



# Innovation Hub

Nova Scotia Health's Innovation Hub is leading research and innovation within the healthcare system to deliver high-impact solutions for patients and providers. It's a catalyst for bringing about positive system change to enhance access and improve health outcomes.

As one provincial organization, Nova Scotia Health is well positioned to both lead and partner on health-related innovation initiatives. Our province is the perfect size to test and try innovative ways of delivering care using new technologies and treatments. We are large enough to have the resources and infrastructure in place, yet small enough to be nimble and adaptable to implement new and innovative ways of doing things – for the benefit of patients and their families.

We have a wonderful community of entrepreneurs and innovators who are keen to create solutions for Nova Scotians, along with the incredible expertise and dedication of leading clinicians and researchers. Through strategic partnerships with these clinical champions, industry, healthcare foundations, governments and academic partners, the Innovation Hub is transforming healthcare through the best available evidence and innovative solutions.

This single point of entry allows innovators, clinical teams, researchers, patients and families, students, partners, and investors to come together to discover and implement innovative healthcare solutions for Nova Scotians that have impact regionally, nationally, and beyond, and contribute directly to our local economy.



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*We are very proud to be taking a big step forward in changing the healthcare landscape in this province with the Nova Scotia Health Innovation Hub. The leading-edge work that is happening here is allowing us to tackle some of the biggest challenges in our health system, and that will propel us into the future.*

***Dr. Gail Tomblin Murphy, Vice President of Research, Innovation and Discovery, and Chief Nurse Executive, Nova Scotia Health***

## *Nova Scotia Health Innovation Hub: Positioned for Impact to Transform Care*



**Innovation launchpad for new technologies**



**Clinical implementations and innovative solutions**



**Business development and commercialization**



**Clinical trials research excellence**



**Evidence-based decision making**



## *Health Innovation Showcase*

In February 2022, Nova Scotia Health's Innovation Hub hosted a virtual showcase to highlight how staff and clinicians are transforming the delivery of care through innovative ideas and technologies, and to feature successful innovations within the health system. Attended virtually by 600 viewers, the Innovation Showcase also served as the official launch of the Innovation Hub to signal that Nova Scotia Health is being purposeful in developing partnerships in the health innovation ecosystem to find and develop solutions for healthcare challenges.

### **WATCH THE HEALTH INNOVATION SHOWCASE ON DEMAND:**



**DAY ONE** of the showcase featured surgical robotics, the inaugural Innovators in Residence program, clinicians and their innovations (advancements in wound care and UV light devices for disinfection of airborne viruses), and the official launch of Nova Scotia Health's Innovation Hub.



**DAY TWO** of the showcase featured an announcement about a new model of collaborative care with pharmacists and nurse practitioners, a fireside chat with Nova Scotia Health's interim President and CEO Karen Oldfield, clinicians and their innovations (using AI in respiratory monitoring, a prototype device for inhaler use in children, and developing solutions for pain management), and a panel on the importance of partnership to enable innovation to improve patient care.

## *Innovators in Residence*

A new Innovators in Residence program was announced during the Innovation Showcase. As part of the Innovation Hub, this program will promote and enhance the visibility of innovation at Nova Scotia Health.

The Innovators in Residence will provide innovation thought leadership with clinical teams, administration, and executive leadership, and champion clinical implementations of new technologies, services, and solutions within the health system, adding their expertise and insight, and making recommendations. They will represent Nova Scotia Health at industry events nationally and globally to help develop new business and funding opportunities, and will lend their knowledge and expertise to identify commercialization opportunities, stemming from ongoing research and the evaluation of innovation initiatives.



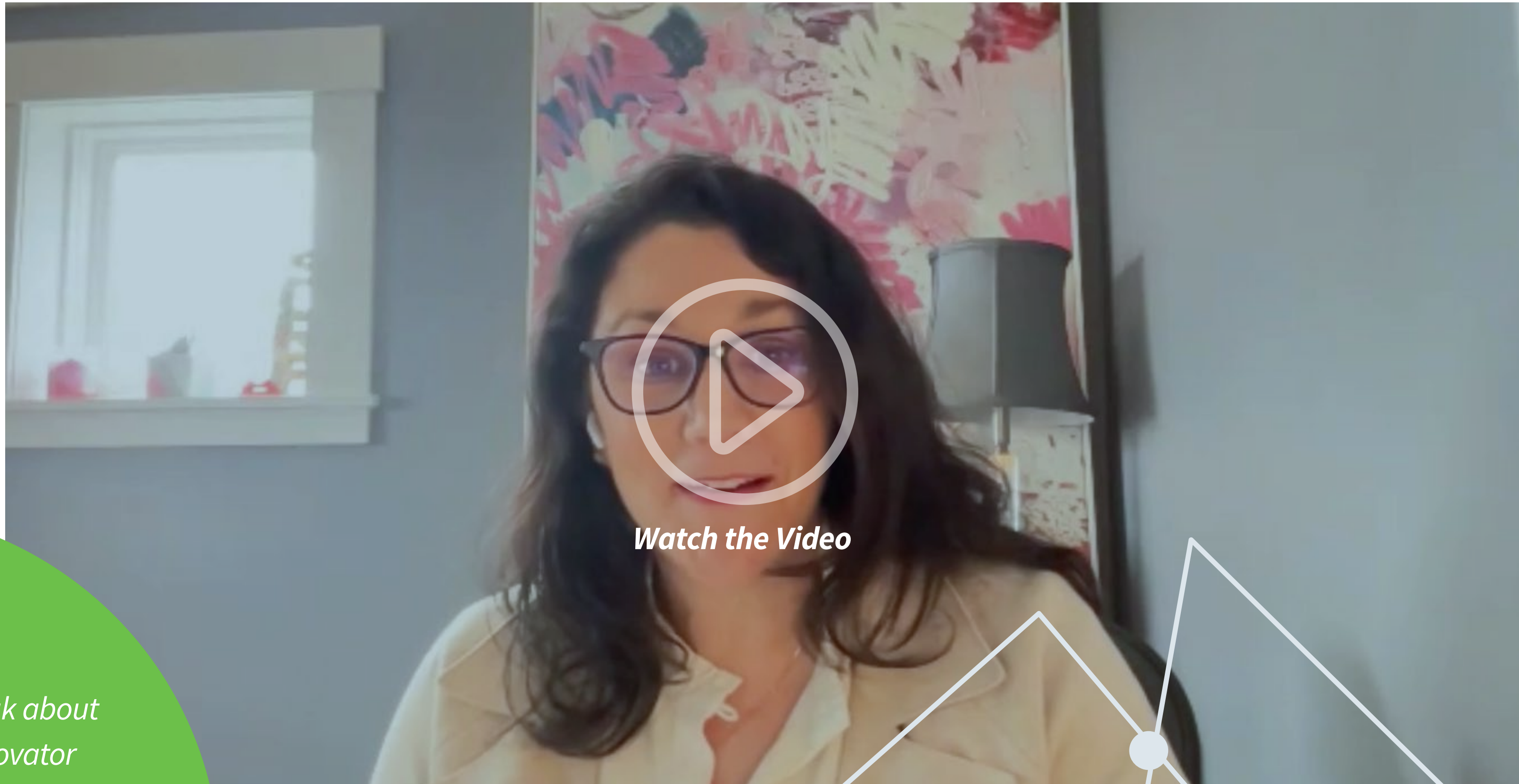
**DR. KAREN CROSS  
MD, PhD, FRCSC**

Dr. Karen Cross is a plastic, reconstructive and aesthetic surgeon at Nova Scotia Health with a specialization in advanced tissue injury and wound care. She is also CEO and co-founder of MIMOSA Diagnostics Inc., which has created a portable device for wound diagnostics. Dr. Cross relocated to Nova Scotia from Ontario, in part because of the opportunity to be an Innovator in Residence.



**DR. MICHAEL DUNBAR  
MD, FRCSC, PhD, FCAHS**

Dr. Michael Dunbar is an orthopedic surgeon at Nova Scotia Health's QEII Health Sciences Centre and a professor of surgery and director of research at Dalhousie University. He is conducting critical research to validate the efficacy of robotics in hip and knee surgeries. Dr. Dunbar is the first joint Nova Scotia Health-Dalhousie University Innovator in Residence.



*Watch the Video*

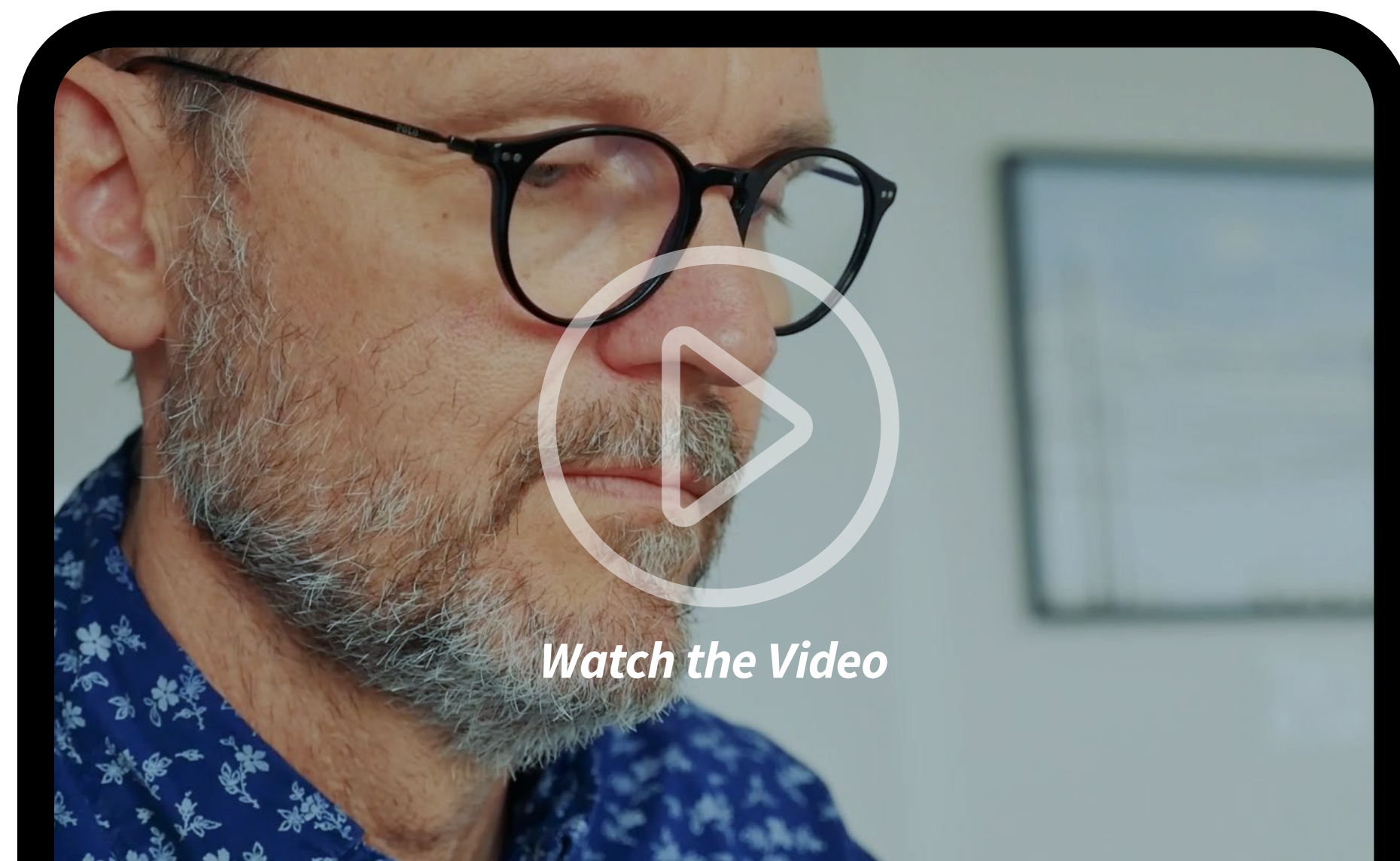
*Watch Dr. Karen Cross speak about what it means to be an Innovator in Residence at Nova Scotia Health, and the work she is leading to create equity in the health system through inclusive technology.*



*Delivering High Impact  
Health Care Solutions*

## VirtualCareNS

In May 2021, the Innovation Hub launched VirtualCareNS to provide unattached patients with access to online medical appointments with local family doctors and nurse practitioners. This proof-of-concept initiative was first piloted in the Northern and Western parts of the province, and then began expansion to the Central and Eastern areas of Nova Scotia in December 2021. Currently, over 70 per cent of people on the Need a Family Practice Registry now have access to VirtualCareNS, and more than 16,000 virtual appointments have occurred.



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*All the doctors have been more than inviting and kind. They take their time with you, it's not a big rush or anything. ... If I'm trying to get a prescription, I don't have to leave my house. I can sit here and do it, it's awesome.*

**Laurie Williams,  
VirtualCareNS patient**

**See more patient impact stories at [VirtualCareNS.ca](https://VirtualCareNS.ca)** 



### **LIBRARY TECHNICIAN REDUCING BARRIERS TO VIRTUAL CARE IN PICTOU COUNTY**

Samantha Zuberovic, a virtual care technician with the Pictou-Antigonish Regional Library, spends much of her time assisting people to register for VirtualCareNS and navigating the platform.

[Read the full story](#)

*If the program is really going to make a difference, people have to be comfortable and not intimidated by the technology or process. It's incredibly rewarding to see the weight lifted from people's shoulders; they come in nervous and tend to leave smiling and a lot more relaxed. I had no idea how big this actually was or how dramatically it can affect people's lives.*



## *Virtual Care @ Your Library*

Recognizing that technology can be a barrier to accessing virtual care, Nova Scotia Health's Innovation Hub partnered with the Aberdeen Health Foundation and Pictou-Antigonish Regional Library earlier this year to offer in-person support to access VirtualCareNS and other virtual health care appointments at the New Glasgow, River John and Westville libraries. Residents of Pictou County can book a room equipped with a computer or mobile device at their nearest library for a confidential virtual appointment, and receive support from trained library staff.

[LEARN MORE](#) 





## VirtualEmergencyNS

VirtualEmergencyNS is a pilot program for patients visiting the emergency department with health concerns that can be appropriately treated through a virtual visit. Launched in February 2022, it's being tested by a team at Colchester East Hants Health Centre's emergency department, with support from the Innovation Hub. Following triage, patients whose health concerns are appropriate for virtual care are offered the option to access VirtualEmergencyNS. They are supported by an on-site nurse or advanced care paramedic during the virtual appointment, who can perform a physical assessment as needed. The VirtualEmergencyNS physician is able to order tests or provide prescriptions for patients directly through the virtual platform.

[LEARN MORE](#) 



### TRURO DOCTOR SUPPORTED BY NOVA SCOTIA HEALTH'S INNOVATION HUB TO PROVIDE VIRTUAL EMERGENCY CARE

Dr. Jan Sommers, head of emergency at Colchester East Hants Health Centre, began experimenting with an iPad and a Bluetooth stethoscope in the assessment of patients during the pandemic. In a few short months after connecting with the Innovation Hub, VirtualCareNS was launched to provide patients presenting with urgent but non-life-threatening conditions with more timely access to emergency care.



***Listen to the Chats on Change podcast as Dr. Janet Sommers and Jenna Gallop, RN, speak with Karen Oldfield, interim President and CEO, about this innovative initiative.***



## Surgical robotics improving patient care

A new robot funded by the QEII Foundation is transforming the future of arthroplasty surgeries in Nova Scotia. The Mako SmartRobotics system, the second surgical robot of its kind in Canada, is used during hip and knee surgeries to precisely place a joint implant. Nova Scotia Health's Innovation team collaborated with the orthopedics surgical team and industry partner Stryker to obtain the Mako robot last fall. The orthopedics surgical team at the QEII Health Sciences Centre is currently conducting research on the personalization of procedures that are now made possible with this robot. They are evaluating patient outcomes when compared to traditional surgery, and how the robot could be used on other joints in the body.

[LEARN MORE](#) ↗

### QUICK RECOVERY FOLLOWING ROBOT-ASSISTED KNEE SURGERY

Dino DiQuinzio was one of the first patients to undergo knee surgery with Dr. Dunbar and the surgical team, using the Mako Robot. A civilian pipefitter with the Department of National Defense, he spent spend many years in tight quarters, going up and down stairs, and kneeling on icy cold steel, all which led to his need for a knee replacement.

[Watch his story](#)



### NOVA SCOTIA HEALTH'S INNOVATION TEAM LEADING THE WAY FOR ORTHOPEDIC SURGICAL ROBOTICS IN ATLANTIC CANADA

Learn how the Innovation Hub supported this initiative, from business case development to logistical coordination of the robot's arrival in Nova Scotia.

[Read the full story](#)



*“ Having this piece of technology will revolutionize the way we provide orthopedic care for Nova Scotians. For the first time, using this surgical robot, we're able to investigate and precisely replace a joint that is tailored to the patient, by being able to adapt the surgical plan based on their unique skeletal shape and soft tissue envelope. Paired with our research study, what we learn will benefit many people in the future.*

**Dr. Michal Dunbar, Orthopedic surgeon, QEII Health Sciences Centre, Nova Scotia Health**



### *C3: Care Coordination Centre*

Nova Scotia Health's new Care Coordination Centre is a collaborative approach to decision-making using real-time data that will improve how we coordinate the movement of patients and deliver care throughout their healthcare journey. An Innovation Hub initiative that's being implemented over the next two years, C3 will provide a real-time view on access to care, patient flow and health system resources to support clinical teams to identify issues and find solutions together. It will also generate actionable insights to drive continuous improvements in how healthcare is delivered to improve the quality of patient care.



***Listen to the Chats on Change podcast as Gordon Peckham and Dr. Kirk Magee, two leaders of the Care Coordination Centre at the QEII Health Sciences Centre, speak with Karen Oldfield, interim President and CEO, about this innovative initiative.***



*C3 is essentially an operation centre that brings together state-of-the-art technology to paint a picture of what's happening in our health system with real-time data. It will also allow us to have more integration across the services and programs, and to have more of an operational picture as to what the issues are in terms of workflow and processes, so that we can identify potential problems, predict problems, and then implement solutions.*

***Gordon Peckham, Senior Director,  
Care Coordination Centre Operations,  
Nova Scotia Health***



## MEET ONE OF NOVA SCOTIA'S FIRST RN PRESCRIBERS

Jennifer Radcliffe started nursing in 2006. After working all over the province, in the Northwest Territories and the Yukon, she is now part of the team at the Truro Access and Sexual Health Clinic. She's also part of Nova Scotia's first RN prescribing cohort who are able to write prescriptions and order routine tests for patients. [Read the full story](#)

“ *I was looking at doing something more with nursing, and this was just the perfect fit at the perfect time. The program was really interesting; it was definitely different than anything I've experienced before, and it's so rewarding to have been able to complete it ... and as a result, I've been able to help lessen their workload.* ”

## *Improving access to care: RN prescribing comes to Nova Scotia*

The roles and responsibilities of healthcare professionals are always evolving to better meet population health needs, and to improve timely access to care. Supported by the Innovation Hub's Interprofessional Practice and Learning team, registered nurses in Nova Scotia can now prescribe a limited number of medications, devices and order relevant screening or diagnostic tests within their specific areas of expert nursing practice, after completing additional training to become an authorized prescriber. The intent is to complement existing services and improve access to health care for all Nova Scotians.

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## *Research is care: Nova Scotia Health's Clinical Trials Unit*

The Innovation Hub's Clinical Trials Unit is driving excellence in the clinical research trials of tomorrow. The Clinical Trials Unit is central to our ability to provide clinicians and patients with access to cutting-edge treatment options by conducting breakthrough research that brings meaningful outcomes to patients. With a focus on decentralized clinical trials, Nova Scotia Health is becoming a partner of choice by implementing innovative solutions to increase access to leading therapies for patients and matching researchers with sponsor-initiated clinical trial opportunities.

### **BREATHING A LITTLE EASIER: NOVA SCOTIA HEALTH PLAYS IMPORTANT ROLE IN DEVELOPMENT OF NEW CYSTIC FIBROSIS DRUG**

From a very young age, those living with Cystic Fibrosis are aware that they have a life-threatening condition, and that their future might be uncertain. A new drug that has been referred to as the biggest innovation in cystic fibrosis treatment, Trikafta, developed by Vertex Pharmaceuticals, is now available to Nova Scotians with cystic fibrosis for free through the province's pharmacare program. Nova Scotia Health's research team in Respiriology, which is supported by the Innovation Hub's Clinical Trials Unit, has been a key partner with Vertex Pharmaceuticals on clinical trials for cystic fibrosis treatments since 2010.

[Read the full story](#)

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*I think that people assume that all of this research takes place somewhere else; ... we keep getting asked back by Vertex, so that shows the quality of research we are doing and the data that we are delivering. [A principal investigator for this trial] is excited for us to be on the national and international radar, and have people know that we're here, we're a great site to work with, and we deliver the goods.*

**Andrea Dale, Respiratory Therapist and Research Coordinator, Respiriology, Nova Scotia Health**



*Partnerships:  
Working Together  
to Enhance  
Health Care*

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*We are pleased to launch this partnership with Sobeys and work toward improving access to primary care for individuals in the New Glasgow and Truro areas. Nurse practitioners provide valuable expertise and will work collaboratively with the pharmacists in these clinics while providing timely and appropriate access to high-quality care. This partnership is a prime example of the innovative solutions that are being implemented by Nova Scotia Health's Innovation Hub. We look forward to learning from this proof-of-concept program and evaluating how this model could support other areas of the province.*

**Dr. Gail Tomblin Murphy, Vice President, Research, Innovation and Discovery, and Chief Nurse Executive, Nova Scotia Health**

## *Nova Scotia Health partners with Sobeys and Lawtons Drugs on pharmacy walk-in clinic*

Recognizing this need to provide people with another option to access timely primary care, and to reduce non-urgent visits to busy emergency departments, Nova Scotia Health has partnered with Sobeys Inc. on an innovative collaborative care model that pairs pharmacists and nurse practitioners together. Known as Lawtons Drugs Pharmacist Walk-in Clinic+, people in the New Glasgow and Truro areas are now accessing timely care as part of this proof-of-concept initiative supported by the Innovation Hub that began in February 2022. By pairing pharmacists who are practicing to their full scope with nurse practitioners, together they can assess and treat a variety of illnesses and health conditions, prescribe medications, and make referrals as needed. This enables patients to access the care that they need in a timely manner from an appropriate primary care provider, and it alleviates pressure on local emergency departments.

**LEARN MORE** 

## *New Atlantic Clinical Trials Network paves the way for all Atlantic Canadians to benefit from Clinical Trials*

At the beginning of this year, Nova Scotia Health's Innovation Hub initiated a strategic research partnership among health authorities in the Atlantic provinces to build our collective clinical trial capacity. This Atlantic Clinical Trials Network, formally announced in June 2022 at the BIO International Convention, the world's largest biotech partnering event, will be key in attracting national and international companies who want to partner and invest in Atlantic Canada. Collaborating with other health system partners in the region as the Atlantic Clinical Trials Network increases Nova Scotia Health's ability to attract and retain top researchers, and to provide clinicians and patients with access to cutting-edge treatment options.

[LEARN MORE](#) ↗



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*We are pleased to partner with our Atlantic colleagues to further important research that will benefit Atlantic Canadians and people around the world. Innovation drives research and better outcomes for patients. This partnership will support the best talent, create new opportunities for clinicians and cutting-edge treatment options that can potentially shape national or global clinical practice.*

**Minister Michelle Thompson**  
**Nova Scotia Department**  
**of Health and Wellness**





## *Attracting internationally educated nurses to increase access to care*

Positioned within Nova Scotia Health's Innovation Hub, the Nova Scotia International Community of Healthcare Workers Engagement Program (NICHE) is testing a sustainable strategy for the recruitment of qualified internationally trained health professionals as a means of improving access to care in rural Nova Scotia. Leveraging well-established partnerships across government, foundations, industry, education, and community partners, the NICHE program is being established in Northern Zone using a proof-of-concept approach accompanied by rapid evaluation and continuous quality improvements. Internationally trained healthcare professionals recruited from countries such as India, Kenya, and the Philippines will offer care through a Rural Centre of Excellence. The centre will provide primary care to both attached and unattached patients, offer urgent care services, enable emergency department diversions through onsite access to virtual care, and enable care at home and in long-term care through technology solutions.



## *Simulation education in health care: The SimEd Network*

Simulation and interprofessional learning are gold standards in healthcare education, essential to highly skilled providers and safe, quality healthcare. The SimEd Network, co-led by the Innovation Hub's Interprofessional Practice and Learning team, supports simulation-based learning, assists in developing simulation expertise and enables best practice sharing. A partnership between Nova Scotia Health, IWK Health Centre, Dalhousie University, and now the Nova Scotia Community College, the network connects those involved in health simulation education to grow our partners' learning and capacity to deliver the highest quality simulation-based education in Nova Scotia.



### **STAYING NIMBLE, STAYING SAFE**

Checklists, standard procedures and teamwork go hand-in-hand with the smooth delivery of health care, but the COVID-19 pandemic has put a whole new spin on what it means to stay consistent and work together. Simulation training was conducted at healthcare sites across the province, giving physicians, nurses and paramedics opportunities to practice using the new airway tools and procedures both on manikins and, for some, with clinical-grade cadavers. This hands-on practice allowed teams to troubleshoot and disclose their fears. [Read the full story](#)

**In the early days of the COVID-19 pandemic, Dr. Lorri Beatty, an emergency physician at the QEII, was appointed to a specialized COVID airway team tasked with training healthcare teams across Nova Scotia.**

## *Promoting health through collaborative research and innovation in Nova Scotia's Eastern Zone*

In October 2021, Cape Breton University and Nova Scotia Health's Innovation Hub hosted a virtual conference to build capacity for health research and innovation partnerships in the Eastern Zone. Coordinated by the university's Centre for Health Wellness and Extended Learning, the conference featured a keynote presentation from Annette Verschuren, CBU chancellor and CEO of NRStor Inc., who shared her perspectives on driving innovation in Cape Breton. Dr. Brian Goldman, emergency department physician and host of CBC's award-winning *White Coat, Black Art*, headlined the second day of the conference, and introduced delegates to the concept of disruptive innovation and teamwork. Almost 350 individuals joined virtually for 18 presentations focused on happy and healthy aging, clinical trials in Cape Breton, Mi'kmaw health and wellness, and best practices in pressure injury prevention and care.



***Watch the conference on demand***



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*Healthcare systems must be able to facilitate the effective flow of patients through several care areas. In particular, we want to leverage neural network-based machine learning algorithms to create highly accurate prediction models.*

***Dr. Enayat Rajabi,  
Assistant Professor,  
Shannon School of Business,  
Cape Breton University***

### **CAPE BRETON UNIVERSITY RESEARCH PROBES HEALTHCARE USING ARTIFICIAL INTELLIGENCE**

Dr. Enayat Rajabi, along with Nova Scotia Health affiliate scientist Dr. Corrine MacIsaac, both professors at Cape Breton University's schools of business and nursing, respectively, are unpacking some of the complexities of healthcare using data analytics and machine learning to examine the experiences of patients in Nova Scotia hospitals. The application of artificial intelligence has the potential to contribute to improved hospital bed utilization and patient flow through stages of care. The research aims to identify the most significant clinical and patient characteristics associated with those waiting for placement in long-term care or nursing homes, to develop a model that supports a proactive approach to managing hospital beds. **Read the full story**

## CLINICAL RESEARCH MENTORSHIP COLLOQUIUM



### *Clinical Research Mentorship Colloquium*

Opportunities to combine medical practice and clinical research are growing around the world and are a critical part of the research success at research-intensive institutions. The first ever Clinical Research Mentorship Colloquium in Atlantic Canada was formed last fall to provide expertise and training support to early career clinical researchers, who are working with advisors and mentors on answering clinical questions through the development of a research project. Nova Scotia Health's Innovation Hub has partnered with Dalhousie University, the IWK Health Centre, Dalhousie Medical Research Foundation, and the New Brunswick Health Research Foundation to support the first cohort of 17 participants.

### **PARTICIPANTS**

Dr. Kim Anderson,  
Cardiology

Dr. Wael Sumaya  
Cardiology

Dr. Kavish Chandra  
Emergency Medicine

Dr. Rawan Alrashed  
Emergency Medicine

Dr. Vicki Munro  
Endocrinology

Dr. Pam Jarrett  
Geriatric Medicine

Dr. Samuel Searle  
Geriatric Medicine

Dr. Suzanne Salsman  
Geriatric Medicine;  
Physical Medicine &  
Rehabilitation

Dr. Shifana Lalani  
Maternal Fetal Medicine

Ms. Jennifer Skinner  
Dalhousie Medicine  
New Brunswick

Dr. Amanda Vinson  
Nephrology

Dr. Divya Subburaj  
Pediatric Hematology/Oncology

Dr. Stephanie Villeneuve  
Pediatric Hematology/Oncology

Dr. Abraham Nunes  
Psychiatry

Dr. Michael Ha  
Radiation Oncology

Dr. Allison Wallace  
Surgery

Dr. Yong Kim  
Community Health  
and Epidemiology



## *Research team to determine if UV-C light can reduce infections in Long-Term Care facilities*

A research team led by Dr. Kenneth Rockwood is testing whether UV lights installed in long-term care facilities will reduce influenza-like illnesses, respiratory infections, and COVID-19 infections among residents. The study, funded by Research Nova Scotia and designed with support by the Innovation Hub's Implementation Science team and Clinical Trials Unit, is taking place at two long-term care facilities in Nova Scotia: Windsor Elms Village in Falmouth and Northwood's Halifax campus. In other parts of the world, Far UVC lighting has been employed in various sectors, including in schools and hospital settings, to provide continuous disinfection in occupied spaces.

[LEARN MORE](#) ↗



*The pandemic has had a particular impact on older adults, especially those with underlying health conditions. We want to see if Far-UVC light can kill airborne viral transmissions, including the SARS CoV-2 virus, in long-term care facilities.*

**Dr. Kenneth Rockwood,  
Geriatric and Senior Medical Director, Frailty  
and Elder Care Network, Nova Scotia Health**



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*Local funding from healthcare foundations, because of the generosity of donors, can make a critical difference in supporting the important work of researchers and innovators. Without them, we would not be able to provide quality care for patients, their families and communities across our province, which is grounded in applying health research and innovation to enable positive health outcomes.*


***Dr. Gail Tomblin Murphy, Vice President, Research, Innovation and Discovery, and Chief Nurse Executive, Nova Scotia Health***

## *Partnerships with healthcare foundations key to furthering research funding*

Philanthropy is an important catalyst for research and a critical means of leveraging other funding dollars for research projects. This combined power of philanthropy and collaboration is currently at work within the Nova Scotia COVID-19 Health Research Coalition, an alliance formed among several healthcare partners in 2020, including the QEII Foundation and Nova Scotia Health's Innovation Hub, to support research studies focused on health system decisions, vaccine development, novel treatments, and social response to the pandemic. Since then, several research teams funded through the Nova Scotia COVID-19 Health Research Coalition have been successful in attracting additional funds.

**Read the full story** 





*Enabling  
a Learning  
Health System*

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*The program has given me more confidence in my current practice with the detailed knowledge I'm learning about the Canadian nursing system ... This financial assistance [from the QEII Foundation] is coming at a crucial time in my Canadian journey and will help me follow my passion to help my community in the future.*

**Yemisi Olatunji, 2021 QEII Foundation  
Diversity in Healthcare Bursary Recipient**

## *Nova Scotia Health Learning Institute for Health Care Providers*

This spring, to reflect the expanding scope of its programming and focus on interprofessional learning, the Registered Nurses Professional Development Centre is now known as the Nova Scotia Health Learning Institute for Health Care Providers. As part of the Innovation Hub Interprofessional Practice and Learning team, the Learning Institute has new and redesigned programs that are being provided by a number of collaborative partners that support health care providers across the system.

**LEARN MORE** 

### **RN BRIDGING/RE-ENTRY PROGRAM HELPS INTERNATIONAL STUDENTS IN THEIR NURSING JOURNEY**

Diversity and representation matter everywhere, including in health care. With people from all walks of life accessing healthcare services, supporting a system that includes diverse healthcare staff is crucial to meet the cultural needs of everyone it serves. Yemisi Olatunji, who worked for 13 years as a registered nurse in Nigeria before moving to Canada, received a Diversity in Health Care Bursary from the QEII Foundation, and is upgrading her skills through the Learning Institute for Health Care Providers RN Bridging/Re-Entry program, so that she can be licensed to use her skills and knowledge as a Registered Nurse in Nova Scotia's healthcare system.

**[Read the full story](#)**





## **NEW CRITICAL CARE PARAMEDIC PROGRAM HELPING TO ADVANCE PROFESSION IN NOVA SCOTIA**

Last fall, the first cohort of advanced paramedics enrolled in a new Critical Care Paramedic program offered through Nova Scotia Health's Learning Institute for Health Care Providers, in partnership with EHS LifeFlight. Participants spent time learning fundamental concepts, participated in simulation learning, and completed an interprofessional model of clinical experience. The learners also participated in a unique preceptorship opportunity, where they spent time both in the emergency department and with LifeFlight. This is an intentional design element of the new program to allow the paramedics to learn critical care paramedic competencies, regardless of the environment. [Read the full story](#)



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*The curriculum was designed and developed through collaboration of the Nova Scotia Health Learning Institute for Health Care Providers faculty and critical care paramedics. This type of program will ultimately advance the profession.*

**Carla MacDonald, Interim Director,  
Learning and Education Resources,  
Interprofessional Practice & Learning,  
Nova Scotia Health**

## Network of Scholars

Nova Scotia Health's Innovation Hub has a Network of Scholars who enhance embedded research, innovation and implementation science initiatives and activities within the organization. These scientists and clinical champions from across the province come together to identify patient, community and system priorities, and are transforming the results of their scientific research into health care practice.



*The implementation science and network of scholars strategy within the Innovation Hub are key enablers toward our strategy for a learning health system at Nova Scotia Health. We have created a strategic and systematic approach to engaging learners and scholars in providing health system experience, mentorship and training to develop key competencies. At the same time, the strategy to increase capacity for embedded scientists and scholars creates the capacity for the system to engage in the use of best practice evidence and supports for rapid implementation and evaluation of key recommendations and best practice evidence.*

**Dr. Tara Sampalli, Senior Scientific Director, Research, Innovation and Discovery, Nova Scotia Health**

## NOVA SCOTIA HEALTH WELCOMES TOP TALENT THROUGH HEALTH SYSTEM IMPACT FELLOWSHIP PROGRAM

Dr. Katrin (Julia) Kaal and Mike Reid, both from Dalhousie University, are Health System Impact Fellows who are working with Nova Scotia Health as part of the Innovation Hub's Network of Scholars. This prestigious program of the Canadian Institute for Health Research provides an opportunity for doctoral trainees and post-doctoral fellows who are studying health services and policy research, or related fields, to apply their research and analytic talents to priority issues and challenges in health care. It is a unique opportunity to work within a health system with an academic supervisor who will guide their experiences and develop specific skills that will prepare them for future opportunities to work as embedded scientists within the health system. [Read the full story](#)



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*Over the next two years, we will set the stage for advancing precision medicine in Atlantic Canada. For Nova Scotians, this will mean better access to clinical trials for new cancer treatments, a better ability to match treatments to a patient's specific cancer, closer-to-home testing to monitor how patients respond to treatment, and so much more. It is really an exciting time for us here in Atlantic Canada, and I am absolutely thrilled to be part of the consortium.*

***Dr. Robin Urquhart, Associate Professor,  
Dept. of Community Health and Epidemiology,  
Dalhousie University***

## **NOVA SCOTIA RESEARCHERS JOIN ATLANTIC CANCER CONSORTIUM TO ACCELERATE PRECISION MEDICINE FOR CANCER PATIENTS**

Dr. Robin Urquhart is an affiliate scientist with Nova Scotia Health and an associate professor at Dalhousie University. She's also the provincial lead of a new Atlantic Cancer Consortium where doctors and scientists in Nova Scotia are partnering with colleagues in New Brunswick and Newfoundland and Labrador to focus on research that will improve cancer outcomes in the region. They are working together under a joint pilot project with the goal of becoming a member of the Terry Fox Research Institute's new Marathon of Hope Cancer Centres Network, a pan-Canadian research network to accelerate precision medicine for cancer patients.

**LEARN MORE** 





*Throughout the pandemic, rapid reviews have been conducted based on requests from the organization's Emergency Operations Centre, Executive Leadership team, and various working groups that have been established to address priority needs during COVID-19. We're engaging key partners in our health system, provincial, national and international leaders and – most importantly – our patients, their families and communities. Together, we are using best practice evidence to transform healthcare capacity in Nova Scotia.*

***Dr. Tara Sampalli, Senior Scientific Director, Research, Innovation and Discovery, Nova Scotia Health***

## *Nova Scotia Health's implementation science team accelerating rapid reviews for health system decision making during COVID-19*

Nova Scotia Health's Implementation Science team, as part of the Innovation Hub, leads the creation of rapid reviews to inform best practice evidence, policy direction and practice improvements, with the overall goal to improve the health, safety and wellbeing of Nova Scotians. COVID-19 created an unprecedented and urgent need to support planning and decision-making considerations. Over the past two years, rapid reviews have been created on topics related to the pandemic such as public health response, infection control practices, long-term care, personal protective equipment, virtual care, vaccine efficacy and hesitancy, working with vulnerable populations, the safety of the workforce, patient engagement, and more. [Read the full story](#)



## Canada Research Chairs

The Government of Canada's Research Chairs program provides support for top researchers in the country, including health care, to encourage academic research and training at Canadian universities. A number of Nova Scotia Health physicians and affiliate scientists were announced as new or renewed research chairs in the 2021-22 year.



**Dr. Rudolf Uher**

Psychiatrist, Nova Scotia Health  
Faculty of Medicine, Dalhousie University  
Tier 1 Canada Research Chair  
in Early Interventions in Psychiatry



**Dr. JianLi Wang**

Affiliate Scientist, Nova Scotia Health  
Faculty of Medicine, Dalhousie University  
Tier 1 Canada Research Chair in Health  
Data Science and Innovation



**Dr. Javeria Hashmi**

Affiliate Scientist, Nova Scotia Health  
Faculty of Medicine, Dalhousie University  
Tier 2 Canada Research Chair in Pain



**Carlos Hernandez-Castillo**

Affiliate Scientist, Nova Scotia Health  
Faculty of Computer Science,  
Dalhousie University  
Tier 2 Canada Research Chair  
in Artificial Intelligence for Health



**Dr. Miriam Ruth Lavergne**

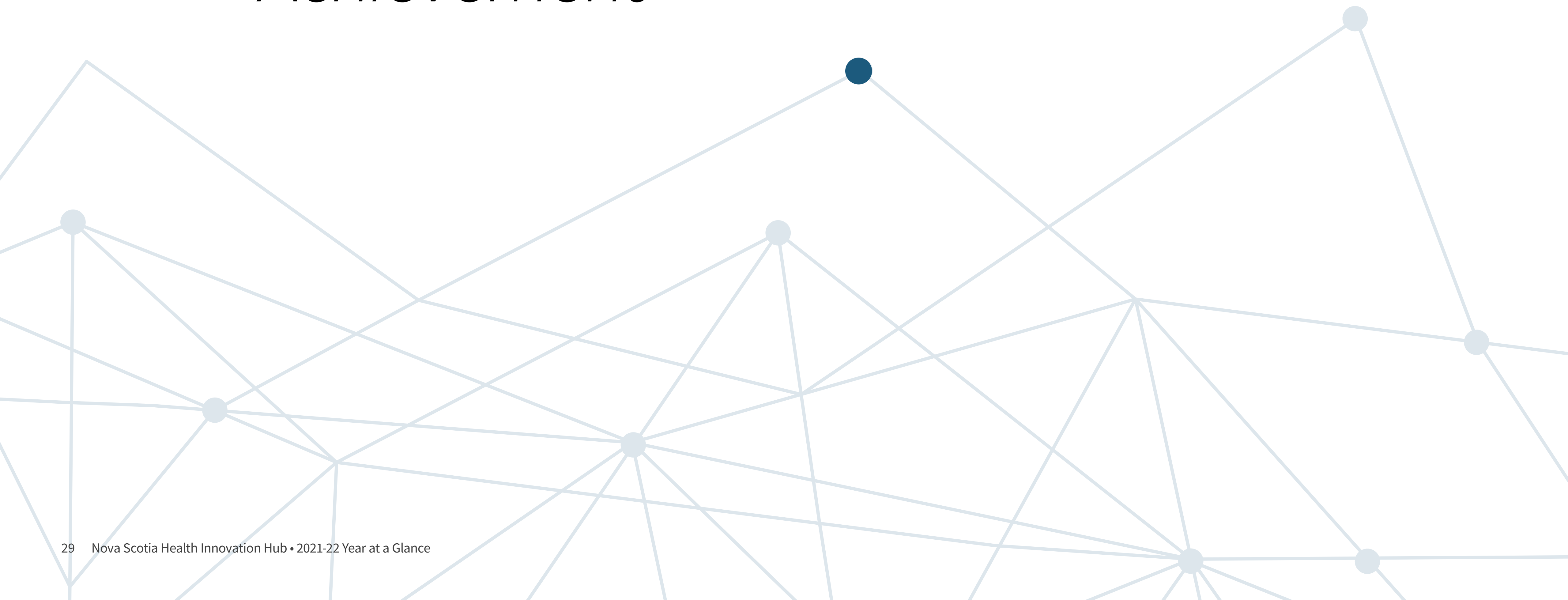
Researcher, Nova Scotia Health  
Faculty of Medicine, Dalhousie University  
Tier 2 Canada Research Chair  
in Primary Care



**Dr. Haorui Wu**

Affiliate Scientist, Nova Scotia Health  
Faculty of Health, Dalhousie University  
Tier 2 Canada Research Chair in Resilience

# *Recognizing Achievement*





## *Dr. James Robar receives the Governor General's Innovation Award for 3D printed devices*

Dr. James Robar, chief of medical physics at Nova Scotia Health, received the Governor General's Innovation Award from the Rideau Hall Foundation last spring for integrating 3D printed devices to improve the treatment of skin, breast, head/neck and gynecological cancers. As co-founder of Adaptiiv Medical Technologies, he has created software that enables clinical teams to print customized accessories used during radiation therapy that are custom fit to the shape of the patient's body, which improves the accuracy of the cancer treatment.



***Watch this video of Dr. Robar speaking about what it means to be an innovator, and how the medical physics team is spearheading innovation at Nova Scotia Health.***

## *Dr. Kenneth Rockwood: World-leading geriatrician and anti-ageism campaigner wins the Ryman Prize*

Dr. Kenneth Rockwood, a geriatrician and Senior Medical Director of the Frailty and Elder Care Network at Nova Scotia Health and DMRF Kathryn Allen Wheldon Endowed Chair in Alzheimer's Research at Dalhousie University, was recognized with the Ryman Prize in December 2021 for more than 30 years of research, collaboration and practical clinical work for older adults living with frailty and dementia, and his long-term campaign to battle ageism in healthcare. Presented by the Right Honourable Jacinda Ardern, Prime Minister of New Zealand, the prize is awarded by an international jury of experts for exceptional work that has enhanced the quality of life for older people. Established by the Ryman Foundation, it is the equivalent of a Nobel Prize for those working in the field of health for older people.

Dr. Rockwood was selected for his truly unique contribution to the understanding of ageing.



***Watch this video of Dr. Rockwood speaking about the journey of his career in geriatric medicine***

*Dr. Gail Tomblin  
Murphy recognized  
for dedication to  
health sciences and  
leadership in nursing*

Last fall, Dr. Gail Tomblin Murphy, Vice President of Research, Innovation and Discovery, and Chief Nurse Executive at Nova Scotia Health, was inducted as a fellow to the Canadian Academy of Health Sciences, in recognition of her dedication and excellence in research in health system strengthening and health workforce planning locally, regionally, nationally and globally. Being invited to become a fellow is a top honour among the health sciences community in Canada, where individuals are recognized by their peers through the Academy, both nationally and internationally, for what they have contributed over the course of their career to advance the academic health sciences. Additionally, Gail also became a fellow of the Canadian Academy of Nursing, through the Canadian Nurses Association. The Academy's fellowship program was established in 2019 to recognize the country's most accomplished nurse leaders for their contributions and continued impact on the profession and health systems.

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*Dr. Ivan Wong develops  
innovative shoulder  
surgery technique*

Dr. Ivan Wong, an orthopedic surgeon at Nova Scotia Health who specializes in sports medicine and trauma surgery, has received the premier award for orthopedic research in Canada, the J. Édouard Samson Award, from the Canadian Orthopedic Foundation. Dr. Wong has developed a new surgical solution that allows for the placement of bone grafts to help augment bone loss in the shoulder joint, while avoiding the complications associated with the more commonly used surgical approach. The groundbreaking surgical innovation developed to treat shoulder instability was profiled during a live broadcast to international conference participants in December 2021. It has been shown to offer patients improved outcomes and low rates of recurrent shoulder dislocations. In addition, recovery is easier than other procedures, and involves wearing a sling for only a couple of weeks.

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## *Nova Scotia Health 2021 Making Waves Awards*

Nova Scotia Health's Making Waves Awards program recognizes individuals and groups who have made outstanding contributions to the health and well-being of Nova Scotians. Every day, individuals and teams of staff, physicians, researchers and volunteers strive to deliver high quality care and services in all areas of our province. The following three individuals were the recipients of the 2021 awards for research and innovation:



### **OUTSTANDING RESEARCHER AWARD: DR. RATIKA PARKASH**

Nova Scotia Health prides itself on achieving excellence in health, healing and learning. Dr. Ratika Parkash's research studies are doing just that – by extending new knowledge and care about cardiac health in Nova Scotia and Canada, as well as around the globe.

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### **EARLY CAREER / EMERGING RESEARCHER AWARD: DR. KARTHIK TENNANKORE**

Dr. Karthik Tennankore is already making great strides in kidney disease research and care. As a Principal Investigator for the past seven years, he has made a name for himself across Nova Scotia, throughout Canada and around the world, and is helping to establish a highly regarded nephrology research program within Nova Scotia Health.

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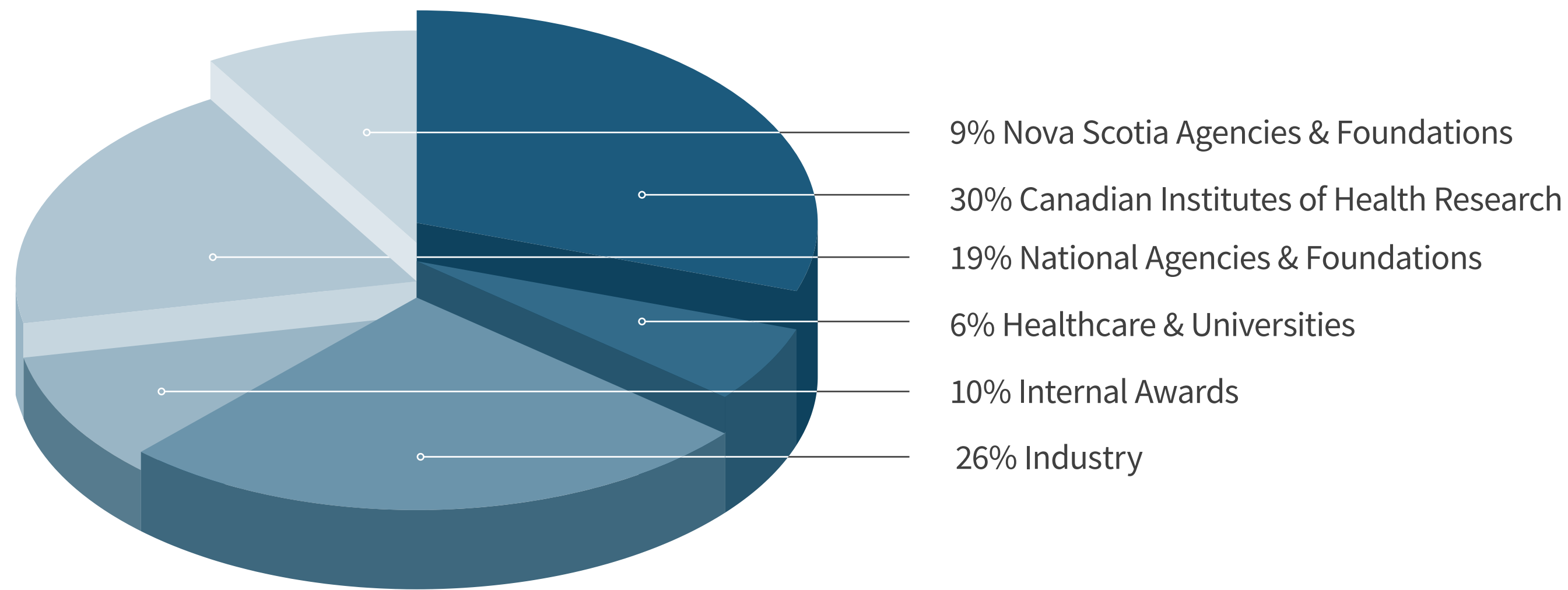


### **INNOVATOR AWARD: DR. JO-ANNE WILSON**

Innovative ideas bring about new products and technologies, and can also be improvements on processes to enhance safety and quality of care. Dr. Jo-Anne Wilson, a clinical pharmacy specialist with the Nephrology team in Central Zone, and a member of the Provincial Renal Program, has developed an innovative solution for medication reconciliation in ambulatory care settings to review patients' medications to identify if any could be causing discomfort or harm.

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# Source of Research Awards: 2021-22



Total Awards:  
\$27,587,552

