



Queen's
UNIVERSITY

FACULTY OF
Health Sciences

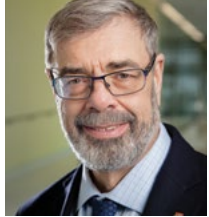
DEAN'S REPORT
2016-2017





ASK
questions
SEEK
answers
ADVANCE
care
INSPIRE
change

Setting new milestones



Queen's University has, for many decades, been known for its phenomenal student experience. But in recent years, there has been a big collective push to realize our goal for a balanced academy by combining that excellent student experience with an intensified research environment. There is a

general appreciation around campus that what's needed most, notwithstanding increasing challenges in the funding environment, is a redoubled focus on fortifying our research endeavours.

Our Faculty of Health Sciences has long been committed to the notion that we are an essential contributor to the university's research mission. Success in that mission is measured, in part, by research revenues.

For many years, our faculty has hovered between \$75 and \$90M in research revenues. This year, we are pleased to present, in this report, a new threshold for success – \$118M. Although one shouldn't be wed to the exact number, breaking the \$100M barrier for our small faculty is a significant milestone.

All hands have been on deck. Under the guidance of our Vice-Dean (Research), Dr. Roger Deeley, the \$118M has come from all sectors of the faculty, across all three schools, across all disciplines, and across all of the four Canadian Institutes of Health Research pillars: biomedical research; clinical research; health services research; and social, cultural, environmental, and population health research.

The breakdown of the revenues for this year (as highlighted on page 6) reveals that, while we have held our own with

respect to major federal grant funding, we have intensified our growth on the industry and corporate side of research. It is my view that this traces to – first and foremost – spectacular successes in the Canadian Cancer Trials Group, and also the product of what is now a five-year-strong industry engagement strategy across the entire faculty.

We've proudly listed recent successes that have surpassed the \$500K threshold on the next few pages, though we are very aware there is a long list of other grants and contracts that have collectively contributed to the final total.

There are, of course, many research-related elements to celebrate, in addition to the strengthened revenues. This year we have seen significant progress, led by Dr. Deeley, on our vision to create Canada's first Integrated Research Institute between a Faculty of Health Sciences and its academic hospital partners.

We are proud of the progress made through the International Centre for the Advancement of Community Based Research (ICACBR) under the leadership of Dr. Heather Aldersey. The ICACBR team recently secured a \$20.4M partnership between Queen's University, the University of Gondar in Ethiopia, and the MasterCard Foundation.

We stood alongside our hospital partners with pride as Kingston Health Sciences Centre unveiled the William J. Henderson Centre for Patient-Oriented Research, which will serve our faculty dedicated to this specific type of inquiry.

We celebrated the launch of Queen's Cardiopulmonary Unit (Q-CPU), which recently opened its doors. The unit is a testimony to the vision and leadership of our Head of Medicine, Dr. Stephen Archer, and a strong team of scientists and clinicians dedicated to pulmonary, cardiac and vascular research.

Part of our agenda is to advance transdisciplinary research efforts and collaborations. A great example of this is a project led by Dr. Marian Luctkar-Flude, which studies the after-care breast cancer survivors receive from their primary care practitioners. Along with an expert panel that included an oncologist, family physicians, nurse practitioners, and breast cancer survivors, Dr. Luctkar-Flude identified 21 key recommendations for post-treatment breast cancer survivorship care as part of her research.

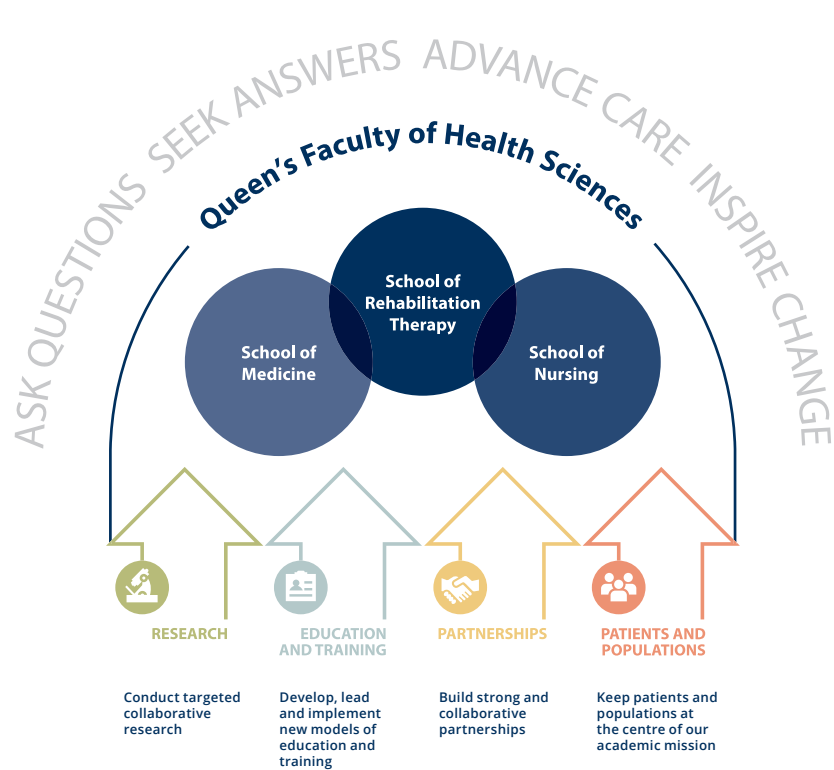
We have an enormous amount to be proud of in this year's activity in the Faculty of Health Sciences beyond the realm of research. Our three schools remain incredibly popular for prospective students, and our student satisfaction metrics are off-the-scale high. We continue to advance our agenda of educational innovation through initiatives like the significant transformation of our 29 specialty medicine residency programs to competency-based education, the elaboration of a Doctor of Science in Rehabilitation and Health Leadership, and the spectacular success of our Healthcare Quality program, with a recent approval of a new PhD stream.

Thank you to the faculty, staff, and students who have made this year an exceptional one. We have set these new milestones together.

A handwritten signature in black ink, appearing to read 'Richard K. Reznick'.

Richard K. Reznick, MD, MEd, FRCS, FACS, FRCSEd (hon), FRCSI (hon)
Dean, Faculty of Health Sciences
Director, School of Medicine
Queen's University
CEO, Southeastern Ontario Academic Medical Organization (SEAMO)

Four Unifying Strategic Directions



Dr. Jennifer Medves
Vice-Dean, Faculty of Health Sciences and Director, School of Nursing

Dr. Richard Reznick
Dean, Faculty of Health Sciences and Director, School of Medicine

Dr. Marcia Finlayson
Vice-Dean, Faculty of Health Sciences and Director, School of Rehabilitation Therapy

Our guiding principle – the fates of the three schools in the Faculty of Health Sciences are inextricably linked

By the Numbers

543 full-time and **1,460** part-time faculty

3,000 learners

60 programs offered

\$118 million in research revenue

900 studies in progress

1,605 applications for **140** seats in undergraduate nursing

1,776 applications for **148** seats in occupational and physical therapy

4,839 applications for **100** seats in medicine

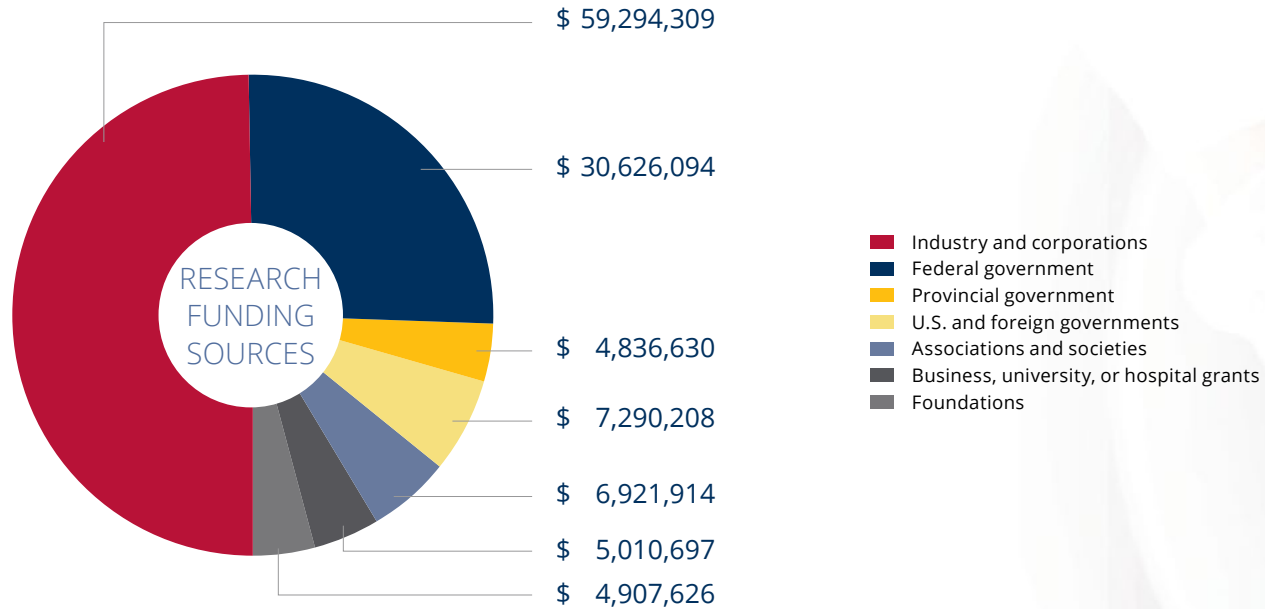
98% of UGME students placed in CaRMS match

99% of PGME placements filled in CaRMS match



Faculty of Health Sciences Research Funding

Departments, Research Centres/Institutes and Schools for Fiscal Year 2016/2017



Total Research Revenue
Received as of April 30, 2017

\$ 118,887,478



Faculty of Health Sciences Research Units

Queen's University is one of Canada's most research-intensive universities and adding to the strength of our research enterprise are the research groups, centres, and institutes. The Faculty of Health Sciences at Queen's hosts a number of thematically-focused groups of investigators that work collaboratively across disciplines, including basic and clinical biomedical sciences, population studies and health services, and policy research. These research groupings bring together investigators in the Schools of Medicine, Nursing, and Rehabilitation Therapy, and, in some cases, include investigators from the Faculties of Arts & Science and Engineering & Applied Science. The Faculty of Health Sciences research units include:

Canadian Institute for Military and Veteran Health Research (CIMVHR)

cimvhr.ca
Contact: David Pedlar • cimvhr@queensu.ca

Cancer Research Institute at Queen's University (QCRI)

qcri.queensu.ca
Contact: David Berman • bermand@queensu.ca

Cardiac, Circulatory, Respiratory Research Program (CCR)

dbms.queensu.ca/research_groups/ccr
Contact: Don Maurice • mauriced@queensu.ca

Centre for Health Services and Policy Research (CHSPR)

healthsci.queensu.ca/research/chspr
Contact: Michael Green • michael.green@dfm.queensu.ca

Centre for Neuroscience Studies (CNS)

neuroscience.queensu.ca/
Contact: Roumen Milev • milevr@providencecare.ca

The Centre for Studies in Primary Care (CSPC)

queensu.ca/cspc/
Contact: Richard Birtwhistle
richard.birtwhistle@dfm.queensu.ca

Gastrointestinal Disease Research Unit (GIDRU)

meds.queensu.ca/gidru/
Contact: Stephen Vanner • vanners@hdh.kari.net

Group for Research in Reproductive and Developmental Origins of Health, Disability and Disease

meds.queensu.ca/departments/reproductive_and_developmental
Contact: Chandrakant Tayade • chandrakant.tayade@queensu.ca

Human Mobility Research Centre (HMRC)

hmrc.engineering.queensu.ca/
Contact: Executive Committee • hmrc@queensu.ca

Infection, Immunity and Inflammation Research Group at Queen's (3IQ)

healthsci.queensu.ca/research/3iq
Co-Directors: Sam Basta • bastas@queensu.ca
Katrina Gee • kgee@queensu.ca
and Andrew Craig • ac15@queensu.ca

International Centre for the Advancement of Community Based Rehabilitation (ICACBR)

rehab.queensu.ca/icacbr/
Contact: Heather Aldersey • hma@queensu.ca

Queen's Collaboration for Health Care Quality: A Joanna Briggs International Centre of Excellence

queensu.ca/qjbc/welcome
Contact: Christina Godfrey • christina.godfrey@queensu.ca

Queen's Nursing and Health Research

nursing.queensu.ca/research/queen_s_nursing_and_health_research
Contact: Joan Tranmer • tranmerj@queensu.ca

Translational Institute of Medicine (TIME)

Contact: Stephen Vanner • vanners@hdh.kari.net

Major funding successes in 2016-2017*

Shetuan Zhang

Biomedical and Molecular Sciences

Molecular mechanisms of antibody-mediated QT prolongation and cardiac arrhythmias

Chandrakant Tayade

Biomedical and Molecular Sciences

Therapeutic targeting of immune-inflammation pathway via IL23-IL17 axis in endometriosis

Brian M Bennett

Biomedical and Molecular Sciences

The HNE mouse: a new model of cognitive impairment and Alzheimer's Disease that displays neuronal and vascular pathologies

Peter L Davies

Biomedical and Molecular Sciences

Discovery and engineering of ice-binding proteins for health applications

Richard V Birtwhistle

Canadian Institute for Military and Veteran Health Research

IBM and CIMVHR support groundbreaking research at CIMVHR, program evaluation, and the dissemination of information to practitioners and policy makers with a goal of improving health and health outcomes for military, Veterans and their families

Heather Lee Stuart

Centre for Health Services and Policy Research

Bell Canada Mental Health and Anti-stigma Research Chair

Mark Ormiston

Medicine

Cellular and molecular mechanisms of Natural Killer cell-mediated vascular remodeling in Pulmonary Arterial Hypertension

Stephen J Vanner

Medicine

Novel signaling mechanisms leading to pain in irritable bowel syndrome

David P Lillicrap

Pathology and Molecular Medicine

The intertwined biology, pathobiology and translational implications of factor VIII and von Willebrand factor

Xiaolong Yang

Pathology and Molecular Medicine

Exploring the role of the Hippo pathway in lung cancer

Anne Duffy

Psychiatry

Predicting the onset of bipolar disorder: A longitudinal high-risk study

Simon French

School of Rehabilitation Therapy

Imaging use for low back pain by primary contact practitioners

Douglas J. Cook

Surgery

Efficacy of nanobodies in thromboembolic MCA stroke model in non-human primates

Andrew Robinson

Oncology

A Randomized, Double-Blind, Phase III Study of Platinum+ Pemetrexed Chemotherapy with or without Pembrolizumab (MK-3475) in First Line Metastatic Non-squamous Non-small Cell Lung Cancer Subjects

* Grants or contracts in excess of \$500,000

New clinical trials in 2016-2017*

Janet Dancey

Canadian Cancer Trials Group

Canadian Cancer Trials Group Operations and Statistics Centre at Queen's University

Janet Dancey

Canadian Cancer Trials Group

Canadian Cancer Trials Group – CCSRI Program

Lois Elizabeth Shepherd

Canadian Cancer Trials Group

Alliance study A041202 – A randomized Phase III study of bendamustine plus rituximab versus ibrutinib plus rituximab versus ibrutinib alone in untreated older patients (≥ 65 years of age) with chronic lymphocytic leukemia

Lois Elizabeth Shepherd

Canadian Cancer Trials Group

PALbociclib CoLaborative Adjuvant Study

Christopher John O'Callaghan

Canadian Cancer Trials Group

A Randomized, Phase III, Double-Blind, Placebo-Controlled Study of Regorafenib in Refractory Advanced Oesophago-Gastric Cancer (AOGC)

Janet Dancey

Canadian Cancer Trials Group

A Phase II Study of Concurrent Dabrafenib and Trametinib with Stereotactic Radiation in the Management of Patients with BRAF Mutation-Positive Malignant Melanoma and Brain Metastases

Janet Dancey

Canadian Cancer Trials Group

A Phase II Study of Durvalumab and Tremelimumab in Patients with Advanced Rare Tumours

Christopher John O'Callaghan

Canadian Cancer Trials Group

A Phase II Study of Durvalumab and Tremelimumab and Best Supportive Care Vs. Best Supportive Care Alone in Patients with Advanced Colorectal Adenocarcinoma Refractory to Standard Therapies

Christopher John O'Callaghan

Canadian Cancer Trials Group

A Randomized Phase II Trial of Gemcitabine and Nab-Paclitaxel Vs. Gemcitabine, Nab-Paclitaxel, Durvalumab and Tremelimumab as 1st Line Therapy in Metastatic Pancreatic Adenocarcinoma

Wendy Ranjana Parulekar

Canadian Cancer Trials Group

The STICs and STONES: Prospective Assessment of Aspirin in Chemoprevention of High Risk Ovarian Cancer. A Randomized Translational Window of Opportunity Trial

Annette Hay

Canadian Cancer Trials Group

A Single Arm Phase II Study of High-Dose Weekly Carfilzomib plus Cyclophosphamide and Dexamethasone in the Treatment of Relapsed Multiple Myeloma After 1-3 Prior Therapies

* Grants or contracts in excess of \$500,000

New Providence Care Hospital opens its doors

“With 622,000 square feet of new construction, Providence Care Hospital incorporates the latest technology and best-practice design elements to enhance quality of life for our patients, clients, visitors, and staff. This is truly a one-of-a-kind hospital that is both innovative and person-centered.”

*– Cathy Szabo,
Chief Executive Officer
Providence Care Hospital*

A longstanding quest to create a facility that meets the aging, rehabilitation and mental health needs of the people of southeastern Ontario came to fruition in 2017 with the opening of the new Providence Care Hospital.

The hospital is equipped with 270 private inpatient rooms, surrounded by several spaces for activities, including family lounges, kitchenettes and dining rooms. The hospital is also home to a number of Providence Care’s outpatient services and clinics that are conveniently located in the center of the building near the main entrance.

The security, communication and computer systems are completely modern, and new telemedicine and videoconferencing platforms support collaboration and connection across the region. The hospital was designed to be energy efficient and was built with the lake, landscape, natural light and outdoor accessibility in mind. The Worship Centre overlooks Lake Ontario and was designed with input from faith leaders in our community.

Dedicated teaching and research space was thoughtfully incorporated into the new hospital, as it is the new home of the Queen’s University Department of Psychiatry, Department of Physical Medicine and Rehabilitation and the Department of Medicine’s Division of Geriatric Medicine.

“Providence Care Hospital brings to life the concept of patient-centered care, where services are not siloed in separate facilities, but instead are working in collaboration to meet the physical, emotional, social and spiritual needs of each person,” said Cathy Szabo, Chief Executive Officer of Providence Care Hospital.

“With 622,000 square feet of new construction, Providence Care Hospital incorporates the latest technology and best-practice design elements to enhance quality of life for our patients, clients, visitors, and staff. This is truly a one-of-a-kind hospital that is both innovative and person-centered.”



The new center is a tremendous benefit and will assist in attracting the best health care professionals to Kingston. It is a wonderful learning environment for students and faculty that are invested in mental health, rehabilitation science, and complex care, to perform research. The ultimate beneficiaries will undoubtedly be our patients and clients from Kingston and beyond. Congratulations to all who contributed their time, advice and expertise to help open the doors of the new Providence Care Hospital.

SRT faculty members address a leading cause of disability in Canada

“This work is ground-breaking as it is the first study investigating the overuse of imaging for low back pain to include all relevant healthcare disciplines.”

*– Dr. Simon French,
School of Rehabilitation Therapy*

This year, several researchers from the School of Rehabilitation Therapy and their collaborators, received funding from the Canadian Institutes of Health Research (CIHR) to support advances in addressing a leading cause of disability in Canada: low back pain. Two studies led by researchers at the SRT aim to address these challenges.

In the first study, supported by a \$100,000 CIHR Catalyst Grant, Principal Investigator, Dr. Jordan Miller, and Co-Investigators from the SRT (Drs. Simon French, Kathleen Norman and Catherine Donnelly) and Department of Family Medicine (Drs. David Barber and Michael Green), undertook a pilot study to determine the feasibility of implementing a new physiotherapist led primary care model for low back pain. If this work indicates that a larger study is feasible, the results have the potential to inform transformations in primary care. These changes could include integrating physiotherapists within primary care teams for people with low back pain or other health conditions associated with disability.

A second study, supported by more than \$700,000 in CIHR funding, is led by Principal Investigator Dr. French and Co-Principal Investigator Dr. Norman, along with Co-Principal Investigator Dr. Green of the Department of Family Medicine and the Centre for Health Services and Policy Research. The project focuses on imaging use for low back pain by primary care practitioners. Although guidelines consistently recommend that

imaging is not routinely performed for patients presenting with low back pain without signs or symptoms indicating a potential pathological cause, imaging rates remain high. “This overreliance on imaging can cause harm from unnecessary radiation, can lead to inappropriate treatments, and can result in worse health outcomes,” said Dr. French.

To address this issue, the study’s objectives are twofold: first, to determine the rate and predictors of inappropriate lumbar spine imaging (x-ray, CT scan and MRI) for people with non-specific low back pain presenting to primary care practitioners in Ontario. Second, the project seeks to design effective knowledge translation strategies to reduce inappropriate imaging for people with low back pain in primary care settings in Canada.

“This work is ground-breaking as it is the first study investigating the overuse of imaging for low back pain to include all relevant health care disciplines,” comments French. The multidisciplinary Queen’s research team comprises primary care experts representing chiropractic, family medicine, and physiotherapy, along with statistical expertise from the Department of Public Health Sciences, and administrative database expertise. The primary knowledge user on the team is Choosing Wisely Canada. Additional Canadian and international team members provide expertise in low back pain, primary care, and knowledge translation.



Dr. Simon French,
Principal Investigator



Dr. Kathleen Norman,
Co-Principal Investigator



Dr. Jordan Miller,
Principal Investigator

By taking innovative and multidisciplinary approaches, researchers at the School of Rehabilitation Therapy and their collaborators are addressing one of the most common health problems in primary care that affects up to 80% of Canadians during their lifetime, and one in every five Canadians at any given time.

Nursing faculty joins forces to build expertise in data analysis

The analyst provides input on grant applications, and assists in the development of research questions and analysis plans, leading to more successful grant applications and faster project completion times.

It's been more than two years since nine faculty members joined forces (and funds!) to increase expertise in the use of large administrative datasets by educators at Queen's Nursing and Health Research.

The overall aim of the joint venture was to build capacity among School of Nursing (SON) faculty and to address issues relevant to both patient care and nursing — an uncommon approach for nursing research.

Through financial support by the SON, and nine individual faculty members, the School of Nursing — Institute for Clinical Evaluative Sciences (SON — ICES) was created. As its first order of business, the group secured a dedicated analyst, with an in-depth knowledge of available databases, from the ICES — Queen's University satellite site. The analyst provides input on grant applications, and assists in the development of research questions and analysis plans, leading to more successful grant applications and faster project completion times.

In 2016, the SON accounted for 10% of ICES research activities at Queen's. Because its faculty works closely with knowledge users, several projects have received funding by the Ministry of Health and Long-Term Care's Applied Health Research Question (AHRQ) Program. Dr. Monakshi Sawhney received \$23K and Dr. Kevin Woo was awarded \$34K for projects on health care use. Dr. Elizabeth VanDenKerkhof was the lead ICES scientist for the projects.

Drs. Sawhney, Katie Goldie, and Joan Tranmer also secured an additional \$25K in peer-reviewed funding. Sawhney will study the influence of depression on incident myocardial infarction, while Goldie will examine health care use following ambulatory surgery and Tranmer will investigate the relationship between shift work and incident diabetes or hypertension.

Several funding applications for projects involving ICES and Canadian Primary Care Sentinel Surveillance Network (CPCSSN) datasets are currently under review.

With close to 15 projects at various stages of development, SON — ICES is keeping scientists Tranmer and VanDenKerkhof busy. Their leadership and dedication to developing methodological expertise is instrumental to the success of the group and has inspired others to follow in their footsteps. Goldie recently joined the ICES Fellowship program and



L to R: Dr. Elizabeth VanDenKerkhof, Dr. Katie Goldie, and Dr. Joan Tranmer.

is forging collaborations and diligently developing her ICES research program. Other faculty are working towards gaining ICES Scientist status, which will further increase capacity in the SON.

In addition to its research, the SON — ICES also participates in the Biostatistics Practicum Placement initiative. The initiative offers students in the collaborative MSc in Biostatistics program a full-time summer placement at the ICES — Queen's University satellite site. During placement, students conduct statistical data analysis for health projects.

In 2017, a Biostatistics practicum student, under the supervision of Tranmer, performed a mediation analysis on the potential association of psychological job stress, sleep quality and lifestyle behaviours, on the development of hypertension and/or diabetes in shift workers.

More information about the ICES – Queen's University satellite site can be found at www.ices.on.ca/queens or by contacting Dr. Joan Tranmer, Site Director, or Ms. Yvonne DeWit, Lead Analyst.

Renewed funding for research in frailty

“Implementing standardized ways to identify and measure frailty will support comparisons between jurisdictions and identify variations in care, outcomes and health care resource utilization.”

*– Dr. John Muscedere,
Scientific Director and CEO,
Canadian Frailty Network*

What are the implications of a frail 90-year-old living at home? How will our health care system cope with an aging population estimated to grow by 30 per cent in the coming years? What is frailty and how is it identified?

The answers to these questions will impact each one of us during our lifetime, whether for ourselves, or our loved ones. They are also at the heart of the work of the Canadian Frailty Network (CFN). Hosted by Queen’s, the CFN — formerly known as Technology Evaluation in the Elderly Network — was established to improve health care for an aging population and position Canada as a global leader in providing the highest quality of care for our most ill elderly citizens.

Launched in May 2012 and led by Scientific Director, Dr. John Muscedere, the network supports original research and helps train the next generation of health care professionals and scientists to improve outcomes for aging Canadians.

This year, the CFN celebrated a major milestone when its funding was renewed through the Government of Canada’s Networks of Centres of Excellence (NCE) program. CFN will receive \$23.9M over the next five years, matched by \$30M in contributions from 150 partners. With the support of the NCE program, CFN is able to combine the collective research expertise, knowledge and talent of experts, stakeholders, partners and network members from across the country.

CFN achieved a number of successes over the last five years, including a national partnership with the Canadian Foundation for Healthcare Improvement and Mount Sinai Hospital, that implemented elder-friendly models of care in 17 hospitals in Canada. To date, nearly 550 young scholars, students and trainees have developed enhanced specialized skills and knowledge through CFN.

The timing of the network’s focus on the elderly couldn’t be more pertinent. Today, there are more Canadians over the age of 65 than under the age of 15, and more than a million Canadians who are medically frail. In its second term, CFN is dedicated to standardizing

the way in which frailty is identified and measured in various care settings. It will continue to build evidence on frailty to assist health care professionals in making the best possible decisions, ultimately leading to better care for patients.

“Implementing standardized ways to identify and measure frailty will support comparisons between jurisdictions and identify variations in care, outcomes and health care resource utilization,” said Muscedere. “This can increase value from health care resources by avoiding underuse and overuse of care. Informed by evidence, our goal is the right care, delivered in the right setting, as determined by older, frail individuals, with their families and caregivers.”



Taking part in the funding announcement was, from left: Dr. Richard Reznick, Dean, Faculty of Health Sciences; Mark Gerretsen, Member of Parliament for Kingston and the Islands; Bettina Hamelin, Vice-President of Research Partnerships, NSERC; Dr. John Muscedere, Scientific Director and CEO, Canadian Frailty Network; Russell Williams, Chair, Board of Directors, Canadian Frailty Network; and Dr. John Fisher, Interim Vice-Principal (Research).

Photo credit: Garrett Elliott

Rehabilitation Therapy hosts 50th Anniversary Speaker Series

“For me, Dr. Sinha’s lecture highlighted some of the challenges facing older adults in Canada... This comes into particularly sharp focus with respect to ethical considerations, it’s not an ‘us and them’ way of thinking, as the aging phenomenon impacts us all. As a society, we’re all in this together.”

– Todd Tran, PhD student
Aging and Health program



Pictured (L to R) Dylan Anderson (AGHE), Josie Lui (OT), Nancy Botting, Bindia Darshan (OT), Brandon Cammish (PT), Monika Mistry (OT), Greg Smith (PT)

As part of its 50th anniversary celebrations, the School of Rehabilitation Therapy hosted a Speaker Series during which prominent guests shared their experiences and knowledge with students, alumni, and the broader Queen’s and Kingston communities. Themes included: leadership in rehabilitation, the impact of mobile technology, and emerging patterns of health and disease. The impact of these events was underscored by a generous gift from the school’s graduating classes of 2016 through the ThankQ fund to help support the series and the rich learning opportunities it provided for students.

The first event in the series featured Nancy Botting, who spoke about leadership in rehabilitation. Botting, a Queen’s PT’92 grad, always dreamed of working with Olympic athletes. During her presentation, she shared with the audience the journey she travelled since her time in the PT program, offering current students insight into what it takes to turn dreams into reality. Nancy was a member of the Canadian Medical Teams for the Olympic games in 1996, 2004 and 2008, the Paralympic games in 2012, and the PanAm and ParaPan Am Games in 2015. Her most recent role was as Chief Therapist for Team Canada at the 2016 Rio Paralympic Games.

During the second event in the series, Dr. Samir Sinha spoke about the impact of mobile technology. Sinha, architect of the Government of Ontario’s Seniors Strategy, was named by *MacLean’s Magazine* as one of Canada’s 50 most influential people and its most compelling voice for older adults in Canada. The lecture explored how the advent of mobile technologies may hold answers to improving care for the aging population. The event formed part of an intensive

on-campus session for the school’s online programs in Aging and Health.

“For me, Dr. Sinha’s lecture highlighted some of the challenges facing older adults in Canada,” said Todd Tran, a PhD student in the Aging and Health program. “This comes into particularly sharp focus with respect to ethical considerations. It’s not an ‘us and them’ way of thinking, as the aging phenomenon impacts us all. As a society, we’re all in this together.”

The third event in the series focused on emerging patterns of health and disease. It coincided with the school’s annual student-led Rehabilitation Science Research Colloquium. In her presentation, Dr. Mary Forhan highlighted how rehabilitation science and rehabilitation therapies are well poised to address the biological, psychological and sociological factors that contribute to participation in activities and life roles known to enable wellness and promote health for persons living with obesity. Forhan leads a multidisciplinary team of researchers, practitioners and persons living with obesity that focuses on improving the quality of life for persons living with obesity. She was the first occupational therapist in Canada to define the role of occupational therapy in obesity prevention, management and treatment.

The 2016 ThankQ gift from the occupational and physical therapy students helped support this Speaker Series and the valuable learning it provided to all who attended. Additionally, the school recorded and posted videos of these lectures to its website in order to provide a lasting legacy that builds on the foundation of its 50th anniversary celebrations.



Dr. Forhan, centre, with RHBS students and SRT faculty members Philip Wendt and Dr. Terry Krupa



Drs. Finlayson and Sinha.

National research network addresses Lyme disease problem

Left untreated, Lyme disease can lead to arthritis, heart or nervous system disorders, or recurring neurological problems.

In the last few years, Canada has witnessed a surge in cases of Lyme disease. Caused by a bacterium *Borrelia burgdorferi*, Lyme disease is transmitted to people and animals through tick bites. Ticks are small arachnids and their bites often go unnoticed because of their tiny stature. During the nymphal stage, ticks are often as small as a poppy seed.

Lyme disease can be difficult to diagnose. It often presents with symptoms ranging from chills, fever, headache and muscle and joint pain, to swollen lymph nodes. These symptoms are typically associated with the flu. If a patient has a history of tick bites, it can help narrow the diagnosis, but not all patients know with certainty that they have been bitten or exposed. Left untreated, Lyme disease can lead to arthritis, heart or nervous system disorders, or recurring neurological problems.

The Kingston, Frontenac, Lennox & Addington Public Health's Action Plan on Lyme Disease states that the region had the highest rates of *Borrelia*-infected blacklegged ticks in the country between 2006 and 2013. Rates are expected to rise due to ongoing climate changes, as well as other contributing factors. This creates a substantial risk to Kingston's population.

In response to this growing health concern, Dr. Kieran Moore, Associate Medical Officer for the KFL&A Public Health Unit and professor in the Departments of Family Medicine and Emergency Medicine, teamed up with colleagues Dr. Anna Majury, Clinical Microbiologist at Public Health Ontario and Assistant Professor in the Department of Biomedical and Molecular Sciences, and Dr. Gerald Evans, Chair of the Department of Medicine's Division of Infectious Diseases, to create a National Lyme Disease Research Network.

The network spans the country, consisting of 19 research laboratories. It has engagement from federal, provincial and municipal levels of government. This broad scope of expertise and access to shared knowledge puts the network in an excellent position to generate new strategies to address the ongoing threat of this elusive and challenging disease.



The Lyme Disease Research Network is the first of its kind in Canada. Prior to its creation, a forum for collaboration and knowledge sharing about the disease did not exist. Although still in the early stages of development, the network has already amassed a wealth of expertise in its epidemiologists, entomologists, clinical microbiologists and basic scientists. In April, it hosted an inaugural meeting, bringing together over 40 clinicians, scientists and public health officials from across the country.

The network is focused on continued expansion, with a goal of facilitating collaboration among Canada's best minds and Lyme researchers. The Faculty of Health Sciences at Queen's University stands firm in its goal of creating a tick-borne illness pan-Canadian research group to strive for a better understanding of Lyme disease.

Study examines patient recovery at home after joint replacement surgery

In the past ten years, the duration of a hospital stay after total joint replacement surgery has decreased, due to the introduction of multidisciplinary fast-track programs that focus on patient education, multimodal analgesia and targeted physiotherapy.

Arthritis affects one in five Canadians and osteoarthritis is the most common form of the disease. People suffering from osteoarthritis experience joint pain, stiffness, swelling and decreased function. One of the ways to reduce joint pain and improve function is through total joint replacement surgery.

In the past ten years, the duration of a hospital stay after total joint replacement surgery has decreased, due to the introduction of multidisciplinary fast-track programs that focus on patient education, multimodal analgesia and targeted physiotherapy. The affect of these changes on patients, once discharged to recover at home, is unknown.

Limited information is available on a patient's function, pain and use of health care facilities in the first few weeks following discharge. Dr. Monakshi Sawhney proposed to address this gap in knowledge and was awarded a Women's Giving Circle grant through the 2017 Health Sciences Internal Grant Competition. The grants were awarded to projects with a focus on musculoskeletal disease, osteoporosis and arthritis.



Dr. Monakshi Sawhney

Sawhney is an assistant professor at the School of Nursing and a nurse practitioner with a clinical practice in the management and treatment of acute and chronic pain. She and her team, comprised of Drs. Elizabeth VanDenKerkhof, Melanie Jaeger, and Mark Harrison and nurse practitioner Susan Vasily, will examine the impact of hospital stay duration, pain, function and fatigue, on health care utilization following early discharge after lower extremity joint replacement.

A total of 140 patients will be recruited from both Kingston Health Sciences Centre hospital sites to participate in the study. Their levels of pain, function and fatigue, and unplanned health care facility visits, will be

assessed through a phone interview at five days, two weeks and six weeks post-surgery. Recruitment for the study began in May 2017 and data collection is scheduled to be completed by the end of the calendar year.

Information gathered during the study will assist health care professionals in providing patients with tailored prevention and treatment strategies to improve function, reduce pain, fatigue and other adverse symptoms experienced after total joint replacement surgery. This, in turn, will improve health care quality, safety and efficiency.



A custom training program for delegation of Turkish therapists

During the summer of 2016, the School of Rehabilitation Therapy was contacted by a faculty member from Hacettepe University regarding the possibility of developing customized training on the Person-Environment-Occupation (PEO) model in occupational therapy. The initiative stemmed from a European Union-funded project to support the establishment of the Vocational Rehabilitation Centre at the Hacettepe University in conjunction with its Department of Occupational Therapy. The school was intrigued by the opportunity to develop such a custom program with far reaching outcomes.

The Vocational Rehabilitation Centre works to enable employment for persons with disabilities. The centre's work is carried out by specialized occupational therapists in cooperation with physicians, physiotherapists, vocational counsellors, psychologists, audiologists, speech therapists, social workers, and other related health staff. The work is unique, given the central role played by occupational therapy, which is a relatively new profession in Turkey.

The dual purpose of the training was to network Turkish therapists with rehabilitation scientists and service providers in North America, and to deliver training on models of occupational therapy that are not well developed in Turkey. The PEO model, an area of expertise for several of the school's faculty, is a framework that guides clinical reasoning in analyzing and understanding the interdependent interaction between the person the environment, thereby forming a foundation for application in practice.

In November, two of the School's faculty members, Drs. Terry Krupa and Rosemary Lysaght, facilitated the week-long training, which took place in Kingston. A group of 10 therapists from Turkey travelled to Canada for the program. Drs. Krupa and Lysaght developed the training on the PEO Model with specific attention to how the model is applied in vocational rehabilitation. Training included presentations, case studies,

program and service examples, and group work. In addition, the program introduced participants to current evidence-based approaches to employment support and how PEO is aligned with these approaches.

After their week in Kingston, a post-training assignment was completed by the participants, providing the opportunity to apply learning in context, with feedback from faculty. The assignment allowed participants to

select a case-based issue relevant to their area of expertise and research interest. The PEO model was then applied to the case, including specific examples of direct strategies or interventions, and compared to prior practices. Participants created a training module for learners that integrated their learning and left them with training tools for future use.

"This initiative created a valuable opportunity, both for those from Queen's, as well as the program participants from Turkey, to make professional connections and share perspectives," said Dr. Rosemary Lysaght, Associate Director (Occupational Therapy), and one of the program's instructors. "It provided valuable skillsets for these therapists, who were able to return home and apply this learning to their future clinical and educational practice."

Following the training, Krupa and Lysaght were invited to join a panel of international scholars as part of the International Vocational Rehabilitation Symposium held in Antalya, Turkey in April. Their presentation, entitled



The Turkish delegation, pictured with Drs. Krupa and Lysaght.

"Vocational Rehabilitation Through the Lens of the PEO Model," contributed to an interprofessional training event for rehabilitation professionals, educators, and persons living with disability in Turkey.

The conference provided the opportunity to reach out to a broader audience of young therapists and disability advocates, while at the same time reconnecting with the therapist-scholars they met during the Kingston training, and gaining access to an interesting group of international trainers and researchers in vocational rehabilitation.

Overall, the training positioned Queen's University's School of Rehabilitation Therapy as a source of expertise in the areas of occupational science, occupational therapy and vocational rehabilitation, and built bridges to a broader community of scholars and therapists.

A cultural and academic exchange with Niigata University of Health and Welfare

“Our visit (to NUHW) not only expanded our perspectives of occupational therapy, this experience deepened our admiration and dedication to this profession.”

– Charlotte Larry,
Occupational Therapy 2016



The NUHW group tours KGH



NUHW students experience pumpkin carving.

In 2015, the School of Rehabilitation Therapy and Niigata University of Health and Welfare (NUHW) formalized a relationship through a memorandum of understanding (MOU). Based on a history of informal visits and exchanges between faculty members from the schools' occupational therapy programs, the MOU provided a foundation to foster cultural and academic exchanges, as well as research collaborations, between the two institutions. Throughout this partnership, as faculty members and students from Japan and Canada visited each other's campuses, they gained exposure to new academic and clinical-practice settings, and made important connections along the way.

The first of these visits took place in February 2016, when Charlotte Larry, OT'16, Casandra Boushey, OT'17, and Gowshia Visuvalingam, OT'16, became members of a delegation that visited NUHW in Japan, along with Dr. Setareh Ghahari, Assistant Professor from the Occupational Therapy Program. “This opportunity provided us with a chance to gain unique perspectives by fully immersing ourselves in the health care system of another country, halfway across the globe,” said Larry.

The seven-day visit to NUHW included meetings with faculty members, events with traditional Japanese food prepared by students, an opportunity to meet with the NUHW President, and a mini-symposium to learn about ongoing faculty research in occupational therapy at the university. In addition, the students' knowledge and understanding of occupational therapy practice in Japan was greatly enhanced by visits to diverse practice settings, including a skilled nursing facility, the Nagaoka Children's Clinic, an acute care hospital, a rehabilitation hospital, and an inpatient psychiatric hospital.

The first formal visit by NUHW to Queen's, which took place in September 2016, included a delegation of two OT faculty members and five OT students. During this five-day visit, the group toured Kingston healthcare facilities and community organizations, including Kingston General Hospital, Providence Care, Hotel Dieu's Child Development Centre (Kids Inclusive), and Community Connections. The students attended several classes alongside Queen's OT students, and the delegation met with faculty members and the Dean of the Faculty of

Health Sciences, Dr. Richard Reznick. The group also enjoyed several cultural experiences unique to Kingston, including a visit to the historic downtown farmers market, a boat tour of the Thousand Islands, and a pumpkin carving event led by the Rehabilitation Therapy Society.

While at Queen's, NUHW faculty member, Dr. Yoichi Nagai, delivered a special presentation to SRT faculty and students on the development and evaluation of the Japanese Playful Assessment for Neuropsychological Abilities (JPAN), which was designed for children with sensory integrative challenges.



OT student Ankit Dhawan learns the art of calligraphy.

The second visit to Japan by Queen's OT students took place in June 2017 and included OT students Kevin Monk, OT'17, Samantha Oostlander, OT'18, and Ankit Dhawan, OT'18, as well as the School of Rehabilitation Therapy Director, Dr. Marcia Finlayson. During this visit, the Queen's students had the opportunity to try their hand at the art of Japanese calligraphy. While at NUHW, Finlayson delivered a lecture to an OT class entitled “Building evidence to support practice”, on the example of managing fatigue in multiple sclerosis.

These exchanges provide rich learning opportunities for all involved. “Our visit (to NUHW) not only expanded our perspectives of occupational therapy,” said Larry. “This experience deepened our admiration and dedication to this profession.”

Going forward, it is anticipated that such exchanges will grow into an opportunity for faculty teaching exchanges, shared research studies, and new opportunities for student interaction across all programs in the School of Rehabilitation Therapy.

Revolutionary cardiac procedure first of its kind in Canada

“This new procedure represents a combination of the most advanced surgical techniques along with less invasive catheter techniques. Instead of the traditional approach to fix chronic irregular heart rhythms, we now offer an extremely innovative and effective hybrid approach.”

*– Dr. Gianluigi Bisleri,
Cardiac surgeon,
Kingston Health Sciences Centre*

Kingston Health Sciences Centre (KHSC) made history in 2017 when it became the first Canadian institution to successfully complete a revolutionary treatment for patients suffering from atrial fibrillation.

The procedure, a hybrid cardiac ablation, helps patients heal faster, reduce or cease the use of medication and lowers the number of required future hospital visits.

“This new procedure represents a combination of the most advanced surgical techniques along with less invasive catheter techniques,” said Dr. Gianluigi Bisleri, a cardiac surgeon at KHSC and associate professor of surgery at Queen’s.

“Instead of the traditional approach to fix chronic irregular heart rhythms, we now offer an extremely innovative and effective hybrid approach.”

Atrial fibrillation is the most common type of irregular heart rhythm. It affects approximately one in four Canadians. Historically, patients have relied on medication, along with traditional cardiac ablation procedures, to help restore normal heart rhythms. During a traditional ablation procedure, physicians create scars inside the heart that prevent abnormal electrical signals from moving through the heart tissue. This traditional approach is typically performed either by inserting long, flexible tubes with wires, called catheters, into the heart through the patient’s groin, or by using more invasive surgical approaches that often require opening the chest and stopping the heart.

With the new procedure, a cardiologist uses digital technology to map the inside of the heart, while the surgeon performs ablation on the outside of the heart using another specialized device. This requires only three keyhole incisions to navigate to the heart, removing the need to open a patient’s chest.

“We are treating patients in a way we haven’t before,” said Dr. Ben Glover, a cardiologist at KHSC and assistant professor of cardiology at Queen’s. “By combining technology, with the knowledge and expertise of our medical teams, we are able to treat complex cases with a high success rate in a minimally invasive manner.”

The cardiac mapping system technology used during the procedure is the first of its kind in North America and is a result of a strategic capital investment made by KHSC. Known as the Ensite Precision cardiac



Photo credit: Matthew Manor / KHSC

Cardiac surgeon, Dr. Gianluigi Bisleri (R) works alongside cardiologist, Dr. Ben Glover (L) during the procedure in the operating room at KHSC’s KGH site.

mapping system, this technology provides highly detailed models and maps of the heart that allow physicians to diagnose a wide range of irregular heart rhythms.

In addition to treating patients in a new way, this procedure also offers new insights into atrial fibrillation that will help expand further medical research in the field.

“Through this novel procedure, we have been able to see the mechanisms of atrial fibrillation and the effects of this hybrid approach in an unprecedented way. This will allow us greater insights and understanding into this common heart condition,” said Bisleri.

“We are extremely excited that KHSC is a pioneer in delivering this treatment, which is due to the unique collaboration among the teams of cardiologists and cardiac surgeons.”

Integration of acute care hospitals: A momentous occasion

“There is not a single issue more important in the current health care environment than moving forward as an integrated system. Kingston, as a community, will benefit greatly from all boats rowing in the same direction under singular leadership.”

— Richard Reznick,
Dean of the Faculty of Health Sciences
Queen's University

On April 1, 2017, Hotel Dieu Hospital (HDH) and Kingston General Hospital (KGH) officially integrated their functions and a new corporation — the Kingston Health Sciences Centre (KHSC) — was formed.

As observers of health care in Kingston will understand, the integration of the two acute care hospitals was a momentous occasion that will help transform the delivery of patient care in the region. Under KHSC, each site continues to fulfill its unique role, with the KGH site providing complex-acute and specialty care, and the HDH site providing acute-ambulatory care. The HDH site retains its Catholic identity and mission while the KGH site remains secular.

In the new configuration, an inaugural board of directors, executive team and unified professional staff, was chosen. Dr. David Pichora was named the new Chief Executive Officer (CEO), while Dr. Michael Fitzpatrick became the KHSC Chief of Staff.

KHSC operates under one budget and will develop and implement one corporate strategy for both hospital sites. Staff at both locations are employees of KHSC, which makes the corporation one of the largest public sector employers in the region, and the largest hospital corporation in southeastern Ontario.

The notion of an integrated hospital started two years ago. Through the incredible work of two board chairs — George Thomson of Kingston General Hospital (KGH) and Michael Hickey of Hotel Dieu Hospital (HDH), and with the help with many others, the process unfolded in an extraordinarily positive way.

Jim Flett, KGH interim CEO, and Dr. David Zelt, KGH Chief of Staff, deserve special recognition, as they worked indefatigably on the integration and helped make the marriage of KGH and HDH a very successful one. In addition, the professional staff had an extraordinarily positive attitude about the integration and are extremely charged by the advantages that an integrated hospital will proffer.

There is not a single issue more important in the current health care environment than moving forward as an integrated system. Kingston, as a community, will benefit greatly from all boats rowing in the same direction under singular leadership.

Congratulations to all of the many people who were involved in the creation of this new hospital, including the board chairs who began the process, as well as Dr. Scott Carson and Ms. Sherri McCullough who championed much of the initiative.



The notion of an integrated hospital started two years ago through the incredible work of two board chairs — George Thomson of Kingston General Hospital (KGH) and Michael Hickey of Hotel Dieu Hospital (HDH),

Healthcare Quality programs improve quality, reduce risk, promote safety

A growing umbrella of programs, housed within the School of Nursing and the Department of Anesthesiology & Perioperative Medicine, focuses on advancing health care quality and safety. Currently, the health care programs are comprised of the Master of Science in Healthcare Quality and a proposed Doctor of Philosophy in Health Quality that is currently under review.

In 2012, the School of Nursing and the Department of Anesthesiology & Perioperative Medicine began the Master of Science in Healthcare Quality (MScHQ) program. It was developed to meet an identified need in the Canadian educational system for a stand-alone graduate program focused on advancing the quality and safety of health care delivery. The MScHQ program is the first of its kind, specializing in linking theory and practice in quality, risk, and safety. It offers interdisciplinary courses, led by leaders in their respective fields. This program addresses the growing need for interactions across disciplines, professions, and communities.

The MScHQ program is a two-year, part-time, interdisciplinary, course-based program consisting of seven core courses and a supervised culminating project, leading to an MScHQ degree that will prepare professionals for practice, research and education in the developing area of health care quality, risk and safety. Students have two mandatory, one-week intensive sessions each year. The remainder of the program is a combination of synchronous and asynchronous study using web based technology offering convenient distance learning opportunities, and flexibility that is particularly important for those working full time.

The MScHQ program has grown from 20 students to over 60 admitted each year. A core value of the program is the multidisciplinary approach reflected in the background and academic experience of the students and faculty.

The MScHQ program provides professionals with the knowledge and tools to research, advocate, and implement



strategies for risk reduction and quality improvement within the health care system.

Those behind the MScHQ program have applied to implement a Doctor of Philosophy in Health Quality (PhDHQ) starting in September 2018 to meet academic and industry demands.

The program is overseen by Dr. Jennifer Medves, Vice-Dean (Health Sciences) and Director of the School of Nursing, and Dr. Joel Parlow, Head of the Department of Anesthesiology and Perioperative Medicine. The administrative team is comprised of Dr. Kim Sears (Associate Director), Dr. Kim Turner (Medical Lead), Lindsay Cameron (Manager), Laura Offord (Graduate Program Coordinator) and Nicole Rogerson (Graduate Program Assistant).

The Healthcare Quality faculty consists of skilled academics from different backgrounds, all committed to increasing our

graduates' abilities to change the current landscape of health care quality.

The Healthcare Quality programs recently welcomed Dr. Thomas Rotter as the first full-time faculty member to the team. Rotter was the Saskatchewan Research Chair in Health Quality Improvement Science at the University of Saskatchewan. He holds two PhDs, one from the University of Dresden in Germany and the second from Erasmus University. Rotter will be working alongside other program faculty members to advance health care quality, risk, and safety research in multidisciplinary settings.

For further information on our faculty, please visit the website at www.queensu.ca/mschq/home.

New partnership helps create future leaders in Ethiopia



Queen's Principal Daniel Woolf (left), Kim Kerr, Deputy Director, Education and Learning, Mastercard Foundation, and Asrat Atsedewoyin, Vice-President Academic, University of Gondar, exchange university flags to mark the partnership.



A traditional Ethiopian coffee ceremony, featuring freshly roasted beans, was part of the celebration. Guests at the launch event also enjoyed Ethiopian bread and other traditional foods.

One of the strategic priorities of the School of Rehabilitation Therapy is to make meaningful contributions to the work of its collaborators locally, nationally and internationally. An announcement in January 2017 marked a major contribution to this priority in the form of a 10 year, USD \$24.2M partnership with Ethiopia's University of Gondar and The MasterCard Foundation's Scholars Program. This announcement represented the culmination of 18 months of collaboration, grounded in a mutual expertise in, and commitment to, community-based rehabilitation (CBR) and inclusive education. The school's International Centre for the Advancement of Community Based Rehabilitation, led by Dr. Heather Aldersey, acts as the hub of project activities at Queen's.

The MasterCard Foundation partners with academic institutions and NGOs to educate and develop next generation leaders who are committed to contributing to their communities. Increasing access to post-secondary education for disadvantaged youth is vital to this effort. The partnership will focus on one segment of this target population: youth with disabilities. Transformational leaders are required to achieve this goal. This partnership with the University of Gondar and The MasterCard Foundation will contribute to launching these leaders.

First, project staff at the two universities will develop and implement a training certificate in CBR that will provide experiential learning opportunities for The MasterCard Foundation Scholars at the University of Gondar. Through the CBR certificate, scholars will learn about the rights of people with disabilities and practical strategies to enable people with disabilities to access educational and other life opportunities. The certificate will provide participating scholars with critical skills and experiences necessary for development as transformational leaders.

Second, Queen's will provide opportunities for up to 60 University of Gondar faculty to upgrade their credentials to a Master's or PhD, and for Queen's University and University of Gondar faculty members to engage in research collaborations with Queen's faculty to address issues related to inclusive education and community-based rehabilitation in Ethiopia and elsewhere in Africa. Through these opportunities, faculty from both universities will contribute to developing the next generation of leaders in Ethiopia and Africa.



Representatives from Queen's, the University of Gondar and The Mastercard Foundation during a visit to Kingston in May 2016.

Finally, some of the University of Gondar faculty travelling to Queen's will complete the Occupational Therapy program in the School of Rehabilitation Therapy, and then work with our faculty to develop and launch the first occupational therapy program in Ethiopia. By developing an occupational therapy program at the University of Gondar, the partnership will create a new career path for transformational leaders in Ethiopia.

The School is incredibly honoured and grateful for the opportunity to partner with the University of Gondar and The MasterCard Foundation. The collective efforts contributing to this project will be transformative for current and future students, and faculty, at both universities.



Health careers beyond academia: Exploring connections with industry

Strengthening our national capacity in life sciences ultimately provides greater opportunities for academic institutions to partner with the private sector.

Our number one goal for our students has always been to provide the knowledge, skills and experiences that will allow them to sustain a fabulous career in their particular fields of interest.

Graduate studies is one area where our strategy for achieving this is changing rapidly and requires constant re-evaluation. For some of our graduate students, a career as a university scientist is the end goal. However, we have seen this landscape shift dramatically over the last decade, and, as a faculty, there is recognition of the importance of exposing all of our students to careers in science beyond the borders of campus.

Recently, the Faculty of Health Sciences Industry Engagement Strategy highlighted a number of opportunities for graduate students. The strategy focuses on building and intensifying public-private partnerships with Canada's large, multinational pharmaceutical and medical device companies, all of which are seeking early-career scientists with specialized knowledge of how industry functions.

Over the last four years, we initiated conversations with over 40 companies, 30 of which sent delegations to Queen's to explore collaborative research opportunities with junior and senior investigators. These discussions undoubtedly served to catalyze new areas of investigation and other forms of collaborative work. They have also helped to identify how we can prepare our students for fulfilling careers in the pharmaceutical industry.

The strategy is maturing and becoming foundational in our thinking, especially as funding agencies like the Canadian Institutes of Health Research (CIHR) become more explicit about the need for partners that can support knowledge translation activities.

There are other important trends to note, such as an increased desire by provincial and federal governments to focus on life sciences as a key driver of economic growth, through innovative procurement, and the changing view of health care as a cost driver to an economic opportunity.

Strengthening our national capacity in life sciences ultimately provides greater opportunities for academic institutions to partner with the private sector. To capitalize on the promise of life sciences to deliver new wealth and improved health care for Canadians, we must ensure, as an academic institution, that our students and trainees have the necessary experience and skill set to contribute to building this sector in the long term.



Under the leadership of Seth Chitiyat, James Reynolds, and Deborah Brown, this last year, we worked diligently to create a new program that addresses these realities. In May 2017, Queen's hosted the first Career Pathways in the Healthcare Industry event, to kick off the new Certificate in Pharmaceutical and Healthcare Management Innovation and strengthen connections with industry. This event was geared towards students with an interest in understanding more about health science-related careers in industry.

Some of Canada's leading life sciences executives joined Queen's students and faculty for the interactive symposium, including Vratislav Hadrava, Vice-President & Medical Director at Pfizer Canada, Dion Neame, Head of Scientific and Medical Affairs Canada at Sanofi Pasteur and Michael Duong, Director of Medical Affairs (Evidence Generation) at Hoffmann-La Roche. They highlighted unique career opportunities in the pharmaceutical industry and spoke about the ways in which different functional areas in research, medical and scientific affairs, intersect in contributing to Canada's health care system. Overall, it was an engaging event, and one that we plan to host annually for our students, both on campus, and across the country.

Building empathy through the First Patient Program

“While it’s easy to be interested in our medical findings, we should not see patients as specimens.”

– Alana Fleet,
Undergraduate medical student

One of the most unique aspects of our undergraduate medicine curriculum is the First Patient Program. It offers students the opportunity to experience the health care process, with a real patient, at the beginning of their academic journey.

At the start of the school year, each first-year student is paired with a patient from the community. The student accompanies the patient to treatments and appointments over the next 18 months. The program has three main objectives:

- To give students the opportunity to observe and assist in the care of their patient, often buoying their spirits, while developing and honing diagnostic and treatment skills.
- To allow the student to become holistically integrated into the life of their patient in order to build the crucial skills every successful health care provider needs.
- To assist the student in developing the understanding that patient care exists on a continuum, from prevention to diagnostics to treatment to wellness, across different services and specialties.

Although the program officially runs until the end of their second year, many students stay in touch with, and continue to follow, their patients, even after the official program is over.



Alana Fleet and Jonathan Cluett are medical students who were paired with Bill and Lorna as part of the program.

Learning to be a good doctor is a personal, as well as a professional, task and learning to deliver patient-centered care is one of the keys to a successful practice. With that in mind, one of the biggest benefits of the program is that students develop something that cannot be taught in a classroom: empathy.

Alana Fleet and Jonathan Cluett are medical students who were paired with Bill as part of the program.

“While it’s easy to be interested in our medical findings, we should not see patients as specimens,” said Fleet. “Rather, we need to see, and act like, they are people first, with a problem to attend to in the right way. We should be interested in them, but not only in what is wrong with their body, since what we see as pathological is also their norm. What helps us to excel is making connections between the small problem at hand and the whole person.”

Bill turned out to be a great pairing for Fleet and Cluett, not least because Bill’s wife, Lorna, was a constant companion, sharing her own health care story.

“I now better appreciate that, even when patients are positive and motivated, their health care experiences are complicated and varied,” said Fleet. “In my first report, I commented on the ease of developing a relationship with my patient. While this was the case with Bill, it’s not that way with all patients and professionals. Even for Bill, his relationships vary with his doctors and other providers. Subtle aspects of your personality, or behaviours, can strengthen a physician-patient relationship, or break it down quite quickly. Thus, I have become much more self-aware and open to ask for feedback, to gauge my interactions with patients.”

Cluett’s sentiments echo Fleet’s.

“Above all else, Bill and Lorna have taught me the simplest lesson: to care for the whole person. Again, this is not a novel concept. Medical students hear it from Day 1, but it doesn’t quite click until you see it first-hand. I feel humbled to have learned so much from this program. I will always remember Bill and Lorna, my true ‘first’ patients.”

A tribute to Malcolm Peat, founder of ICACBR

“The anniversary is an important milestone, in that it marks 25 years of international collaboration with people with disabilities, their families, and the organizations that serve them.”

*– Dr. Heather Aldersey,
Interim Director of ICACBR*

The 2016-17 year was marked by two significant events for the School of Rehabilitation Therapy's International Centre for the Advancement of Community Based Rehabilitation (ICACBR). In October 2016, the centre celebrated its 25th year. Sadly, just four months later, many of the same researchers, students, and faculty were joined by family and friends to commemorate the life of Dr. Malcolm Peat, former Director of the School of Rehabilitation Therapy and ICACBR founder, who passed away a few weeks after the anniversary celebration.

The centre's 25th Anniversary celebration featured past and present members of the centre, and offered the opportunity to look back on earlier projects, as well as ongoing efforts to expand community-based rehabilitation (CBR) practices in communities around the world. CBR is a multi-sectoral strategy focused on enhancing quality of life for people with disabilities and their families by meeting basic needs and ensuring inclusion and participation.

Dr. Terry Krupa, Professor Emerita at the School of Rehabilitation Therapy, reflected, “Just as Dr. Malcolm Peat, and the other founders envisioned, the Centre has advanced the knowledge and practice of CBR, and has provided a platform for training the next generation of practitioners and researchers.”

The centre currently manages several projects including the Access to Health & Education for all Disabled Children & Youth (AHEAD) project in

Bangladesh and the Queen Elizabeth II Scholarships for Excellence in International Community Based Rehabilitation. The centre serves as the hub of activities at Queen's. Recently, a 10-year, USD \$20.4M partnership with Ethiopia's University of Gondar and The MasterCard Foundation's Scholars Program was announced.

“The anniversary is an important milestone, in that it marks 25 years of international collaboration with people with disabilities, their families, and the organizations that serve them,” said Dr. Heather Aldersey, Interim Director of ICACBR.

In addition to celebrating its positive contributions to lives and communities around the world, friends of the centre recognized the life and contributions of its founder at a special commemoration event. “Dr. Malcolm Peat was an inspiring and visionary force,” said Dr. Marcia Finlayson, current Director of the School of Rehabilitation Therapy. “For my entire career, the school has been recognized as a leader in community-based rehabilitation and the place to study if one wanted an international rehabilitation experience. The reason for this: Dr. Malcolm Peat.” Dr. Peat will be missed. However, his legacy lives on through the people who have benefited from his knowledge, mentorship, friendship and vision, and through the continued work of the ICACBR.



Founder and former executive director of the ICACBR, Dr. Malcolm Peat, reflects on 25 years of the centre's work helping individuals with disabilities around the world.



(L to R) Principal Daniel Woolf; Dr. Heather Aldersey, Director, Access to Health and Education for all Children and Youth with Disabilities in Bangladesh (AHEAD); Dr. Richard Reznick, Dean, Faculty of Health Sciences.

Canadian Blood Services honours student and faculty member

Curran was inspired to give back to the blood system and set a goal of replacing the 1,000 blood donations she received during treatment.



Dr. David Lillicrap, Department of Pathology and Molecular Medicine, and Canada Research Chair in Molecular Homeostasis, received the Canadian Blood Services' Lifetime Achievement Award. Mackenzie Curran, a second-year nursing student from Kingston, was presented with the 2016 Schilly Award for excellence in recruitment and promoting awareness of the need for blood, stem cells, organs and tissues.

The Canadian Blood Services Honouring our Lifeblood event is an annual reminder of how important this vital fluid can be. The event, held Sept. 12, 2016, at the Canadian Museum of Nature in Ottawa, celebrated the contributions of people and organizations that make our country's blood system, stem cell network and transplant organization a national treasure.

The collective altruism of the approximately 120 people who attended the event was remarkable and humbling. The individual blood, stem cell and organ donors, donor recruitment volunteers and Canadian Blood Services staff members honoured during the evening, ensure our volunteer blood system provides a safe and effective infrastructure for medical care in Canada. One amazing honoree from Nova Scotia was recognized for his lifetime donation count of more than 1,050 units.

The Queen's University Faculty of Health Sciences was well represented during the Honouring our Lifeblood event with recipients of the two foremost honours the organization bestows.

Mackenzie Curran, a second-year nursing student, was presented with the 2016 Schilly Award for excellence in recruitment and promoting awareness of the need for blood, stem cells, organs and tissues.

Dr. David Lillicrap, Department of Pathology and Molecular Medicine, and Canada Research Chair in Molecular Homeostasis, received the Canadian Blood Services' Lifetime Achievement Award.

At age 16, Curran was diagnosed with myelodysplastic syndrome (preleukemia). The diagnosis is unusual in younger patients and it took the combined expertise of Drs. Pat Farmer, David Good and Michael Rauh to confirm the early evolution to acute myeloid leukemia for Curran.

Dr. Mariana Silva has since managed Curran's clinical care, which ultimately led to the requirement of a stem cell transplant at the Hospital for Sick Children in Toronto. The search for Curran's stem cell donor resulted in the recruitment of thousands of new donors in Kingston.

Following her recovery, Curran was inspired to give back to the blood system and set a goal of replacing the 1,000 blood donations she received during treatment. Over 500 units of blood have been



Mackenzie Curran is seen with her life-saving stem cell donor, Alexander Turk in 2015.

collected, to date, and 3,000 potential donors have been added to the stem cell registry.

During her time at Queen's, Curran continues to recruit new donors among her peers. She often advocates for blood and stem cell donation, appearing on television, radio and at numerous events, including one where she discussed the Canadian blood system with Members of Parliament. Curran is an impressive young woman and Queen's was fortunate to recruit her to its nursing program.

Lillicrap was presented with the prestigious Lifetime Achievement Award in recognition of his long-standing engagements with the research portfolio of the Canadian blood system, the Queen's Hemostasis Group's landmark contributions to the field of hemostasis, and his work in improving the lives of patients with bleeding disorders. The invaluable contributions of Dr. Paula James, as well as those of the other members of the Queen's Hemostasis Group, led to Lillicrap's award and deserve the highest accolades for their work.

Canadian Blood Services evolved from the Krever Commission Report on the Blood System in Canada; 2016 marks the 18th anniversary of this outstanding organization.

Engaging undergraduate nursing students in research



SWEP student Molly helping out with the filming of simulations for a virtual game.



Pictured: A standardized patient, SWEP student Molly Steer, and Evan Keys (MNSc student).

May 1, 2017, was an historic day for Katherine Babayan, Alexandra Palmeri and Molly Steer. On that day, the trio — all undergraduate students from the School of Nursing (SON) — began their first activities as the inaugural intern class of the Summer Work Experience Program (SWEP) Research Internship.

The goal of the program was to engage undergraduate nursing students in research and scholarship activities and allow them to develop research expertise. Babayan, Palmeri and Steer were paired with two to three supervisors each and, throughout the summer, took part in both group and individual activities. The trio participated in a five-day systematic review training course, attended MSc defenses and took part in Discovery Day. They also attended regular meetings with their supervisors in order to define and conduct research-related work and to share knowledge and experiences.

“My experience working as a SWEP intern has massively expanded my understanding of the unique applications of my nursing education,” said Palmeri (BNSc ’18). “It was an honour to be mentored by such incredible researchers, and, it is no doubt that I will use the skills I learned this summer to make a difference in the health care world for years to come.”

Research interests from participating faculty included: exploring associations between shiftwork and depression, detailing the pain experience of patients, health care utilization following surgery, breast cancer survivorship care, clinical simulation and faculty development, patient engagement in safety,

management of an acute pain management database, and understanding formal leadership in long-term care. Interns had the opportunity to choose their areas of interest.

“I thoroughly enjoyed working with the other interns,” said one intern. “It was a very supportive environment where we felt comfortable to ask questions, teach new concepts and learn more about the various projects we were each working on.”

The SWEP Research Internship was created in the fall of 2016 by a group of eight faculty members from the SON. All those involved agree the initiative was a resounding success. Faculty were able to share a passion for research and were exposed to new ideas — such as how to better use social media and how to design infographics — by the students.

Students provided the support needed to advance research objectives, while at the same time, learning about research-related activities such as data analysis, literature reviews, framework development and report writing.

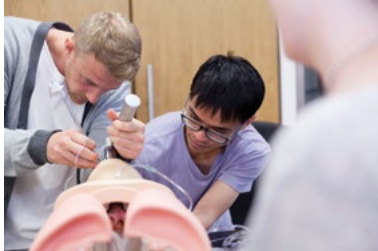
“I thoroughly enjoyed working with our SWEP students,” Dr. Katie Goldie. “They brought new ideas to my program of research, an enthusiasm to learn, and encouraged collaborative projects among faculty members. I was most surprised by the skills they taught me. For example, Alexandra hosted weekly social media sessions to assist me to effectively promote my research outputs and ideas, as well as engage with other academics outside of my institution. Bidirectional learning is not frequently discussed, but is a unique feature of the SWEP program.”



Pictured: Supervisor Dr. Katie Goldie and SWEP student Alexandra Palmeri.

With such a great first experience, the SON intends to continue the program next year. The group expressed extreme appreciation for the financial support of Career Services and the Summer Work Experience Program. More information about the SWEP internship can be found on the Career Services website.

Queen's leads Canadian medical schools in CBME transition



Residents in all 29 specialty medicine programs at Queen's are now assessed under a competency-based education model.



Leveraging the teaching and learning methods, tools, relationships and passion that our students and faculty share.

As Canada celebrated its 150th anniversary July 1, 2017, we officially launched competency-based medical education (CBME) across all 29 of our specialty programs. While other medical schools in Canada will implement CBME over the next five years, we committed to an accelerated institutional path in 2015, and are now in a remarkable position to be at the leading edge of key transformative changes in the education of physicians in Canada.

Although our School of Medicine has trained excellent doctors for years, a number of factors have shown that a change was necessary. Current systems of medical training cannot keep up with our rapidly changing world of technology. There is an ever-expanding body of medical knowledge. Important and essential patient safety initiatives have been developed. A reduction in duty hours and a renewed focus on trainee wellness has occurred and our learners have a growing set of advanced needs. The traditional blueprint for medical education needed urgent transformative change.

Leveraging the teaching and learning methods, tools, relationships and passion that our students and faculty share, we spent the last two years designing a new path for 29 programs at Queen's. We did this by supporting each other in this institutional change process, and in so doing, strengthened and expanded the community of education leaders that values principles such as a shared aspirational vision, co-production, responsive leadership, the diffusion of innovation and a systems-based approach to transformative change. All of this happened under the watchful eye of the CBME executive team: Dr. Damon Dagnone, Dr. Leslie Flynn, Dr. Rylan Eagan, Jennifer Railer, Dr. Denise Stockley, Dr. Richard van Wylick, Dr. Ross Walker, and Dr. Laura McEwen.

At the program level, 29 leadership teams were created and have done a fantastic job. Each team had four fundamental tasks to complete over the last two years: perform a critical review and implement a reform of their curriculum; implement new concepts, such as entrustable professional activities (EPAs), milestones, and competencies, into training programs; perform a critical review of assessment methods that result in the redesign of a comprehensive program of assessment; and identify education champions within program to become academic

advisors to trainees and competence committee members, who will guide decisions for promotion.

There are many other stakeholder groups that have joined us on our journey and we couldn't have done this important work without their partnership. This includes our many CBME sub-committee members, our hospital partners in Kingston and, at distributed sites, our frontline faculty, our current resident trainees, patient advisors and community members, and — last, but certainly not least — the Royal College of Physicians and Surgeons of Canada's executive leadership.

Each group has been influential in the co-production and evolution of this transformative project. Moving forward, we will continue to nurture these ongoing partnerships to assist us in the implementation process.

After over two years of preparation, we're excited about the launch of CBME, but this is just the starting line. We are going to need a lot of ongoing communication and continued hard work to make sure our accelerated institutional path to CBME is a success in terms of quality improvement, program evaluation and improved outcomes for our trainees and the patients in our care.



The CBME Executive Team is joined by many of the 29 Program Team leads to celebrate the launch of CBME at Queen's University.

A novel way to create safer and healthier workplaces

The high cost of occupational injuries, along with growing public demand for quality health care, are strong motivators for organizations to create a culture of safety.

Since 2009, health care has ranked second out of 16 employment sectors in Ontario for lost-time injury rates.

Despite great emphasis on compliance, and fines to control occupational injuries, statistics are not improving. One of the keys to changing this trend is to develop a culture of healthy and safe workplaces, including effective utilization of leading indicators in a hospital's Occupational Health and Management System (OHSMS).

Leading indicators are proactive measures hospitals are encouraged to implement to support health and safety. While they are widely used in high-risk industries — such as mining — hospitals usually rely on lagging indicators, like incident and accident rates, lost-time claims and absenteeism, to identify and correct occupational health and safety issues. A structured OHSMS using leading indicators is novel in health care.

Dr. Joan Almost was awarded a Ministry of Labour Research for the Workplace grant in May 2016. Her project, entitled “A Study of Leading Indicators for Occupational Health and Safety Management Systems in Healthcare” brought together researchers Peter Strahlendorf and Elizabeth VanDenKerkhof, a provincial health and safety association, the Public Services Health Safety Association (PSHSA), occupational health and safety (OHS) specialists Joanna Noonan and Louise Caicco Tett, and health care administrators Mike MacDonald and Tracy Kent-Hillis.

The first phase of the study began in 2016 and included an assessment of the OHSMS in two Ontario acute care hospitals. The assessment was adapted from Jonathan Bennett and Patrick Foster’s study “Predicting Progress: The Use of Leading Indicators in Occupational Safety and Health”. It evaluated six leading indicators through a series of interviews with the leadership team, OHS department representatives and Joint Health and Safety Committee members. Indicators evaluated included: senior management commitment, continuous improvement, communication, competence, employee involvement and occupational health management.



L to R : Dr. Elizabeth VanDenKerkhof, Dr. Joan Almost, Geneviève Paré, Vanessa Silveira

In conjunction with the hospital, an intervention was developed to address gaps found during the assessment. The intervention is ongoing and will conclude in March 2018 with additional interviews, surveys and focus groups.

In partnership with the PSHSA, the study examined a new, proactive approach to strengthening current OHSMSs by utilizing leading indicators. The high cost of occupational injuries, along with growing public demand for quality health care, are strong motivators for organizations to create a culture of safety.

Nursing students promote safe, child-friendly spaces

“I heard a lot about the project from other students and wanted to get involved. It was important for me to be a part of this. There is a concern that if no safe space is available, parents could stop breastfeeding early. Pumping is also a challenge.”

– Laura Kuikman
NSc'17

Three nursing students worked hard to make the Queen's University campus a more inclusive space for parents and caregivers.

Alina Leffler, Laura Kuikman, and Andrew Ma (NSc'17), working under the supervision of Dr. Katie Goldie and Alicia Papanicolaou, developed the Queen's University Child Friendly Campus (QUCFC) Initiative as part of their community health training.

The project was built on the success of nursing students Kyrinne Lockhart (NSc'16) and Rachel Hannigan (NSc'16), who created a network of three breastfeeding spaces on campus last year.

“I heard a lot about the project from other students and wanted to get involved,” said Kuikman. “It was important for me to be a part of this. There is a concern that if no safe space is available, parents could stop breastfeeding early. Pumping is also a challenge.”

The QUCFC features a number of new resources for parents on campus and the three students worked to conceptualize, build, and deliver the initiative. They walked the entire campus and surveyed every washroom for access to change tables, created a new website with a list of online resources for parents and caregivers, and created a Facebook page to establish an online support system. They also created a survey that will help them, and the next group of students, to gather information to assess the needs of the campus community more efficiently.

Included on the website is a map of all baby change tables and breastfeeding locations on campus. Each breastfeeding-friendly space has quiet, clean, and sanitary spaces identified by common signage, comfortable seating, electrical outlets, and a nearby washroom.

“We have a number of people that need to bring children to campus for various reasons,” said Ma. “This effort will help bring a collective voice to support positive change for this group, which has often gone unnoticed.”

With their part of the project complete, the three students brought the information to the attention of university administration. A number of new buildings are being completed on campus and there are strict building code rules, including the need for a universal washroom and adult-size change tables.



The Queen's University Child Friendly Campus Initiative was built by Andrew Ma, Laura Kuikman, and Alina Leffler.

“These students did great work and have hopefully brought some change to campus,” said Goldie. “The next group will use the information from our survey and continue moving the project forward. We'd like parents on campus to rally together and join this initiative to have their voices heard and needs met.”

For more information, visit <http://nursing.queensu.ca/general/qucfc>.

A community partnership with Sienna Senior Living

“I think everybody should have (such an experience) at least once in their lifetime. I’ve learned so much today. Everybody’s been so kind and welcoming and I really appreciate everything everyone has done for me.”

– Verna Clancy,
Sienna Senior Living
community member

The School of Rehabilitation Therapy’s interdisciplinary programs in Aging and Health involved extensive consultation with organizations serving the needs of the growing population of older adults. It was through this consultation process that the school had an opportunity to engage with Sienna Senior Living. The company, which operates three retirement homes and a long-term care facility in Kingston, offers a signature Dreams Program, aimed at fulfilling the lifelong dreams of its residents.

Through the collaboration with Sienna, staff at the School of Rehabilitation Therapy were able to make a lifelong dream come true for Sienna Senior Living community member, Verna Clancy. The school worked closely with other faculties across the university to bring Clancy to campus for a day.

Clancy had always been drawn to art, and wanted to study the subject at university, she never had the opportunity. Thanks to a collaboration between Queen’s School of Rehabilitation Therapy and Sienna Senior Living, Clancy was able to experience for herself what it would be like to study at the university.

“While developing the programs in Aging and Health, we had the opportunity to meet several program managers from Sienna,” said Erika Beresford-Kroeger, Online Programs Manager at the School of Rehabilitation

Therapy. “When I was later contacted by Royale Place in Kingston, we were thrilled to help in any way we could. It was inspiring to experience the excitement from everyone across campus, especially those in Art History and at the Agnes, who helped the school make Verna’s dream come true.”

Arriving at Etherington Hall at 9:30 a.m., Clancy attended a lecture by Dr. Una D’Elia (Art History) *‘The Renaissance in Italy: The Rebirth of Classical Antiquity.’* It was part of an introductory course on Art in the West. Continuing the experience. She then had lunch at The Grad Club and completed her day with a guided tour of the Agnes Etherington Art Centre.

It was an unforgettable day, Clancy said, and was capped off with a personalized certificate of recognition from the School of Rehabilitation Therapy to commemorate her visit to campus.

“I think everybody should have (such an experience) at least once in their lifetime. I’ve learned so much today. Everybody’s been so kind and welcoming and I really appreciate everything everyone has done for me,” said Clancy.

In Ms. Clancy’s case, Queen’s and the School of Rehabilitation Therapy was also able to make her dream come true.



As part of her Queen’s University experience, Verna Clancy, front, second from left, attended a lecture by Una D’Elia (Art History).



Verna Clancy received a personal tour of the Agnes Etherington Art Centre from Judith Walker.

Building Better Together: Educational innovation at SRT

“These innovations in our OT and PT programs are good examples of our work here at the school. We are continually seeking ways to enhance the educational experience of our students, which will ultimately strengthen rehabilitation practice.”

*– Dr. Marcia Finlayson,
Vice-Dean (Health Sciences),
Professor and Director,
School of Rehabilitation Therapy*

This year, educational innovation brought new perspectives and learning opportunities to the occupational and physical therapy programs.

For the occupational therapy students, a new course module, created with the support of a grant from Queen's Centre of Teaching and Learning, helped foster collaboration between students in occupational therapy (OT) and engineering in creating assistive devices for end users. The instructional team of Catherine Donnelly and Susanne Murphy from the School of Rehabilitation Therapy, and representatives from Mechanical and Materials Engineering, Claire Davies and Elizabeth Delarosa developed, *“Building Better Together: An Interdisciplinary Approach to Teaching and Learning”* with the aim of applying the Canadian Interprofessional Health Collaborative's framework to an academic environment.

Through the course, students from OT and engineering teamed up to create an assistive device. The teams had to interact and collaborate with each other as well as with a person in need of the device. The course was developed to mirror a device design process, providing the students with experience that can be applied in future careers.

The initiative was supported through an inaugural Centre for Teaching and Learning Educational Leadership Initiative grant. The Educational Leadership Initiative is aimed at supporting Queen's students, faculty, librarians and staff who want to forge new educational paths.

In the school's physical therapy (PT) program, a new narrative practice module was developed, then launched, in one of its core courses, PT 864 (Complex Health Conditions). The module, based on the principles of narrative medicine, is designed to provide students with experiences of witnessing, sharing and reflecting on the stories that shape their patients and themselves, and to prepare students to deliver sustainable, compassionate, and patient-centered care.

The development and evaluation of this module was enabled by an AMS Phoenix Call to Caring grant. The grant also supported the development of a similar module provided by SRT faculty member, Dr. Trisha Parsons, to practicing physiotherapists in partnership with the Ontario Physiotherapy Association. These modules have resonated



A team of engineering and occupational therapy students display their project during the final poster event for the Building Better Together course. The course was created through the Centre for Teaching and Learning's inaugural Educational Leadership Initiative grant. From left: Robert Diebel (OT), Isaac Freda (Engineering), Akram Ghoudi (Engineering), Katie Fisher (Engineering), Elizabeth Gibson Crowder (OT) and Robyn Bernick (OT).

with students and clinicians, by creating a space to talk about the most challenging aspects of their practices, and providing an important support for those emotional aspects embedded in care provider roles.

“These innovations in our OT and PT programs are good examples of our work here at the school,” said Director Dr. Marcia Finlayson. *“We are continually seeking ways to enhance the educational experience of our students, which will ultimately strengthen rehabilitation practice.”*

Empowering cancer survivors

“When I started my PhD, there wasn’t a single comprehensive guideline that addressed all of these issues. My work synthesized recommendations from 30 published guidelines into one document.”

*– Dr. Marian Luctkar-Flude
Queen’s School of Nursing*



Dr. Marian Luctkar-Flude.

Following the completion of cancer treatment, people living with the disease move into a new phase: survivorship care. Often, neither they, nor their primary care practitioners, are familiar with all the aspects of this type of care, of which there are four components: prevention of recurrent and new cancers and late effects of cancer treatment (e.g. exercise, nutrition, smoking cessation); surveillance for recurrent and new cancers and late effects of cancer treatment (e.g. mammogram, medical history, physical examinations); interventions for long-term effects of cancer and its treatment (e.g. management of pain, lymphedema, fatigue, distress); and coordination of care between primary care providers and specialists (e.g. use of survivorship care plans and referrals).

Dr. Marian Luctkar-Flude’s research is changing that. A lecturer and instructor in the Queen’s School of Nursing since 2001, Luctkar-Flude’s doctoral research looked specifically at breast cancer survivors and the after-care they received from their primary care practitioners.

“When I started my PhD, there wasn’t a single comprehensive guideline that addressed all of these issues. My work synthesized recommendations from 30 published guidelines into one document.” Since the publication of Luctkar-Flude’s recommendations, the American Society of Clinical Oncology published a comprehensive guideline for breast cancer survivorship care that addresses the four domains of survivorship care and the many issues relevant to primary care.

As well as mapping specific survivorship issues and existing guideline recommendations, Luctkar-Flude’s research also looked at the self-reported knowledge and practices of primary care physicians and nurse practitioners in the greater Kingston region. “Not surprisingly, they were most familiar with the surveillance aspects of breast cancer survivorship care and less likely to be screening for, or managing, issues like fatigue or sexual problems.”

“I interviewed primary care providers and asked them about the challenges they face when implementing these guidelines. Generally, they reported that they have not had any education on survivorship care and they worry about having to keep track of survivors to ensure that their follow-up care is delivered in a timely manner. Breast cancer survivors used to be followed in the cancer centre for at least five years

after diagnosis. These days, stable early-stage breast cancer patients are being discharged back to primary care follow-up within one to two years of their diagnosis.”

Along with an expert panel that included an oncologist, family physicians, nurse practitioners, and breast cancer survivors, Luctkar-Flude identified 21 key recommendations for post-treatment breast cancer survivorship care.

In addition to implementing the guidelines, and knowing what resources are available to their patients, primary care practitioners working in family health teams can share this information with their colleagues. Nurses, dieticians and physiotherapists can all participate in screening and counselling activities related to survivorship care. At cancer screening clinics, the nurse navigator could be the first point of contact when survivors are discharged from oncology follow-up. This could help general practitioners who are not part of family health teams.

Luctkar-Flude has several collaborations underway related to survivorship care. “I’m working with Dr. Hugh Langley, the primary care lead for the Southeast Regional Cancer Program, to follow up with the women who have been discharged ‘early’ from follow-up in the cancer centre (i.e. within one and two years of their diagnosis) and are now being followed in primary care... I am conducting surveys and interviews to determine how satisfied they are with their survivorship care and to look at which aspects of survivorship care are being addressed and what the gaps are.”

Luctkar-Flude is also collaborating with a researcher from McGill University, Dr. Roland Grad, to disseminate the recommendations for breast cancer survivorship care to clinicians using a mobile app.

“Finally, I am collaborating with Dr. Linda Beckett from the Kingston Institute for Psychotherapy and Neurofeedback, Dr. Dianne Groll from the Department of Psychiatry at Queen’s, Ms. Janet Giroux, a nurse practitioner in the Cancer Centre, and Dr. Jane Tyerman from Trent University, to conduct a pilot feasibility trial of the effect of neurofeedback on post-cancer cognitive impairment (“chemo-brain”) and cancer fatigue.”

New Transformational Gifts

Despite exceeding our financial targets, we have many unfunded priorities in our mission to help develop the next generation of health care professionals and help train future scientists focused on discoveries and innovations in biomedical and health care research.

Following the incredibly successful Initiative Campaign, we began to focus on recruiting a new Volunteer Cabinet and thanking our generous donors. We were hopeful for – but not counting on – new transformational gifts in the fiscal year, and we were pleasantly surprised. Led by a spectacular investment by the MasterCard Foundation in Rehabilitation Therapy, I am pleased to report that a total of \$24.6M was donated to the Faculty of Health Sciences in 2016-17. This represents the best revenue year in our faculty's history; in the last three years, \$42M has been raised for health sciences priorities.

Notable Major Gifts:

- **MasterCard Foundation** – Rehabilitation Therapy
- **Bell** – Chair in Mental Health and Anti-Stigma Research
- **Dr. Richard Lyttle** – Biochemistry Fellowship
- **Callahan Foundation** – Medicine Scholarships
- **Derick Brenninkmeyer Foundation** – Wound Care
- **Joan Webber** – Nursing and Alzheimers Research
- **Bergeron Clifford** – Rehabilitation Medicine
- **Empire Life** – Public Health Fellowships

Despite exceeding our financial targets, we have many unfunded priorities in our mission to help develop the next generation of health care professionals and help train future scientists focused on discoveries and innovations in biomedical and health care research.



The 2017/18 Faculty of Health Sciences priorities include:

- Facilities for the School of Nursing
- Facilities for the School of Rehabilitation Therapy
- Endowed and Expendable Research Chairs
- Professorships/Fellowships
- Lectureships
- Canadian Cancer Trials Group
- Surgical Innovation
- Aboriginal Initiatives

Dean's Advancement Cabinet

Andrew Pipe	Lucas Murnaghan
Andrew Bruce	Michael Peters
Robert Reid	Peter Shedden
David Dodge	Reid Drury
David Cook	Sue Guichon
David Pattenden	Thomas Fiala
Eleanor Rivoire	T.J. Garrett
Gordon Francis	Cathy Ambler
Heather Clarke	Kathy Pritchard
Johanne Blansche	Cathy Lysack
John P. Kostuik	Jo-anne Marr
Louise Morrin	

MasterCard Foundation

This year, we embarked on a historic partnership with the Mastercard Foundation and the University of Gondar. Thanks to a generous 10-year, USD \$20.4M grant from The MasterCard Foundation, Queen's University has begun a partnership with the University of Gondar to advance inclusive education for young people with disabilities in Ethiopia and other countries in Africa.

As part of the Foundation's Scholars Program, the partnership will provide 450 next-generation African leaders with a high-quality education at the University of Gondar, while also providing 60 of the university's faculty members with the opportunity to study at Queen's. They will enhance their skills in innovative pedagogy and in leading collaborative research between African and North American universities. The University of Gondar and Queen's University will also collaborate to develop Ethiopia's first occupational therapy program.

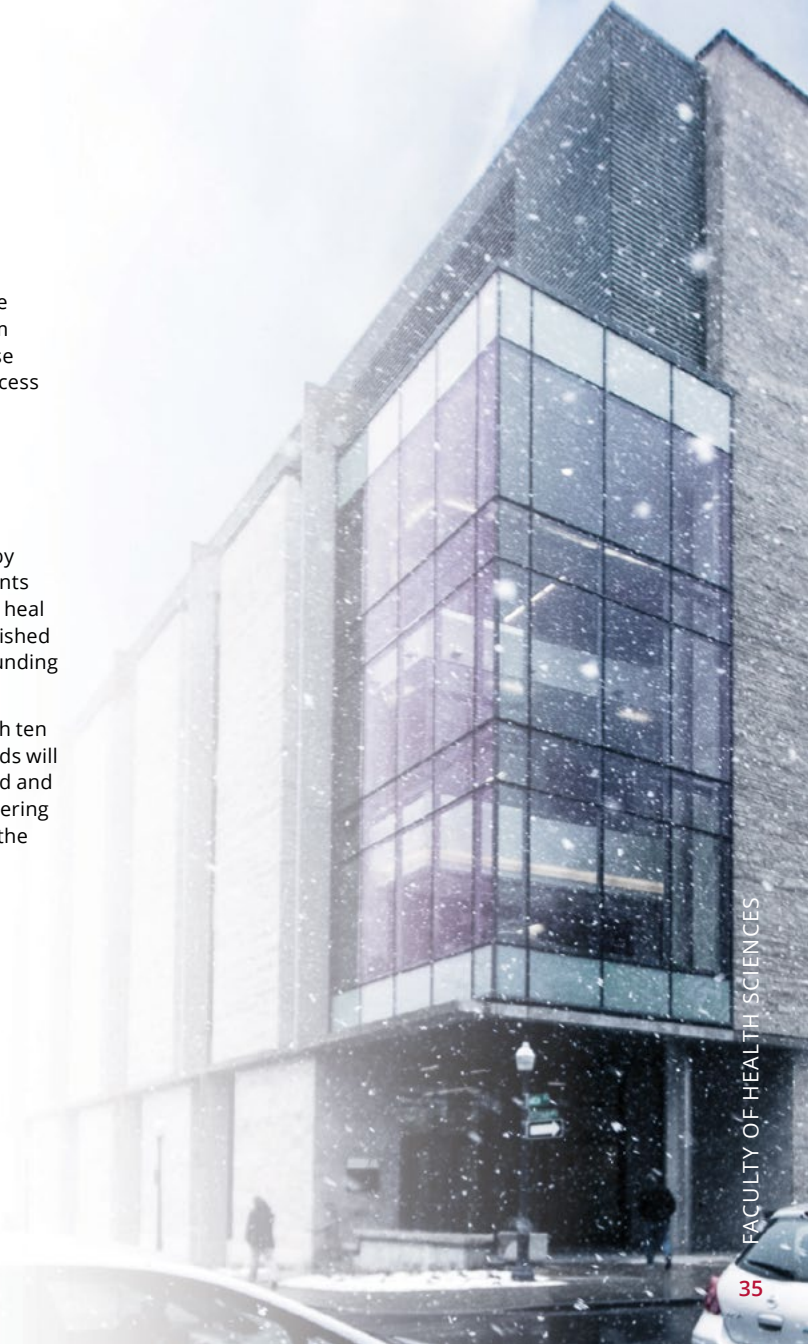
Bergeron Clifford

Ted Bergeron and Chris Clifford have worked together representing injured clients since 1999. The health care community has always been important in helping them represent their clients. They are proud to support those who are discovering ways to improve the recovery process for individuals who have experienced injury. This year, they donated to both Dr. D. J. Cook and the Centre for Neuroscience Studies.

The George Callahan Foundation

The George Callahan Foundation was created in 1980 by Dr. Callahan's family and friends to help medical students facing financial challenges become the physicians who heal Canadians every day. Callahan had a long and distinguished career in emergency medicine as well as being the "founding father of corporate medicine".

This year the Foundation directed proceeds to establish ten Queen's School of Medicine Student Awards. The awards will be decided on the basis of demonstrated financial need and academic achievement to undergraduate students entering the first medical year within the School of Medicine in the Faculty of Health Sciences.



Faculty of Health Sciences Award Recipients

Queen's University Prizes for Excellence in Research

Stephen Vanner

Regional Education Mentorship award

Clifford Rice

Mihran and Mary Basmajian Award for Excellence in Health Research

Amer Johri

Faculty of Health Sciences Education Award

Andrea Winthrop

Anne O'Riordan

H.F. Pross Educational Technology Award

Laura Kinderman

Queen's Alumni Award for Excellence in Teaching

Michelle Gibson

Queen's Principal's Teaching and Learning Awards: Award for Educational Technology

Lindsay Davidson

Lynel Jackson

Michelle Gibson

Stephen Mann

Sheila Pinchin

W. Ford Connell Award for Excellence in Teaching

David Taylor

Susan Moffatt

Anthony Sanfilippo

Journal of Wound Care Professional Education Award

Kevin Woo

Reddick Award for Excellence in Nursing Education

Lewis Tomalty

Monakshi Sawhney

Jennifer Dods

Dana Edge

Royal Society of Canada new members of the College of New Scholars, Artists and Scientists

Stéphanie Bélanger

Chancellor A. Charles Baillie Teaching Award

Catherine Donnelly

Vanier Institute of the Family's Colonel Russell Mann Military Family Health Research Award

Heidi Cramm

Canadian Blood Services Lifetime Achievement Award

David Lillicrap

Distinguished Scientist Award from the American Heart Association

Steven Archer

Regional Education Teaching Award

Christie Freeman

Nursing '84 Award for Excellence in Clinical Teaching

Marnie Chapman

Ron Wigle Mentorship Award

Paul Manley

Education Development Award in Regional Education

Kuros Moozar

Faculty of Health Sciences Executive Appointments



Michael Adams
*Department Head,
Biomedical and Molecular
Sciences (Reappointment)*



Richard Birtwhistle
*Walter Rosser Chair in
Family Medicine*



Kathleen Norman
*Associate Director,
Physical Therapy Program*



John Allingham
*Associate Head (Undergraduate),
Department of Biomedical and
Molecular Sciences*



Robert Campbell
*David Barsky Chair in
Ophthalmology and Visual Sciences*



José Pereira
*Gillian Gilchrist Chair in
Palliative Care Research*



Bruce Banfield
*Associate Head (Graduate),
Department of Biomedical and
Molecular Sciences*



Marcia Finlayson
*Vice-Dean, Faculty of Health Sciences
and Director,
School of Rehabilitation Therapy
(Reappointment)*



Anthony Sanfilippo
*Associate Dean,
Undergraduate Medical Education
(Reappointment)*



James Biagi
*Interim Department Head,
Oncology*



Michael Green
*Brian Hennen Chair in Family
Medicine and Department Head,
Family Medicine*

Keeping up the momentum



Richard K. Reznick, MD, MEd, FRCSC, FACS, FRCSEd (hon), FRCSI (hon)
Dean, Faculty of Health Sciences
Director, School of Medicine
Queen's University
CEO, Southeastern Ontario Academic Medical Organization (SEAMO)

I hope that you've enjoyed reading through this report on the spectacular year we had in 2016-17. There is certainly much to be proud of and yet, as always, we will continue to be restless. We will strive to keep this momentum going by investing in novel and exciting approaches in both research and education. We will forge ahead on our goal of creating a new and innovative space for our nursing and rehabilitation therapy schools. We will continue to focus on recruiting the best in health sciences to our faculty. We will expand and launch new programs, and we will embrace the future of health care by empowering our researchers in fields of emerging strength.

Global health, bioinformatics, digital health, pain management, precision oncology, military and Veteran health, and novel surgical techniques are just a few of the new targeted research areas that our faculty is now investing in. We intend to position ourselves as leaders in these fields by effectively using technology in support of better health care, advancing our transdisciplinary collaborations, increasing both community-based and international research efforts, and building stronger partnerships with industry, government, and philanthropists.

For our students, we will continue to advance competency- and capability-based models of education, pursue hybrid approaches to deliver such education, and prepare them for shifts in the health care environment, knowing that they will face many different obstacles in health care from those of us who have contributed to their education.

On both sides of the balanced academy, there is a great amount exciting work ahead of us. As always, I invite you to keep in touch with me throughout the year through twitter and my weekly blog. Please join in the conversation, and keep me up to date on your own successes and stories.

Thank you to everyone who contributed to the creation of this year's Dean's Report: the teams at the Queen's Gazette and Queen's Alumni Review, Kingston Health Sciences Centre staff, our students, staff and faculty members, and our growing student-based communications team here in the faculty.

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<https://meds.queensu.ca/blog>

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