

Research in Progress

Volume 10, Issue 3

Celebrating
10 Volumes!

Standout in Atlantic Canada: Dr. Robin Urquhart Receives \$950,000+ from CIHR 2016-2017 Foundation Grant Competition



Dr. Robin Urquhart

Congratulations to Dr. Robin Urquhart, NSHA/Dalhousie Department of Surgery, for receiving funding from CIHR's 2016-2017 Foundation Grant Competition.

CIHR's mandate is to "excel, according to internationally accepted standards of scientific excellence, in the creation of new knowledge and its translation into improved health for Canadians, more effective health services and products and a strengthened Canadian health care system." Dr. Urquhart will be using her \$950,000+ award for her research program involving: "Follow-up care of cancer survivors: optimizing survivor and health system outcomes".

The Foundation Grant Competition saw 600 applications submitted across Canada, 14 of which were from Nova Scotia. Only 76 across Canada were funded and Dr. Urquhart's was the only funded application in Atlantic Canada. Each application went through a 3 stage review process where only successful applicants advanced to the subsequent stage.

Dr. Urquhart is an Assistant Professor and Ramia Scientist in the Department of Surgery, with cross-appointments in the Department of Community Health and Epidemiology and Division of Medical Education. She is also a Senior Scientist with the Beatrice Hunter Cancer Research Institute and an Affiliate Scientist at NSHA.

**NSHA Research Services has been proud to support and work with Robin--
Congratulations to Robin and her team!**

October 2017

Communication Survey Results

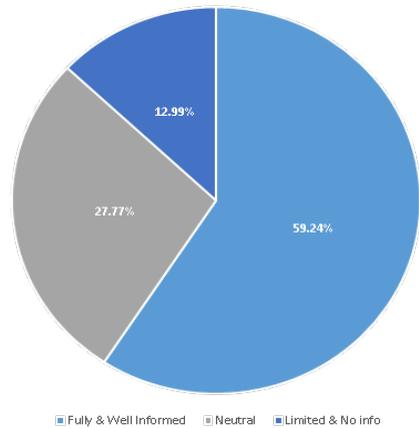
We Are Listening! *Research in Progress* Moves Online

Thank you to those who participated in our Communications Survey.
We had 112 responses!

Key findings:

- 60% felt that they were “well informed” or “fully informed”; add the neutral response of “adequately informed” and we have an **87% satisfaction rate!**
- Our website was the highest ranked DIGITAL tool, with emails from Michelle coming in 2nd
- This newsletter was the highest ranked PRINT tool- but many of you said that you would prefer more online communications
- Knowing about Education and Funding opportunities as soon as they are available was ranked highest; self service frequency was ranked 2nd highest

What best describes your impression of communications within Research Services?



After analyzing the results, we are pleased to announce that this newsletter will now migrate online! Please visit the new home for NSHA Research News at the link below.

Benefits of Research In Progress online:

- searchable
- subscribe to updates or self-serve when interested
- same types of information (new staff, researcher accolades & researcher profiles) online
- information will be delivered faster than our print version

We say goodbye to our newsletter in print form but our Annual Report and Research Focus will still remain available in print and online.

Research In Progress is online now and can be accessed here:

<http://www.cdha.nshealth.ca/research-online-news>

A back catalogue of print newsletters is here:

<http://www.cdha.nshealth.ca/discovery-innovation/publications/research-progress-newsletter>

We used REDCap for our survey, please check it out at: <http://www.cdha.nshealth.ca/REDCap>



Dr. Thomas Marrie

Welcome Dr. Thomas Marrie

We welcome Dr. Thomas Marrie as the interim Vice President Research, Innovation & Knowledge Translation at NSHA.

Dr. Thomas Marrie is an accomplished researcher, administrator and infectious disease specialist. Having studied pneumonia for more than 4 decades, Dr. Marrie came full circle as the 14th Dean of Dalhousie Medical School (2009-2014) – the very institution where he studied medicine.

As Dean, he ended his tenure with several significant accomplishments. The first class of the expansion of Dalhousie Medical School (Dalhousie Medicine New Brunswick) graduated in 2014 and an increased number of African-Nova Scotians now are enrolling in medical school.

A priority as Dean was to increase research capacity and in 2013 Canada's First Endowed Occupational Medicine Research Chair was established with J.D. Irving.

Dr. Marrie is a Fellow of the Canadian Academy of Health Sciences and served as the President of the board from 2011-2013.

Please join us in welcoming Dr. Marrie to NSHA!

Congratulations Dr. Michael Dunbar!



We extend our warm congratulations to Dr. Michael Dunbar, orthopaedic surgeon at NSHA, QEII Foundation Endowed Chair in Arthroplasty Outcomes and professor of surgery at Dalhousie University, who was inducted into the Canadian Academy of Health Sciences in September.

Dr. Dunbar holds leadership positions with Canadian Joint Replacement Registry; Canadian Arthroplasty Society and the International Knee Society. He authored over 100 scientific papers and has delivered 300 presentations world-wide. As principal or co-investigator his grant capture is over \$25 Million. He received the Samson Award for outstanding orthopaedic research in Canada over a ten-year period and was named one of the top 22 knee surgeons in North America by his peers. Please extend your best wishes to Dr. Dunbar on this great achievement.

Researcher Profile- Dr. James Robar

What is your current research project?

I am involved in several research projects with the common theme of improving radiation therapy or radiosurgery. One recent effort is the development of a new technology to detect a patient's body position during the delivery of high-energy x-ray beams, in order to monitor and ensure accuracy of treatment. Right now, my research team is focusing on stereotactic radiosurgery—a non-invasive treatment of benign or malignant tumours, as well as of conditions such as arteriovenous malformations (AVMs) or trigeminal neuralgia. The technology that we are developing allows us to read out the patient's head position in three dimensions, 200 times per second and with sub-millimetre precision. If the patient moves, we will know, and can interrupt treatment. The technology uses an array of novel capacitive sensors.



Dr. James Robar

How did you become interested in your research topic?

A few years ago, I came across a black paint that was highly electrically conductive. You could apply a thin layer to virtually any material, and then use the painted region, for example, as a switch by touching it. But when I experimented further, I realized that it was detecting the approach of my hand long before it had made contact, and with high sensitivity. This is basic physics! I then 3D-printed a ring-shaped prototype that could, for example, be placed around a patient's head. The detector element was very thin, so it wouldn't disturb the incoming radiation beams. At the time, my five-year-old Keira helped me paint on the eight detectors. With some basic data acquisition and math (mostly by me, not Keira), pretty soon we were creating doodles on a monitor by waving our hands in the air. It was fun and proved the concept.

What has been unexpected about your findings so far?

Since the human body allows a high capacitance, but plastic does not, the detector can effectively “see through” an immobilization mask that the patient may be wearing for treatment. This wasn't a property that we originally thought about, but it is exactly what we want. It also provides a key competitive advantage – other real-time approaches have to monitor the patient's skin, which gives a poor surrogate for the position of a brain tumour.

What's innovative about your research?

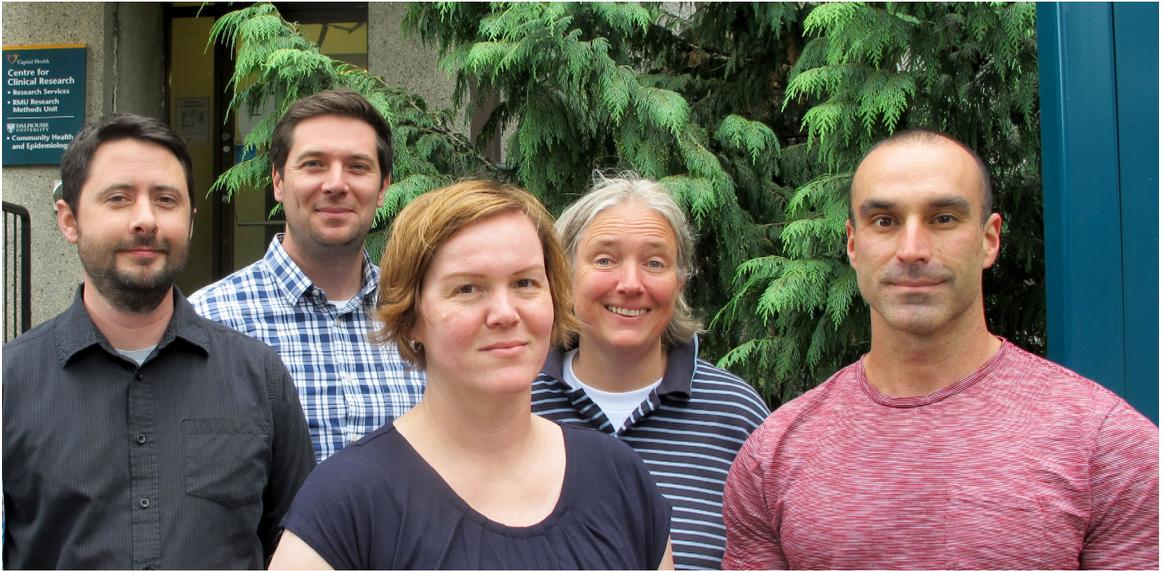
Nobody has built a system like this before, to our knowledge. With the help of Dalhousie ILLI, we filed a patent. Now, through collaboration with our industry partner Brainlab AG and with support from ACOA, we are working on this technology to bring the tech to patients worldwide.

One word that best describes how you work: matinal

What technology can't you live without? The GPS chart plotter on my sailboat. It keeps me on target.

How do you envision your research benefiting the “public at large”?

We foresee all of our research projects as improving outcomes for patients, increasing efficiency of care, or improving the patient experience. Also, by doing the R&D within a graduate program, we educate many medical physics trainees – who will be the next generation of clinical physicists and innovators.



RMU Staff: Joe Fraser, Chris Theriault, Daniela Meier, Olga Kits & Steve Doucette

What's the most requested service you provide to researchers?

Researchers often contact the RMU for database support and biostatistical consulting. Typically, these two services go hand in hand as our database specialists know very well how the data needs to be laid out in a database, in order to create an analytical data set that can be easily imported into a statistical software program. Over the last year, we have seen increases in requests for qualitative methods support and health economic consulting. We anticipate this trend to continue. More researchers are interested in a health economic evaluation of their intervention in order to assess additional benefits beyond immediate patient outcomes. This is an important consideration from a healthcare system perspective.

What's the newest thing at the RMU?

The newest support available to researchers via the RMU is REDCap. REDCap, is a free, secure, web-based application for building and managing online surveys and databases for research studies. It was introduced at the NSHA earlier this year and is available to all NSHA-affiliated researchers. REDCap presents a much more sophisticated option for high quality and secure data capture compared to commonly used products like Microsoft Excel or Access. To date, 2537 Institutions in 116 countries utilize it, which opens up possibilities for multi-centred research studies in Canada and beyond. Databases can be quickly developed and customized based on a study's needs. RMU database specialists serve as REDCap administrators and oversee the creation of projects as well as management of users. The RMU will be offering two workshops in the near future to introduce researchers and research staff to REDCap to explore how it could benefit their research studies. Stay tuned for the announcements.

What is something researchers may not know about the RMU?

One of the most common misperceptions about the RMU is that we charge for all of our services. While we do charge for some of our services, there is a significant number of services that we provide for free. They include the one-hour initial consult, all preparatory work required for the duration of a project, support for research design and methods refinement, initial support in the context of a grant application and development of Statement of Work. We encourage researchers to look for funding opportunities and include our services in their budgets in consultation with our consultants. You can find more specific information about our services on our website. <http://www.cdha.nshealth.ca/rmu>

Educational Opportunities

Date/Time	Topic	Presenter (s)	To Register/More Info
October 12, 2017 <i>12 Noon - 1pm</i> <i>RMU Room 114</i>	Establishing Grants, Institutional Awards & RMU Consulting Reports	Jennifer Thurlow, Jayne Sierens, Daniela Meier	email: elaine.strohm@nshealth.ca
October 18, 2017 <i>12 Noon - 1pm</i> <i>RMU Room 114</i>	Patient Engagement	Jonathan Dyer	email: elaine.strohm@nshealth.ca
October 24, 2017 <i>12:00noon- 1:00pm</i> <i>Royal Bank Theatre</i>	Privacy & Research at NSHA	Matt Holland	email: elaine.strohm@nshealth.ca
November 9, 2017 <i>12 Noon - 1pm</i> <i>RMU Room 114</i>	Submitting & Reporting to the NSHA REB: Set Yourself Up for Success!	Brittany Scott, Starla Burns	email: elaine.strohm@nshealth.ca
November 16, 2017 <i>12 Noon - 1pm</i> <i>RMU Room 114</i>	Establishing Contracts & Research Finances	Alicia Benton, Jane MacLeod	email: elaine.strohm@nshealth.ca
November 22, 2017 <i>12 Noon - 1pm</i> <i>RMU Room 114</i>	Research Designs	Dr. Jill Hatchette	email: elaine.strohm@nshealth.ca

Not available to come in person? Have Lync/Skype for Business?

You may be able to join an education session remotely! Please send a note to the registration email next to each session to inquire about joining sessions remotely.

NEW: Education Session Recordings Available Online!

Disappointed to have missed an educational session? Select educational sessions are now available for viewing as post-session recordings online.



Check out our vimeo channel!

<https://vimeo.com/channels/nsharesearch>

Questions/Concerns/Comments? Contact: amy.wilson@nshealth.ca

Internal Funding Opportunities & TRIC Recipients

Deadlines	Program Name	Agency	More Information
November 1, 2017 May 1, 2018	Translating Research Into Care (TRIC)	QEII Foundation	http://www.cdha.nshealth.ca/discovery-innovation/qeii-fdn-tric-grants
March 15, 2018 September 15, 2018	NSHA Research Fund (NSHA RF)	NSHA	http://www.cdha.nshealth.ca/discovery-innovation/research-fund

Congratulations TRIC Award Recipients!

The Translating Research Into Care (TRIC) health care improvement research program was established in 2013 with funding from the QEII Foundation and the IWK Foundation. The funding program supports research that will provide evidence and facilitate the translation of clinical science into improved healthcare policy, service delivery and patient care at NSHA and IWK Health Centre.

May 2017 TRIC Award Recipients

Name	Award	Research Description
Jacqueline Gahagan & Ashley Harnish	Level 1 \$2,931	Improving Timely Care and Access for Trans and Gender Diverse Population in Primary Health Care-Central Zone: An Exploratory Study
Matthew Rigby & Laurette Geldenhuys & Colleen Caines	Level 3 \$59,700	Implementation of an Intraoperative Margin Assessment Protocol in Head and Neck Cancer Surgery
Michael Vallis & Lynn Edwards & Janelle Comeau	Level 3 \$60,000	Supporting Psychosocial Distress in Diabetes Care: A Patient-Centered Integrated Care Management Initiative

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Research Resources

Tell Us About You & Your Research!



We want to know about your success! If you are published, receive an award or have some very innovative research- we want to know!

We also invite all NSHA Researchers to join the Researcher Directory. You can join the Directory or access Directory listings at:

<http://www.cdha.nshealth.ca/discovery-innovation/researcher-directory>

Please contact NSHA Research Publications Coordinator Amy Wilson with stories of your research: amy.wilson@nshealth.ca 902-473-5156

RMU Research Methods Unit **RMU**

Research Methods Unit (RMU)

Do you need help refining the quantitative or qualitative design and methods for your research project, health economics, statistical, and/or data management support? Would you like a quote for our services for an upcoming funding application? The Research Methods Unit can help. Our priority is to support your research.

It's easy—visit our web site and submit the RMU Consultation Request form. We'll be in touch shortly thereafter to book an initial consult during which we will work with you to identify the best solution(s) for your needs. For more information about how the RMU can help your research, how the RMU consulting process works or to request a quote for an upcoming research grant application, please visit:

<http://www.cdha.nshealth.ca/rmu>



Research in Progress is produced by NSHA Research Services. You can view this newsletter and the newsletter archive at:

<http://www.cdha.nshealth.ca/discovery-innovation/research-progress-newsletter>

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