRATORS BY SUBSPECIALTY**

for Postaraduate (PG) and Undergraduate (UG)

Cardiology Sharon Dunn (PG) Elena Wilkinson (UG)

Dermatology Katie Crosby

Endocrinology Julie Fraser

Gastroenterology Sarah Barnett

**General Internal Medicine** Jennifer Delanev (PG) Andrea Oster (UG)

**Geriatric Medicine** Terri Baker (PG) Athena Christie (UG)

Hematology Kelly Watson

**Infectious Diseases** Sue Brushett

Medical Oncology Amanda MacKay

Nephrology Rod McLaggan

Neurology Ashley Doucette (PG) Andrea Ellis (UG)

**Palliative Medicine** Jo-Ann Clark

**Physical Medicine & Rehabilitation** Alysha Nelson

Respirology Gift Madusha

Rheumatology Jessica Burchell

**BY SUBSPECIALTY** 

**SECTION 2** 

Quality Care: Leading Quality Care Through Innovation

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photo: QEII Foundation

Optimizing rehabilitation care following spinal cord injury

### Optimizing rehabilitation care following spinal cord injury

Dr. Sonja McVeigh, Medical Director and Physician co-leader for the Neuro-rehabilitation program at the QEII, is widely recognized as a leading spinal cord injury (SCI) rehabilitation expert in the Atlantic provinces. A champion of collaboration in healthcare, Dr. McVeigh has been part of the establishment of the Spinal Cord Injury Network of Atlantic Provinces (SCINAPS) over the past year, bringing together rehabilitation experts from across the region to improve patient outcomes following SCI. Now, Dr. McVeigh has her eye on an even broader picture, with a goal to contribute to the optimization of rehabilitation care for patients with SCI patients across Canada.

"Often, the length of stay in hospital following spinal cord injury is considered a key metric of a patient's rehabilitation success, with shorter stays representing more successful recoveries," explains Dr. McVeigh. "This view is incomplete, as collaboration with our SCI colleagues across the country has identified other indicators within several domains of SCI rehabilitation care that may more accurately measure successful rehabilitation. These can include domains such as walking, emotional well-being, and sexual health."

By monitoring and implementing indicators in several targeted domains of rehabilitation care for patients who have sustained SCI in Nova Scotia, Dr. McVeigh and her rehabilitation team aim to optimize SCI rehabilitation care. This optimization will be accomplished through identification of systemic barriers and successes, thereby promoting continuous improvement toward best practices that align with counterparts in the Atlantic region and nationally. Pending a successful grant application, Dr. McVeigh and her Halifax colleagues hope to join forces in this work with Ontario's Spinal Cord Injury Implementation and Evaluation Quality Care Consortium, along with other experts across Canada.

"The next step is to identify best practices for rehabilitation care and evaluation across the country, so that we are all on the same page about how to optimize spinal cord injury recovery for patients," says Dr. McVeigh. "Our involvement in this Consortium will advance our collaboration within the Atlantic region and Canada-wide to improve patient rehabilitation and facilitate a successful return to life following spinal cord injury." DR. McVEIGH REFLECTS

Our involvement in this Consortium will advance our collaboration within the Atlantic region and Canada-wide to improve patient rehabilitation and facilitate a successful return to life following spinal cord injury.

# Increasing access to peritoneal dialysis

During his early days of training in Nephrology at Dalhousie, Dr. David Clark recognized the value of peritoneal dialysis as a home-based therapy for patients who develop end-stage kidney disease and the need to improve access to peritoneal dialysis catheter insertion so that more candidate patients could perform this type of dialysis at home.

Now Assistant Professor of Medicine in the Division of Nephrology, Dr. Clark has been working since July 2019 to facilitate the Percutaneous Peritoneal Dialysis Catheter Insertion Program. A highly collaborative effort with a team of home dialysis nurses, radiation technicians, nephrologists, back-up surgeons, and other support staff, this novel program allows candidate patients in need of dialysis to have their peritoneal dialysis catheter inserted at the bedside, reducing otherwise long surgical wait times, and saving the operating room for patients who have more complex needs and require a catheter inserted through surgery.

Beyond avoiding the operating room, Dr. Clark's method is minimally invasive, allows quick recovery and healing times, and results in lower health care costs.

Taking this method from his training at a larger centre in Ontario as an interventional nephrologist, Dr. Clark is proud to now apply it here in Nova Scotia. "With this service, more patients can maintain their routines and a high quality of life, while alleviating stress on our current healthcare system," says Dr. Clark. "Very few nephrologists have learned this procedure and taken it elsewhere; the fact that we've created this initiative in Nova Scotia is a success in itself."

In an initial appointment, a patient meets with Dr. Clark to decide whether they are a good candidate for the procedure. A few weeks after the one-day procedure has been scheduled and completed, peritoneal dialysis nurses train patients to use the catheter and properly administer their own dialysis at home.

In its first year alone, the program has surpassed its goal of 25 catheter insertions by 30 percent. Moving forward, the team plans to continue this growth and meet the needs of more patients in Nova Scotia by eventually expanding its procedural space as part of the QEII redevelopment and setting a new goal of providing 50 percutaneous catheters per year. The program is also working to bring the procedure to other parts of Atlantic Canada by training doctors through the Home Dialysis Fellowship, which began in August 2020.

"This program is something envisioned in Atlantic Canada years ago," says Dr. Clark. "So many willing players came together to make this happen, and we're standing on the shoulders of giants. I'm so pleased to return to this region and deliver this care to Atlantic Canadians. We are excited to grow together and see where we go next."

# Improving access to ambulatory care

The ability to provide timely access to clinical care is a key component of any well-functioning health system. With ample data to show that many health conditions and diseases are best treated early on, reducing wait times and improving patient access to care is paramount.

With a mission to improve access to clinical care in Nova Scotia, the Department of Medicine's Quality Committee recently conducted a comprehensive review of the ambulatory care delivery, in partnership with the Nova Scotia Health Authority.

Over the past year, the Committee collected data on a range of factors affecting access to ambulatory care, including the triage process, patient communications, wait times and more. Through this comprehensive review, the Committee was able to identify the most efficient administrative and operating practices—as well as the least—to help inform systems change.

After identifying best practices revealed in this review, the Division of General Internal Medicine has already implemented a number of changes to improve patient access to care, with great success. Through centralizing the triage process, identifying patient candidates for virtual care and leveraging telephone and e-consultations, the Division was able to drastically improve wait times and referrals for patients over a short period, from a ninemonth wait, to immediate booking.

In addition to reducing wait times, the improved triage process and transition to virtual healthcare also prepared the Division to respond well to the onset of the COVID-19 pandemic, and to maintain patient access to care throughout.

"Taking a virtual approach to healthcare, where possible, comes with many advantages," explains Dr. Nabha Shetty, Assistant Professor in the Division of General Internal Medicine. "By implementing a more robust triage process, we've seen that virtual care allows doctors to accommodate a greater number of patients in their daily practice, while helping patients to save time on transportation and limiting disruptions to their schedule. In the case of the pandemic, this approach has also allowed us to continue care while prioritizing the safety of patients and staff."

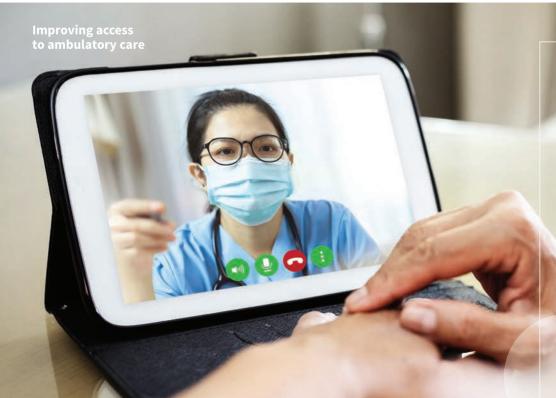
Building on this momentum, Dr. Shetty and colleagues will work to roll out a comprehensive provincial trial of e-consultations over the next several months, as part of a federally funded initiative to support the advancement of virtual technology and care during the pandemic.

In addition, they are also working to develop new ambulatory health scorecards, to help clinics and healthcare providers understand how their operating practices compare to others within the current landscape, and where they can make changes to improve patient access to care.

"If we can monitor the data through these scorecards on an ongoing basis, we can truly change the system," says Dr. Shetty. "The end goal is to make the most effective practices standard across all divisions, so that we can improve access to ambulatory care for all."



dr. clark reflects on percutaneous peritoneal dialysis catheter insertion program This program is something envisioned in Atlantic Canada years ago. So many willing players came together to make this happen, and we're standing on the shoulders of giants.



### DR. SHETTY REFLECTS

"If we can monitor the data through these [new ambulatory health] scorecards on an ongoing basis, we can truly change the system. The end goal is to make the most effective practices standard across all divisions, so that we can improve access to ambulatory care for all."

### Rheumatology pilot project with physiotherapist triage

Of the 1,400 people that are currently on the waiting list to see a rheumatologist in Nova Scotia, only some will actually need to be treated by one. A year-long collaborative pilot project is investigating a new model of triaging these patients, using the expertise of physiotherapists.

Dr. Janet Roberts, Assistant Professor in the Division of Rheumatology is leading the project, called Improving Rheumatology Resource Utilization and Access to Specialty Care for Patients with Inflammatory Arthritis in Nova Scotia through Enhanced Triage.

"Ideally, we should be seeing patients with inflammatory arthritis within three months of symptom onset, as there is evidence that early intervention leads to improved outcomes," says Dr. Roberts.

As part of the project, Dr. Roberts is working with two physiotherapists with extensive experience in rheumatology. Referrals from family physicians for the treatment of arthritis are divided into two groups—half going through the new triage process, the other half through the regular process.

As part of the enhanced triage process, additional information such as blood work and radiographs are requested, and patients are asked to complete a questionnaire to determine sources and patterns of pain and discomfort.

The goal of this enhanced standardized triage is to identify non-inflammatory conditions, such as osteoarthritis and fibromyalgia, that can be managed without a rheumatology consult, thereby ensuring that patients with inflammatory arthritis can be seen in a timely fashion.

"We're all excited about this project," says Dr. Roberts. "Physiotherapists have extensive training in musculoskeletal disease and incorporating them into our current model of care just makes sense. Our goals are to ensure that patients are seen at the right time by the right specialist and to decrease wait times and improve outcomes in inflammatory arthritis." DR. ROBERTS REFLECTS

We're all excited about this project. Physiotherapists have extensive training in musculoskeletal disease and incorporating them into our current model of care just makes sense. Our goals are to ensure that patients are seen at the right time by the right specialist and to decrease wait times and improve outcomes in inflammatory arthritis.

Rheumatology pilot project with physiotherapist triage

# Caring for the hearts of Nova Scotians

It's no secret that our population in Nova Scotia is aging, and that many of us are living longer lives than previous generations. While this affords us more time to enjoy the people and things that we love most in life, it can also come with an increased risk of health challenges—including that of heart failure. In an effort to improve treatment and meet the growing needs of our population in this area, Dr. Miroslaw Rajda in the Division of Cardiology is proud to offer specialized care for patients with advanced heart failure in the Atlantic Provinces through the Cardiac Transplant Clinic, Advanced Heart Failure Clinic and Heart Function Clinic.

"Heart failure is becoming more and more common," says Dr. Rajda. "We've been extremely successful at treating conditions like coronary artery disease and cholesterol, which has resulted in us living longer but the older we get, the more likely we are to experience things like heart attacks, which can cause significant damage to the heart."

Providing care to pre- and post-cardiac transplant patients, Dr. Rajda is part of a designated team of heart failure specialists, including cardiologists, surgeons, nurses, nurse practitioners, dieticians, a social worker and a psychologist. Through a comprehensive, interdisciplinary approach, the clinics also provide patients who have experienced damage to the heart from heart attacks, viruses and other causes with guidance on how to best manage their heart failure.

"With an aging population and a longer life expectancy comes an opportunity to learn," says Dr. Rajda. "When we accumulate patients within these areas, we gain experience as physicians, and we can better understand how best to treat them. That's what this is all about—providing the best care for our patients and our population that we possibly can."

### Delivering innovative long-term care solutions during the COVID-19 outbreak

The initial outbreak of COVID-19 in Nova Scotia hit one vulnerable population particularly hard: the residents of long-term care. Northwood's 483-bed long-term care facility in Halifax was devastated by many cases and deaths in the early days of the pandemic.

Among the key issues was a lack of available space to isolate residents who had contracted COVID-19 from those who hadn't, in order to contain the spread of the virus. In addition, residents recovering from COVID-19 and in need of rehabilitation struggled to get the care they needed due to spatial limitations, physical distancing guidelines and concerns of further spread.

In an effort to alleviate these two fundamental challenges, Dr. Sam Searle, Geriatrician, Dr. Barry Clarke, Northwood Medical Director, Josie Ryan, Executive Director, Northwood and colleagues, initiated the creation of a rehabilitation unit in a local hotel, transferring Northwood residents who had survived COVID-19 to a safe location, where they could begin proper recovery. This transfer also helped to control the outbreak within the existing Northwood facility, freeing up space to isolate those who remained COVID-19 positive from those who had not yet contracted the virus.

Bringing together an interdisciplinary team to care for residents and aid in their recovery, including continuing care assistants, a physiotherapist, nurse practitioners and more, the rehabilitation unit was a huge success. Conducting comprehensive medical assessments and monitoring patient health over time, Dr. Searle and his colleagues found that over 70% of residents were able to re-establish or improve their mobility function, compared to their pre-COVID-19 levels.

"The improvement in mobility that we saw was hugely gratifying," says Dr. Searle. "The unit really helped residents return to a better quality of life following COVID-19—even allowing them to socialize again within a safe bubble—while also helping to control the outbreak at the main Northwood location."

With remarkable results, Dr. Searle's innovative solution has major implications for future outbreaks of COVID-19 in long-term care. This model could also benefit long-term care facilities facing other various health challenges in the future, including influenza outbreaks, which have negative repercussions on residents every year. Another hotel unit will be set up shortly for people in hospital who are waiting to go to long-term care, but do not yet have a bed.

"This project was really a shining light during the initial COVID-19 outbreak that reflected positively on the resilience of the residents, families and healthcare workers involved, all working together at a difficult time to make things better," says Dr. Searle.



DR. RAJDA REFLECTS ON SPECIALIZED CARE FOR PATIENTS WITH ADVANCED HEART FAILURE With an aging population and a longer life expectancy comes an opportunity to learn. And that's what this is all about—providing the best care for our patients and our population that we possibly can.

> Delivering innovative long-term care solutions during the COVID-19 outbreak

### DR. SEARLE REFLECTS

"This project was really a shining light during the initial COVID-19 outbreak that reflected positively on the resilience of the residents." SECTION 3

Research: Driving Research Excellence

Can one simple blood test help millions of people worldwide?

### Can one simple blood test help millions of people worldwide?

Statistics show that more than seven percent of Canadians over 12 years old, and over 400 million people worldwide, live with type 2 diabetes. Medical professionals have puzzled for years over how strict blood sugar control can prevent heart disease in some people with type 2 diabetes and yet harm others. Now Leah Cahill, Ph.D., Howard Webster Department of Medicine Research Chair and Community Health & Epidemiology at Dalhousie University, may have found the missing piece to the puzzle.

Cahill and her team believe that determining whether or not strict blood sugar control will help or harm a patient depends on which of the two forms of the blood protein called haptoglobin they have in their system. In 2018, Cahill and her team received funding from the Dalhousie University Department of Medicine and Nova Scotia Health to dig deeper into the theory.

"We've published a major study in which we used an inexpensive blood test to determine haptoglobin type in participants from a large clinical trial of strict blood control and re-analyzed the data in the two haptoglobin groups separately. We found that strict blood sugar control prevented heart disease in people with one haptoglobin type but provided no benefit to people with the other type, even causing an increased risk of death."

Following this game-changing discovery, Cahill has united a global team of skilled researchers, including cardiovascular epidemiologists, clinicians and statisticians at prestigious institutions, such as Dalhousie University, Harvard University, Columbia University, University of Oxford and Johns Hopkins, to name a few. The team also includes the world expert in haptoglobin type, Dr. Andrew Levy, from the Rappaport Faculty of Medicine at Technion Israel Institute of Technology.

Funded by the Canadian Institutes of Health Research (CIHR), the findings of this research could potentially result in a medical breakthrough: the first-ever introduction of personalized medicine based on a genetic marker for the management of type 2 diabetes.

"Our current step is to expand our research to include more diversity in participants, to include a variety of types of blood sugar controls—such as different goals, medications and lifestyles —and to incorporate different methods to analyze the data," says Cahill. "I am extremely excited to be working with this team on research that could hopefully help millions of people." LEAH CAHILL, Ph.D. REFLECTS

I am extremely excited to be working with this team on research that could hopefully help millions of people.

### Enhancing stroke recovery through national, collaborative research

Following a stroke, many patients experience a range of complications that can make it difficult to resume daily activities, including impairments in speech, memory, motor function and more. Given the often long and challenging road to recovery that many persons with stroke experience, researchers around the world are working to identify novel solutions that can help improve and expedite the rehabilitation process.

Marilyn MacKay-Lyons, Ph.D., Professor at the School of Physiotherapy, and Dr. Anita Mountain, Associate Professor with the Department of Medicine, Division of Physical Medicine and Rehabilitation, are collaborating with an interdisciplinary team of experts at Dalhousie, Nova Scotia Health and across Canada to advance stroke recovery locally and nationally.

As part of CanStroke, a national clinical trials platform in stroke recovery, MacKay-Lyons, site principal investigator, Dr. Mountain, site qualified investigator, and Melanie Dunlop, research coordinator, are currently involved in a novel trial called FLOW, aimed at improving motor recovery after stroke.

"In working with a multicenter, multidisciplinary group of experts across the country, we're able to conduct better studies with larger sample sizes, while sharing resources, knowledge and best practices," says Dr. Mountain. "It is work like this that can really generate meaningful data and meaningful outcomes, to benefit patients here in Nova Scotia and across Canada."

In the FLOW trial over the last year, a unique combination of medication and physical activity in stroke patients at the Nova Scotia Rehabilitation Centre, located at Halifax's QEII Health Sciences Centre was being tested. Their goal is to determine whether an antidepressant medication called Fluoxetine—used in conjunction with a structured physical rehabilitation program—will improve the recovery of motor function more than the drug or physical rehabilitation alone.

"As one of eight sites across Canada involved in this work, we hope to make a significant impact on the research literature, while making participation in national clinical trials available to stroke patients here in Nova Scotia."

### Improving wheelchair training among Occupational Therapists

Transitioning to a wheelchair is a major life event and can be a difficult adjustment for both users and their caregivers. In accordance with multiple peer-reviewed journal articles and recommendations from the World Health Organization (WHO), wheelchair-skills training is one important step for a successful transition to wheelchair use. That's why in April 2019, Dr. R. Lee Kirby in the Division of Physical Medicine and Rehabilitation and the Wheelchair Research Team set out to understand just how many Occupational Therapists in Nova Scotia were providing this type of training and to identify systemic gaps in this area.

"After looking at the research, it was evident that building wheelchair skills is beneficial to those using the wheelchair, their caregivers and ultimately, to the healthcare system overall," says Dr. Kirby. "It really got us thinking about the training that Occupational Therapists are providing in Nova Scotia."

Developing and distributing an online survey to Occupational Therapists across Nova Scotia, Dr. Kirby and his colleagues collected data to determine the extent of wheelchair skills training being provided to patients in the province. The survey results demonstrated less wheelchair skills training for patients and caregivers than expected, and a lack of perceived preparedness by Occupational Therapists to provide this service.

"We found that only one-third of Occupational Therapists surveyed reported feeling equipped to provide wheelchair training to their clients and their caregivers, which may help to explain the lack of training being provided," says Dr. Kirby. "These findings may help to bridge a gap in Occupational Therapy education for both emerging students and established therapists across the province."

Thanks to the gaps identified in this recent study, Dr. Kirby looks forward to refinements in education and healthcare policy that will improve practice in Nova Scotia. The Wheelchair Research Team hopes that the results of this survey will have a positive impact on wheelchair users and their caregivers across the province and more widely.



### DR. MOUNTAIN REFLECTS ON FLOW

It is work like this that can really generate meaningful data and meaningful outcomes, to benefit patients here in Nova Scotia and across Canada.

Improving wheelchair training among Occupational Therapists

### DR. KIRBY REFLECTS

"After looking at the research, it was evident that building wheelchair skills is beneficial to those using the wheelchair, their caregivers and ultimately, to the healthcare system overall."

photo: QEII Foundation

Department of Medicine researchers continued to grow their reputations as leaders in their areas of expertise and strengthen their ability to attract funding support. In 2019/2020, Department members received more than \$16.6 million in research funding. The funding supports ground-breaking research projects that are changing care and improving lives for many. The success has been grounded in an expansion of the Department's research mandate and purposeful investment in its research capacity. The Department's organizational structure also supports research with a departmental Research Committee and Resident Research Committee.

In 2019/2020, the role of Department Research Director changed hands. We would like to thank outgoing Research Director Dr. John Hanly for his years of leadership and vision, and welcome Dr. Melissa Andrew into this role.

### Investing in Department Researchers

Securing funding is the foundation to any research team's success. With that in mind, the Department has dedicated funds to invest in its researchers, with a large part of that funding provided by the Department's own University Internal Medicine Research Foundation (UIMRF). UIMRF funding allows the Department to be strategic and responsive to the needs of our researchers, giving them a competitive edge. The Department has been able to offer support to its members through a variety of grant and fellowship competitions, including: matching funds with the Nova Scotia Health Research Fund's Category 1 competitions, internal and external research fellowships (including the Dalhousie Clinical Investigator Program (CIP) for residents), bridge and pilot funding, and investing in junior investigators. The Department also continues to offer matching funds to help secure national and international grants.

#### UIMRF approved the following awards in 2019/2020:

### UIMRF INTERNAL FELLOWSHIP AWARD — CLINICAL INVESTIGATOR PROGRAM

Dr. Thomas Brothers | First year CIP sponsorship PGY3 Internal Medicine Supervisors: Drs. Andrew Hayward and Duncan Webster

Dr. Jasmine Mah | Second year CIP sponsorship PGY2 Internal Medicine Supervisor: Dr. Melissa Andrew

#### **UIMRF INTERNAL FELLOWSHIP AWARD**

M. Ulises Perez-Zepeda, Ph.D. | \$55,000 Frailty in countries of the American continent

### UIMRF JUNIOR DEPARTMENT MEMBER AWARD

Dr. Kim Anderson | \$50,000 Failing at Diagnosing Heart Failure: Health Care Utilization Before Hospitalization

### **UIMRF JUNIOR DEPARTMENT MEMBER AWARD**

Dr. Kristin Ikeda | \$49,745 Functional MRI (fMRI) and magnetoencephalography (MEG) in pre-surgical lateralization of language and memory functions: Determining clinical usefulness and applications

### **UIMRF MATCHING FUNDS AWARD**

Dr. Michael Thorne | \$50,000 Diagnostic and Therapeutic Roles of Butylcholinesterase in Multiple Sclerosis

### **UIMRF MATCHING FUNDS AWARD**

Dr. Karthik Tennankore | first year \$23,433.75 Aldosterone bloCkade for Health ImproVement Evaluation in end-stage renal disease (ACHIEVE). Proposal for Enhancing Recruitment in Halifax, Nova Scotia In early 2020, the COVID-19 pandemic evolved into a pressing issue for all health services, with tremendous ramifications for research. Many DoM researchers were quick to pivot their work to address the COVID-19 challenge, launching research projects to address systems issues (e.g. virtual care provision), challenges for vulnerable populations (e.g. Long-term care and dialysis), robust hospital-based surveillance for COVID-19 and discovery science on immune responses to the novel coronavirus.

In March 2020, the Department launched the UIMRF COVID-19 Emergency Bridge Funding competition. This grant was created with the goal of supporting DoM members and their research teams in light of the impact of COVID-19 on research operations.

The UIMRF COVID-19 Emergency Bridge Fund was able to support the following divisions/research teams:

Division of Respirology | Dr. Paul Hernandez | \$20,250.00 Division of Cardiology | Dr. Ratika Parkash | \$64,898.73 Division of Nephrology | Dr. Karthik Tennankore | \$36,911.40 Division of Medical Oncology | Dr. Arik Drucker | \$32,604.00

### **ENDOWED RESEARCH CHAIRS**

In 2019/2020, the Department of Medicine had four endowed research chairs. As leaders in their fields, the research chairs had a critical role in increasing knowledge of their area of expertise through research and teaching:

Leah Cahill, PhD Howard Webster Department of Medicine Research Chair

Dr. Jafna Cox Heart and Stroke Foundation Endowed Chair in Cardiovascular Outcomes

Dr. Sultan Darvesh DMRF Irene MacDonald Sobey Endowed Chair in Curative Approaches to Alzheimer's Disease

Dr. Kenneth Rockwood DMRF Kathryn Allen Weldon Endowed Chair in Alzheimer's Research

### **DEPARTMENT OF MEDICINE RESEARCH COMMITTEE**

Dr. Melissa Andrew (Chair) Dr. Amir AbdelWahab Dr. Lisa Barrett Chris Blanchard, Ph.D. Leah Cahill, Ph.D. (Howard Webster Department of Medicine Research Chair; Co-chair, Resident Research Committee) Dr. Sultan Darvesh Dr. Natalie Parks Dr. Ravi Ramjeesingh (Co-chair, Resident Research Committee) Dr. Alexa Smith (New Brunswick Representative) Dr. Alexa Smith (New Brunswick Representative) Dr. Michael Stewart Dr. Karthik Tennankore Olga Theou, Ph.D. Dr. Christine Short (Department Head; ex officio) Heather Fraser (Administrative Coordinator)

### DEPARTMENT OF MEDICINE RESIDENT RESEARCH COMMITTEE

Leah Cahill, Ph.D. (Howard Webster Department of Medicine Research Chair; Co-chair, Resident Research Committee)

Dr. Ravi Ramjeesingh (Co-chair, Resident Research Committee)

Dr. Lisa Barrett

Dr. Mahmoud Elsawy

- Dr. Ian Epstein (Director, Postgraduate Training Program)
- Dr. Jordan Francheville (Resident Representative)
- Dr. Ali Imran
- Dr. Robyn Macfarlane
- Dr. Magnus McLeod
- Dr. Ari Morgenthau (Resident Representative)
- Dr. Najaf Nadeem

Dr. Michelle Ricci (Resident Representative)

Heather Fraser (Administrative Coordinator)

### **RESEARCH EVENING 2019**

In November 2019, approximately 50 people gathered at the Prince George Hotel to learn more about new and established researchers in the Department of Medicine.

Presentations included:

- Patient-Centered Care in Cirrhosis Dr. Tasha Kulai, Division of Digestive Care and Endoscopy
- Rheumatic Complications of Immunotherapy: More Questions than Answers
   Dr. Janet Roberts, Division of Rheumatology
- Lyme Disease in NS Dr. Todd Hatchette, Departments of Pathology, Microbiology and Immunology, and Medicine

### **RESEARCH AWARDS**

### **Department of Medicine Research Lifetime Achievement Award** Dr. Shelly McNeil, Division of Infectious Diseases

**Department of Medicine Research Excellence Awards** 

Dr. Lisa Barrett, Division of Infectious Diseases Leah Cahill, Ph.D., Department of Medicine Research Dr. John Hanly, Division of Rheumatology

**Department of Medicine Resident Research Excellence Awards** Dr. Ari Morgenthau, PGY1-3 Dr. Ahmed Mokhtar, PGY4-6/CIP

### **Department of Medicine Resident Research Publication Awards**

Dr. Thomas Brothers, PGY1-3 Dr. Ari Morgenthau, PGY1-3

# Our Achievements

### CARDIOLOGY

Dr. Ata Quraishi

"In 2019/2020, the Division of Cardiology continued with its excellence in patient care. Our TAVI program doubled its capacity and performed more than 100 TAVR procedures in the fiscal year. In addition to clinical care, Cardiology members advance the role of physician leaders. Dr. John Sapp has been appointed as Dalhousie Assistant Dean, Clinical Research for a three-year term. In addition to leading his own research program, Dr. Sapp will work closely with department heads and the Medical Research Development Office to increase research productivity and involvement in clinical research performed by physicians in clinical departments."

- 2,226 patients transferred from other provincial hospitals
- 3,437 patients seen in Heart Function Clinic
- 21,340 inpatient care days
- 135,037 cardiac-related procedures
- 31,546 ambulatory clinic encounters

### **CLINICAL DERMATOLOGY & CUTANEOUS SCIENCE**

Dr. Kerri Purdy (Interim Division Head effective January 2021) Dr. Peter R. Hull (until January 2021)

"As I reflect on the 2019/2020 year, I am proud of us in dermatology for maximizing the use of our limited physician resources to continue seeing many patients clinically, completing research and supporting our nine resident trainees."

241 telemedicine consults6,634 outpatient clinic visits703 day surgeries

### **DIGESTIVE CARE & ENDOSCOPY**

Dr. Kevork Peltekian

"Even though more resources are needed to provide quality digestive care and safe endoscopic procedures across the province, 2019/2020 was the first year the Division was up to its full complement with the recruitment of the next generation of academic gastroenterologists. This allowed us to focus on enhanced specialty care delivery with further growth in advanced endoscopy, colon and liver cancer surveillance, inflammatory bowel disease management, and gave us the ability to send one of our members for specialty training in motility and nutrition to ensure comprehensive digestive services over the next decade."

- 6,987 outpatient physician clinic visits
- 6,780 endoscopy unit visits
- 779 GI endoscopy cancer screenings

#### ENDOCRINOLOGY

Dr. Ali Imran (Interim Division Head effective May 2020) Dr. Stephanie Kaiser (until May 2020)

"The Division of Endocrinology established a special one-year training program for international endocrinologists hoping to gain experience in the areas of neuropituitary disorders and thyroid oncology. Two foreign trained endocrinologists have successfully completed the program."

2,758 registrations to physicians with diabetes diagnosis7,525 general endocrine clinic visits

### **GENERAL INTERNAL MEDICINE**

Dr. Nabha Shetty (Interim Division Head) Dr. Stephen Workman (until April 2020)

"2019/2020 allowed GIM to realize the vast potential of virtual care delivery and non-traditional models of care. We maintained minimal wait times to access GIM care by leveraging non-face-to-face care, building relationships with primary care and successfully completing the first trial of provincial e-consultation."

- 12,356 MTU/IMCU/GI patient encounters by GIM members
- 3,919 clinic visits, QEII Health Sciences Centre
- 2,401 clinic visits, Dartmouth General Hospital
- 113 clinic visits to immunology clinic
- 68 non-urgent wait time (days)

### **GERIATRIC MEDICINE**

Dr. Chris MacKnight

"A year remembered for the growth of services dedicated to meeting the needs of frail adults in person, at home, and the luxury of being together as a team."

- 1,467 inpatient consults
- 2,931 visits to geriatric day hospital program
- 346 home visits
- 2,401 clinic visits, Geriatric Ambulatory Clinic
- 186 clinic visits, PATH Clinic

### **HEMATOLOGY**

Dr. Sudeep Shivakumar (Interim Division Head)

"By rising to the challenges in the system, the Division of Hematology is proud to continue to excel in clinical care, research productivity, and medical education."

inpatient admissions
ambulatory care visits
inpatient consults

### **INFECTIOUS DISEASES**

Dr. Shelly McNeil

"Infectious Diseases is proud of its members' accomplishments and the recognition for the amazing work that they do. In 2019/2020, Dr. Lynn Johnston received the Stephen Couban Outstanding Faculty—Resident's Choice Award; Dr. Lisa Barrett received the Doctors Nova Scotia Physician Health Promotion Award; and Dr. Shelly McNeil received the DoM Research Lifetime Achievement Award and the DoM Achievement Award recognizing sustained, exceptional commitment to the Department."

- 5,441 clinic visits
- 4,270 inpatient consults
- 2,223 visits to general infectious diseases clinic

### **MEDICAL ONCOLOGY**

Dr Daniel Rayson

"The Division of Medical Oncology, in conjunction with the Emergency Department (ED), initiated a streamlined and comprehensive referral system for patients presenting to the ED with a previously undiagnosed solid malignancy. This integrated process dramatically shortens the wait time for biopsy confirmation of disease and streamlines entry into the cancer system for a previously poorly served patient population."

2,551	new patients seen
14,827	visits to medical oncology clinic at QEII
8,845	telephone/chart check interventions
124%	inpatient bed occupancy rate—QEII

### **NEPHROLOGY**

Dr. Ken West

"In 2019, Dr. Dave Clark joined the division and started our Percutaneous Peritoneal Dialysis Catheter Insertion Program. This has allowed us to improve patient care by increasing the home dialysis rate by 30% allowing patients to have their care at home."

809	inpatient new consults
7,024	inpatient follow-ups
592	dialysis cases

### **NEUROLOGY**

Dr. Ian Grant

"In 2019/2020, the Division of Neurology took steps to improve outcomes in patients with acute stroke. These included improved pathways to deliver endovascular thrombectomy (EVT) for patients throughout Nova Scotia and PEI, and the introduction of an acute stroke nurse role to expedite the administration of thrombolytic therapy."

1,950	inpatient consults
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- 774 inpatient admissions
- 11,853 ambulatory clinic visits

### **PALLIATIVE MEDICINE**

Dr. David Duperé

"In 2019/2020 we were able to improve patient care by working with the Nova Scotia Health Authority and thinking outside the box to increase our physician resources. We thought outside the box AND the box went away."

- 1,198 consults
- 249 clinic visits
- 104 patients discharged to Hospice Halifax (opened 2019)
- 604 physician home visits
- 856 families supported through the bereavement program

### **PHYSICAL MEDICINE & REHABILITATION**

Dr. Amra Saric

"In 2019/2020, the Division of PM&R continues to deliver excellent inpatient and outpatient care. We are most proud of our efforts to improve access to our services by expanding our Acquired Brain Injury (ABI) outreach programs into the community and increasing our utilization of virtual care."

22,934 inpatient bed days226 telehealth visits672 inpatient consults

### RESPIROLOGY

### Dr. Paul Hernandez

"In 2019, the Division of Respirology received a report of the accreditation review from the Royal College indicating that our adult respirology training program met all accreditation standards and was exemplary in a number of key indicators. This achievement acknowledged the sustained efforts over many years of our program directors, program assistants, training program committee, and faculty (both in our Division and other supporting disciplines) to providing an excellent learning environment for our trainees in Respirology."

3,592	outpatients
1,655	inpatient consults
2,723	visits to the sleep lab

### RHEUMATOLOGY

Dr. Volodko Bakowsky

"As I reflect on 2019/2020, I am proud of our continued support of the academic and clinical mission of the Department. Our researchers have achieved success studying systemic lupus erythematosus (Dr. John Hanly) and immune effects from cancer checkpoint inhibitors (Dr. Janet Roberts). In addition, we have members who have significant leadership positions, including Associate Dean Undergraduate Medicine (Dr. Evelyn Sutton) and departmental Continuing Professional Development Chair and Royal College of Physicians and Surgeons Rheumatology Specialty Committee Chair (Dr. Trudy Taylor)."

- 10,879 visits to rheumatology clinics
- 190 visits to injection clinic
- 672 inpatient consults

# Our People

The Department awards below were recognized at the Awards Extravaganza on June 30, 2020—a virtual event. We'd also like to congratulate the many members who also received awards outside the Department which are too numerous to include here.

Most of the awards below are normally presented at the Department of Medicine Spring Party. The virtual event was more inclusive in terms of awards and invitees.

### SERVICE

### **5-Year Service** Natalie Burns. **Division of Cardiology** Shelbie Stacey-Allen, **Division of Physical Medicine** & Rehabilitation Elissa Hughes, **Division of Geriatric Medicine** Athena Christie. **Division of Geriatric Medicine** Laura MacPherson. **Division of Cardiology** Kelly Watson, **Division of Hematology** Amanda MacKay, **DoM Education** Valerie Weatherby, Division of Medical Oncology (retired)

### **10-Year Service**

Teresa Brake, Division of Physical Medicine Rehabilitation (resigned) Nicole Deveau, Division of Medical Oncology Ashley Doucette, Division of Neurology Natalie Garneau, Division of Digestive Care & Endoscopy

### **15-Year Service**

Nicole Chiasson, Division of Cardiology Elaine Haines, Division of Hematology Sandra Porter, Division of Digestive Care & Endoscopy

### 25-Year Service

Elizabeth (Betty) Migel, Division of Cardiology Michelle Bourgeau, Division of Cardiology Nancy Young, Division of Cardiology Heidi Blois, Division of Respirology

### Retirements

Dr. Graeme Rocker, Division of Respirology Dr. David Simpson, Division of General Internal Medicine Dr. Geoffrey Turnbull, Division of Digestive Care & Endoscopy Sandra Aucoin, Team Lead, Division of Clinical Dermatology & Cutaneous Science Heidi Blois, Team Lead, Division of Respirology Crystal Stadling, Team Lead, Division of Neurology Valerie Weatherby, Division of Medical Oncology

### Promotions

Effective July 1, 2020

### **To Professor:**

Dr. Melissa Andrew, Division of Geriatric Medicine Dr. Alwin Jeyakumar, Division of Medical Oncology Jason Leblanc, Ph.D., Department of Pathology (cross-appointed to DoM)

### **To Associate Professor:**

Dr. Meredith Chiasson, Division of Respirology Dr. Robyn Macfarlane, Division of Medical Oncology Dr. Ravi Ramjeesingh, Division of Medical Oncology

### AWARDS

**DoM Achievement Award 2020** Dr. Shelly McNeil, Division of Infectious Diseases

**Clinical Excellence Award** Dr. R. Mark Sadler, Division of Neurology

### **Excellence in Leadership Award** Dr. Chris MacKnight,

Division of Geriatric Medicine

**Excellence in Quality & Innovation Award** Dr. Jeffrey Dempster, Division of Palliative Medicine

### Brian M. Chandler Lifetime Achievement Award in Medical Education

Dr. Nancy Morrison, Division of Respirology

### Faculty Excellence in Medical Education Award

Dr. Simon Houston, Division of Respirology Dr. Anne Marie Krueger-Naug, Division of Palliative Medicine Dr. Mary-Margaret Keating, Division of Hematology Dr. Chris Gray, Division of Cardiology

Stephen Couban Outstanding Faculty Award—Residents' Choice Dr. Lynn Johnston, Division of Infectious Diseases

### **RESEARCH AWARDS**

### **Research Lifetime Achievement Award**

Dr. Shelly McNeil, Division of Infectious Diseases

### **Research Excellence Awards**

Dr. Lisa Barrett, Division of Infectious Diseases Leah Cahill, Ph.D., Department of Medicine Research Dr. John Hanly, Division of Rheumatology

### **Resident Research Excellence Award**

Dr. Ahmed Mokhtar, PGY5 Cardiology Dr. Ari Morgenthau, PGY3 Internal Medicine

### **Resident Research Publication Award**

Dr. Thomas Brothers, PGY3 Internal Medicine Dr. Ari Morgenthau, PGY3 Internal Medicine

### DEPARTMENT OF MEDICINE GRAND ROUNDS AWARDS

### **Overall Excellence Award**

Dr. Michael Stewart, Division of Digestive Care & Endoscopy

**Guest Speaker Award** Dr. Marc Carrier (presented on behalf of the Division of Hematology)

### **CELEBRATING OUR PEOPLE**

### **Award of Merit**

Dr. Sultan Darvesh, Division of Neurology Dr. Osama Elkhateeb, Division of Cardiology Dr. Lori Wood, Division of Medical Oncology

### **ADMINISTRATIVE STAFF AWARDS**

Administrative Assistant Award Sandra Bellefontaine, Division of Medical Oncology

Program Administrative Award Katie Barkhouse & Sophie Montreuil, DoM Education

Team Lead Award Heidi Blois, Division of Respirology

#### **RESIDENT RECOGNITION AWARDS**

**Chief Medicine Resident 2019—Halifax** Dr. Whitney Faiella

**Chief Medicine Resident 2019—Halifax** Dr. Kabi Thana

**Chief Medicine Resident 2019—Saint John** Dr. Alexandra Saunders

**MTU Chief Resident 2019** Dr. Alexandra Rogers

**Excellence in Undergraduate Teaching** Dr. Jonathan Gale

**Excellence in Summer Grand Rounds** Dr. Thomas Brothers

Outstanding Consultant Trainee Award Dr. Caitlin Jackson-Tarlton, PGY4 Neurology Dr. Scott Lee, PGY5 General Internal Medicine

Outstanding Academic Performance Award PGY1—Dr. Mary Purcell PGY2—Dr. Stephanie Pipe PGY3—Dr. Curtis Marcoux

**Outstanding Resident Award** PGY1—Dr. Steven Morrison PGY2— Dr. Jonathan Gale PGY3—Dr. Whitney Faiella

#### **GRADUATING RESIDENTS**

**PGY3 Core Internal Medicine** 

Dr. Abdulaziz Almudaires Dr. Ahmed Al Shammari Dr. Adil Bata Dr. James Boudreau Dr. Thomas Brothers Dr. Whitney Faiella **Chief Resident** Dr. Elizabeth Faour Dr. Jaclyn Ferris Dr. Ellen MacDonald Dr. Curtis Marcoux Dr. Ari Morgenthau Dr. Alexandra Rogers **MTU Chief Resident** Dr. Margaret Sheridan Dr. Kabilan Thanapaalasingham (Chief Resident) Dr. George Worthen Dr. Richa Parihar SJ Site Dr. Michelle Ricci SJ Site Dr. Alexandra Saunders SJ Site (Chief Resident) Dr. Keillor Steeves SJ Site

#### **PGY6 Cardiology**

Dr. Ahmad Alkharaza Dr. Daniel Belliveau Dr. Andrew Caddell

**PGY5 Dermatology** Dr. Noelle Wong

**PGY5 Gastroenterology** Dr. Tyler Mullen Dr. Harrison Petropolis

**PGY4 General Internal Medicine** Dr. Jaclyn Vertes Dr. Bethany Woodrow

**PGY5 General Internal Medicine** Dr. Christopher Green Dr. Scott Lee

**PGY5 Hematology** Dr. Erica Kelly Dr. Jacques Maillet

**PGY5 Infectious Diseases** Dr. Mark Robbins

**PGY5 Medical Oncology** Dr. Pierre O'Brien Dr. Raviya Singh **PGY5 Nephrology** Dr. Dominic Poirier Dr. Ryan Pratt

**PGY5 Neurology** Dr. Majed Alzahrany Dr. Sherry Hu

**PGY5 Physical Medicine & Rehabilitation** Dr. Ammar Al Khudairy Dr. Nathan Heinrichs

Fellow, Electrophysiology Dr. Jason Davis Dr. David Lee

**Fellow, Interventional Cardiology** Dr. Aziz Algethami Dr. Mognee Alameer Dr. Sunil Thambi

Fellow, Infectious Diseases Dr. Hilal AlSidari

Fellow, Epilepsy Dr. Yousef Alnajar

Fellow, Neuromuscular (Neurology) Dr. Adnan Badahdah

Fellow, Genitourinary (GU) Oncology Dr. Myuran Thana

### **OTHER NOTABLE AWARDS**

The Faculty of Medicine announced awards and promotions at the Annual Faculty Meeting on June 2, 2020.

Early Career Award for Excellence in Clinical Practice Dr. Ashley Miller

Award for Excellence in Clinical Practice Dr. Mark Sadler

**Community Teacher** of the Year Award Dr. Brian Moses

**Excellence in Patient-Oriented Research** Dr. Karthik Tennankore



DALHOUSIE FACULTY OF MEDICINE Department of Medicine



DoM

## Forward Together

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