Recipes for Success

Dalhousie University, Department of Medicine Nova Scotia Health, Central Zone

ANNUAL REPORT 2021-2022





Faculty of Medicine Department of Medicine



Vision

A vibrant department respected for its culture of collaboration and commitment to the health of its communities.

Mission

Together, we advance patient care by fostering excellence in research and education.

Our Values

High-Value Care: Strive for optimal outcomes and available resources, every day for every patient.

Continuous Drive for Improvement: Never compromise our conviction that high-quality research and education are essential to delivering high quality care.

Respect: Show others that we value and appreciate them through our words, actions and relationships. Grow a culture of inclusion.

Forward Thinking: Take the long view; consider what's needed now and 20 years out.





DALHOUSIE | Faculty of Medicine UNIVERSITY | Department of Medicine





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The Department of Medicine Strategic Plan 2020/2024

STRATEGIC PILLARS

Optimize Academic Outcomes — Education Optimize Academic Outcomes — Research Optimize Clinical Care Outcomes Strengthen Foundations for Success

> Support Administrative Staff Build Strong Centralized Supports Support Physicians

> > Department of Medicine • 2021-22 Annual Report

A MESSAGE FROM THE DEPARTMENT HEAD

Dr. Christine Short

Welcome to our 2021-22 annual report.

This year was marked by the challenges posed by COVID-19 and the evergrowing demands for acute medical care. Despite these difficulties, our department has worked together and with our partners to provide quality care to our patients, advance health care through research, quality, and clinical innovation, and educate the physicians of tomorrow.

Last year, we had 348,094 patient encounters, taught 845 learners at the undergraduate and postgraduate levels, celebrated almost 500 publications, and brought in over 11 million dollars in research funding. These accomplishments are a testament to our collective efforts and successes.

Our recipe for success is working together.

When we come together, we have a stronger voice, more ideas to solve complex problems, more understanding to support each other, and more to celebrate. The stories in our annual report are all examples of how we are doing this in the clinical and academic world. I want to thank everyone for their hard work and dedication, and I hope this report shines a light on the value of our department.

Warmest regards,

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Christine Short, MD, FRCP(C), FACP Head, Department of Medicine, Dalhousie University Central Zone, Nova Scotia Health Associate Professor of Medicine, Dalhousie University





WHO WE ARE AND WHAT WE DO

Together, we advance patient care by fostering excellence in research and education.

We Specialize In

- 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 Are

220 AFP Subspecialty Physicians

- **3** PhD Members (Dal and NSH)
- **293** Dalhousie Appointments (Academic; joint/cross/adjunct, community-based specialists)
- **144** Medical Residents (PGY1-PGY6)
- 79 Subspecialty Fellows
- 73 Administrative Staff

We Provide Care

COVID provided us with the opportunity to expand virtual care and to maintain our ambulatory patient care volumes. Despite the many restrictions we've encountered with COVID, we have been able to provide timely care to many of our patients, with a 34% increase of visits done via virtual methods.

- 204,577 Ambulatory Care Registrations
- 97,965 In-Person Visits
- **106,876** Virtual Visits (including phone, ZOOM, Telus, MEDEO, Real Presence, Telehealth)
- 48% In-Person 52% Virtual 93% **Inpatient Occupancy** 110,578 **Daily Inpatient Care Visits** 19,058 **Inpatient Consults** Consults by the Senior 2,664 Internist in the ED IMCU/CCU Patients Seen 11.217 194,067 Other Services (such as
 - ECGs, Echos, chemo injections, PFTs, Caths, transfusions, EMG, etc.)

We Teach

- **144** Postgraduate residents
- 24 External learners in Core Internal Medicine
- **39** Residents who rotated at an external site (4 weeks)
- **97** Undergraduate medical students on core rotations (1164 weeks)
- **90** Undergraduate electives
- **450** Undergraduate tutors for Dalhousie Medical School (3,179 hours)

We Research

- **331** Peer-reviewed publications (by 500 Department of Medicine authors)
- **40** Published abstracts (by 82 Department of Medicine authors)
- **15** Non peer-reviewed publications (by 16 Department of Medicine authors)
- **101** Research presentations (by 178 Department of Medicine authors)
- 5 Endowed chairs

Research Funding

Division Totals

Funds received by NSH and Dalhousie, fiscal 2021-22

\$1,927,178	Cardiology
\$38,707	Clinical Dermatology & Cutaneous Science
\$161,495	Digestive Care & Endoscopy
\$672,207	Endocrinology & Metabolism
\$88,082	General Internal Medicine
\$1,056,638	Geriatric Medicine
\$3,246,665	Hematology
\$954,371	Infectious Diseases
\$1,195,053	Medical Oncology
\$1,326,679	Nephrology
\$151,034	Neurology
\$60,000	Palliative Medicine
\$75,000	Physical Medicine & Rehabilitation
\$111,589	Research - General
\$215,325	Respirology
\$117,993	Rheumatology
\$11,398,022	Total research funding



DIVISION HIGHLIGHTS

Cardiology

Dr. Ata Quraishi Division Head

The Division of Cardiology continued to deal with an ever-increasing demand for both inpatients and outpatient services. Despite the increasing clinical challenges, the Division members produced high quality research and continued to provide high quality education for all the learners. There were several clinical high points over the year 2021-22 but the two most prominent ones were: Reducing the elective echocardiogram wait time from two years to less than 6 weeks and increasing the transcatheter aortic valve intervention numbers from 50 per year to greater than 180 cases in the fiscal year 2021-22. This was only possible with dedication, collaboration, and teamwork.

"Recipe for success: Commitment, Dedication, Collaboration, and Teamwork."

Clinical Dermatology & Cutaneous Science

Dr. Kerri Purdy Division Head



A highlight for Dermatology in the past year has been the addition of outreach clinics – including monthly travel to two indigenous communities and additional sites for tele-dermatology. We plan to continue to expand these opportunities in the coming months to years. "One ingredient in our recipe for success in dermatology is that we are embracing 'thinking outside of the box.' We are applying new and innovative ideas to improve the efficiency of the clinic and thus our ability to provide more dermatologic care to Nova Scotians."

Digestive Care & Endoscopy

Dr. Ian Epstein (*pictured top*) **Dr. Steven Gruchy** (*pictured bottom*) Co-Division Heads





In the past year we have developed the Complex Polyp Assessment Committee (CxPAC), led by Drs. Kohansal, Farina, Patel, Stewart, and Petropolis. This is a collaborative group consisting of gastroenterologists and colorectal surgeons. The motive for this initiative was the knowledge that in Nova Scotia a significant number of benign complex polyps are treated surgically, whereas the standard of care is endoscopic resection. The goal of the committee is to streamline and optimize the adjudication and management of referred complex polyps to our division, either through endoscopic resection or surgery. The process has led to improved collaboration and dialogue between members of the therapeutic endoscopy and surgery

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.



groups which we believe will improve access, the quality-of-care provided to our patients and reduce the number of unnecessary surgeries.

"Advocacy for our GI and hepatology patients is the key. There are high levels of inflammatory bowel disease, biliary disease and cirrhosis in our community and our division is committed to growing resources to help meet our patients' needs."

Endocrinology & Metabolism

Dr. Ali Imran Division Head

The Division of Endocrinology has continued to expand multidisciplinary care for Nova Scotians and is in the process of establishing a diabetes outreach program with key stakeholders in the Province. The major highlight during this past year is the new ultrasound guided thyroid biopsy clinic led by Dr. Vicki Munro. This clinic aims to streamline thyroid biopsy referrals. The division is also establishing a collaborative care model for low risk thyroid cancer to support patients and their primary care providers. We are thankful to all our team members who have come together in these challenging times and have made Endocrinology a wonderful place to work.

"Our goal is to provide the best possible care to our patients, expand new horizons through research, and train the next generation of leaders in Endocrinology."

General Internal Medicine

Dr. Nabha Shetty Division Head



GIM plays a significant role in Education, fulfilling key leadership roles including the Core IM Associate Program Director, and Assistant **Clerkship Director, Simulation** Director and POCUS director. We have made strides in our outreach with primary care by increasing our presence in collaborative clinics in Fall River Family Practice, Ravines Medical Centre Bedford, North End Community Health Centre, Dalhousie Family Medicine, Bedford Waterfront, Newcomer Health Clinic and Spryfield Medical Centre. We have maintained paperless operations since wave 1 and are advocates for integration of information technology into healthcare. Using Virtual Hallway, a web-based platform created in Nova Scotia, we have been able to expand our internal medicine expertise to all primary care practitioners throughout Nova Scotia.

"Our recipe for success has been, and will continue to be, advancing the education of learners and improving patient care through innovation and technology."

Geriatric Medicine

Dr. Paige Moorhouse Division Head

A highlight of the past year was the reorganization of geriatric outpatient services under the leadership of Drs. von Maltzahn, Searle and Lacas to single referral/triage and expanded access to multidisciplinary assessment for outpatient services.

"Our recipe for success was leveraging the strength of our doctors, nurses and allied health care providers to rally around a common goal of improving the accessibility and quality of our outpatient services."

Hematology

Dr. Sudeep Shivakumar Division Head



This year we began to offer CAR T-cell therapy, a novel and groundbreaking therapy that offers a potential cure to patients with refractory lymphoma, here in Nova Scotia. Previously, patients had to be sent to Boston to receive this life-saving treatment, but we have now treated over 15 patients locally with excellent response rates and substantial cost savings to the health care system!

"The recipe for success in Hematology has been to continue to innovate to provide the best possible care for patients. This includes novel treatments such as immunotherapy drugs, revolutionary therapies such as CAR T-cell therapy, and exciting clinical research in fields such as thrombosis, bleeding disorders, and blood cancers, with a focus on inherited hematologic malignancies where we are leaders in Canada."



Infectious Diseases

Dr. Shelly McNeil Division Head



As the COVID-19 pandemic surged into its second year, the Division of Infectious Diseases continued to play a key role in Nova Scotia's pandemic response providing advice, support and leadership to NS Health and DHW regarding COVID-19 therapeutics, immunization and testing strategies, Infection Prevention and Control, and Occupational Health, Safety and Wellness. On the non-COVID front, we were thrilled to welcome Dr. Mark Robbins to the division. Dr. Robbins completed his Internal Medicine residency followed by Infectious Diseases training here at Dalhousie then went on to complete fellowship training in Transplant Infectious Diseases at the University of Alberta. We are excited to have Mark back with the division and look forward to building an expanded clinical care focus in Transplant ID and the care of immunocompromised individuals.

"ID's recipe for success is, without a doubt, our people! We are a small but mighty team whose resilience, collegiality, adaptability and work ethic has allowed us to weather the most personally and professionally challenging period of our careers. As responsibilities of physicians in the division continued to escalate through the year, our amazing team of administrative assistants, clerical staff and nurses truly stepped up and continued to provide timely, safe and responsive care for our patients. We are fortunate to have such a wonderful, supportive work family and I am grateful for all of them!"

Medical Oncology

Dr. Nathan Lamond Division Head



The Division of Medical Oncology continues to work with the Nova Scotia Cancer Care Program to ensure that cancer care close to home is available to all Nova Scotians. The Division of Medical Oncology further expanded outreach services to community cancer clinics outside of Halifax with the addition of Dr. Myuran Thana providing in-person clinics at Yarmouth Regional Hospital and an increase in tele-oncology clinics to multiple sites. The entire division continues to work in concert with a growing group of general practitioners in oncology at sites across the province. This expanding model of care allows for expert subspecialty cancer care in addition to systemic therapy close to home for the increasing population of Nova Scotians living with cancer. This model also allows for a seamless transition of care and reduced travel for many cancer patients in the Western Zone whose care was transitioned to our division due to a leave of absence in their zone.

"The key to successful oncology care lies in the collective effort of a dedicated multidisciplinary team of professionals."

Nephrology

Dr. Neil Finkle Division Head

A COVID-19 clinical pathway was created and implemented for kidney transplant patients in response to an increased risk of severe COVID-19 in patients living with kidney transplants. This pathway included a letter to all patients followed in the clinic informing them of their risk and outlining supports available, as well as a step-by-step clinic response to a patient with a positive test. Since its inception, more than 200 patients have made use of the pathway to help facilitate a confirmatory PCR (test), gain access to a home SpO2 monitor, streamline access to centrally allocated therapeutics, and be directed for emergency care/ immunosuppression changes as appropriate.

"Our recipe for success is to continue to be innovative, collaborative and hardworking while always prioritizing patient care."

Neurology

Dr. Ian Grant Division Head

In 2021, the Division of Neurology said farewell to a pillar of our division. Dr. Steven Phillips led the Stroke Program for over 30 years. He built our acute stroke unit, a model for others of its kind across the country, was a key figure in developing stroke best practices in Canada, and was a very active clinical trialist. He was the recipient of many distinguished honours, including Dalhousie University's Dr. G. W. Archibald Gold-headed Cane Award in Medical Humanities and the Heart and Stroke Foundation of Canada's Ray Hnatyshyn lectureship award. A beloved member of our division and a consummate clinician and teacher, Steve retired at the end of 2021.





He has paved the way for a new generation of stroke neurologists, who have big shoes to fill.

"In a year or so affected by the pandemic, flexibility was our recipe for success. The situation required that we have each other's back and adapt to ever-changing conditions, often on a moment's notice – something our team is always ready to do."

Palliative Medicine

Dr. David Dupere Division Head

Despite being in the middle of the COVID pandemic, the Division of Palliative Medicine was able to achieve one of its most significant goals- to provide physician coverage for the entirety of the Central Zone. The addition of a third home/ clinic consult service helped with the increased palliative care needs in the Halifax area. The creation of a new outreach team helped to better serve the Windsor and Tri-Facilities areas.

"If you can laugh together, you can work together."

Physical Medicine & Rehabilitation

Dr. Amra Saric Division Head



The Division of Physical Medicine & Rehabilitation focused on a development of the new programs. With our multidisciplinary teams we

developed three investments in technology projects supported by **QEII** foundation: the Arm and Hand Lab. the Gait and Balance Lab and functional electrical stimulation technology, that will significantly improve patient care in the future. The Spinal Cord Injury (SCI) team in collaboration with the QEII's plastic surgery department started an interdisciplinary upper extremity clinic that treats patients who have lost limb functions, with an expectation that more than 75 per cent of patients who receive surgery will get meaningful function back in their hands. The wheelchair skills team continues to work on quality improvement projects on wheel-chair service delivery within the Central Zone. Physiatry in collaboration with ICU care team assessed impact of early rehabilitation access to patients in the ICU. Division team members continue to serve in a leadership role as a Chair of the PM&R Specialty Committee at the Royal College and a Co-Chair (Rehabilitation) of the Canadian Stroke Best Practice Recommendations Advisory Committee.

"PM&R's recipe for success is individual commitment to a group effort – this is what makes great teamwork and team success!"

Respirology

Dr. Paul Hernandez Division Head

Implications of COVID-19 on delivery of Respiratory Healthcare. Members of the Division of Respirology contributed to publication of a number of key position statements by the Canadian Thoracic Society to provide guidance to Canadian clinicians and healthcare administrators regarding the delivery of respiratory healthcare in the era of COVID-19. These publications covered topics such as the implications of the pandemic on pulmonary function testing, bronchoscopy, sleep studies, pulmonary rehabilitation, use of facemasks by the public, and COVID vaccinations.

"The recipe for success for the Division of Respirology in the challenging period of the second year of the pandemic was finding the right mix of innovation, collaboration, adaptability, and perseverance."

Rheumatology

Dr. Volodko Bakowsky Division Head

The Division of Rheumatology continued to grapple with the difficulties of providing predominantly ambulatory care that requires physical examination given the restrictions placed upon us by the pandemic. There were 13,300 patient registrations during this time, an increase of 2000 compared to prepandemic numbers. In addition, the division has continued to expand timely access to care for cancer patients who develop rheumatic complications of immunotherapy. Clinical care for this patient population is combined with a research program, with patients now enrolled in a national prospective cohort collecting both clinical and biological data.

"This year was definitely a struggle for us. The physicians, nurses and administrative and booking staff all leaned on one another for support. Adversity brought out the best in people and I feel fortunate to work with the people I do."





Education OM

COMPETENCE BY DESIGN

The First Batch of Residents Graduate under Competence by Design Model

The 2021-2022 Core Internal Medicine Residents are the first group to complete their training under the Royal College of Physicians and Surgeons of Canada *Competence by Design (CBD)* assessment model.



Pictured (*left side, front to back*): Drs. Steven Morrison, Sarah Badawod, Samina Nazarali; (right side, front to back): Drs. Laura Sheriff, Gabrielle Melanson, Phil Hillier, Jenna MacGregor

The Royal College of Physicians and Surgeons of Canada launched CBD across Canada's 17 universities to update the training of medical specialists in Canada. The program uses CanMEDS 2015 as the basic framework to assess the basic competencies to ensure physicians are graduating with basic competencies to meet the local health needs and requirements.

The Royal College organizes each specialty program into 4 stages of training. For internal medicine the stages of training are:

Stage 1 – Transition to Discipline (TTD) – corresponds to approximately the first 3 months of PGY1.

Stage 2 – Foundations of Discipline (FOD) – corresponds to approximately the next 9 months of PGY1.

Stage 3 – Core of Discipline (COD) – corresponds to approximately PGY2 and PGY3.

Stage 4 – Transition to Practice (TTP) – corresponds to the IM PGY4; for most residents this stage is after the completion of core internal medicine residency training in a subspecialty program.

Five Key Ingredients in CBD

The Royal College explains the CBD program in the following 5 key areas:

- **1. Stages of Training:** The Royal College organizes each specialty program into 4 stages of training.
- Clear learning objectives: Within each stage of training, residents are required to complete a list of learning objectives called Entrustable Professional Activities (EPAs) and milestones based on the CanMEDS 2015 framework.
- 3. Observations documented: Observers record EPA observations and provide feedback to residents through an online portal. The request for feedback is resident driven.
- 4. **Committee Review:** At designated stages in their training, a program competence committee reviews the documented observations, along with other assessment data collected via various feedback channels, and provides a recommendation to the Residency Program Committee on the resident's progression to the next stage of training. Any gaps are addressed before the resident is promoted to the next stage.
- 5. Progress to the next stage: Once the resident moves to the next stage, they are given a new set of competencies, or EPAs, to complete.

Source: https://www.royalcollege.ca/rcsite/cbd/what-is-cbd-e

CBD Go-Live Dates by Specialty

2018	2019	2020	2021	2022
Medical Oncology Nephrology	Gastroenterology General Internal Medicine Internal Medicine Rheumatology	Neurology Physical Medicine and Rehabilitation	Adult Cardiology Respirology	Dermatology Hematology

2022 Internal Medicine Residents

Congratulations to these PGY3 core internal medicine residents who will be the first group to graduate under the CBD program.

Dr. Mark Bartolacci Dr. Suzanne Boursalie Dr. Michael Catarino Dr. Rachael Chan (Saint John) Dr. Lauren Curry Dr. Andrea Davenport Dr. Alexandra Dittrich Dr. Ciarán Galts Dr. Joshua Goodwin Dr. Peter Gregory Dr. Jasper Johar Dr. Lynnea Lobert (Regional) Dr. Maggie McGuire Dr. Steven Morrison Dr. Mary Purcell Dr. Shannon Rasmussen (Saint John) Dr. Rammdeep Saini (Saint John) Dr. Matthew Spear (Saint John) Dr. Jacques Van Wijk (Regional) Dr. Felix Zhou Dr. Reem Zubaid

A New Evaluation Model

Dr. Ian Epstein has been the Program Director for the core internal medicine residency program since 2013. Looking back to July 2019 when the core program integrated the CBD assessment model, Dr. Epstein reflects how the new model has changed the way residents are evaluated for the better, and what the future of residency assessment will look like moving forward.



Dr. Ian Epstein is a Gastroenterologist and the Program Director for the Core Internal Medicine Residency Program.

Dr. Epstein acknowledges that CBD has added more paperwork to the assessment process. He notes that for residents to request staff to evaluate them on a number of tasks and procedures, or what the College of Physicians and Surgeons refers to as "Entrustable Professional Activities" (EPAs), is a change that will take some getting used to. Prior to CBD, residents were essentially evaluated only by In Training Evaluation Reports, or ITERs, at the end of each 28-day block. According to Dr. Epstein, the ITERs did not provide as comprehensive an assessment of a resident's progress in the program as EPAs do.

"I believe in CBD. There is sound medical education theory and evidence that competency-based, workplace-based assessments are a more authentic and better model than the older fashioned, summative end of rotation evaluations."

Dr. Epstein said that providing residents with a summative evaluation at the end of a rotation may seem like a good idea, but that model is challenging as preceptors may not have the full picture of a resident's experience, and there is limited time or exposure to a resident over a rotation to really provide a detailed ITER.



DoM

In addition to ITERs, the core internal medicine education used to collect and analyze a myriad of assessment data including documented clinical encounters, call cards and verbal feedback. Dr. Epstein says "*CBD is a more organized* way to collect workplace-based assessments. Despite the growing pains, it is more valuable for the program."

Shifting to Committee-Based Review

Prior to CBD, Dr. Epstein was responsible for reviewing assessment data for up to 60 residents with the program administrator and education staff. Now the model has shifted to a committee of 6 physicians, called the Competence Committee. This committee meets six to eight times a year and reviews each of the postgraduate years (PGY1 through PGY3) at least twice per year. The committee reviews the results of the residents' progress on 21 EPAs between the three stages: Transition to Discipline (TTD), Foundations of Discipline (FOD), and Core of Discipline (COD), along with their formative written and oral exam scores, ITERs, and feedback from the residents' academic advisors. Each resident is assigned an academic advisor from the Department of Medicine who helps to guide them through CBD and is available to answer questions and provide mentorship. Residents who require extra support are reviewed and followed more frequently to ensure that the learners stay on track with their training. "Having a Competence Committee look over assessment data is better for learners," says Dr. Epstein. "In the long run it is more work, but it adds value and insights for learners, and is a good thing."

Dr. Epstein notes that although CBD can add an assessment burden for faculty, and can potentially add to the level of stress, he believes the benefits make the program worthwhile for educators, faculty, and residents. According to Dr. Epstein, there are several pros to the CBD program including:

- Truer representation of a resident's progress.
- Residents receive a formal report card at least twice per year from the Competence Committee.
- Competence Committee identifies resident's strengths or weaknesses and can help create learning plans on a more-timely basis.
- Availability of more assessment data.

CBD is not a perfect system, Dr. Epstein admits, and notes the following challenges with the program as it currently stands:

- Assessment burden on staff physicians.
- When newly introduced has the potential to contribute to overall stress for residents and physicians.
- Technology is not easy-to-access in clinical spaces; requires login to One45.

Resident Perspective

Dr. Suzanne Boursalie is a PGY3 core internal medicine resident and served as Co-Chief for the program from January 1 – December 31, 2021. She is a member of the first cohort of residents completing their residency under CBD. Dr. Boursalie experienced some challenges with CBD: getting physicians to complete EPAs in a timely manner, access to complete certain procedures (especially during COVID) and feeling feedback fatigue. Dr. Boursalie said that she often referred to her ITERs for feedback on her rotations. Dr. Boursalie also felt that the One45 system could be improved to better meet the needs of the residents and faculty. She said, "I do feel like a platform which allowed for more spontaneous EPA completion would help with staff completion rates. For example, an app that allowed the resident to pull up the EPA and have the staff immediately fill it out would significantly improve the experience for filling out EPAs and might allow for more verbal feedback during the completion of the EPA." Although the CBD program did have its challenges, Dr. Boursalie said that she found having an academic advisor throughout the program to be beneficial.

Looking Ahead

The CBD model is new to internal medicine and according to Dr. Epstein, "three years in medical education is not a *long time.*" He anticipates CBD will be around for another 10 to 20 years and the program will evolve and the digital platform will continue to improve. Dr. Epstein anticipates the Competence Committee will go through continuous quality improvement as the members gain more knowledge and experience. He says that the committee has gained more insights and is gaining access to benchmarking data as more groups go through CBD. To date, one cohort has gone through the COD stage and two cohorts have gone through the first two phases of CBD: TTD and FOD. Dr. Epstein hopes that as the stresses of the pandemic start to decline, and residents and physician staff have more familiarity with the program, that the assessment burden will start to ease. "At a program level, CBD is leaps and bounds a better assessment model. There are drawbacks like paperwork burden and reliance on One45 (software), but it's way better than what we had before."



REGIONAL EDUCATION

A Slice of the Pie: Distributed Learning Model Immerses Residents Into Community Medicine

In July 2019, the Dalhousie Department of Medicine introduced regional education training programs in response to the provincial government's plan to expand residency education outside of larger medical centres like Halifax, NS. The first group of core internal medicine regional residents will graduate this year.

When the liberal government won the provincial election in 2017, they delivered on a campaign promise to increase the number of physicians in the province, focusing on regional centres. The government added 30 residency training seats. Of these, 15 seats went to the family medicine residency program and the other 15 seats were designated for specialties across Dalhousie University. Dr. Ian Epstein, Program Director for the core internal medicine residency program, said that the program was well poised to deliver regional based learning as the program already had a training site at Saint John Regional Hospital and also delivered training at Dartmouth General Hospital. The core internal medicine program committed to two seats and the general internal medicine residency program took two seats. The other seats were distributed amongst different programs. Within the department, dermatology and neurology also received additional seats. Dr. Epstein said, "the core internal medicine and general internal medicine residency programs are unique because residents spend at least half of their time away from their home program."

The regional education programs continue to grow and evolve. When the program launched in 2019, there were 5 regional residents across programs in the department. This academic year, there are a total of 12 regional residents: core internal medicine (6), general internal medicine (4), and dermatology (2). The growth of the program has had a ripple effect on administration, physician leaders, and regional hospitals. Each group plays a vital role development and delivery of regional education.

Internal Medicine Training Sites in the Maritimes

The number displayed is the total number of internal medicine residents that trained at the site during the 2021-22 academic year.



Snapshot: Regional Residency Training Programs

The Department of Medicine dermatology and neurology residency programs also have designated regional residency seats. These programs have different training criteria than internal medicine and general internal medicine; they do not have dedicated regional training sites. Residents are required to spend less time in community rotations in comparison.

	Core Internal Medicine	General Internal Medicine
Program Length	3 years	2 years
CaRMS Seats	Up to 2	Up to 2
Pathway	Medical School then match to Halifax, NS; Saint John, NB; or Regional Stream	Complete core internal medicine training and match to Halifax, NS or Regional Stream
Regional Training Sites	First year: half year spent in Cape Breton; a variety of sites in the Maritimes in second and third years	Split between Yarmouth and Halifax
Program Director	Dr. Ian Epstein	Dr. Allen Tran
Regional Residents	<text><text><text><section-header><text><text><text></text></text></text></section-header></text></text></text>	<section-header><text><text><section-header><text><text><text><text><text></text></text></text></text></text></section-header></text></text></section-header>



The Path Less Traveled: Regional Stream Residency Training

Get to know the physicians, staff and residents, who bring the regional training program to life.

Amanda MacKay Regional Education Coordinator



Amanda MacKay was hired in March 2020 as the first regional education coordinator for the Department of Medicine. In her role, she is the first point of contact for regional residents and assists them with everything related to their training: scheduling their rotations, finding accommodations, and serving as a bridge to facilitate communication between the core internal medicine training program and the various training sites across the Maritimes. Amanda says that the regional residents like the flexibility of working in a rural setting and getting to see a wide variety of cases as positive aspects of the program. Sometimes, though, being the only internal medicine resident in a community hospital can have its challenges. She says that "not having other trainees in the same zone to talk about their day can be difficult." New programs have been developed to address these gaps, such as Yarmouth Regional Hospital's navigator. This new role, funded by the city of Yarmouth, provides learners with a direct community connection.

The navigator offers a variety of support services. Amanda says that she has been impressed with how the navigator is helping to build a sense of community – they often organize social activities such as whale watching to bring people together who may otherwise be new to the area. The goal is to promote wellness and to encourage physicians to stay in the communities where they trained.

"It has been a pleasure working with the regional residents and I am very much looking forward to seeing this part of the program grow."

Dr. Allen Tran Program Director, General Internal Medicine Residency



Dr. Allen Tran is a general internist based in Halifax, NS, and is the Program Director for the General Internal Medicine Training program. Residents complete their core internal medicine training (3 years) and can apply through the MSM subspecialty match process for 2-year General Internal Medicine Subspecialty

Residency in Halifax or the Yarmouth Regional Stream. For the Yarmouth stream trainees, they complete 6 blocks in Yarmouth, 13 blocks in Halifax, and another 7 blocks in Yarmouth (each block is 28 days). With this model, residents are getting exposure to Halifax, a tertiary care centre, but spend half of their time in a community healthcare setting. The program benefitted from the acceleration of virtual learning and increased use of better virtual platforms due to the pandemic. This resulted in a better experience for the Yarmouth residents during academic half day sessions and point-of-care ultrasound image review teaching. According to Dr. Tran, the main benefit of the regional stream is that residents in this program are exposed to the full breadth of general internal medicine in the community. GIM in larger centres, like Halifax, tend to have a more select population of patients due to the larger number of clinical services available. At the Yarmouth site, residents have greater exposure to patients in the Intensive Care Unit (ICU) and see a wide variety of cases as they are the main medical specialty available. As there are fewer learners, residents complete a higher number of procedures. Residents in Yarmouth still have teaching opportunities, as there is a family medicine training program in Yarmouth. The GIM residents in Yarmouth will teach and supervise family medicine residents in the ICU and in formal teaching sessions. Dr. Tran sees a bright future for the program. He said, "one of the challenges we anticipated was recruitment into the program as Yarmouth is a smaller city. But, so far, the seats have been filled for three years in a row."



Dr. Brian Moses

Site Director for Yarmouth Regional Hospital; Chief of Internal Medicine, Western Zone



Congratulations to Dr. Moses who was recognized by Doctors Nova Scotia with the Community Specialist of the Year Award!

Dr. Brian Moses is a general internist and provides care at his clinic in Yarmouth and at the Yarmouth Regional Hospital. Dr. Moses helped to establish the Yarmouth site of the Dalhousie General Internal Medicine (GIM) Program. The Yarmouth GIM stream started in July 2019 and the first graduating class was in June 2021. Dr. Moses reports, "thus far, the stream has been successful with all 4 residents graduating on time, 50% staying in the Maritimes to practice GIM, 75% practicing as community general internists and positive reviews from the residents." Dr. Moses enjoys the opportunity to have learners on a regular basis and says that it gives him another incentive to stay up to date.

"There is a great group in Yarmouth – dedicated physician leaders. The program is being tailored based on feedback from the residents."

Dr. Daniele "Dan" Valentini PGY5 General Internal Medicine Resident, Yarmouth Regional Stream

Dr. Valentini will complete his general internal medicine subspecialty training in June 2022 and will be pursuing a Critical Care Fellowship at McMaster University. We got to learn more about Dr. Valentini and his experiences in the Yarmouth regional training program.

What have you enjoyed most about the regional program in Yarmouth?

The regional program in Yarmouth provides a degree of freedom and autonomy that is difficult to find in a large, academic training centre. This was a pleasant surprise to me and is probably the aspect of the program I've enjoyed the most. The schedule in Yarmouth is also different in that you change services on a weekly basis rather than month to month. For me, this was a welcome change as I enjoy variety and the "quicker" pace of a week to week transition. Apart from medicine, Yarmouth is a peaceful, nice town with friendly people.

From your perspective, what would be a few benefits of the regional program compared to the traditional GIM subspecialty residency?

In my eyes, the Yarmouth GIM stream is two subspecialty residencies rolled up in one. It provides one year of GIM training in a large, academic tertiary centre with all the other subspecialties one would expect. It also provides one year of training in a rural community with a catchment area of 60,000 people where GIM is one of the few subspecialties available. Due to this, a trainee can expect to be prepared to practice in either setting which is of huge benefit.



How has the regional residency program prepared you for the next steps in your medical journey?

Feeling prepared and competent to practice in both an academic and community setting has given me a lot of confidence moving forward. During my time in Yarmouth, I became comfortable practicing in a setting with very sick patients without having other specialties at my fingertips for support. It forced me to not only increase my breadth of knowledge, but also created an environment where I became a more independent, resourceful, and overall a better physician. This will without a doubt serve me well as I begin my second subspecialty at McMaster University in Adult Critical Care Medicine.

"I think the biggest advantage of a distributed model is that it provides residents/fellows with the skills they need to work in the community. I also think it provides a better window into the business side of medicine."



Dr. Dongsheng Gao

Cardiologist and Internal Medicine Site Director at Cape Breton Regional Hospital



Dr. Dongsheng Gao (right), Kathleen Williams (left), Medical Education Coordinator at CBRH.

Dr. Dongsheng Gao is a Cardiologist and the internal medicine residency site director at Cape Breton Regional Hospital (CBRH). Dr. Gao completed his Electrophysiology Fellowship in cardiology at the QEII Hospital in Halifax, NS, and can appreciate the different training experiences between larger training centres like Halifax and regional hospitals like his in Cape Breton. Dr. Gao has spent the last 8 years in Cape Breton and has come to appreciate the many benefits of the tight-knit group of physicians and staff at CBRH. He said that it's not unusual for him or the residents to "walk down the hall" to discuss a patient case or interact with other subspecialists. Due to the small number of residents that train there (usually 4-5 residents at a time), the faculty and residents have a lot of opportunity for one-on-one training and the ability to see a wide variety of patients and cases. In larger centres, like Halifax or Saint John, the resident experience tends to be more focused in a specific area as there are more specialists on-site. Due to geography, CBRH is a busy hospital

and residents can benefit from getting involved in the full scope of care. Residents can also request to book time to learn from other specialists; they are not required to only work with the physician or service they're assigned to for their block. Dr. Gao is excited about the future possibilities of the program as the hospital is growing and going through a major renovation, including the development of a new cardiac catheterization lab. As more internal medicine doctors and staff join the hospital, he envisions that there will be more supervisors to oversee residents.

"As we do not have many residents, we build close relationships. We know the residents, and the residents also know us."

Dr. Lynnea Lobert

PGY3 Internal Medicine Resident, Regional Stream



Dr. Lynnea Lobert earned her medical degree from North Ontario School of Medicine in Thunder Bay. She completed her third (and final) year core internal medicine regional residency in June 2022. Dr. Lobert matched to the general internal medicine subspecialty training program, Yarmouth regional stream, where she will continue her training in community medicine.

What have you enjoyed most about the regional residency program?

I enjoyed having the opportunity to explore different areas of the Maritimes. I was able to meet a lot of wonderful people from different communities. Welcoming and encouraging staff who initiated and facilitated many diverse learning experiences.

From your perspective, what would be a few benefits of the regional program as compared with the traditional core program?

One of the largest benefits I found was the amount of one-on-one learning time available with staff. Due to the decreased numbers of learners, there are more opportunities available to perform procedures. Being able to see the different approaches taken by various physicians and hospital systems has allowed me to expand and incorporate different components into my own approach. I enjoyed the mixture of working in a large academic centre learning from specialists, as well as, smaller community hospitals working with generalists and seeing the wide scope of practice.

How has the regional residency program prepared you for the next steps in your medical journey?

Having seen the scope of practice by a generalist in small communities has allowed me to be able to tailor my training and practice. Seeing the impact that a small team of physicians can have on a community has been, and will continue to be, encouraging.



Internal Medicine Residency Program - Report from Saint John, N.B. Site Director





Dr. Alexa Smith is the Site Director of the Internal Medicine Residency Program, Assistant Professor at Dalhousie University (NB) and Memorial University of Newfoundland, and Division Head of Rheumatology at Saint John Regional Hospital.

The 2021-2022 academic year for the Internal Medicine Saint John site was a fun, progressive, and successful one.

Our residents kicked off the year with a local retreat where they spent the weekend in St. Martin's exploring the scenery, playing trivia games, and roasting marshmallows over a bonfire.

In the fall, we were excited for our PGY3s upon learning all four of them had not only successfully matched to their first choices of subspecialties but are also continuing with Dalhousie! We wish them all the best in their future careers.

Our Chief resident, Dr. Cameron Ashe, has been working on coordinating and developing regular recruitment sessions locally with the New Brunswick Medical Society. He has also contributed in a large way to planning Code Blue competency for both our current and incoming PGY1s. New to the Saint John site this year is the MTU Chief position. Dr. Natasha Larivee was our successful candidate and has been evolving this new role by implementing positive changes and initiating projects such as resident driven M&M rounds, virtual MTU & CCU orientations, and helping both medical students and residents get their ITERs and EPAs completed. Dr. Jaclyn LeBlanc, Curriculum Coordinator for Saint John, introduced social determinants of health to our noon teaching curriculum with presentations from local groups within the community. She has also reinstated whiteboard teaching, arranged Royal College practice sessions, and provided individual career counseling sessions. Her dedication to the residents' learning is invaluable.

Last, but certainly not least, we are grateful to Resident Affairs and NBMS for initiating quarterly meetings with our residents to provide wellness sessions and an opportunity for residents to voice any feedback they wish to discuss.

We look forward to seeing what the 2022-2023 year will bring!

2021-2022 Internal Medicine Residents – Saint John, N.B.

PGY1

Dr. Karen Cholmondeley Dr. Kayla Chubbs Dr. Madelaine Leung Dr. Jacob Michaud

PGY2

Dr. Cameron Ashe Dr. Natasha Larivee Dr. Brandon Persaud

PGY3

Dr. Rachael Chan Dr. Shannon Rasmussen Dr. Rammdeep Saini Dr. Matthew Spear



DEPARTMENT OF MEDICINE GRAND ROUNDS

DATE	PRESENTER	DIVISION	ΤΟΡΙϹ	
Tuesday, April 06, 2021	Dr. Ali Kohansal	Division of Digestive Care & Endoscopy	"Managing GI Bleeding in 2021: What's hot and what is not"	
Tuesday, April 13, 2021	Dr. David Clark	Division of Nephrology	"Peritoneal Dialysis: There and Back Again"	
Tuesday, April 20, 2021	Dr. Karen Doucette	Division of Infectious Diseases	"Increased Infection Risk Organ Donors (IRD): The Importance of Language in Medicine"	
Tuesday, May 04, 2021	Dr. Laurie Mallery	Division of Geriatric Medicine	"Advance Care Planning and the COVID-19 Pandemic"	
Tuesday, May 11, 2021	Dr. Chester Oddis	Special Rounds	"The Many Faces of Myopathy"	
Tuesday, May 18, 2021	Dr. Michael Dunbar	Special Rounds	"Doctor, My Hip is Trying to Kill Me - Tales from the Front Line"	
Tuesday, May 25, 2021	Dr. Daniel Malebranche	Division of Cardiology	"Mick Jagger had a TAVI for his aortic stenosis. Can I get one too?"	
Tuesday, June 01, 2021	Dr. Allan Detsky	Anderson-Dickson Lecture Division of Endocrinology & Metabolism	"Reflections on a 45 Year Career in General Internal Medicine in Canada"	
Tuesday, June 08, 2021	Dr. Ali Imran	Quality Rounds	"Medical Management of Cushing's Disease"	
Tuesday, June 15, 2021	Dr. Brian Wong	Resident Rounds	"Building Capacity for Quality: The What, How, and Why"	
Tuesday, June 22, 2021	2021 Dr. Mary Purcell, Dr. Peiran Resident Summer Rou Sun, Dr. Josh Goodwin		"ACP and Conference Highlights"	
Tuesday, July 06, 2021	Tuesday, July 06, 2021 Dr. Mark Bartolacci		"Alcoholic Cardiomyopathy"	
Tuesday, July 06, 2021	Dr. Suzanne Boursalie	Resident Summer Rounds	"Heart Failure Reduced Ejection Fraction in 2021: New Guidelines and Practical Applications in Nova Scotia"	
Tuesday, July 13, 2021	Dr. Michael Catarino	Resident Summer Rounds	"Rheumatic Adverse Events and Immunotherapy"	
Tuesday, July 13, 2021	Dr. Lauren Curry	Resident Summer Rounds	"Geriatrics for the Oncologist"	
Tuesday, July 20, 2021	Dr. Andrea Davenport	Resident Summer Rounds	"Sepsis: What have we learned during the pandemic?"	
Tuesday, July 20, 2021	Dr. Alex Dittrich	Resident Summer Rounds	"Cystic Fibrosis: A Review and Updates on Therapy"	
Tuesday, July 27, 2021	Dr. Josh Goodwin	Resident Summer Rounds	"What is the Evidence Behind the New Alzheimer's Disease Drug, Aducanumab?"	
Tuesday, July 27, 2021	Dr. Peter Gregory	Resident Summer Rounds	"Caring for a Care Provider: Etiologies, Diagnosis and Treatment of Physician Burnout"	

DATE	PRESENTER	DIVISION	ΤΟΡΙϹ	
Tuesday, August 03, 2021	(EoE): Where we starte		"Eosinophilic Eosophagitis (EoE): Where we started and where we are at now"	
Tuesday, August 03, 2021	Dr. Lynnea Lobert	Resident Summer Rounds	"Cardiac Amyloidosis"	
Tuesday, August 10, 2021	Dr. Maggie McGuire	Resident Summer Rounds	"Hemophagocytic Lymphophistiocytosis"	
Tuesday, August 10, 2021 Tuesday, August 17, 2021	Dr. Steven Morrison	Resident Summer Rounds	"Contrast Associated Acute Kidney Injury: An Evolving Understanding of a Common Diagnosis"	
Tuesday, August 17, 2021	Dr. Mary Purcell	Resident Summer Rounds	"Multisystem Inflammatory Syndrome after COVID-19 Infection"	
Tuesday, August 24, 2021	Dr. Stephanie Pipe	Resident Summer Rounds	"Negative Impacts of Sleep Deprivation on Resident Wellness"	
Tuesday, August 24, 2021	Dr. Jacques Van Wijk	Resident Summer Rounds	"Pandemic of Non-Adherence: Why GINA Revamped Asthma Management"	
Tuesday, August 31, 2021	Dr. Felix Zhou	Resident Summer Rounds	"Review of alcohol use disorder pharmacotherapy"	
Tuesday, August 31, 2021	Dr. Reem Zubaid	Resident Summer Rounds	"Peripartum Cardiomyopathy"	
Tuesday, September 07, 2021	Dr. Julie Zhu	Division of Digestive Care & Endoscopy	"Gender Disparity in Liver Transplant"	
Tuesday, September 14, 2021	Dr. Karthik Tennankore	Division of Nephrology	"Best of the Best: The Top Nephrology Stories of 2020-2021"	
Tuesday, September 21, 2021	Dr. Ted Rosen	JB Ross Lecture - Division of Dermatology	"New Anti-Infectives and Why We Need Them"	
Tuesday, September 28, 2021	Dr. Ratika Parkash	Division of Cardiology	"Atrial Fibrillation in Heart Failure: New Evidence The RAFT-AF Study"	
Tuesday, October 05, 2021	Drs. Brian Moses, Chris Green, Kathryn Whittemore	Division of General Internal Medicine	"Case Files from the Yarmouth Regional Hospital"	
Tuesday, October 12, 2021	Dr. Sue Robinson	Division of Hematology	"Iron Deficiency - Don't Miss it and Always Treat it!!"	
Tuesday, October 19, 2021	Dr. Robyn Macfarlane	Division of Medical Oncology	"Cancer and COVID: What We Know So Far"	
Tuesday, October 26, 2021	Dr. Larry Robinson	Arthur Shears Lecture	cture "Comparison of US and Canadian Healthcare Systems - Stories from a US immigrant"	
Tuesday, November 02, 2021	Dr. Churn-Ern Yip	Division of Endocrinology & Metabolism	ogy "Immune Checkpoint Inhibitors & Endocrine Toxicities"	
Tuesday, November 09, 2021	Drs. Paul Bonnar and Lisa Barrett; Tasha Ramsey, Pharmacist	Division of Infectious Diseases	"COVID 101: Medication and Model of Care Overview"	



	DATE	PRESENTER	DIVISION	ΤΟΡΙϹ
	Tuesday, November 16, 2021	Dr. Masis Perk	Special Rounds	"A Tale of Digoxin Therapy; From Don't Stop to Can't Start"
	Tuesday, November 23, 2021	Drs. Alex Legge and Myuran Thana	CPC Rounds	"Clinicopathological Conference (CPC) Rounds: From the Cold Case Files"
	Tuesday, November 30, 2021	Dr. Allan Abbass	Special Rounds	"Detecting and Managing Emotional Factors in Somatic Presentations"
	Tuesday, December 07, 2021	Dr. Stephen Phillips	Division of Neurology	"The Stroke Revolution - A Personal Perspective"
	Tuesday, December 14, 2021	Dr. Alex Dittrich	Holiday Rounds – Resident Presentation	"Faculty Roasting on an Open Fire"
	Tuesday, January 11, 2022	Dr. Gabrielle Horne	Division of Cardiology	"Stretchy on the Inside: Connective Tissue Disorders and Genetic Vasculopathies – What the non-specialist needs to know"
	Tuesday, January 18, 2022	Dr. T. Jock Murray	Special Rounds	"The History of Dalhousie Medical School: 1868-2022"
	Tuesday, January 25, 2022	Drs. Volodko Bakowsky and Nicole Herschenhous	Division of Rheumatology	"The Nature of Empathy and Compassion and their Role in Healthcare"
	Tuesday, February 08, 2022	Dr. R. Lee Kirby	Division of Physical Medicine & Rehabilitation	"Motor Skills Learning: How to "Up your Game" as an Internist"
	Tuesday, February 15, 2022	Dr. Melissa Andrew	Division of Geriatric Medicine	"Frailty, Vaccines and Vaccine Preventable Illnesses"
	Tuesday, February 22, 2022	Dr. Jocelyn Lockyer, Professor Emerita, Department of Community Health Sciences, Cumming School of Medicine, University of Calgary	Education Rounds	"Assessment and Feedback in a Competency Based Era: Exploring theory, evidence and its application"
	Tuesday, March 01, 2022	Dr. Jamie Gregor	Division of Digestive Care & Endoscopy	"Making the tertiary primary: Refining our approach to the management of irritable bowel syndrome"
	Tuesday, March 08, 2022	Dr. Amy Hendricks	Division of General Internal Medicine	"Penetrating the desert: Reaching rural Nova Scotia with specialty care"
	Tuesday, March 22, 2022	Dr. Sudeep Shivakumar	Division of Hematology	"Clots, Bleeds and The Pill - Cases & Conundrums"
	Tuesday, March 29, 2022	Dr. Mary MacNeil	Division of Medical Oncology	"Brain Metastasis: Precision medicine, and Hope for the Future"



EDUCATION – OUR TEAM & PROGRAMS

2021-2022 Academic Year

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
- Dr. Christine Short Education Head, Department of Medicine
- Dr. Lori Connors
 Postgraduate Medical Education
 Communications Lead

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. Tallal Younis** Clerkship Director
- Dr. Nicholas Forward Assistant Clerkship Director
- Nina Nedic
 DoM Undergraduate Coordinator
 * Significant involvement by
 Department of Medicine

Med 1 Core Units (Pre-Clerkship)

- Foundations of Medicine
- 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)

Electives Med 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



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Postgraduate & Subspecialty

- Dr. Ian Epstein
 Program Director, Core Internal
 Medicine Residency Program
- Dr. Aaron Leblanc
 Associate Program Director, Core
 Internal Medicine Residency
 Program
- Katie Barkhouse
 Education Manager/
 Program Administrator
- Dr. Alexa Smith Site Director, Saint John
- Amanda MacKay
 Regional Coordinator
- Isha Seth Education Coordinator
- Alicia Mason
 Saint John Education Coordinator

Training Sites

- Halifax
- Saint John
- Dartmouth
- Fredericton
- Moncton
- Miramichi
- Sydney
- Yarmouth
- Kentville
- Bridgewater
- New Glasgow
- Truro
- Charlottetown

Chief Residents

January-December 2020:

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

January-December 2021:

- Dr. Suzanne Boursalie, Halifax
- Dr. Peter Gregory, Halifax
- Dr. Shannon Rasmussen/ Racheal Chan, Saint John

Resident Group Totals

- **48** Halifax (Core IM)
- **12** Saint John
- 6 Regional
- **79** Subspecialties

Program Directors by Subspecialty*

Cardiology

- Dr. Andrew Moeller (PG)
- Drs. Sarah Ramer/Priya Koilpilllai/Chris Koilpillai (UG)

Dermatology

- Direct-entry Residency Program
- Dr. Ashley Sutherland (PG)
- Dr. Peter Green (UG)

Endocrinology

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

Digestive Care & Endoscopy

- Dr. Stacey Williams (PG)
- Dr. Tasha Kulai (UG)

General Internal Medicine

- Dr. Allen Tran (PG)
- Dr. Chinmoy Chowdhury (UG)

Geriatric Medicine

- Dr. Maia Von Maltzahn (PG)
- Dr. Kata Koller (UG)

Hematology

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

Infectious Diseases

- Dr. Ian Davis (PG)
- Dr. Mark Robbins (UG)

Medical Oncology

- Dr. Alwin Jeyakumar (PG)
- Dr. Jennifer Melvin (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. Anne Marie Krueger Naug (PG)

• Dr. Lindsay Flinn (UG)

Physical Medicine & Rehabilitation Direct-entry Residency Program

- Dr. Anita Mountain (PG)
- Dr. Sonja McVeigh (UG)

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Respirology

- Dr. Simon Houston (PG)
- Dr. Alex Nelson (UG)

Rheumatology

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

Program Administrators by Subspecialty*

Cardiology

- Sharon Dunn (PG)
- Elena Wilkinson (UG)
- Dermatology
- Hyen Rosen
- Endocrinology
- Tumay Boxill
- Gastroenterology
- Sarah Cooper

General Internal Medicine

- Victoria Gilks (PG)
- Andrea Oster (UG)

Geriatric Medicine

Hematology

Nephrology

Neurology

Respirology

Rheumatology

- Ruth Ampi Kanakam (PG)
- Athena Christie (UG)

Hiyam Gedalia

Susan Brushett

Rod MacLaggan

Andrea Ellis (UG)

Palliative Medicine

Jo-Ann Clarke

Alysha Nelson

Allysa Robinson

Jessica Burchell

(PG) = Postgraduate

(UG) = Undergraduate

Ashley Doucette (PG)

Physical Medicine & Rehabilitation

Infectious Diseases

Medical Oncology

Jill Lindgren



Clinical Care

BORN FROM COVID-19: AN INNOVATIVE COLLABORATION BETWEEN PHYSIATRY AND ICU

Dr. Suzanne Salsman, a physician in the Division of Physical Medicine and Rehabilitation (PM&R) posed a simple question: "how can physiatry help with mobility in the Intensive Care Unit (ICU) for patients with COVID-19?" This led her to a project that would create a new, synergistic collaboration between physiatry and the ICU.

We connected with Dr. Salsman to learn more about her background and the collaboration project which is gaining traction. Dr. Salsman and her team were recently awarded a \$26,000 grant from the Dalhousie University Clinical Research and Mentorship Program to further their innovative and proactive approach to patient care.

Please tell us about your background. How long have you been with the Department of Medicine? What is your area(s) of specialty?

I completed medical school and residency in PM&R at Dalhousie University. Prior to medicine, I completed a Master of Science in Pathology. I joined the Department of Medicine in 2016. I am an Assistant Professor and as of this year, the Director of Research for the division and residency program. I work at the Nova Scotia Rehabilitation & Arthritis Centre as well as a private community practice. My clinical work focuses on both musculoskeletal medicine and neuro-rehabilitation, with subspecialty interests including MS rehabilitation, ALS, neuromuscular disease (such as cerebral palsy, myotonic dystrophy, Duchenne Muscular Dystrophy), orthotics/bracing and muscular skeletal conditions such as osteoarthritis, chronic pain and injury. My current research examines the impact of mobility on outcomes for critical care patients. Believing in the strength of collaboration, I am a member of many committees and networks, including Department of Medicine Promotions Committee, Executive Committee, Nova Scotia Health/IWK Research Ethics Board, Canadian ALS Research Network, Canadian Neuromuscular Disease Registry, and Doctors Nova Scotia Section of Physicians for Indigenous Health.



From left to right: Mete Erdogan, Doug Vincent, Dr. Suzanne Salsman, Dr. Robert Green and Dr. Osama Loubani (not pictured: Dr. Samuel Searle) *Photo credit:* Danny Abriel

When and how did the current collaboration between PM&R and ICU start? What were the driving factors of the collaboration?

As a rehabilitation team, we were anticipating that our specialty, physical medicine and rehabilitation, would be needed for rehab of COVID patients in the ICU, acute care sites (COVID and non-COVID units), rehab centre, and outpatients (long COVID). Through conversations with the head of the Intensive Care Unit (ICU), Dr. Robert Green, we found a common interest in mobility. In collaboration with Doug Vincent, ICU physiotherapist, and the Early Mobility Program, we developed the Mobility Daily Assessment, which has shown positive outcomes for trauma patients in our Nova Scotia ICUs. Given my experience in musculoskeletal medicine and neuromuscular disease, a collaboration seemed like an exciting opportunity both clinically and for research. Thinking about the important role of cardiopulmonary rehab, patient consults include questions around respiratory health and secretion management.

By fall 2020, we created an ICU inpatient rehabilitation consult form to be used by our rehabilitation staff. We were connected to Dr. Osama Loubani, a physician in the departments of critical care and emergency medicine, who has led the development and implementation of a



provincial ICU quality database which provides data to analyze and improve quality of care for ICU patients. This database would also help to expand our ICU-Rehabilitation collaboration. As a result of this introduction, an ICU-Rehab project was set up at the Victoria General hospital and I started doing consults. By January 2021, Dr. Green and I started a resident project with Dr. Brighid McFadden, PGY3 resident in our division and Mete Erdogan, Research Coordinator with Trauma Nova Scotia, for systematic review asking, "What is the impact of early consultation by a PM&R Physician on the outcomes of critically ill patients?" In spring of 2021, Dr. Green connected me with Dr. Samuel Searle, a physician in the Division of Geriatric Medicine. In Summer 2021, I joined the post-COVID in primary health care practice support program (PSP) clinical advisory group and gave two presentations on post-COVID rehabilitation. September 2021 opportunity to participate in the Clinical Research Mentorship Colloquium (CRMC) with mentorship by Dr. Lee Kirby and collaboration with Dr. Searle under his mentor Dr. Kenneth Rockwood.

Learning more about the PSP program made me realize the focus for physiatry in post-COVID care was for patients recovering from moderate to severe illness, for which they had been hospitalized and likely spent time in the ICU. We were seeing some these patients already for inpatient rehab and their rehab needs were similar to patients with weakness or nerve damage and deconditioning following prolonged ICU and/or hospital stays for other severe illnesses. The need to address physical impairments suffered by patients with COVID-19 provided the opportunity for us, as physiatrists, to address a new illness with the knowledge and training ubiquitous in our rehab team. Through my conversations with Dr. Green and Dr. Sam Searle, I realized that this knowledge could also be shared in addressing the rehab needs of any adult patient recovering from critical illness. The CRMC was an excellent opportunity. Dr. Searle and I participated in the 6-month program, meeting regularly with our mentor (Dr. Kenneth Rockwood and Dr. Lee Kirby, respectively) and attending expert lectures and group discussions with other participants around all aspects of clinical research. It was an invaluable opportunity to learn from the expertise and experience of established clinical researchers here at Dalhousie University. It provided me with the guidance, energy, and inspiration I needed to get organized, and at the end of it, Dr. Searle and I were successful in our application to the 2022 Clinical Research Mentorship Colloquium competition and were awarded \$26,737 in funding.



What was the current involvement of physiatry in the ICU before the collaboration? How is it evolving?

Physical Medicine & Rehabilitation has regularly consulted for patients with severe brain injury, burns, ICU myopathy/ neuropathy and spinal cord injury, but this is more often outside the ICU (IMCU, inpatient floor). I started doing PM&R consults in the VG ICU in the fall of 2020. Currently I am completing the ICU consultations. I approach it by looking at a patient's immediate rehabilitation needs as well as getting a good history of their functional baseline prior to admission, comorbidities that can impact recovery and rehab, as well as the patient, family or care workers goals and expectations with regard to mobility and function prior to leaving the hospital. This often requires a good chart review prior to seeing the patient, given the limitations of sedation, ventilation, communication, cognition, pain, and anxiety affecting the patient's ability to provide a good functional history. This has now evolved into a Rehab-ICU-Geriatrics collaboration between me, Dr. Samuel Searle and Dr. Robert Green, where we envision a role for our specialties as regular consultants in the ICU.

How would a patient in the ICU benefit from physiatry intervention in this new model? Can you provide an example?

We have a systemic review underway to ask the question "What is the impact of early consultation by a PM&R Physician on the outcomes of critically ill patients?" We had previously asked, "In critically ill patients admitted to an intensive care unit, what is the impact of physiatry consultation on mortality, length of hospital stay, and other patient outcomes?" We were not finding much literature that puts physiatrists in the ICU.



We can learn from other specialties. Our long-term care facilities were the hardest hit in our first wave, and Dr. Samuel Searle helped set up a hotel model for our alternate level of care patients, where most patients were minimally symptomatic or asymptomatic COVID-19. They used individual goal attainment scaling in addition to goals of maintaining pre-COVID-19 mobility/transfers. I planned to track something similar for our patients recovering from COVID-19.

During the first wave, we had one patient recovering from COVID-19 admitted to the Nova Scotia Rehabilitation Centre. They were cared for as ICU associated weakness or critical illness myopathy/neuropathy. This person was highly motivated and responded well to physical therapies, and during their stay we also addressed issues with fatigue, shortness of breath, and cognitive and memory issues, as well as emotional lability.

Describe the program objectives, goals, and milestones.

There is currently a disconnect between the ICU, acute

care, and rehab.In collaboration with the ICU team and members of the Division of Geriatric Medicine, we are trying to address how to bridge this gap. We are all learning about each other's specialties to see how working together can enhance an early mobility program and address and prevent delirium and limit frailty in in critically ill older adults.

What is the status of the program? Future plans?

We are planning a role for physiatry in the new trauma rehab unit, and in the future would like to create a specific post-ICU outpatient clinic integrated into our neuromuscular rehab clinics. Dr. Amra Saric and I just recently met with Dr. Rob Green and Dan Cashen, Director of Trauma Nova Scotia, to discuss a role for physiatry in the new inpatient trauma unit that is scheduled to go live in October 2022. Over time, as we measure the value of consultation with our team of physiatrists, as well as several other specialties, we will help answer that very important question of which patient populations will benefit the most from rehab interventions.

QUALITY IMPROVEMENT STEERING COMMITTEE

The Quest for Continuous Quality Improvement

The Department of Medicine Quality Improvement Steering Committee's aim is to improve the clinical care experience of patients under the care of the department, including optimizing timely access to high value care and improving patient safety. The Committee works closely with the Nova Scotia Health Quality Improvement and Safety framework in providing excellence in health care and services to all patients at Nova Scotia Health.

QISC Mission

To improve the patient care experience provided by the Department of Medicine. This will be achieved by leading and supporting initiatives spanning the seven domains of healthcare quality:

- 1. Safety
- 2. Efficiency
- 3. Effectiveness
- 4. Timeliness
- 5. Integration
- 6. Equity 7. People-centeredness
 - (including accessibility and appropriateness)

Quality Improvement (QI) projects involve rigorous data measurement and systematic changes to processes to improve quality of clinical care delivery and/or patient safety.

QI Project Examples:

- Developing a standardized order set to reduce catheter-associated line infections
- Determining guidelines adherence for the assessment of adrenal incidentalomas
- Reducing medication-related adverse events using
- telemedicine-based assessment



Dr. Ferhan Siddiqi is an Endocrinologist, Quality Director, and Chair of the Quality Improvement Steering Committee

QISC Purpose

The purpose of the committee is to take a leadership role in influencing a culture of quality improvement within the Department of Medicine through oversight and support of projects related to quality, efficiency of care, health services delivery, administration, and systems-level change.

2021-22 QISC Initiatives – QI Project Examples:

- A systematic review of the process by which QI projects are submitted and approved at Nova Scotia Health to find efficiencies and mitigate barriers for Department of Medicine faculty/trainees interested in starting new QI initiatives.
- Obtaining access to patient incident reporting data from the Safety Incident Management System (SIMS) for data analytics and identifying recurrent system events for targeted QI interventions.
- May 31, 2022 Quality Day. The committee is planning a department-wide virtual event to showcase the quality-focused initiatives of physicians, trainees, allied-health professionals, and project teams.

Quality Improvement Steering Committee

Dr. Ferhan Siddiqi, Chair Dr. Jeff Dempster Dr. Nicholas Forward Dr. Ali Kohansal Dr. Keigan More Dr. Wael Sumaya Dr. Sean Taylor Dr. Trudy Taylor Dr. Joshua Goodwin, PGY3 Internal Medicine Resident Dr. Jenna MacGregor, PGY2 Internal Medicine Resident Dr. Grace Park, PGY2 Internal Medicine Resident Megan Bourque, NSH Quality and Patient Safety Denise Hatchette, Administration, Ex-officio Valerie Orgar, Administrative support

Get to know Dr. Ferhan Siddiqi

Dr. Siddiqi is a physician and Associate Professor with the Division of Endocrinology & Metabolism and has been with the department for the past eight years. He is the Quality Director and Chair of the QISC. Dr. Siddiqi completed his Internal Medicine residency at Dalhousie University and his subspecialty training in Endocrinology from the University of Toronto. He also holds a Master of Science in Healthcare Quality from Queen's University. When he's not hard at work, Dr. Siddiqi enjoys playing soccer and woodworking. Dr. Siddiqi also enjoys traveling and wishes to visit Istanbul and the south of Spain one day soon. When it comes to entertainment, Dr. Siddiqi enjoys movies and a good gelato.

What drives his passion for QI work?

"I like problem-solving, so quality improvement is an opportunity to apply solutions-oriented, systems-level thinking to the work that I/we do every day. In the "whirlwind" of our daily work, it's easy to lose track of what really matters most. QI affords a chance to reaffirm what's important in a way that provides value to patient care, and how we can focus on doing that work better. The first-of-its-kind in the department, this year's Quality Day will offer a forum to share work in quality improvement initiatives that are happening in the department right now. By sharing successes (and failures) of ways in which to improve clinical care, we can all learn to apply new methods that enhance patient care and reaffirm our department's commitment to providing value to the healthcare system."



CLINICAL SYSTEMS AND INNOVATION COMMITTEE Spotlight on Dr. Jennifer Jones, Chair

Dr. Jennifer Jones is the Chair of the recently formed Clinical Systems and Innovation (CSI) committee. Learn more about how Dr. Jones is leading the committee to advance innovative research and clinical care in our community.



Dr. Jennifer Jones, Division of Digestive Care & Endoscopy

About Dr. Jennifer Jones

Dr. Jennifer Jones is a physician and Associate Professor of Medicine at Dalhousie University, Team Lead of the Nova Scotia Collaborative Inflammatory Bowel Diseases (NSCIBD) program, and Chair of Research in the Division of Digestive Care and Endoscopy at the Queen Elizabeth II Health Sciences Center in Halifax, Nova Scotia. Dr. Jones completed her gastroenterology training at Dalhousie University in 2004 and went on to do a clinical and research fellowship in inflammatory bowel diseases (IBD) at the Mayo Clinic Rochester. From there, she completed her MSc in Epidemiology while working in the IBD program at the University of Calgary, Alberta. Dr. Jones started as an Assistant Professor of Medicine developing the first provincial IBD program at the Royal University Hospital (University of Saskatchewan, Saskatchewan Health Region) in 2009. In 2015, Dr. Jones returned to the Dalhousie University Department of Medicine, Division of Digestive Care and Endoscopy in Halifax, NS. Since her return, she has completed the Doctors Nova Scotia Physician Leadership Development Program (2018) and formal certification training in implementation science through the University of California San Francisco (2021).

CSI Committee Purpose

Our purpose is to improve the health and well-being of all Nova Scotians living with chronic disease by improving access to high quality healthcare informed by implementation and evaluation of evidence-based best practice through strategic innovation.

CSI Committee Mission

To serve as provincial and national leaders and catalyst for the health system change through development, implementation and evaluation of novel, patient-centered health system innovation(s). Our ultimate goal is to overcome access barriers to quality, cost-effective healthcare and to ensure that Nova Scotians receive this care by the right person(s), in the right place, and at the right time.

CSI Committee Members

Dr. Jennifer Jones, Chair Dr. Nicholas Giacomantonio Dr. Doris Grant Dr. Anne Marie Krueger-Naug Dr. Ashley Miller Dr. Paige Moorhouse Dr. Alex Nelson Dr. Penelope Poyah Dr. Tara Sampalli Dr. Christine Short Dr. Michael Stewart Dr. Stephen Workman *Ex-officio:* Denise Hatchette Wayne Marsh

Her clinical and research passions relate to implementing and evaluating models of care, collaborative care initiatives, embedding eHealth technology into clinical care delivery and patient centered program development to improve access to care as well as disease and health system outcomes. She also has interest in the use of population-based data to evaluate outcomes for chronic gastrointestinal conditions.



When and why was the committee formed?

The CSI committee was formed to support the Department of Medicine's clinical strategic plan by developing infrastructure and a process to engage, support, and empower department members leading efforts to achieve health system transformation and improved access to costeffective care for Nova Scotians and the communities served by the department.

What are the key projects the committee has been working on over the past year?

Implementation effectiveness of evidence-based referral and flow pathways across Primary Care and the Department of Medicine through SMART PATH

Project leads: Dr. Harrison Petropolis, Dr. Michael Stewart, Dr. Jennifer Jones, Division of Digestive Care & Endoscopy and Dr. Anna Neumann, Department of Family Medicine, Dalhousie University

The goal of this project is to leverage eHealth technology to support the integration of primary and specialty care providers to implement evidence-based, specialist facilitated care. Through extensive engagement and an iterative human centered design process, a high-fidelity SMART PATH prototype through a platform called Virtual Hallway has been achieved. SMART PATH provides a onestop experience through which referring providers are supported to provide evidence-based care, access resources, and to improve referral efficiency and navigation to specialists so that the right patients are being seen by the right provider, in the right facility, at the right time. The pilot project will focus on collecting implementation and early effectiveness data for two condition specific pathways starting with anemia and undifferentiated lower gastrointestinal tract symptoms and will take place in fall 2022. It is anticipated that this intervention will lead to reduced wait times to consultation, diagnosis, and treatment, greater provider and patient satisfaction, quality of life, and more cost-effective referral and triage processes. After a successful pilot, it is anticipated that other pathways will subsequently be onboarded and that SMART PATHS will be scaled and spread.

Community-based Peer Support Program for Women Living with Heart Disease: Optimizing Clinical Care Outcomes: Supporting Primary and Secondary Care in the Community

Project lead: Dr. Sharon Mulvagh, Division of Cardiology

Through standardized, evidence-supported training of peers who provide community-based educational and emotional support to women with heart disease, it is anticipated that access to education, self-management, and emotional support for these women will improve. This will ultimately lead to improvements in QoL, disease control, and health resource use. Project Leader, Dr. Sharon Mulvagh, will conduct an Nova Scotia pilot, with hopes of scaling, and spreading the Women at Heart initiative initially developed in collaboration with the Ottawa Heart Institute. Dr. Mulvagh and her team received CSI funding for their pilot which will launch the fall of 2022.

REDUCE-IT: High level hub and spoke model for the delivery of guideline directed, multidisciplinary care for Nova Scotians with risk factors for cardiovascular disease.

Project lead: Dr. Nicholas Giacomantonio, Division of Cardiology

The REDUCE-IT project, led by Dr. Nicholas Giacomantonio and his team focuses on development of a "hub and spoke" model that supports implementation of evidence-based, guideline-directed therapy through a multidisciplinary, community-based program for Nova Scotians living with cardiovascular disease. The project's implementation plan is under active development with the support of the DoM CSI and NSH R&I. This care delivery model has potential to be extrapolated to other chronic disease states as well.

A new kind of COAD: Meeting the needs of people with advanced chronic disease outside the acute care setting

Project leads: Dr. Stephanie Connidis, Department of Family Medicine; Dr. Anne Marie Krueger-Naug, Division of Palliative Medicine

Under the leadership of Dr. Connidis and Dr. Krueger-Naug and team, this project aims to improve access to homebased, multidisciplinary care for frail patients with end-stage dyspnea to improve quality of life and reduce healthcare costs. Building upon the success of the INSPIRE program, this initiative focuses on providing high quality care for patients and providers in their communities through access to an expert multidisciplinary team. This project is in the active development phase, with additional support through NSH R&I, to ensure that the intervention(s) and implementation strategies are well defined, supported, and measurable, setting this project up for maximal success.



Optimizing Patient Experience and Flow Through Acute Medicine Services: Putting Recommendations into Action

Project leads: Dr. Paige Moorhouse, Division of Geriatric Medicine; Dr. Nabha Shetty, Division of General Internal Medicine

In this project, Drs. Shetty and Moorhouse have proposed development and implementation of evidence supported goals of care evaluation process and infrastructure to be embedded within acute care medical services. It is anticipated that this project would have potential to reduce emergency department and inpatient burden and to reduce costs of care. This project is in the early ideation and development phase with significant progress anticipated in 2022/23.

What are the committee's key accomplishments you are most proud of?

Over the past 18 months we were able to establish an entirely new committee, terms of reference and governance, as well as to engage the Department of Medicine's key stakeholders directly about CSI's mandate and work. I am also proud that we received several project proposals from department members, all of which we are supporting in some form through project guidance and constructive feedback, implementation science support, promotion of key stakeholder engagement (i.e., collaboration with NSH R&I Hub) and, in some cases, funding.

How do you see the work of the committee evolving in the future?

The work of the CSI chair and project leads will become better supported through investment in Department of

Medicine resources including an Implementation Scientist (PhD), a project manager (MSc), and enhanced knowledge translation and communication. These positions will start by January 2023. I also see the work of the CSI becoming more seamlessly integrated with and supported by Nova Scotia Health Research and Innovation. As project pilot data emerges that demonstrates successful implementation and early health system impact, I anticipate further engagement with key health system players including the Department of Health and Wellness, Dalhousie University Faculty of Medicine, community leaders, and government in order to scale and spread promising initiatives. We anticipate early pilot data from a few projects this fall.

What fuels your passion for this type of work?

At the end of the day, we all pursued careers in medicine to help people with disease and illness by providing the best medical care possible - at both the individual and population level. The best care includes that which is accessible, patient-centered, and informed by evidence. In addition to being a clinician and researcher who is evidence driven, I am also a creative, big picture thinker with a passion for human-centered design. These passions, along with the struggles I have encountered with providing what I consider to be "best care" to my patients who suffer from IBD, now exacerbated by the negative impact of the COVID-19 pandemic on our healthcare system, motivated me to pursue formal training in implementation science to better support the research and innovation work I do with my own patient population as well as the important work of the CSI Committee. My desire to make a positive difference for patients and providers at the health system level fuels my passion for this work.

Project	Project Pitch with EP Gap*	Stakeholder Engagement	Logic Model Creation	Implementation Plan	Evaluation Plan	Start-up Funding	Implementation Pilot
Evidence -based referral & patient flow pathways	1	1	1	1	1	In progress	Anticipated summer/ early fall 2022
Program for Women Living w/ Heart Disease	1	1	1	1	✓		In progress
REDUCE-IT	1	1	In progress				
A new kind of COAD	1	1	In progress				
Optimizing Patient Experience and Flow	1						

CSI Project Overview Gantt Chart (Project proposals reviewed in June/July 2021)



Department of Medicine • 2021-22 Annual Report


Research

CLINICIAN INVESTIGATOR PROGRAM

Rising Stars: Dr. Thomas Brothers and Dr. Jasmine Mah

The goal of the Clinician Investigator Program is to provide medical residents with structured and rigorous research training—in the midst of their residency—so that they develop the research skills and experience they require to become clinician investigators upon completing their residency.

Source: Dalhousie University website

Dr. Thomas Brothers and Dr. Jasmine Mah are enrolled in the Dalhousie University Clinician Investigator Program (CIP). They are funded through the Department of Medicine University Internal Medicine Research Foundation, which supports medical clinical research endeavors. Learn about their backgrounds and what drives their passion for research.



Dr. Tommy Brothers is a subspecialty resident in General Internal Medicine and in the Clinician Investigator Program at Dalhousie University, and a PhD student in Epidemiology & Public Health at University College London. He holds specialty certification in Addiction Medicine from the International Society of Addiction Medicine. His clinical and research work focuses on improving health care for people with substance use disorders. Dr. Brothers co-led an unofficial, trainee-run hospital inpatient addiction medicine consultation service and helped to organize Halifax's first safe injection site.

Dr. Thomas Brothers

Thomas (Tommy) Brothers never intended to be a doctor. A son of two Nova Scotian physicians who met at Dalhousie University medical school, Tommy had an early introduction to medicine. When it came to planning his future profession, he decided to forge his own path and pursued an Arts degree in English and History at Dartmouth College in New Hampshire, USA. It was his minor in Bioethics, however, that made him reconsider his career path. "I started getting interested in the history of medicine and medical research and how medicine can be helpful and harmful and powerful and all of the ethical problems and the potential for medicine for social justice in an unequal society," said Brothers. After considering his options, he realized that medicine would offer him a career where he could work on these issues, help people, and make a difference.

With his goal of becoming a doctor in mind, Dr. Brothers returned to Nova Scotia and applied for research assistant jobs. He got his first job with Dr. Kenneth Rockwood in the Division of Geriatric Medicine. Dr. Brothers credits Dr. Rockwood's generosity in hiring him when he had limited experience in research methodology and statistics. Dr. Brothers counts this time as the beginning of his research journey. Dr. Brothers gained invaluable hands-on lessons about research methodology and what it was like to work in academia.

"It was an incredibly positive experience for me," said Brothers. "Dr. Rockwood became a role model and a dear mentor and I could see how he's such a passionate advocate for frail, older adults and he really integrates his research and his clinical work, but also advocacy – looking for solutions to really big problems and advocating for vulnerable populations and research to find solutions. And even though my research interests have changed, and I am focused on substance use and addiction, a lot of the same lessons of integrating research, clinical practice, and advocacy work, I really learn from him."



Research for social justice

In 2013, Dr. Brothers was accepted into Dalhousie University Medical School and continued working with Dr. Rockwood through the Research in Medicine Program, furthering his quest to look at social issues and using medicine and research as a tool for social justice. It was during medical school, Dr. Brothers recalls, that he became interested in the medical side of substance use and addictions. He met the nurses that ran the Mobile Outreach Street Health (MOSH) clinic, a program of the North End Community Health Centre. He job shadowed the nurses and completed as many electives as he could working with the MOSH team.

"They provide primary care and harm reduction care to people in shelters and people living on the street, and they go out and ride alongside the needle exchange outreach team and that kind of thing. They have this really compassionate approach to health care that's based on relationships and these principles of harm reduction and supporting people with love and non-judgment," said Brothers.

Based on his positive experiences with research with Dr. Ken Rockwood and his team, Dr. Brothers knew that he wanted research to be a part of his career. Dr. Brothers first learned about the Clinician Investigator Program (CIP) through the Dalhousie website when he started his core internal medicine residency training at Dalhousie. He was drawn to the program because it offered residents dedicated and protected time to research. He had also heard positive reviews from internal medicine residency colleagues Dr. Caitlin Lees and Dr. Alex Legge who had completed the CIP.

"Research during medical training is really hard. There's always something more urgent going on so it's really like an evening and weekends kind of project," said Brothers. Dr. Brothers decided to apply to CIP after completing his core internal medicine residency to coordinate the timing with his wife Lindsay, a PhD scientist, who was accepted into a prestigious post-doctoral fellowship in Cambridge, UK. He reached out to researchers who specialized in the field of substance use and harm reduction in medicine in London, UK, and ultimately met his current supervisor at University College London. Dr. Brothers is currently pursuing a PhD in Epidemiology and Public Health while concurrently completing his General Internal Medicine subspecialty training at Dalhousie University.

Although Dr. Brothers and his wife's plans to go to London were delayed due to the pandemic, he says that program has been life changing. He gained flexibility, time, and the financial support from the Department of Medicine he needed to pursue his research. "It's amazing to step away from the urgency of clinical work at the hospital and have some time to read deeply and think deeply."

Current research and future plans

The focus of Dr. Brothers thesis work is on bacterial infections that come from injection drug use. He notes that this is a common and serious problem in the hospital and injectingrelated infections are becoming more prevalent in society with the rise of the opioid and housing crises.

"Often times patients come into hospital with opioid withdrawal and pain, and they have had negative experiences. Providers might be afraid to give opioids to people with an opioid addiction, and patients have to be in hospital for weeks and weeks for intravenous antibiotics. Sometimes they'll need open heart surgery if they have endocarditis, but the surgeons don't know what to do; they disagree," said Brothers. "We have effective treatments for opioid use disorder that are underused in hospital. There are still lots of unanswered questions about how to make care better for these patients and to prevent future infections." After he finishes his CIP program in July 2023, Dr. Brothers will have 9-12 months of training to complete his general internal medicine subspecialty residency. He hopes to find a position as a clinical scientist in Halifax once he completes his medical training. "I have found my place integrating general internal medicine and addiction medicine, "said Brothers. "To be able to go back and forth and do both and have the clinical work inform the research questions, and the research work be applied to clinical work, is a really exciting idea for me."

Dr. Jasmine Mah

The decision to pursue medicine for Dr. Jasmine Mah was personal. During her formative years, she witnessed a family member battle with a medical issue that affected all aspects of her family life. It was this experience, Dr. Mah recalls, that solidified her decision to becoming a doctor. One of her family's doctors provided advice which she never forgot: instead of pursuing treatments with uncertain outcomes, they recommended finding a support network of other families going through the same issues. Helping others, she notes, is one of the privileges of working in medicine. Although Dr. Mah acknowledges that medicine has come a long way, her personal medical philosophy is to look beyond the numbers and examine her patients' personal needs to develop appropriate goals of care.





Dr. Jasmine Mah is an internal medicine resident and PhD student at Dalhousie University who studies social vulnerability and frailty. She believes that social determinants matter to patient health and searches for feasible ways to incorporate strategies addressing social determinants into clinical practice. Dr. Mah is the co-chair of the Canadian Resident Geriatric Interest Group, winner of Dalhousie University's 3 Minute Thesis and a Pierre Elliot Trudeau Scholar. She holds an MD from the University of Ottawa and a MSc in Health Policy, Planning & Financing from the London School of Hygiene and Tropical Medicine and the London School of Economics.

"[As a doctor], very often we know what's going to happen. We can predict the prognosis and the trajectory of people with different chronic diseases. It is almost easier to continue offering more options and increasing the level of care. You can always say 'we'll do this, and we'll do that, but I think it takes a deeper understanding of the functional and cognitive consequences to really take a step back to have the confidence to say we can do all these things, but should we be doing all these things? Especially if some of them may not be beneficial," says Mah.

A voice for older adults

Dr. Mah has been interested in geriatric research since her undergraduate days at University of Ottawa. Her first research experience was in Dr. Jeffrey Jutai's lab at the Bruyère Research Institute, focusing on assistive technology for older adults with chronic diseases. Dr. Mah continued working in the lab throughout her undergraduate years and during medical school. She also gained experience as a lab manager and site coordinator for a national CIHR funded randomized control trial on older adults. As a student, Dr. Mah attended national geriatrics conferences and heard from world-class researchers. It was at this time that she learned of Dr. Kenneth Rockwood's research lab in geriatrics at Dalhousie University. She says that given her early exposure to research, she knew that she wanted to become an academic geriatrician and have an opportunity to work in Dr. Rockwood's lab.

Fast forward to today and that's exactly what Dr. Mah did. She matched to the internal medicine residency program at Dalhousie. A colleague recommended that she meet Dr. Melissa Andrew, Research Director for the Department of Medicine and Professor in the Division of Geriatric Medicine. They clicked right away. As a graduate of the Clinician Investigator Program (CIP) herself, Dr. Andrew introduced Dr. Mah to the program and recommended it for her career path. "Her [Dr. Andrew] passion for geriatrics, immunization in older adults and social vulnerability was inspiring and reflected the experiences and patients that I was seeing in the emergency department at the time," said Mah.

Currently in her fourth year of CIP and third year of internal medicine residency, Dr. Mah earned her MSc in Health Policy, Planning and Financing from the London School of Hygiene and Tropical Medicine and the London School of Economics during her CIP program. She is pursuing a PhD through the Medical Research Graduate Program at Dalhousie. The focus of Dr. Mah's thesis is on social vulnerability in older adults. Dr. Andrew is her thesis supervisor and Dr. Rockwood is a member of her thesis committee.

One of the projects Dr. Mah is working on is looking at "orphan patients", or patients who were a "social admission", in the hospital. She says that neither of these terms are appropriate because they add no diagnostic value and stigmatize these patients further. She says these patients are some of the most vulnerable patients in the community and may face higher mortality rates in the hospital than patients who have a cardiac arrest. "It's a lot more difficult for an acute care centre to treat someone with frailty and confusion," says Mah. She is currently reviewing orphan patients records from 2010 to 2021 and recently received a grant from the Nova Scotia Health Research Fund to conduct interviews to better understand the needs of this population. "This is my passion project," says Mah.

Dr. Mah thanks the CIP and the Department of Medicine for providing her financial support and the time to focus on her research endeavors. "We [CIP residents] meet once a month and go through a case study and also have our own retreats," says Mah. "The curriculum is actually really useful for [questions such as] how do you get a job as a researcher, how do you approach ethical considerations as a researcher, and how do you negotiate as a researcher."



A Trudeau Scholar

Dr. Mah was selected as a 2021 Trudeau Scholar; an experience that she says has "pushed her way of thinking outside of her comfort zone." Throughout the program, she was exposed to politicians and attended leadership summits with the goal of building the skills necessary to translate her research and impact change on a larger scale. Dr. Mah says that to be a change agent, "you have to speak the language of the politicians and policymakers." She is fascinated with knowledge translation and the idea of "science diplomacy," a term that she says has gained traction in some circles and something she is interested in learning more about.

"Everyone does such great research, but if we're not getting that information to people who can utilize it to help our population, then why are we doing that research?" said Mah. Dr. Mah has been successful in getting her research out to the public. She has a knack for explaining complex issues in a simple way. Earlier this year, Dr. Mah took the top spot in the Dalhousie University Faculty of Graduate Studies 3 Minute Thesis (3MT) competition with her presentation, "Social Vulnerability: What It Is, How to Measure It, and Why It Matters." According to the Dalhousie website, the competition gives graduate student researchers a platform to share their ideas and compete for cash prizes. Dr. Mah not only won the Dalhousie competition, she came in second place in the Eastern Regional 3MT competition and will compete in the national finals later this year. Dr. Mah considers winning the Dalhousie competition her greatest accomplishment this year.

"Even my parents could understand it," says Mah. "The most important part is that I'm spreading awareness that there are patients who are admitted to hospital because they are socially vulnerable. They are a population that deserves our attention and support – if only because that could be us one day. Medicine must play a role in improving the social conditions that lead to illness, disease and hospitalization. And I'm able to spread that message."

REPORT FROM THE DIRECTOR OF RESEARCH



Dr. Melissa Andrew is a Professor in the Division of Geriatric Medicine and Director of Research for the Department of Medicine. Her research examines frailty and social vulnerability in older adults with application to dementia, models of care, and vaccinology.

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 2021-22, department members received approximately \$11.4 million in research funding. The funding supports groundbreaking 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 supports research with a departmental Research Committee and Resident Research Committee.

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: 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 local, national and international grants, as well as resident research funding to assist resident research projects with small amounts of funding (such as for publications or software fees).



RESEARCH – A SNAPSHOT

UIMRF approved the following awards in 2021-22:

UIMRF Internal Fellowship Award – Clinical Investigator Program

- Dr. Thomas Brothers | third year CIP sponsorship PGY4 Internal Medicine / Supervisors: Drs. Andrew Hayward and Duncan Webster
- **Dr. Jasmine Mah** | fourth year CIP sponsorship PGY3 Internal Medicine / Supervisor: Dr. Melissa Andrew

UIMRF Internal Research Fellowships

• **Dr. Myles O'Brien**, PhD | \$60,000 "The Personalized Approach for Healthy Aging Program"

UIMRF Matching Research Funds Award

• Dr. Amy Trottier | \$72,443.50 (over 3 years) "Interplay between genetic predisposition and environmental factors on the development of plasma cell dyscrasias in the Maritime Provinces"

UIMRF Resident Research Funding

• **Dr. Adam Patterson** | \$712.43 "Unilateral Abdominal Clonic Jerking as an epileptic phenome non: A report of Three Cases" [publication fees]

Endowed Research Chairs

In 2021-22, the Department of Medicine had five 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:

- **Dr. Leah Cahil**l, PhD Howard Webster Department of Medicine Research Chair
- **Dr. Jafna Cox** Heart and Stroke Foundation Endowed Chair in Cardiovascular Outcomes (completed Chair terms at the end of June 2021)
- **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
- **Dr. Karthik Tennankore** QEII Foundation Endowed Chair in Transplantation Research

The Department of Medicine was selected by the Faculty of Medicine Research Advisory Committee to lead the recruitment for The Heart and Stroke Foundation of Nova Scotia Endowed Chair in Cardiovascular Outcomes Research, in conjunction with the Department of Community Health and Epidemiology. The recruitment is expected to be underway in 2022-23.

Department of Medicine Research Committee

- Dr. Melissa Andrew (Chair)
- Dr. Amir AbdelWahab
- Dr. Lisa Barrett
- Dr. Chris Blanchard
- **Dr. Leah Cahill** (Howard Webster Department of Medicine Research Chair; Co-chair, Resident Research Committee)
- Dr. David Clark
- Dr. Sultan Darvesh
- **Dr. Shane Journeay** (DMNB Representative)
- Dr. David Clark

- Dr. Sultan Darvesh
- **Dr. Shane Journeay** (DMNB Representative)
- Dr. Ali Kohansal
- Dr. Ravi Ramjeesingh (Co-chair, Resident Research Committee)
- Dr. Michael Stewart
- Dr. Olga Theou
- Dr. Amanda Vinson
- **Dr. Christine Short** (Department Head; ex officio)
- Heather Fraser (Administrative Coordinator)

Research Week 2022

Virtual Research Week took place in April 2022, with over 75 people joining the virtual sessions to learn about research taking place in the department. The sessions made use of the virtual format to showcase 26 "short snapper" presentations, and 50 online abstracts, posters, and video poster presentations from Department members, undergraduate students, residents, research fellows, graduate students, and research associates.

Dr. Gaynor Watson-Creed, Assistant Dean of Serving and Engaging Society at Dalhousie University and Chair of the Board of Engage Nova Scotia, provided the keynote presentation on the topic of, "Wicked Problems and Health Outcomes."

Research Awards

Department of Medicine Research Lifetime Achievement Award

• **Dr. John Hanly**, Division of Rheumatology

Department of Medicine Research Excellence Awards

• Dr. Wael Sumaya, Division of Cardiology



- Dr. Amanda Vinson, Division of Nephrology
- Dr. Melissa Andrew, Division of Geriatric Medicine

Department of Medicine Cross Appointed Faculty Research Excellence Award

• **Dr. Olga Theou**, School of Physiotherapy, cross appointment to Division of Geriatric Medicine

Department of Medicine Research Staff Excellence Awards

- **Rachel Warren**, Junior Research Staff, DoM General Research
- Judith Godin, Senior Research Staff, Division of Geriatric Medicine

Department of Medicine Resident Research Excellence Awards

- Dr. Felix Zhou, PGY3
- Dr. Jasmine Mah, PGY3 and CIP

Department of Medicine Resident Research Publication Awards

- Dr. Lindsay Cho, PGY2
- Dr. Thomas Brothers, PGY4 and CIP

We Research

\$11,398,022 Total research funding

- **331** Peer-reviewed publications (by 500 Department of Medicine authors)
- **40** Published abstracts (by 82 Department of Medicine authors)
- 15 Non peer-reviewed publications (by 16 Department of Medicine authors)

- **101** Research presentations (by 178 Department of Medicine authors)
- 5 Endowed chairs

Research Funding

Division Totals

Funds received by NSH and Dalhousie, fiscal 2021-22

\$1,927,178	Cardiology
\$38,707	Clinical Dermatology & Cutaneous Science
\$161,495	Digestive Care & Endoscopy
\$672,207	Endocrinology & Metabolism
\$88,082	General Internal Medicine
\$1,056,638	Geriatric Medicine
\$3,246,665	Hematology
\$954,371	Infectious Diseases
\$1,195,053	Medical Oncology
\$1,326,679	Nephrology
\$151,034	Neurology
\$60,000	Palliative Medicine
\$75,000	Physical Medicine & Rehabilitation
\$111,589	Research - General
\$215,325	Respirology
\$117,993	Rheumatology
\$11,398,022	Total research funding

"DoM researchers continued to grow their reputations as leaders in their areas of expertise and strengthen their ability to attract funding support. In 2021-22, department members received approximately \$11.4 million in research funding."

Dr. Melissa Andrew



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Celebrating Our People

REFERRAL OFFICE PILOT PROJECT

Change Agent – Katie Martin, Division of General Internal Medicine

By Lesley Dagley, Manager, Department of Medicine

Back in 2017-2018, Dr. Ashley Miller began work with the General Internal Medicine (GIM) physician team to streamline the referral and triage process. She noticed that waitlists were very long and wait times even longer. She developed a centralized triage model whereby a rota of physicians took turns triaging referrals to GIM. There were standards for triaging of referrals to improve wait lists. Her work led to more accurate and complete wait lists, which in turn improved their wait times for care and had great improvement for patient care.

In 2018-2019, the Quality Committee for the Department of Medicine led a project reviewing the referral, triage, and booking processes across all divisions of the department. This project was led by Dr. Nabha Shetty and Brittney MacKinnon, Manager. They wanted to identify all the steps in the process from the time a referral is received to the time a patient is seen by a physician to determine if any best practices, standardization, or efficiencies could be gained by the divisions. From this work, they identified some models they felt illustrated best practices in three distinct areas: pre-post triage model, the referral clerk model, and the nurse-booking model.

The referral officer model currently exists in most areas of cancer care and was found to be effective in the management of pre-triage referrals optimizing physician roles in the process by conducting much of the administrative sorting. With centralization of GIM triage and creation of standard procedures for our various clinics, this model was piloted in GIM successfully and has led to improved efficiency with physician triage processes and leveraging our paperless processes.

The administrative team, led by Katie Martin, met with a clinical lead from the One Patient One Record (OPOR) project to develop and design a standard workflow for several months until all the scenarios were reviewed and mapped out for processing. The results were a standardized



process to receive referrals, have them triaged by physicians and booked for appointments by the appropriate staff.

Once all the workflow processes were clear and in place, clinic management engaged with the team to hire a Referral Clerk to perform this work on a full-time basis. This role would be piloted for one year and upon completion of the year pilot, an evaluation would be done to determine whether the role was meeting the needs of the physicians, clinic, and patients. The evaluation looked at the continued improvement of wait times for patients to be seen, the accuracy of the wait lists and general ease of workflow. It was determined at the end of the pilot that the role was successful and permanent funding was secured. The position has been permanent in the clinic for over a year with great success. It was a collaborative effort between the physicians in GIM, the administrative team, the booking team, and clinic management.

In all of this, it was emphasized that all processes were to be as paperless as possible. All referrals are received electronically through "fax to email." The documents are managed through shared folders on a secured shared drive and communication is through email. It is regrettable the only process we've been unable to convert to electronic formatting is to get the referral onto One Content, the patient health record. It must still be printed and sent to Health Records for scanning and uploading to One Content. It is hoped with the implementation of OPOR, that this will transform the entire process.



FOUNDATIONS FOR SUCCESS

The Department of Medicine celebrated the achievements of faculty, residents, and staff at the Awards Extravaganza – Third Edition on June 28, 2022. In a typical year, some of these awards would have been presented at the Department of Medicine spring party. A virtual event was held in lieu of the annual spring party to adhere to COVID-19 health and safety protocols. The virtual format allowed greater award inclusivity and participation for department members and friends outside of Halifax.

In Memoriam

- Dr. Scott Murray

 (July 25, 1955 August 28, 2021)
 Division of Clinical Dermatology
 & Cutaneous Science (Community-based)
- Dr. Sohrab Lutchmedial (October 15, 1969 - November 8, 2021)
 Division of Cardiology, Saint John

(Interventional Cardiologist)

Dr. Arnold Mitnitski
 (1944 – May 26, 2021)
 Professor Emeritus

2021 Service Awards

5 Years

- Katie Martin, Division of General Internal Medicine
- Alysha Nelson, Division of
 Physical Medicine & Rehabilitation

10 Years

- Rachel Kendall, Division of Geriatric Medicine
- Elizabeth (Betty) Migel, Division of Cardiology

15 Years

- Lesley Dagley, Administration
- Shelley Sani, Division of Respirology

20 Years

Anne Veinotte, Administration

25 Years

- **Dr. Graham Bishop**, Division of Respirology (Saint John)
- **Dr. Daniel Carver**, Division of Geriatric Medicine
- Dr. Bruce Colwell, Division of Medical Oncology
- Dr. Jafna Cox, Division of Cardiology
- Dr. Sultan Darvesh, Division of Neurology
- Dr. Paul Hernandez, Division of Respirology
- **Dr. Pamela Jarrett**, Division of Geriatric Medicine (Saint John)
- Dr. Colleen Kelly, Division of Clinical Dermatology & Cutaneous Science
- Dr. Ronald MacCormick, Division of Medical Oncology
- Dr. Ewa Sadowska, Division of Rheumatology (Saint John)

30 Years

- **Dr. Laurie Mallery**, Division of Geriatric Medicine
- **Dr. David Manning**, Division of General Internal Medicine
- Dr. Debra Morrison, Division of Respirology
- Dr. Kenneth Rockwood, Division of Geriatric Medicine
- Dr. Lawrence Title, Division of Cardiology

35 Years

- **Dr. Timothy Benstead**, Division of Neurology
- **Dr. Kevork Peltekian**, Division of Rheumatology
- **Dr. William Sheridan**, Division of Cardiology

40 Years

Dr. Martin Gardner, Division of Cardiology

45 Years

Dr. David King, Divisions of Neurology

 Dr. Ronald Kirby, Division of Physical Medicine & Rehabilitation

Promotions - Effective July 1,2022

- Dr. Samantha Gray was promoted to Associate Professor, Division of Medical Oncology (Saint John)
- Dr. Simon Houston was promoted to Associate Professor, Division of Respirology
- Dr. Kerri Purdy was promoted to Associate Professor, Division of Clinical Dermatology & Cutaneous Science

Retirements

- Dr. Chris MacKnight, Geriatric Medicine April 30, 2021
- **Dr. Glen Ginther**, Geriatric Medicine June 30, 2021
- Dr. Stephen Phillips, Neurology December 31, 2021
- Michelle Henneberry, Cardiology February 28, 2022
- Dr. Donald MacIntosh, Digestive Care & Endoscopy March 31, 2022
- Susan MacDonald, DoM Physician Services March 31, 2022
- Dr. John Hanly, Rheumatology June 30, 2022

Department of Medicine Awards

Brian M. Chandler Lifetime Achievement Award in Medical Education

Dr. Iqbal Bata, Division of Cardiology



DoM Achievement Award

• **Dr. John Sapp**, Division of Cardiology

DoM Clinical Excellence Awards

- Dr. Richard Crowell, Division of Cardiology
- **Dr. Lindsay Flinn**, Division of Palliative Medicine
- **Dr. Laurie Mallery**, Division of Geriatric Medicine

DoM Excellence in Leadership

• Dr. Shelly McNeil, Division of Infectious Diseases

DoM Excellence in Medical Education Award

• Dr. Kimberly Styles, Division of Cardiology

DoM Excellence in Quality & Innovation

• **Dr. Ashley Miller**, Division of General Internal Medicine

Undergraduate Students' Choice Teaching Award

• **Dr. Daniel Carver**, Division of Geriatric Medicine

Dr. Scott Murray Award

• **Dr. Erin Westby**, Dermatology Resident

DoM Outstanding Consultant Trainee Award

• Dr. Whitney Faiella, Cardiology Resident

DoM Administrative Assistant Award

• Raelene Kucyk, Division of General Internal Medicine

DoM Program Administrator Award

• Susan "Sue" Brushett, Divisions of Infectious Diseases and Medical Microbiology

DoM Team Lead Award

• Laura Ring, Division of Infectious Diseases

Grand Rounds Awards

DoM Grand Rounds Overall Excellence Award

 Dr. Andrew Moeller, Division of Cardiology "Creating success out of failure: A review of updated heart failure guidelines"

DoM Grand Rounds Award of Merit

- Dr. Melissa Andrew, Division of Geriatric Medicine "Frailty, Vaccines and Vaccine Preventable Illnesses"
- Dr. Peter Green, Division of Clinical Dermatology & Cutaneous Science "Cognitive errors in Dermatology"

DoM Grand Rounds Guest Speaker Award

 Dr. Simon Carette, The J.F.L.
 Woodbury Lecture in Rheumatology
 "Vasculitis: What have we learned in the last 50 years?"

Core Internal Medicine Residency Awards

Stephen Couban Outstanding Faculty - Residents' Choice Award

• **Dr. Mary Malebranche**, Division of General Internal Medicine

Excellence in Undergraduate Teaching

• Dr. Peter Gregory

Excellence in Summer Grand Rounds 2021

• Dr. Mary Purcell

Outstanding Academic Performance Awards

- Dr. Khalid Alseiari, PGY1
- Dr. Peiran Sun, PGY2
- Dr. Lauren Curry, PGY3

Outstanding Internal Medicine Resident Award

- Dr. Gabrielle Melanson, PGY1
- Dr. Hayam Hamodat, PGY2
- Dr. Andrea Davenport, Angie McGibbon Outstanding PGY3 Resident Award

Co-Chief Medicine Residents – Halifax 2021

- Dr. Peter Gregory
- Dr. Suzanne Boursalie

Co-Chief Medicine Residents - Saint John 2021

- Dr. Rachael Chan
- Dr. Shannon Rasmussen

Chief Medicine Resident - Medicine Teaching Unit 2021

• Dr. Steven Morrison

Academic Advisor of the Year Award

• Dr. Samantha Gray (Saint John)

Fastest EPA Completion "Trigger Finger Award" Faculty - Halifax

• Dr. Paul Hernandez



Fastest EPA Completion "Trigger Finger Award" Faculty – Saint John

• Dr. Brent McGrath

Fastest EPA Completion "Trigger Finger Award" Resident

• Dr. Siavosh Fazelpour

Highest Number EPA Completed Faculty - Halifax

• Dr. Joffre Munro

Highest Number EPA Completed Faculty – Saint John

• Dr. Heather Chambers

Highest Number EPA Completed – Resident

• Dr. Daniele Valentini

Division of General Internal Medicine - Education Awards

Dr. Elizabeth Mann Resident Award for Excellence in General Internal Medicine

• **Dr. Daniele Valentini**, PGY5 General Internal Medicine

The Residents' Choice Award in General Internal Medicine

• Dr. Allen Tran

Dalhousie University Undergraduate Medical Education

Dr. I. M. Szuler Award for Excellence in Undergraduate Internal Medicine

• Yousef Bolous

Dr. Robert C. Dickson Prize in Medicine

- Marie Charles
- Dr. W. H. Hattie Prize in Medicine
- Stephanie Craig

Medical Oncology Undergraduate Achievement Award

• Anna Claire Lamport

The Barbara L. Blauvelt Cardiology Prize

• Jesse Baxendale

Graduating Residents

PGY3 Core Internal Medicine

- Dr. Mark Bartolacci (Halifax)
- Dr. Suzanne Boursalie (Halifax Co-Chief)
- Dr. Michael Catarino (Halifax)
- **Dr. Rachael Chan** (Saint John Co-Chief)
- **Dr. Lauren Curry** (Halifax)
- Dr. Andrea Davenport (Halifax)
- **Dr. Alexandra Dittrich** (Halifax)
- Dr. Ciarán Galts (Halifax)
- Dr. Joshua Goodwin (Halifax)
- **Dr. Peter Gregory** (Halifax Co-Chief)
- Dr. Jasper Johar (Halifax)
- Dr. Lynnea Lobert (Regional)
- Dr. Maggie McGuire (Halifax)

- **Dr. Steven Morrison** (Halifax MTU Chief)
- **Dr. Mary Purcell** (Halifax)
- Dr. Shannon Rasmussen (Saint John Co-Chief)
- **Dr. Rammdeep Saini** (Saint John)
- Dr. Matthew Spear (Saint John)
- Dr. Jacques Van Wijk (Regional)
- Dr. Felix Zhou (Halifax)
- Dr. Reem Zubaid (Halifax)

Cardiology (PGY6)

- Dr. Joshua Janzen
- Dr. Annaelle Kaczmarek
- Dr. Kyle Murnaghan
- Dr. Ashar Pirzada

Fellow, Interventional Cardiology

• Dr. Sharath Kumar, Fellow, Interventional Cardiology

Clinical Dermatology & Cutaneous Science (PGY5)

- Dr. Kristyna Cleminson
- Dr. Erin Maguire
- Dr. Erin Westby

Endocrinology & Metabolism (PGY5)

• Dr. Keillor Steeves

Fellow, Endocrinology & Metabolism

• Dr. Hazem Aljumah

Gastroenterology (PGY5)

- Dr. Sowmya Sharma
- Dr. Dennis Lim



Pictured (left to right): Drs. Grace Park, Hayam Hamodat, Lindsay Cho, Smriti Singh

Gastroenterology Fellow

 Dr. Matthew Miles, Nutrition and Motility Fellowship (External; Alberta)

General Internal Medicine (PGY5)

- Dr. Pier-Alexandre Demers (Regional)
- Dr. Ziran Meng, PGY5 (Regional)
- **Dr. Daniele Valentini**, PGY5 (Regional)

Geriatric Medicine (PGY5)

- Dr. Alan Cook
- Dr. Lucas Diebel
- Dr. Margaret "Maggie" Lovett
- Dr. Alex Rogers

Hematology (PGY5)

• Dr. Curtis Marcoux

Medical Oncology (PGY5)

- Dr. Stacie Connors
- Dr. Margaret Sheridan Nephrology (PGY5)
- Dr. George Worthen
- Dr. Wayel Zanjir

Neurology (PGY5)

Dr. Adam Patterson

Physical Medicine & Rehabilitation (PGY5)

Dr. Gabrielle Hayduk-Costa

Respirology (PGY5)

Dr. Karam Al Jumaily

"Our recipe for success is, without a doubt, our people! We are a small but mighty team whose resilience, collegiality, adaptability and work ethic has allowed us to weather the most personally and professionally challenging period of our careers."

Dr. Shelly McNeil

Division of Infectious Diseases





Forward Together

Department of Medicine Dalhousie University, Faculty of Medicine – Nova Scotia Health, Central Zone QEII Health Sciences Centre, VG Site, Suite 442, Bethune Building, 1276 South Park Street, Halifax, NS, Canada B3H 2Y9

P: 902.473.2379 • F: 902.473.4067 • W: medicine.dal.ca/dom



Faculty of Medicine Department of Medicine

