

VISION

TO BE LEADERS
IN ACADEMIC MEDICINE
PROVIDING INNOVATIVE,
COLLABORATIVE
AND APPROPRIATE CARE
THAT IS SUSTAINABLE.

MISSION

WE ARE A
DIVERSE GROUP
OF HIGHLY TRAINED
PROFESSIONALS DEDICATED
TO IMPROVING HEALTH
THROUGH EDUCATION,
RESEARCH AND
PROVIDING EXEMPLARY
CLINICAL CARE
TO OUR COMMUNITY.

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A MESSAGE FROM THE DEPARTMENT HEAD

DR. SIMON JACKSON

This year's Progress & Profiles is themed: leadership; and rightly so as we are home to many strong, intelligent and influential leaders.

Under the leadership of our Research Director **Dr. John Hanly**, I have witnessed the reinvigoration of our research portfolio. We have welcomed our PhD researchers **Drs. Olga Theou** and **Leah Cahill** who bring us a wealth of expertise with enthusiasm and energy. We have fostered research growth, specifically for our early career investigators and are home to world-class researchers, including: **Drs. John Sapp** (cardiology), **Ken Rockwood** (geriatric medicine) and **Sultan Darvesh** (neurology) to name only a few.

Our education program continues to grow and prosper under **Dr. Chris Gray's** leadership. Known for our exceptionally strong clinical training programs, we are a sought-after Department for medical students and residents. Soon, we will be offering point-of-care ultrasound into our medical teaching practices.

As we celebrate our many leaders, I want to single out those who may not hold senior titles, lead large teams or receive high public profile; but whose contributions are vast and influence immeasurable. Our silent and steady leaders: the clinicians who are the life line to our patients, the educators who ignite the curiosity of our learners, and the administrators who masterfully run our Department so we can do what we do best. Thank you.

As I leave this role, I want to also send a sincere thank you to my Executive Committee, Division Heads, administrators and all my colleagues. You have made this role most enjoyable and it has been a pleasure to serve as your leader. I leave the role with a sense of pride for the work we have done and promise for a bright future.

To our new Department Head, Dr. Christine Short, I look forward to your leadership, guidance and wisdom as we move forward.



SIMON JACKSON, MD, FRCPC(C), MMedEd

Interim Head, Department of Medicine, Dalhousie University
District Chief, Department of Medicine, Nova Scotia Health Authority
Professor of Medicine, Dalhousie University

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LET'S WELCOME

DR. CHRISTINE SHORT
HEAD & CHIEF

In September 2017, the Department welcomed Dr. Christine Short as its new Head and Chief.

Dr. Short, an experienced leader, was previously Head of the Division of Physical Medicine and Rehabilitation. Beyond her clinical and leadership roles, she is an Associate Professor and researcher with interests in mobility, pain, spasticity management and access to services for women with disabilities.

As the leader of the province's largest academic Department, Dr. Short acknowledges the importance of its multi-prong mandate in patient care, education and research.

"Clinical care, research and education are not mutually exclusive," said Dr. Short. "Strength in research and education creates excellence in clinical care."

Dr. Short has a clear vision on the culture she wants to foster to accomplish that mandate.

"I want to grow our Department's sense of collegiality," she said. "And, I want to build on the success of my predecessors, and further strengthen our commitment to mentorship, accountability and strong communications."

Dr. Short plans to lead with inclusivity and unity.

"There will be obstacles, and we will overcome them. There will be victories, and we will share in them. And, we will do this together."



WHO WE ARE &

WHAT WE DO



**WE ARE
AWARD-WINNING
CLINICIANS,
TEACHERS AND
RESEARCHERS
WHO SERVE THE
COMPLEX MEDICAL
NEEDS OF ADULTS
IN HALIFAX, NOVA
SCOTIA AND THE
MARITIMES.**



**WE SPEND
OUR TIME:**

- 71% patient care
- 11% education administration (non-clinical) and teaching
- 10% research
- 8% clinical administration

**278 DALHOUSIE
APPOINTMENTS**

*e.g. cross/adjunct appointments,
community-based specialists and those with
a focused academic only appointment*

**42 NSHA
APPOINTMENTS**

*e.g. PhD researchers, clinical
assistants, hospitalists*

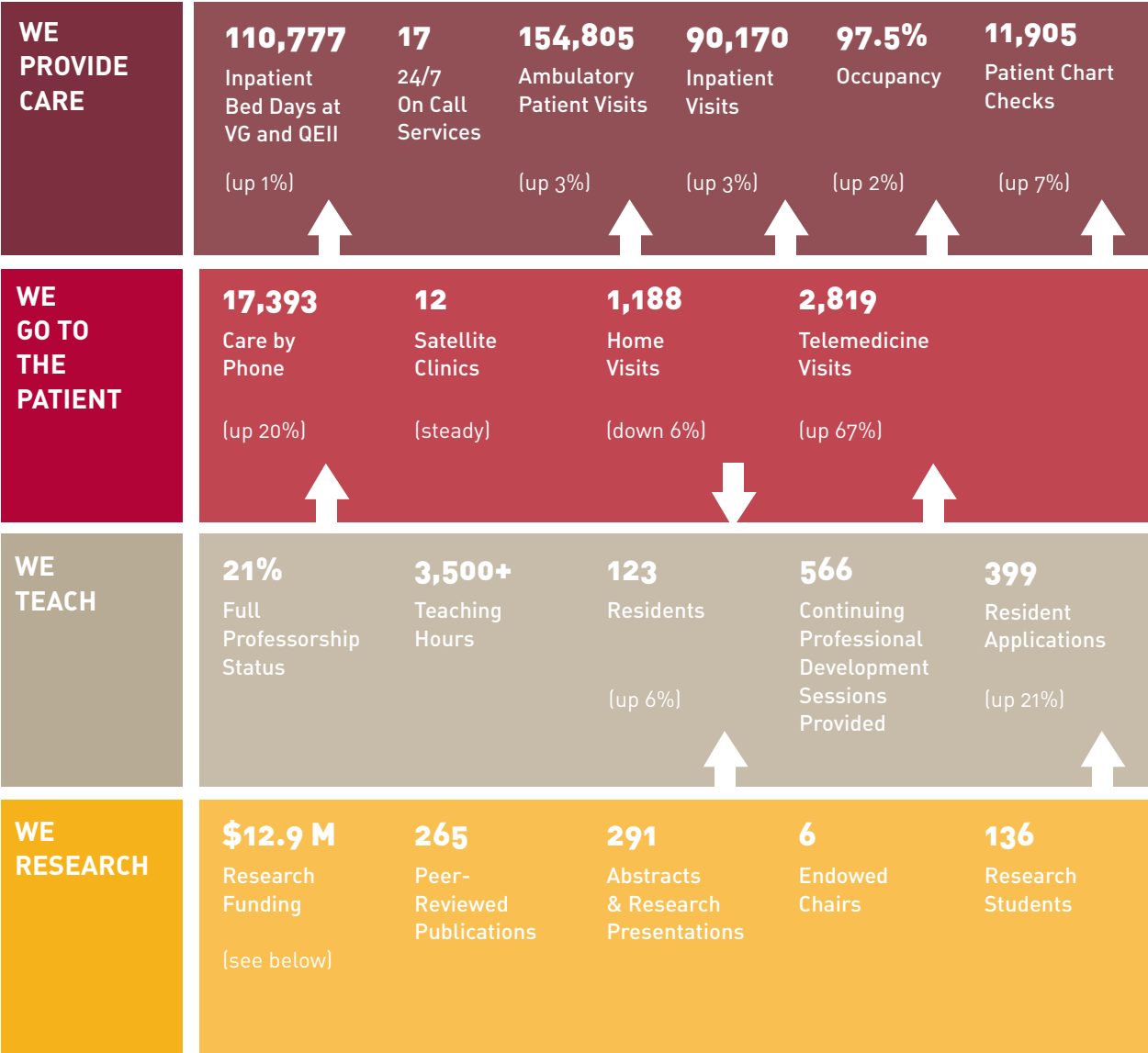


SUBSPECIALTIES:

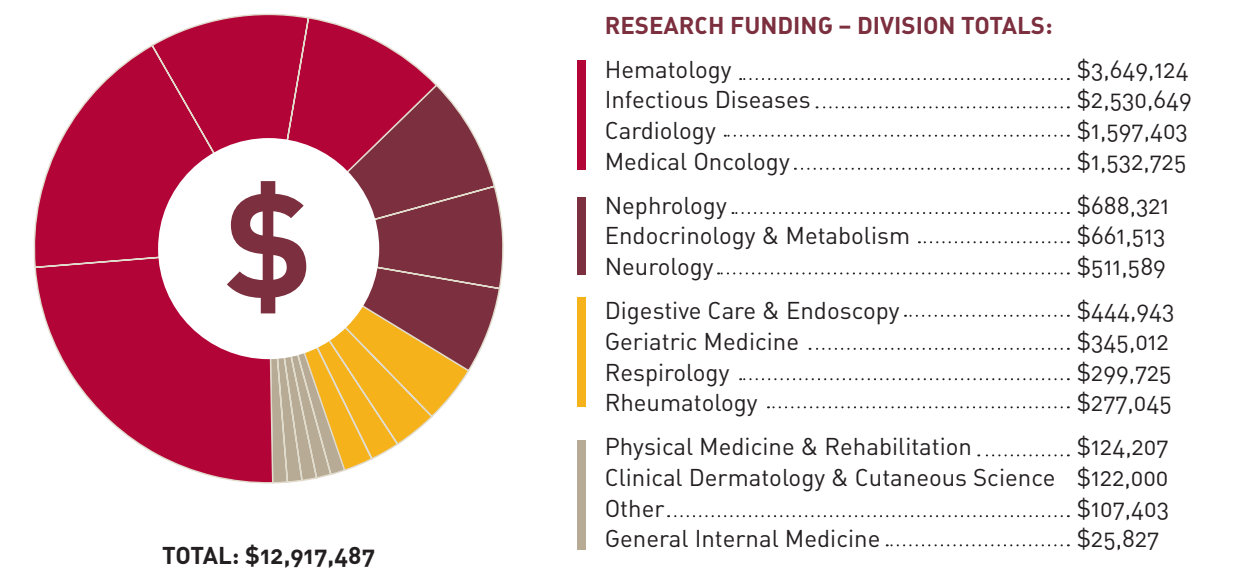
CARDIOLOGY
CLINICAL DERMATOLOGY
& CUTANEOUS SCIENCE
DIGESTIVE CARE & ENDOSCOPY
ENDOCRINOLOGY & METABOLISM
GENERAL INTERNAL MEDICINE
GERIATRIC MEDICINE
HEMATOLOGY



INFECTIOUS DISEASES
MEDICAL ONCOLOGY
NEPHROLOGY
NEUROLOGY
PALLIATIVE MEDICINE
PHYSICAL MEDICINE
& REHABILITATION
RESPIROLOGY
RHEUMATOLOGY

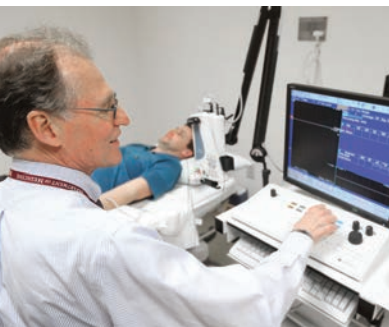


Data compares 2015 to 2016



DIVISION

HIGHLIGHTS



DIVISION OF CARDIOLOGY

The Division of Cardiology provides multidisciplinary care, meaningful learning opportunities and leading research. The division is home to many leaders in their field and is active in reducing the impact of cardiovascular disease on Atlantic Canadians through prevention, treatment and rehabilitation.

**STRONG LEADERSHIP
WITH NATIONAL BODY**

The Canadian Cardiovascular Society is the national organization of cardiovascular professionals. Various division members are shaping the work of that organization. **Dr. Catherine Kells** holds the top position as its President. In that same society, **Dr. Ata Quraishi** chairs the Canadian Cardiovascular Society quality project for Percutaneous Coronary Intervention (PCI), while **Dr. Jafna Cox** chairs the quality project for the Atrial Fibrillation Group.

RESEARCH ADVANCES

This year, **Dr. Ratika Parkash** was published in *Circulation*, one of the most prominent cardiovascular medicine journals. Her study, *Substrate Modification with Aggressive Blood Pressure Control: SMAC-AF*, demonstrated the effect of aggressive blood pressure lowering arrhythmia outcomes after catheter ablation for atrial fibrillation. Division researchers **Dr. Chris Blanchard** (chronic disease behavioural studies), **Dr. Jafna Cox** (cardiovascular health services and outcomes) and **Dr. John Sapp** (diagnosis and management for patients with life-threatening cardiac arrhythmias) continue to move their research forward.

88,219

ECGs (up 2%)

5,633

Stress Tests (down 12%*)

669

Pacemaker AICD,
BIV Implants (up 12%)

**Physician retirements have impacted
ability to meet demand.*

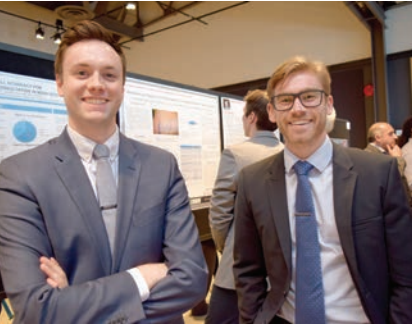


CATHERINE KELLS
01/09–11/16



JOHN SAPP
11/16–09/17

Division Heads



DIVISION OF CLINICAL DERMATOLOGY & CUTANEOUS SCIENCE

The division is a clinical care and tertiary referral centre for the Maritimes. It provides clinical care in general, surgical and subspecialty dermatology clinics and offers consultative advice to inpatients and the emergency department. The clinical staff offer consultations, day surgery, contact dermatitis patch testing and phototherapy treatments to approximately 16,000 patients a year.

COMMITMENT TO COMMUNITY

Dr. Laura Finlayson's volunteer work with Camp Liberté provides Canadian children with moderate to severe skin conditions an opportunity to enjoy the summer camp experience in a safe, confidence-building environment.

FIRST CANADIAN GRANT RECIPIENT

Drs. Peter Hull and Youssef Elhaji (molecular geneticist), are recent recipients of a \$415,000 grant from the Leo Foundation. Drs. Hull and Elhaji are the first Canadian researchers to receive a grant from the foundation based out of Denmark.

NEW CLINIC INCREASES ACCESS TO MELANOMA ASSESSMENTS

A new Early Melanoma Assessment Program, led by **Dr. Richard Langley**, was established this year. The clinic evaluates pigmented lesions. As incidence of melanoma continues to rise, the clinic provides timely access to assess possible melanoma. The division holds a 4.5:1 benign pigmented lesion to malignant melanoma ratio. Researchers in Australia found that general practitioners biopsied approximately 30 benign pigmented lesions for every melanoma, while dermatologists biopsied more than 12 pigmented lesions for every melanoma they diagnosed.

7,173

Outpatient Clinic
Visits (up 1%)

4.5:1

Benign Pigmented Lesion
to Melanoma Diagnosis*

**Above Average. Researchers in Australia found that general practitioners biopsied approximately 30 benign pigmented lesions for every melanoma, while dermatologists biopsied more than 12 pigmented lesions for every melanoma they diagnosed.*



PETER HULL
Division Head

DIVISION OF DIGESTIVE CARE & ENDOSCOPY

This experienced team are experts in inflammatory bowel disease, acid pepsin disease, motility disorders and liver failure and transplantation. The division cares for patients with gastrointestinal diseases in the Maritime provinces which includes specialized consultation and advanced gastrointestinal treatment. Outpatient care is provided through various clinics including: GI General Clinic, GI Liver Transplant Clinic, Advanced Therapeutic Endoscopy Services and Neurogenic Bowel Clinic.

NEW EFFICIENCIES TO MEET GROWING DEMAND

The demand for the division’s services continues to grow. The growth can be attributed to a higher prevalence of digestive problems, likely related to life style and diet, and in Nova Scotia, the introduction of the Provincial Colon Cancer Prevention Program. A reorganization of clinical activities and the creation of the new Ambulatory Care and GI Endoscopy Program (co-directors: Dr. Stacey Williams and Dr. Sunil Patel)

have contributed to streamlining the referral process, delivering more efficient care and improving direct access to endoscopy. These changes contributed to a 28 per cent increase in GI endoscopy encounters.

LEAVING A LEADERSHIP FOOTPRINT

Taking the responsibility of educating future physicians very seriously, many division members hold a significant leadership role in medical education within the Department of Medicine, the Faculty of Medicine, and the Royal College of Physicians and Surgeons of Canada. Additionally, Dr. Dana Farina, Dr. Paul Johnson (Colorectal Surgeon) and Ms. Heather Francis (Health Service Director) co-lead the Provincial Endoscopy Program. Other division members serve on national specialty organizations: including the Canadian Association of Gastroenterology and the Canadian Association for the Study of the Liver.

9,524

Outpatient Clinic Visits (down 2%)

7,054

Endoscopy Unit Visits (up 28%*)

**New Ambulatory and GI Endoscopy Program delivered more efficient care and improved access.*



KEVORK PELTEKIAN
Division Head

DIVISION OF ENDOCRINOLOGY & METABOLISM

The division provides specialized care to people with hormonal and metabolic disorders via inpatient and consultation services, as well as ambulatory care clinics. The majority of the division’s patients have diabetes. The division provides state-of-the-art disease management by working closely with the Diabetes Management Centre, specialists and primary care providers. Clinics are offered to patients with thyroid disorders, pituitary disorders, lipid disorders and osteoporosis.

DIVISION ROOTED IN LEADERSHIP

With an ingrained sense of responsibility to lead change, every division member participates on a Department, provincial or national committee. Contributions, too many to name, include: shaping osteoporosis guidelines and knowledge translation initiatives with Osteoporosis Canada (Dr. Stephanie Kaiser), sitting on the Royal College Endocrinology and Metabolism Examination Board (Dr. Barna Tugwell) and updating the new Diabetes Clinical Practice Guidelines (Drs. Tom Ransom, Ali Imran, and Barna Tugwell).

NEW DIABETES PRECONCEPTION CLINIC

A Preconception Counselling Clinic was introduced for patients with diabetes mellitus (Type 1 or Type 2) who are planning to become pregnant. This weekly clinic at the IWK Health Centre, co-led by Drs. Tom Ransom and Shirl Gee, helps decrease the risk to mother and baby by controlling glucose prior to pregnancy.

NEW DIABETES ELECTRONIC FORM CREATES PATIENT CARE EFFICIENCIES

A new web-based diabetes form has improved communication between the diabetes interprofessional team and increased the turn-around time in reporting back to referring physicians. The form also reduced paperwork, supported more efficient patient visits, improved access to patient information and allows the collection of new data to support future planning and research. The project was led by Drs. Churn-Ern Yip and Ferhan Siddiqi.

11,618

Clinical Visits (up 3%)

3,038

Diabetes Related Visits at VG (up 5%)



STEPHANIE KAISER
Division Head

DIVISION OF GENERAL INTERNAL MEDICINE

The division offers specialized acute internal medicine care through various ambulatory clinics, including disease-specific clinics for hypertension, heart failure, vascular and allergy/immunology. Physicians provide attending service in two medical teaching units and the affiliated intermediate care unit, and in-house consultative service to the QEII Health Sciences Centre Emergency Department. The division is focused on developing care models for frail patients, appropriateness of care and simulation training.

NEW COLLABORATIVE MATERNAL FETAL MEDICINE CLINIC

Dr. Nabha Shetty helped establish a collaborative Maternal Fetal Medicine/ General Internal Medicine Clinic, in partnership with the Department of Obstetrics and Gynecology. The clinic offers specialized medical care to pregnant women. The clinic includes a training component for General Internal Medicine residents.

IMPROVED CARE FOR PATIENTS WITH LIVER DISEASE

A new Fatty Liver Clinic is helping to meet the growing demand for the prevention and management of liver disease in Nova Scotia. This clinic's assessments, which includes using elastography testing, helps establish the risk of liver disease and potentially prevent its development. The clinic is also creating a database to support research, including patient participation in clinical trials.

In addition, patients with the liver disease, primary biliary cholangitis, and are non-responsive to the traditional treatment now have an alternative.

Dr. Magnus McLeod is one of few physicians in Nova Scotia to offer this new medication, ocaliva or obeticholic acid. The treatment, estimated to be needed by 100-150 Nova Scotians, prevents the progression of this liver disease for this subset of patients.

3,307

QEII General Medicine
General Clinic Visits (**up 26%***)

2,229

Dartmouth General
Internal Medicine
Clinic Visits (**up 23%****)

**Increased referrals from subspecialties.*

***Increased physician resource.*



STEPHEN WORKMAN
Division Head

DIVISION OF GERIATRIC MEDICINE

This division provides secondary and tertiary care to frail elderly patients throughout Nova Scotia and the Atlantic provinces. It also offers consultation service at the Dartmouth General Hospital, satellite geriatric clinics in communities across Nova Scotia, and home and nursing home visits. Its world-renowned research in Alzheimer's disease, dementia and care for the elderly, has resulted in establishing gold-standard treatment protocols and practices now adopted throughout Canada and around the world.

EXPANDING ACCESS TO CARE

To meet growing patient needs, the division has expanded its outpatient clinics at Cobequid, to serve patients closer to home; introduced new processes to reduce the wait times for urgent referrals to the Geriatric Day Hospital, and continues to offer outreach clinics in Cape Breton to respond to needs for geriatricians outside of Halifax.

DR. KENNETH ROCKWOOD'S GLOBAL IMPACT

In 2016, the National Health Service of England and Wales adopted the Clinical Frailty Scale, the electronic GP-record based frailty index, and the electronic Comprehensive Geriatric Assessment (plus a frailty index based on the eCGA). The Clinical Frailty Scale was developed by **Drs. Kenneth Rockwood, Arnold Mitnitski** and colleagues. In addition, Dr. Rockwood's work on improving the care of older people in China was recognized with the China Friendship Award, that country's highest honour to foreigners.

51

Geriatric Medicine Beds

701

Inpatient Consults (**up 6%**)

224

Inpatient Admissions
(**down 10%***)

101.3%

Occupancy Rate for Geriatric
Unit Assessment (**up 3%**)

**Decrease is a result of alternate level
care (ALC) admissions increasing.*



CHRIS MacKNIGHT
Division Head

DIVISION OF HEMATOLOGY

Together with medicine, nursing and allied health colleagues, they deliver inpatient and outpatient care at the QEII Health Sciences Centre and participate in collaborative clinics with the IWK Health Centre, Cape Breton Regional Hospital, New Brunswick's Moncton Hospital, and Newfoundland's Eastern Health. The division's clinical programs include: blood and bone marrow transplant program, thrombosis anticoagulation program, bleeding disorders clinic, and an apheresis program. The division is one of Canada's most research-intensive divisions of hematology.

CAPE BRETON GAINS FULL-TIME HEMATOLOGIST

To help improve access to hematological care in Cape Breton, the division has been supporting recent fellowship graduate **Dr. Kate MacInnes** as she starts her full-time practice in Cape Breton. This includes Halifax hematologists offering two clinics a month in Sydney.

Dr. MacInnes also actively participates in a provincial 24/7 call system for hematology and participates in the weekly lymphoma tumour board.

DR. DAVID ANDERSON: PRACTICE-CHANGING STUDY GETS INTERNATIONAL ATTENTION

Dr. David Anderson, lead-author of a practice-changing study in thrombosis, attended 26 Congress of the International Society on Thrombosis and Hemostasis in Berlin. There, he presented his study that compares aspirin with direct oral anticoagulant rivaroxaban for prevention of post-operative venous thromboembolism following total hip or total knee replacement and total hip or total knee arthroplasty. This study is expected to have major implications for patient care given that these are amongst the most common major surgical procedures performed in the industrialized world.

658
Inpatient Admissions
(down 13%*)

12,588
Ambulatory Care
Visits (up 9%)

68%
of Patients Seen in the
Medical Day Unit is for
Hematological Care

**Division is focused on providing care as much as possible on an ambulatory basis which contributes to the reduced inpatient admissions.*



STEPHEN COUBAN
Division Head

DIVISION OF INFECTIOUS DISEASES

In addition to providing inpatient, outpatient and consultative care, this division is the primary resource for physicians across the Maritimes, providing a 24/7 telephone consultation service. Inpatient care (at the QEII Health Sciences Centre) is primarily for patients with severe community-acquired infections and nosocomial infections, and those who are compromised by stem cell and organ transplantation. The division also offers clinics in: general infectious diseases, Hepatitis C, HIV and sexually transmitted diseases. The division is a key advisor in provincial and national policy development related to infectious diseases, hospital-acquired infections, immunization programs, and infection prevention and control guidelines.

DR. LYNN JOHNSTON LEAVES LEGACY

After 20 years of serving on the Public Health Agency of Canada's Expert Working Group (EWG) on Infection Prevention and Control (IPC) Guidelines, **Dr. Lynn Johnston** has stepped down from the working group. Dr. Johnston was the group's Chair for 10 years, where she helped produce major

documents, including: Routine Practices and Additional Precautions, Guidelines for Flexible Endoscopy, Prevention of Healthcare-Associated Pneumonia, and Infection Prevention and Control Measures for Ebola Virus Disease in Health Care Settings. In her role as Chair, she advised the country's medical officers of health on pandemic influenza in 2009 and ebola virus disease in 2014.

LEADING CANADA'S HOSPITAL-BASED SURVEILLANCE NETWORKS

Drs. Shelly McNeil, Melissa Andrew, Todd Hachette and Jason LeBlanc continue to lead the Serious Outcomes Surveillance Network, Canada's hospital-based influenza and pneumococcal surveillance network. This year, the network secured ongoing funding from the Public Health Agency of Canada and joined the Global Influenza Hospital Surveillance Network. The network is contributing to an important international research effort to better define the burden of influenza in aging and to characterize vaccine effectiveness.

620
Phone Consults (up 7%)

4,302
Clinic Visits (down 7%)

346
Hepatitis C
Clinic Visits (up 13%*)

**Media coverage of new curative treatment options for Hepatitis C likely contributed to spike in service.*



SHELLY MCNEIL
Division Head

DIVISION OF MEDICAL ONCOLOGY

This division is a key component of the Nova Scotia Cancer Care Program and an essential service of the Nova Scotia Cancer Centre; the largest cancer centre east of Montreal. Division members have regional and national leadership roles in all aspects of cancer care including major academic and care expertise in breast, gastrointestinal, genitourinary, head and neck, lung, melanoma, neuro-oncology and sarcoma. The division leads the Atlantic Clinical Cancer Research Unit, with clinical trial, translational and pharmacoeconomic research priorities. Division members provide outreach clinical services to Yarmouth and New Glasgow as well as tertiary and quaternary care and patient care expertise for the Maritime provinces.

DR. NATHAN LAMOND BRINGS CANCER CARE CLOSER TO PATIENT'S HOME

Dr. Nathan Lamond leads efforts to improve patient access to cancer care closer to home. He is the Medical Director for the Yarmouth Cancer Clinic

and Co-Chair of the Annual General Practitioners in Oncology meeting designed to develop physician extender capacity and competency in oncology for the benefit of all Nova Scotians.

DR. CAITLIN LEES: CIHR CANADA GRADUATE SCHOLARSHIP

Dr. Caitlin Lees, PGY3, won the Canadian Institutes of Health Research Canada Graduate Scholarship for her study on early versus late palliative care intervention for patients with advanced pancreatic cancer. Division member Dr. Ravi Ramjeesingh served as direct supervisor and Dr. Tallal Younis was co-supervisor.

111%

Inpatient Bed
Occupancy Rate (up 18%)

2,222

New Patient
Consultations (up 5%)

6,561

Telephone/Chart Check
Care Interventions (up 6%)



DANIEL RAYSON
Division Head

DIVISION OF NEPHROLOGY

This division provides tertiary care nephrology services to Nova Scotia and Prince Edward Island, and renal transplantation care to patients in the Atlantic provinces. The division manages patients with all aspects of renal disease, but is a national leader in genetic renal diseases, home dialysis therapies and transplantation. The division also provides clinical service in the Colchester East Hants Health Centre dialysis unit. It often uses telemedicine to manage dialysis patients in rural dialysis units and has expanded use of telemedicine to bloodwork rounds and to some of its clinic visits in seven of the dialysis units covered in Nova Scotia.

RENEWED FOCUS ON HOME DIALYSIS FOR PATIENTS

The division reorganized the Home Dialysis Unit to separate home therapies from satellite dialysis.

This allows a more focused emphasis on home therapies, which is a preferred option for patients. A nurse specialist

was also added to the team. The nurse works closely with the nephrologists covering the satellite sites to improve communication and continuity of care for the patients. There are four satellite dialysis units across the province.

DR. AMANDA (MILLER) VINSON: RESEARCH RECOGNIZED INTERNATIONALLY

Dr. Amanda (Miller) Vinson published a paper on the implications of weight and sex mismatch between kidney donor and recipient. This paper garnered international recognition and resulted in an invitation to speak at the National Institutes of Health (NIH) on sex and gender effects in kidney transplant. Dr. (Miller) Vinson has also started her Master's degree in Clinical Epidemiology at Harvard University.

516

Dialysis Cases
(up 7%)

108

New Cases
(up 5%)



KENNETH WEST
Division Head

DIVISION OF NEUROLOGY

The division investigates, diagnoses and treats the spectrum of neurological conditions. Its activities/programs include the EMG and EEG laboratories, Epilepsy Clinic and Epilepsy Monitoring Unit, Multiple Sclerosis (MS) Research Unit, Cerebrovascular Clinic, Neuro-ophthalmology Clinic, Behavioural Neurology Clinic, Neuromuscular Clinic, Neuro-oncology Clinic, Headache Clinic, ALS Clinic (in collaboration with Physical Medicine and Rehabilitation), and the Maritime Brain Tissue Bank.

EFFECTIVE STROKE TREATMENT TO EXPAND ACROSS PROVINCE

Dr. Stephen Phillips continues to co-lead the Nova Scotia Health Authority process to implement endovascular treatment (EVT) province-wide. EVT is an effective treatment for acute ischemic stroke that is not yet widely available.

EXPEDITED SERVICES TO STROKE CARE

Division efforts have made important strides to provide care and services faster to patients. The stroke team has reduced “door to needle time” for thrombolysis in stroke patients, resulting in times that compare favourably to the national average.

In addition, a “day call” system for staff neurologists was created to expedite emergency assessments, particularly for patients with suspected acute stroke.

2,047

Inpatient Consults

780

Inpatient Admissions
(down 2%)

1,936

Electrodiagnostic Studies
(EMGs) at Halifax
Infirmary (up 7%*)

**An improved booking process allowed for an increased EMG volume and reduced wait times.*



VIRENDER BHAN
Division Head

DIVISION OF PALLIATIVE MEDICINE

This division works with a team of health-care professionals to improve the quality of life for people living with or dying from advanced illness. Physicians provide 24/7 emergency and on-call coverage for the Integrated Palliative Care Service, which includes patients in the community and hospital. Clinical services include: inpatient coverage and consultation, outpatient clinics, home consults and nursing home visits. The team also offers a range of palliative care services including: pain management, social, psychological, emotional and spiritual support therapy.

PALLIATIVE RESIDENCY PROGRAM EXPECTED IN 2018

Dr. Erin Gorman Corsten (Program Director) and Residency Training Program Committee (including Drs. Jeffrey Dempster, David Dupere and Anne Marie Krueger-Naugh) applied for Royal College of Physicians and Surgeons of Canada approval for a new two-year Palliative Medicine residency program. The first resident will begin

in July 2018. Dr. Dupere also sits as the Royal College’s regional representative for the Palliative Medicine Subspecialty Committee. The division provides a one-year palliative care program. The program is jointly accredited by the Royal College of Physicians and Surgeons of Canada and the College of Family Physicians of Canada.

DIVISION MEMBERS ADVANCE PALLIATIVE RESEARCH

Dr. Robin Grant, working with Dr. Jeffrey Dempster, is researching “Medical Cannabis in Palliative Care: Patient Perspectives and Practical Use”. The initial results of the project were presented at Grand Rounds in early 2017. Additionally, Dr. Paul McIntyre supported medical students Anastasia McCarvill and Matthew Lee on the project: “Clinical Portraits: Humanities Elective for Medical Students”. This was presented as a poster at the European Palliative Care Association conference in 2016.

1,032

Consults (up 3%)

86%

of New Consults are
Cancer Related

892

Outpatient Clinic
Visits (up 3%)



DAVID DUPERE
Division Head

DIVISION OF PHYSICAL MEDICINE & REHABILITATION

This team supports a 66-bed inpatient rehabilitation centre focusing on three programs: acquired brain injury, musculoskeletal and amputee, and neuro-rehabilitation and spinal cord injury. The brain and spinal cord programs are nationally accredited with Accreditation Canada. Outpatient clinics are offered in: amputee management, musculoskeletal medicine, Multiple Sclerosis (MS), stroke, brain injury, neuromuscular disorders and neurologic diseases, spinal cord injury, spasticity management and electromyography. In addition, interdisciplinary clinics are available for amyotrophic lateral sclerosis (ALS) and parkinson's (with neurology), spina bifida (with urology and neurosurgery), and spasticity.

ASSISTIVE TECHNOLOGY IMPROVES DAILY LIVING

The division has expanded its independent access to technology (iAT) consultative service. The service supports patients in using a variety of assistive technology (i.e. computers,

tablets and cell phones) to maintain or improve mobility, function and daily living activities. The service includes advocacy, patient education, technology assessments, evaluation and training. The added resource will help to further develop a collaborative and integrated approach to delivering iAT support.

DR. LEE KIRBY PUBLISHES NEW TEXT BOOK

Dr. R. Lee Kirby, with Dalhousie's Wheelchair Research Team, published *Wheelchair Skills Assessment and Training*. This book provides comprehensive but easily understandable protocols for the assessment and training of wheelchair skills. The Wheelchair Research Team, led by Dr. Kirby, has focused on wheelchair safety and performance for three decades. The book is largely based on the team's Wheelchair Skills Program. This program is considered top in the world and has been used by over 75,000 people in 177 countries since 2007.

493

Admissions
(up 4%)

24,452

Inpatient Days
of Care (steady)

4,352

Outpatients
(up 3%)



CHRISTINE SHORT
Division Head

DIVISION OF RESPIROLOGY

Respirology is a diverse subspecialty of internal medicine that offers a varied practice, from acute care medicine to chronic disease management in a multidisciplinary setting. The division offers: a respirology clinic, Rapid Referral Clinic (for urgent outpatient consults), inpatient consultations & emergency, a Pulmonary Rehabilitation Program, Adult Cystic Fibrosis Program, Sleep Disorders Clinic and Laboratory, bronchoscopy and interventional respirology, Pulmonary Arterial Hypertension (PAH) Program, lung transplantation and a pulmonary function laboratory.

INSPIRED GROWS TO EMERGENCY DEPARTMENT

Under the leadership of Dr. Graeme Rocker, the nationally recognized INSPIRED Chronic Obstructive Pulmonary Disease (COPD) Outreach Program has expanded to the emergency department setting. The pilot program is supported by a NSHA Translating Research into Care (TRIC) grant. INSPIRED is a leading practice example for service delivery

in COPD care. It sets new standards for community-based care of advanced COPD and has significantly reduced admissions to hospital for severe COPD patients.

DR. PAUL HERNANDEZ ACTIVELY LEADS CHANGE

If there is an opportunity to lead change or mentor others, Division Head Dr. Paul Hernandez is not far from the scene. In addition to his busy clinical practice and responsibilities as Division Head, he co-chaired the Canadian Thoracic Society COPD Clinical Assembly and the Adult Respirology Examination Board of the Royal College - which led to a major change in exam format. He also chaired the Scientific Planning Committee for the Canadian Respiratory Conference and sits on Dalhousie's Respirology Residency Training Program Committee. His commitment to medical education spans far beyond residents, where he offers programs to other health-care professionals and patients to expand their knowledge and capacity in respiratory care and treatment.

1,917

Inpatient
Consults (steady)

3,530

Outpatients (up 1%)

344

Cystic Fibrosis
Visits (up 15%)



PAUL HERNANDEZ
Division Head

DIVISION OF RHEUMATOLOGY

This division provides specialized medical and consultative care for Atlantic Canadians with inflammatory arthritis and rheumatic diseases through inpatient consultations and ambulatory care clinics, including a specialized lupus clinic.

NEW PATIENT BOOKING
PROCESS IMPROVES WAIT TIMES

A new patient booking procedure was introduced that increases efficiency and flexibility for urgent bookings. This change supported a 54 per cent decrease in the average wait time for urgent patients. Urgent patients are now waiting on average 22 days compared to 34 days last year.

GP-RHEUMATOLOGIST
IMPROVES HOLISTIC CARE

Family physician, **Dr. Samuel Hickcox**, together with physiotherapists, worked with **Dr. Evelyn Sutton** in a collaborative care clinic. This new model of care, provided patients with a more holistic care experience compared to the traditional specialist-only based model.

DIVERSE LEADERSHIP

The division's leadership capacity spans the full spectrum. **Dr. Trudy Taylor** is the Royal College of Physicians and Surgeons' Specialty Chair-Elect for Adult Rheumatology. The division also has a strong leadership presence in education and research with **Dr. Evelyn Sutton** the Associate Dean, Undergraduate Medical Education at Dalhousie University (Halifax) and **Dr. John Hanly** the Department's Research Chair.

1,973

New Patients
(up 2%)

177

Visits at the Injection
Clinic (down 8%)



VOLODKO BAKOWSKY
Division Head



SAINT JOHN NEW BRUNSWICK CAMPUS

The Department of Medicine has an active and vibrant residency training program in New Brunswick. This year marks the tenth anniversary of the Dalhousie Internal Medicine Saint John Campus training program. The Saint John Regional Hospital Department of Medicine offers a full range of services with a variety of subspecialty interests, including nephrology, gastroenterology, neurology, dermatology, endocrinology, rheumatology, and respirology. The hospital-based Internal Medicine residency program offers a strong ambulatory care elective with emphasis on management of patient problems in ambulatory care.

ELECTROPHYSIOLOGY PROGRAM EXPANDS

A dedicated state-of-the-art Electrophysiology Suite was part of a Saint John Regional Electrophysiology Program (EP) expansion this year. The suite is equipped with flouroscope equipment that reduces radiation exposure both to the patient and the

staff working in the EP lab. It also has the latest three-dimensional mapping equipment to treat complex arrhythmia and equipment for Cryoablation. The program, established in 2007 with only one electrophysiologist, **Dr. Satish Toal**, has grown to be a busy program providing comprehensive EP services including device resynchronization and complex ablations.

DR. ROSS MORTON BRINGS NEW EXPERTISE TO THE TEAM

Queens University's renowned medical educator, **Dr. Ross Morton**, has joined New Brunswick's Department of Medicine, mainly on the Internal Medicine Teaching Unit and taking a lead role in Internal Medicine Morning Report. He has a background in medical education, and was appointed Skilled Clinician Course Director at Dalhousie Medicine New Brunswick in January 2017.

10

Years Offering the Core Internal Medicine Residency Training Program in Saint John

10

Residents in the Saint John Internal Medicine Residency Training Program

Chief Resident,
Dr. Heather Chambers



PAUL SOHI
Department Head



LEADERS IN

PATIENT CARE

FLAGSHIP PROGRAM – MEDICINE TEACHING UNIT

Great leaders are often humble. **Dr. Steven Gruchy**, Director of the Medicine Teaching Unit (MTU), fits that description. Although the program is the Department's backbone and sees two broad-based teams performing clinical care, research, and teaching, he demurs to his teams: "I'm not the star of the show."

"There's no clear hierarchy structure," he explains. "It's really a collaborative approach where everybody has an equal say, right from medical students to nurses, physiotherapists, pharmacists, social workers, staff physicians, senior residents, and others. Medical care is just one aspect of it...I'm here to help facilitate."

Whether for frail elderly or those with other multi-system diseases, the MTU identifies needs early and offers tailored care for 42 inpatients on the QEII Halifax Infirmary's Unit 8.2 and 8.3, along with a few more patients admitted in the Emergency Department. As an aging population with more medical conditions, complicated diseases and different treatment strategies, this becomes crucial. "We're really getting into individual care versus a one-size-fits-all approach. Every person has a different set of medical conditions."

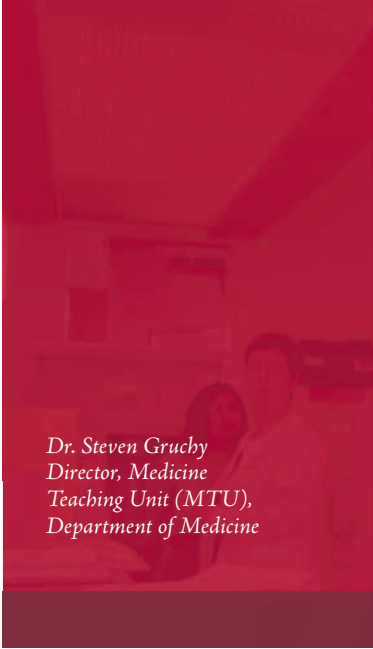
Nurse-led bullet rounds demonstrate this as all involved team members discuss each patient to ensure their needs, including discharge planning, are met. This collaborative process also helps meet length-of-stay

national benchmarks, an aspect of accreditation. Hospital accreditors recently noted the process was a special one. A snapshot of the MTU's initiatives include quality outcomes research, *Choosing Wisely*, and development of a new medicine admission package to include updated preprinted orders, frailty scores, and goals-of-care forms. In Emergency, faculty and residents are working on facilitating flow of patients and a new scholar role secures protected research time for residents.

Dr. Gruchy shares this leadership with long-standing Unit 8.2 nurse manager Linda Hutchins. "She, and the charge nurses, have inspired people to want to provide outstanding clinical care and teaching."

"It's all of the workers involved who should take the credit." He lists: **Dr. David Simpson**, MTU Associate Director, collaborating educational aspects; **Dr. Rosario Rebello**, Assistant MTU Director troubleshooting issues in Emergency; and **Dr. Chris Green**, a third-year resident who digitized orientation guides and other critical documentation. He also considers **Dr. Simon Jackson's** mentorship part of the MTU success story. "A fantastic clinician, educator and administrator." Dr. Jackson was former MTU director and recent Department Head.

"The lottery is won for me. I've been lucky," Dr. Gruchy adds when reflecting on his talented group of colleagues.



*Dr. Steven Gruchy
Director, Medicine
Teaching Unit (MTU),
Department of Medicine*

What leadership means to me.

TO ME (A LEADER) IS SOMEONE WHO'S APPROACHABLE, HAS A VISION OF WHERE THEY SEE THINGS, NOT JUST CURRENTLY BUT IN THE FUTURE, AND INSPIRES PEOPLE TO WANT TO ACHIEVE EVERYTHING THEY CAN WITH RESPECT TO CLINICAL CARE, STUDENT AND RESIDENT EDUCATION, AND FURTHERING RESEARCH TO IMPROVE PATIENT CARE IN THE FUTURE.

**DR. STEVEN GRUCHY, DIRECTOR,
MEDICINE TEACHING UNIT**



Dr. Robbie Stewart, Director, Department of Medicine Quality Care

OVERVIEW ON PATIENT CARE

DEPARTMENT WEIGHS IN ON PROVINCIAL CARE MODEL

In November 2016, more than 70 participants gathered to discuss a province-wide delivery care model for acute medicine services. The Medicine Matters conference was hosted by the Department of Medicine, in partnership with the Nova Scotia Health Authority (NSHA).

NSHA is moving toward a 'Programs of Care' delivery model. Conference participants learned about the model and provided input into the strengths and challenges of the current state, including physician resources. The model focuses on a provincial approach to service delivery; with an expectation to improve health outcomes, standardize care delivery and link clinical and fiscal accountability to provincial strategy and standards.

Alberta offers a similar care model. Dr. Blair O'Neill, a cardiologist and Associate Chief Medical Officer of the Strategic Clinical Networks of Alberta Health Services, offered a key note address to share his province's experiences and lessons learned in implementing medicine program changes.

Dr. Simon Jackson, conference committee chair and Department of Medicine Head at the time of the conference, was keen to facilitate the discussion.

"The Department of Medicine provides a broad spectrum of specialized care for patients from all parts of the province," said Dr. Jackson. "In addition to that, we have many high calibre physician leaders who have a track-record in creating other province-wide programs for their various disciplines. We want to offer this expertise and help our province make the needed improvements in how we deliver care."

SPOTLIGHTS

EPILEPSY UNIT EXPANSION WILL HELP IMPROVE ACCESS

The Division of Neurology, with major assistance from the QEII Foundation, recently completed an upgrade and expansion of the Epilepsy Monitoring Unit (EMU). A new state-of-the-art Epilepsy Monitoring Unit facilitates the investigation of patients with seizures, particularly those who may benefit from epilepsy surgery. The expanded unit is expected to help cut down on the current one-and-a-half-year waitlist. Neurologist, **Dr. Mark Sadler**, was instrumental to the expansion.

TELEMEDICINE SERVICES GROW EXPONENTIALLY

More and more Nova Scotians are benefiting from the Department's expertise in specialties like dermatology and physical medicine and rehabilitation thanks to an increased use in telemedicine. In 2016-17, those two specialties provided 2,819 telemedicine visits. This is a 67 per cent increase over last year.

NATIONAL LEADER IN PERCUTANEOUS CORONARY INTERVENTION

Heart attack care has evolved markedly over the last decade with the demonstration of better outcomes with a much more aggressive interventional approach in the cardiac catheterization laboratory. The Canadian Institute of Health Information report on quality indicators has demonstrated that the QEII Health Sciences Centre has the lowest 30-day mortality rate and readmission rate after percutaneous coronary intervention in Canada. This remarkable result highlights the skill and dedication of the Interventional Cardiology group within the Division of Cardiology.

EDUCATION

SUCCEEDING THE PREDECESSORS

Wise mentors kindle fire in their protégées, and that zeal creates a continuum. **Dr. Ian Epstein**, Program Director for DoM's Internal Medicine Residency Training Program exemplifies this. "Leadership to me includes carrying the torch of my predecessors **Drs. Darrell White** and **Iqbal Bata**, as well as their predecessors, so there's continuity and harmony in the program. Not just to maintain the status quo, but to maintain the level of excellence they established, while also carrying forward great decisions made prior to my time as Program Director."

He embraces that legacy, meeting with all 60 residents, hearing and helping with their struggles, achievements and their academics. "I take a lot of pride discussing their career options and strategies with them. After core Internal Medicine, almost all will pick a subspecialty and apply to other programs. We have a very good track record of our senior residents matching into competitive programs in Halifax and across Canada."

"Residents have stress and they work very hard and get fatigued, but at the end of their time we want them to look back with fond memories and no regrets," he adds. "Even if day-to-day they have moments where they may shed a tear or feel overwhelmed, we want to create a program that supports them. The program takes great pride in helping build resilience, to help residents cope with the difficulties of our profession."

What leadership means to me.

LEADERSHIP IS ABOUT TRUSTING AND EMPOWERING YOUR TEAM, SO TOGETHER WE ACHIEVE A BETTER OUTCOME THAN WHAT ANY ONE OF US COULD DO ALONE.

DR. CHRIS GRAY, DIRECTOR,
DEPARTMENT OF MEDICINE EDUCATION

*Dr. Ian Epstein
Program Director,
Internal Medicine
Residency Training,
Department of Medicine*

Dr. Epstein bows to his team, and lauds the constant work of **Katie Barkhouse** and **Sophie Montreuil** in Halifax, and **Angeles Damil** in Saint John. Special appreciation is given to the soon retiring **Dr. Eric Grant**, Site Director in Saint John, NB. Dr. Grant has been the Site Director since its founding in 2006. He represents 20 plus years as a towering figure in medical education in New Brunswick having made tremendous contributions in designing and running the program.

This team and their strategies succeed: Record numbers of grads have completed the program (up from a historic average of about 17 grads per year to 20 now), with record numbers entering the workforce as new specialists across the Maritimes. Since Dr. Epstein began as program director approximately 15 graduates have begun working in the region as new attending staff, serving the needs of sick patients. "That's our biggest accomplishment," he proclaims.

Continuous quality improvement in the program is Dr. Epstein's wish, rather than radical change. "It's a tumultuous time due to external factors." He cites planning for a November 2018 Royal College Accreditation visit. "I'd like to be well-organized, have the curriculum polished so we all understand what we're trying to accomplish." His group will also prepare for a new national framework for training residents called *Competence By Design*. The decade-long initiative will transform how residents are trained and assessed in all specialties, with Dal's launch in July 2019. "I'd like our program to be well-positioned for that be a huge success."



Dr. Chris Gray, Director, Department of Medicine Education



OVERVIEW ON EDUCATION

PREPARING FOR POCUS

Point of care ultrasound (POCUS) is becoming an expected tool in the internal medicine tool kit. That's why **Drs. Babar Haroon, Sharon Mulvagh, and Marko Balan** (former chief resident of the core internal medicine training program and now a trainee in critical care), have spent the past two years developing the Department's POCUS core internal medicine education program.

"POCUS is proving to be effective in helping us diagnose faster and more accurately, expedite bedside interventions and involve specialists earlier, when needed," said, Dr. Haroon. "Residents are also hungry for this. This is an important addition, as we aim to be the leading internal medicine program in the country."

Curriculum was created using national benchmarks developed by the Canadian Society of Internal Medicine, and published in the *Journal of General Internal Medicine* (September 2017). Drs. Haroon and Balan, sat on the committee tasked with developing the recommendations. Ensuring curriculum is in place is only one step to bringing POCUS to the Department.

Purchasing the equipment is another important milestone. Under Dr. Balan's leadership, the residents played an integral role by helping to raise funds, by running in the Bluenose Marathon for two years. The QEII Foundation also contributed to the ultrasound fund.

The group's next priority is to equip a core group of faculty members to become confident and efficient with the tool, for both patient care and medical education.

The Department purchased three handheld ultrasounds for the MTUs (including the MTU-ED) and a high-quality compact machine designed for point-of-care imaging. These machines complement the ultrasound already in use on the IMCU.

SPOTLIGHT

RESIDENCY APPLICATIONS SPIKE

The 2016-17 saw a spike in applications to its already highly competitive residency program. More than 399 residents vied for the 18 residency positions. Applications were up by 21 per cent, compared to 2016. All positions were matched in the first round.

RESEARCH

DR. ALEX LEGGE: RUNNING START TO RESEARCH CAREER

In an ordinary hospital office, a quiet evolution of leadership simmers. Not a rebel uprising, but an unassuming force in human health and medicine. She's called **Dr. Alex Legge**.

With the acceptance and backing of Dalhousie's Clinician Investigator Program (CIP), this third-year internal medicine resident is deciphering data from patients with systemic lupus erythematosus (SLE). Her holy grail? To craft a prognosticating tool for those who suffer from it so they have more potential to receive intervention early, limiting possible organ failure and even death.

It's a picture that zooms in on trajectories of patients using the frailty concept, identifying those at highest risk by constructing a frailty index. As people accumulate health problems over time, frailty index scores increase, but the approach has never been applied to SLE. Until Internal Medicine Resident Dr. Legge showed up.

"What makes SLE a fascinating disease is that it's fairly unpredictable," Dr. Legge says. "For some it's a mild illness, for others its debilitating or even fatal. Understanding this heterogeneity is key. Currently, we don't have very effective tools for predicting outcomes. With a better tool, we may be able to identify patients who need closer monitoring or more intensive treatments."

What leadership means to me.

OUR DEPARTMENT'S EMERGING AND JUNIOR RESEARCHERS' SUCCESS IS CRITICAL TO ENSURING THE HIGHEST STANDARDS IN RESEARCH ARE EMBEDDED IN OUR ACADEMIC AND CLINICAL PROGRAMS. I CONSIDER IT A PRIVILEGE TO MENTOR AND PROVIDE GUIDANCE TO THESE YOUNG RESEARCHERS AS THEY LAUNCH THEIR OWN PROFESSIONAL PATHS. I TRY TO DO THAT BY GENERATING EXCITEMENT FOR RESEARCH, EMPHASIZING THE EXPECTED ADVANCES IN PATIENT CARE, WHILE FINDING THAT BALANCE WITH INDEPENDENCE AND STRATEGIC MENTORSHIP.

**DR. JOHN HANLY, DIRECTOR,
DEPARTMENT OF MEDICINE RESEARCH**

*Dr. Alex Legge,
Internal Medicine Resident,
Department of Medicine*

She wasn't alone in the inspiration: "It's an idea that **Dr. John Hanly** (Division of Rheumatology) and I came to together. The concept of frailty incorporates many health problems. We've seen it applied to other populations and both felt it would be relevant in SLE."

Along with Dr. Hanly, others have believed in Dr. Legge, with reason. She has a long trail of achievements behind her. The most recent stones on that path are DoM's Research Excellence Award and Best Postgraduate Presentation, Faculty of Medicine (FoM) Best Overall Award for Resident Research, and the FoM Postgraduate Killam Award.

"Throughout the years, I've had just such positive experiences at Dal," Dr. Legge adds. "The institution and the community here has always been so supportive of me."

Dal's accredited postgrad CIP gives her structured and rigorous research training with a supervisor – Dr. Hanly – and a supervisory committee, while she completes her Masters in Community Health and Epidemiology. All this is with the aim of guiding her toward being an independent researcher.

If there's one quality of her supervisor she'd be proud to emulate, it's compassion. "He's a good clinician, a great researcher, supportive, and instrumental in my progress. And an amazing collaborator who listens to and values the ideas of others...I can't say enough about him as a leader in research, and about the Department of Medicine for their support."



Dr. John Hanly, Director, Department of Medicine Research



OVERVIEW ON RESEARCH

DEPARTMENT'S PLEDGE TO EARLY-CAREER RESEARCH GROWS

Fostering a supportive and productive research platform for early-career researchers continues to be a top priority.

The Department's University Internal Medicine Research Foundation (UIMRF) is key to that support. This dedicated fund, a unique practice for Dalhousie clinical departments, supports investigators in growing their research efforts and attracting additional funding. This year the fund supported three fellowships: **Scott Kehler** (supervised by **Dr. Kenneth Rockwood**); **Dr. Cindy Forbes**, (supervised by **Dr. Chris Blanchard**) and **Dr. Caitlin Lees**, PGY3 Clinician Investigator Program (supervised by **Drs. Ravi Ramjeesingh** and **Tallal Younis** in Medical Oncology). The UIMRF also awarded funds to three junior researchers and supported five Research in Medicine (RIM) summer studentship awards.

As the Department's enthusiasm for research grows, so does its Research Day. In 2016, it broke records with more than 165 in attendance, 108 poster displays and 10 podium presentations.

In March 2017, three special Ad Hoc Operating Grants were awarded, where the Department matched the Nova Scotia Health Authority's Research Fund competition (for a total of \$50,000). **Dr. Leah Cahill**, Howard Webster DoM Research Chair, **Dr. Lisa Barrett**, Division of Infectious Diseases and **Dr. Ravi Ramjeesingh**, Division of Medical Oncology walked away with the awards.

Fostering a culture of early-career research seems to be paying off. In 2017, two Department resident researchers were singled out at the Faculty of Medicine Resident Research Awards. **Dr. Alex Legge**, PGY3/CIP walked away with the Best Overall Award and **Dr. Heather MacKenzie**, PGY3 nabbed the Best Work in Clinical Research award.

RESEARCHERS SPOTLIGHT

DR. SULTAN DARVESH

Dr. Sultan Darvesh, Division of Neurology, continues to excel in his research career. This year he received a prestigious project grant of \$1.46M from the Canadian Institutes of Health Research (CIHR). The award was the largest grant in Nova Scotia and in the top twelve in Canada. The project, "PET and SPECT Probes for the Diagnosis of Alzheimer's Disease Targeting Cholinesterase Activity" with co-investigators Steven Burrell and Ian Pottie.

DR. OLGA THEOU

Clinical Research Scientist, **Dr. Olga Theou**, has already made great advances in her research career since joining the Department in early 2017. Dr. Theou researches aging, frailty, and their interaction with physical activity and sedentary behaviors. Her study: *Association between sedentary time and mortality across levels of frailty* was published by the CMAJ (August 2017). Dr. Theou is also an adjunct senior lecturer with the University of Adelaide, Australia. In 2013, she was awarded a Banting Fellowship, which provides federal funding to the very best postdoctoral applicants, both nationally and internationally, who will positively contribute to the country's economic, social and health research-based growth.

DR. KARTHIK TENNANKORE

This early-career researcher, **Dr. Karthik Tennankore**, is carving an impressive research path. This year he received the Kidney Foundation of Canada Biomedical research grant for "Frailty and the Kidney Transplant Wait List." Dr. Tennankore's research interests include hemodialysis outcomes, the influence of frailty on outcomes with renal disorders and renal failure, and outcomes for kidney transplant recipients. His broad research base also includes conducting clinical trials, and has several ongoing collaborations. He has 37 peer-reviewed publications, eight as first author and eight as last author (demonstrating his commitment to supporting residents). He has had 10 funded grants, including co-principal investigator on two CIHR grants.

LEADERS IN RESEARCH

RESEARCHING BETTER CARE FOR TOMORROW

With more than \$12.9 million in annual research funding, our researchers are shaping tomorrow's care in:

- HIV, hepatitis c and cytomegalovirus
- frailty and cognitive impairment
- Alzheimer's disease
- osteoporosis
- kidney transplantation (frailty and post-transplant kidney injury)
- home-based palliative care telemedicine
- new infectious diseases vaccines
- skin disease (i.e. keratolytic winter erythema)
- early melanoma detection
- physical activity in people with chronic disease
- atrial fibrillation and cardiac implantable electronic devices
- ventricular tachycardia (VT)
- cancer therapies
- ALS and multiple sclerosis
- wheelchair performance and safety
- respiratory illness: COPD and asthma
- nutrition
- lupus
- rheumatoid arthritis

LIST OF ENDOWED CHAIRS

In 2016-17, the Department of Medicine had six research chair holders:

Anil Adisesh, PhD

J.D. Irving Limited Research Chair
in Occupational Medicine, Saint John, New Brunswick

Leah Cahill, PhD

Howard Webster Department of Medicine Research Chair

Dr. Jafna Cox

Heart and Stroke Foundation
Endowed Chair in Cardiovascular Outcomes

Dr. Sultan Darvesh

Irene MacDonald Sobey
Endowed Chair in Curative Approaches to Alzheimer's Disease

Louise Parker, PhD

Endowed Chair in Population Cancer Research
for the Canadian Cancer Society, Nova Scotia Division

Dr. Kenneth Rockwood

Kathryn Allen Weldon Chair in Alzheimer Research



*Dr. Leah Cahill,
Howard Webster Department of
Medicine Research Chair*

LEADERS IN ILLNESS PREVENTION

INSPIRED APPETITE FOR NUTRITION SCIENCE

With a flexible mandate, nutritional scientist **Dr. Leah Cahill**, the new Howard Webster Department of Medicine (DoM) Research Chair, has the leeway she needs to meet one of her top goals: to help the culture of research already growing in the DoM to flourish.

Coming from Harvard University's thriving research hub, she taps her experience with open research environments where researchers meet regularly to discuss and support each other's work. One effort to emulate this involves a pilot group to connect DoM researchers in a similar way. "I just make organizing those connections easier," Dr. Cahill says. "It's important since a lot of us work through the same thoughts, even if our programs involve completely different methodologies and subjects. We can share information about resources such as funding opportunities and offer insight on interpreting results. It also helps us share our findings with colleagues. And it's fun!"

Affiliated with Harvard's Department of Nutrition, and a collaborator on the Global Burden of Disease Study, she is developing her own nutritional genomics research program.

"Studies show that poor diet is a top risk factor contributing to the burden of disease and disability worldwide. Heart disease, type II diabetes, and some immune diseases are particularly prevalent in Nova Scotia. Nutrition offers a relatively low-risk, low-cost option for prevention and complementary treatment of disease."

Nutrition is a relatively new field of science. "There's an interesting dynamic right now where public and patients want nutrition knowledge, with great questions, but often there are no evidence-based answers yet." Nutrition researchers around the world like Dr. Cahill are trying to fill the gap. "It's complex. An optimal diet for one person may be quite different than for another. A one-size-fits-all approach to

nutrition doesn't always apply. I like to involve patients in this – they are the consumers of healthcare so their voices should be included in planning research projects."

"There is so much to be discovered," Dr. Cahill says. "The next 10-20 years will be amazing for medical research. I think there will be leaps and bounds and I'm really excited to see what the future brings."

When asked what leadership in her research role means to her, she replies simply: "Leadership to me is providing a vision and direction for a healthier society."

What leadership means to me.

LEADERSHIP TO ME IS PROVIDING A VISION AND DIRECTION FOR A HEALTHIER SOCIETY.

DR. LEAH CAHILL



*Dr. Andrea Kent and Dr. Paul Bonnar
lead the Antimicrobial Stewardship Program (AMS)*

LEADERS IN IMPROVING CARE

A WORLD WITHOUT ANTIBIOTICS?

Visions of the future are leading-edge technology and new cures to old diseases. Enter the disturbing potential reality: People lying in hospital with infections and few or no antibiotics to treat them.

Dr. Paul Bonnar, Physician Lead for the Nova Scotia Health Authority Antimicrobial Stewardship Program (AMS) begun in February 2017, paints an alarming picture: “If we don’t emphasize a change in prescribing behaviours, there’s a really good chance that, in the next generation, we won’t have antibiotics that work.”

“There aren’t a lot of new antibiotics coming up the line,” adds **Dr. Andrea Kent**, AMS Pharmacy Lead. “What we’ll have for antibiotics is what we already have with one or two new ones. Globally, and even within Nova Scotia, we’re seeing resistance become an issue. We have patients for whom we do not have antibiotics or very limited antibiotics to treat their infections.”

That’s why she and Dr. Bonnar lead the NSHA AMS program to optimize antibiotic use, avoid resistance and minimize adverse effects, like *C. difficile* infections. “That means getting the right drug, the right dose, the right duration and right route,” explains Dr. Bonnar. “With at least 30 per cent of inpatients on antibiotics... how you go about that is tricky... But somewhere between 30-50 per cent of those antibiotics can be optimized in some way.”

Similar programs have emerged across Canada, but Drs. Bonnar and Kent want to grow AMS within NSHA, relying on the hard work of many healthcare workers to optimize antibiotic use. The AMS already collaborates with the IWK and with other provinces. It has a dedicated multidisciplinary team: a microbiologist, physician, pharmacists, admin and IT support. Engagement from patients, infection control experts, nursing, clinicians and others add to its focus on inpatients and long-term care, with an eye to expand to the community in the future.

With no defined end to antibiotic resistance, Dr. Kent would be happy to continue until retirement. “This is really the job I wanted 15 years ago... I don’t see this program ending unless we have no antibiotics to conserve.” For now, she concentrates on providing leadership to the pharmacists - getting them trained and comfortable making antibiotic recommendations. “Leadership is visionary and looking to see where we need to go. I may not always know how to get there, but that’s what the team approach is for.”

Dr. Bonnar’s road to AMS launched with Infectious Disease training at Dal, before a clinical fellowship year at Sinai Health System-University Health Network in Toronto. “At the end of the day, I really want to be someone who leads by example and is supportive of all team members, providing guidance so our team thrives as antimicrobial stewards.”

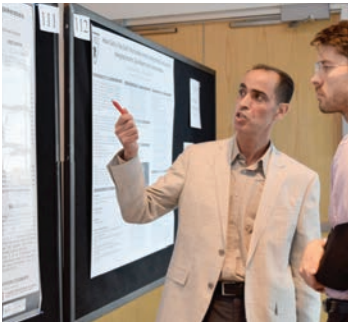
What leadership means to me.

LEADERSHIP IS VISIONARY AND LOOKING TO SEE WHERE WE NEED TO GO. I MAY NOT ALWAYS KNOW HOW TO GET THERE, BUT THAT’S WHAT THE TEAM APPROACH IS FOR.

DR. ANDREA KENT, PHARMACY LEAD, NSHA ANTIMICROBIAL STEWARDSHIP PROGRAM

CELEBRATING

OUR PEOPLE





SERVICE

25 YEAR SERVICE

- Dr. David Anderson,
Division of Hematology
- Dr. James Fraser,
cross appointment from
Department of Diagnostic
Radiology
- Dr. Ellen Jost,
Division of Geriatric Medicine
- Dr. Colm McParland,
Division of Respiriology
- Dr. Vernon Paddock,
Division of Cardiology
- Dr. Miroslaw Rajda,
Division of Cardiology

30 YEAR SERVICE

- Dr. Rebecca Dobson,
cross appointment from
Department of Diagnostic
Radiology
- Dr. Laura Finlayson,
Division of Clinical Dermatology
& Cutaneous Science
- Dr. Christopher Gallant,
Division of Clinical Dermatology
& Cutaneous Science
- Dr. John Hanly,
Division of Rheumatology
- Dr. B. Lynn Johnston,
Division of Infectious Diseases
- Dr. Kevork Peltekian,
Division of Digestive Care
& Endoscopy
- Dr. K. Sue Robinson,
Division of Hematology

35 YEAR SERVICE

- Dr. Nancy MacDonald,
Division of Cardiology
- Dr. Walter F. Schlech III,
Division of Infectious Diseases

45 YEAR SERVICE

- Dr. Ronald Gregor,
Division of Cardiology

RETIREMENTS

- Dr. R. Allan Purdy,
Division of Neurology
- Dr. Nancy MacDonald,
Division of Cardiology
- Dr. David Hirsch,
Division of Nephrology
- Dr. Richard Lodge,
Division of Cardiology
- Dr. John Stewart,
Division of Cardiology
- Dr. Paul McIntyre,
Division of Palliative Medicine
- Dr. Ronald Gregor,
Division of Cardiology
- Dr. Mark Dorreen,
Division of Medical Oncology

PROMOTIONS

TO ASSOCIATE PROFESSOR

- Dr. Lori Connors,
Division of General Internal
Medicine
- Dr. Tony Lee,
Division of Cardiology
- Dr. Stephanie Snow,
Division of Medical Oncology
- Dr. Trudy Taylor,
Division of Rheumatology

TO PROFESSOR

- Dr. Debra Morrison,
Division of Respiriology

AWARDS

Brian M. Chandler Lifetime Achievement Award in Medical Education

Dr. David Simpson,
Division of General Internal Medicine

2017 DoM Achievement Award

Dr. Stephen Couban,
Division of Hematology

Clinical Excellence Award

Dr. Ata-Ur-Rehman Quraishi,
Division of Cardiology

Faculty Excellence in Medical Education

Dr. Nathan Lamond,
Assistant Professor,
Medical Oncology

Dr. Gordon Gubitz,
Program Director,
Neurology

Dr. Erin Gorman Corsten,
Program Director,
Palliative Medicine

Dr. Trudy Taylor,
Program Director,
Rheumatology

Outstanding Faculty – Residents’ Choice Award

Dr. Trudy Taylor,
Division of Rheumatology

Excellence in Resident Research Award 2016-2017

Dr. Shiru (Lucy) Liu, PGY3

Research Lifetime Achievement Award

Dr. Arnold Mitnitski

RESIDENT RECOGNITION AWARDS

Chief Medicine Residents

Drs. Keigan More &
Kate MacEachen, Halifax

Dr. Aimee Noel, Saint John

Associate Chief Medicine Resident

Dr. Andrew Caddell

Award for Excellence in Undergraduate Teaching

Dr. Chris Green

Award for Excellence in Summer Grand Rounds

Dr. Andrew Caddell

Outstanding Resident Awards

PGY1 – Dr. Eric Pond

PGY2 – Dr. Jean Gregoire Leduc

PGY3 – Dr. Alison Dixon

Outstanding Academic Performance Awards

PGY1 – Dr. Kyle Murnihan

PGY2 – Dr. Mark Robbins

PGY3 – Dr. Alex Legge

RESEARCH DAY 2017

Best Overall Poster

Dr. Heather MacKenzie,
PGY3 (Endocrinology –
Barna Tugwell)

Best Undergraduate Presentation

Jordan Francheville
(Saint John – Dan Smyth)

Best Core Presentation

Dr. Alex Legge,
PGY3 (Rheumatology –
John Hanly)

Best Sub-Specialty Presentation

Alastair Dorreen,
PGY5 (Digestive Care &
Endoscopy – Jenn Jones)

Best Research Fellow/ Graduate Student Presentation

Anna Roesler
(ID – Lisa Barrett)



Department of Medicine

Nova Scotia Health Authority & Dalhousie University

QEII Health Sciences Centre, VG Site
Suite 442, Bethune Building
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