

# Research in Progress

## Volume 10, Issue 2

Celebrating  
10 Volumes!

### Dr. Patrick McGrath & Dr. Patricia Lingley-Pottie Win 2017 Governor General's Innovation Award

Congratulations to our Vice President of Research, Innovation and Knowledge Translation Dr. Patrick McGrath and Strongest Families Institute CEO and Dalhousie Professor Dr. Patricia Lingley-Pottie for being selected as 2017 Governor General's Innovation Award recipients.



*Dr. Patricia Lingley-Pottie & Dr. Patrick McGrath*

Founded in 2016 by Governor General David Johnson, the Innovation Awards recognize Canadians at the national level who “contribute to our country’s success, who help shape our future and who inspire the next generation”.

Dr. Lingley-Pottie and Dr. McGrath founded the Strongest Families Institute (a non-profit organization) over 20 years ago and today provide thousands of families with mental health services via phone/online across Canada, Finland and Vietnam. Their proprietary software IRIS (Intelligent Research and Intervention Software) provides services for families at their convenience- eliminating the need to travel. “The social impact we are having on children, youth and families lives is very strong... we are removing barriers to care for them”- says Dr. Lingley-Pottie. The services are free of charge in areas where funding is available.

Ahead of the May 23 awards ceremony in Ottawa, Governor General David Johnson spoke with the 2017 winners via Facebook. You can view the conversation here (~7:30): <https://www.facebook.com/gginnovation/videos/425465254478965/>

In addition to this award, Dr. McGrath and Dr. Lingley-Pottie are co-recipients of the 2013 Earnest C. Manning Foundation Principle Award for Social Innovation and the \$100,000 Encana Principle Award. Dr. McGrath was also named an Officer to the Order of Canada in 2002.

May 2017

## Introducing a New Tool for NSHA Researchers to Capture & Manage Research Study Data

Are you looking for an efficient and secure method to capture and manage your research study data? Research teams often resort to entering and storing their data on Microsoft Office and other spreadsheets. This seems to be the most economic option available to them as custom-built database applications can be time-consuming and costly to build. However, storage of data on spreadsheets can result in data integrity, quality and security issues as they are often unable to effectively capture data. This is especially true for large and complex data models due to a lack of proper data control and security functions. The need for database applications that can ensure data integrity, quality and security has been an ongoing issue for many research teams within the NSHA.

Over the past year, the Research Methods Unit and NSHA IM/IT have been collaborating to implement a new research tool for NSHA affiliated investigators.

Research Services is happy to announce that NSHA investigators will now have access to REDCap.

REDCap is a free, secure, web-based application designed to support data capture for research studies. The system was developed by a multi-institutional consortium initiated at Vanderbilt University. It is a new tool designed for building online surveys and databases.

REDCap provides:

- A platform to efficiently create user friendly, related data entry forms
- The ability to create and manage study participant online surveys
- An intuitive interface for validated data entry (e.g., for data types and range checks)
- Audit trails for tracking data manipulation and data export procedures
- Ability to schedule and track critical study events (e.g., blood draws, participant visits, etc.)
- Export procedures for seamless data downloads to common statistical software packages
- The ability to host databases for multi-site use

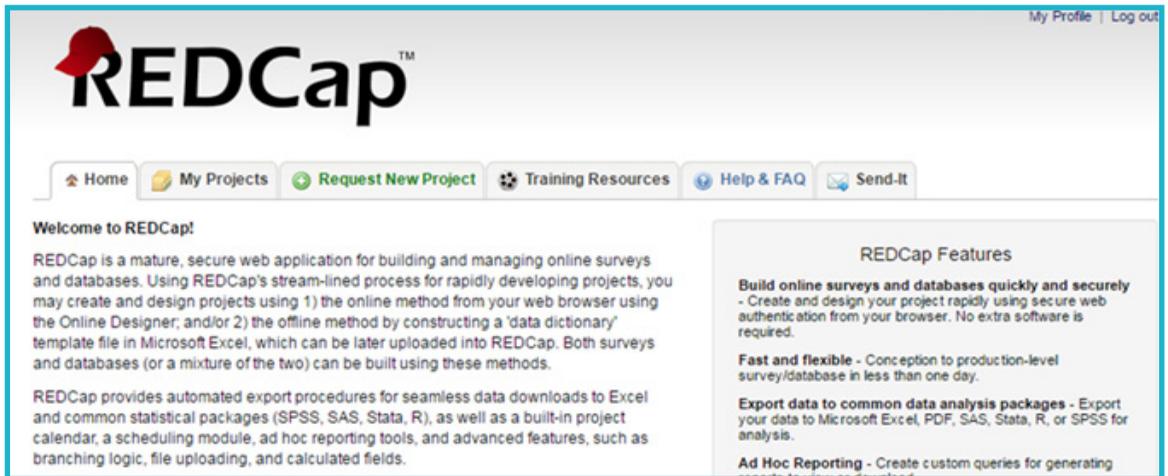
REDCap offers a streamlined process for rapidly developing surveys and databases from scratch through an intuitive ‘point and

**Research Services is happy to announce that NSHA investigators will now have access to REDCap**

click’ interface. REDCap projects can be easily shared between collaborators allowing researchers to leverage work that has been done elsewhere. It also allows

for the collection of anonymous or identified responses from survey participants by sharing a general survey link or sending a personalized invitation to a respondent’s email.

For more information, please visit: <http://www.cdha.nshealth.ca/REDCap>



*The REDCap homepage*

Using REDCap for research studies has many advantages:

- It is secure and web-based. Input data from anywhere in the world with secure web authentication, data and activity logging.
- It is fast and flexible.
- It allows for multi-site access. Projects can be used by researchers from multiple sites and institutions.
- Research teams are in total control of shaping the database or survey.
- It provides advanced question features, auto-validation, branching logic, and stop actions.
- It allows mid-study modifications. Research teams may modify the database or survey at any time during the study.
- It has data import functions. Data may be imported from external data sources to begin a study or to provide mid-study data uploads.
- It has data comparison functions. Double data entry / blinded data entry.
- It allows for export survey results to common data analysis packages. Export data to Microsoft Excel, SAS, STATA, R, or SPSS for analysis.

- It can save empty or completed surveys or forms as PDFs. Generate a PDF version for printing in order to collect responses offline or review completed responses.

While REDCap is a great new addition of tools available to NSHA affiliated investigators, it does have its limitations. It does not lend itself well to complex data models, does not dynamically create records, and has an inflexible production mode. Its form design is linear, and it may not be the best choice for research projects that have specific technology requirements at the centre of the study. REDCap also provides limited reporting and data checking features, and additional software or data checks may need to be used.

However, even with its limitations, it will work for many research studies conducted at NSHA. The team at the Research Methods Unit, together with NSHA IM/IT, is excited to provide a framework to help researchers to achieve their study objectives.

# Researcher Profile

## Dr. Ratika Parkash - Cardiologist

### What is your current research project?

Currently I am working in 2 main streams: atrial fibrillation and cardiac devices. We just published a study about the effect aggressive blood pressure control has on the recurrence of atrial fibrillation after a procedure called ‘catheter ablation’; we were looking to figure out if this could improve outcomes in patients with atrial fibrillation.

We are also looking at the best way to follow up with patients who have cardiac devices, this population is growing and we need to improve our efficiency of follow up.

### How did you become interested in your research topic?

When I was a medical student, I was fascinated with the heart mechanics and then also became interested in the electrical function of the heart. When therapies for atrial fibrillation became more advanced, it became more interesting and I wondered how we could improve outcomes for patients which steered me to research.

### What has been unexpected about your findings so far?

Mainly that our hypothesis about blood pressure control didn’t work. It had shown up in animals and prior studies but it didn’t work for us. We learned a lot from this, our study was short term and we learned that better outcomes likely require more time to work. If you started off with good blood pressure you were ok, but we learned that we need to treat people for longer periods of time to have a bigger effect.

### What’s innovative about your research?

Our project is one of the first clinical trials specifically for atrial fibrillation and catheter ablation. We are also looking at a web based platform to give better access to our patients, especially those at a distance so they don’t have to travel as much.

**One word that best describes how you work:** Persistent

**What technology can’t you live without?** Blackberry, Mac, SAS

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

I hope my research improves the quality and quantity of life for patients with atrial fibrillation but I also want to reduce adverse events for those with cardiac devices and perform follow up with patients with these devices as efficiently as possible.



*Dr. Ratika Parkash, FRCPC, Cardiologist*

# Welcome Andrea Dean



Andrea Dean, Program Manager,  
Research Education Program

We are pleased to announce that Andrea Dean has filled the position of Program Manager for the Research Education Program at NSHA Research Services.

Andrea brings a wealth of knowledge and experience to this position. Employed at NSHA since 2007, she has worked on 50+ industry-sponsored clinical trials as a Research Coordinator in the Department of Ophthalmology & Visual Sciences. During that time she worked collaboratively on clinical trials within other Departments such as Endocrinology, Hematology, Urology, Geriatrics, the Dalhousie MS research unit and was instrumental in helping set up Ophthalmology as a shared service. She also created and implemented an Ophthalmology Research Coordinator Training

Guide complete with SOPs, training requirements for research staff and instructions for new research coordinators for the Department of Ophthalmology & Visual Sciences.

Andrea served a term as a general member for the Capital Health Research Ethics Board from 2009-2013. Originally Andrea had pursued a career in Dietetics as a graduate from Mount St. Vincent University with a Bachelor of Science in Applied Human Nutrition, but has since preferred working in research.

Andrea is a proud wife and mother of two young children and enjoys spending time with her family when not working.

The cover of the Research Focus report, Volume 10. It features the NSHA Research Services logo and the title "Research Focus" in a large, stylized font. Below the title, there is a photograph of a person in a laboratory setting. The cover also includes a quote from a patient and a testimonial from a researcher.

With its aging population and rising rates of diabetes, Nova Scotia carries a growing burden of age- and diabetes-related eye disease. Researchers in the NSHA/Dalhousie Department of Ophthalmology & Visual Sciences are tackling the challenge with high-impact research. Together with their colleagues and with collaborators around the world, they are transforming the understanding, diagnosis, monitoring and treatment of eye diseases.

Research strengths include: world-leading work to understand glaucoma through long-term clinical studies and the development of powerful imaging technologies; identifying genes and treatments for inherited eye diseases; testing novel therapeutics for macular degeneration and diabetic retinopathy; and developing a new generation of safe and effective treatments for pain and inflammation in the eye.

The department is deeply committed to fostering the next generation of eye researchers and has developed extensive supports for trainee research.

**Study Participant Enjoys Recurrence-Free Recovery**

"I was lucky... I received monthly injections and, within three months, my vision had started to improve. By the end of one year of treatment, my vision was almost normal."

Thanks to Lewis' retina in support using equipment purchased with grants from the Heinen Foundation and the QEP Foundation.

The loss of central vision came on suddenly for Vic Lewis. In 2009, the former high school teacher and website developer noticed a black area in the middle of his left eye visual field. It grew so quickly, soon he could only see one side of the eye. An ophthalmologist at his frequent eye clinic promptly referred him to a retina specialist at the QEP Health Sciences Centre. Dr. Alan Charles told:

"Vic, you have macular degeneration, a type of age-related macular degeneration that can progress to total blindness," says Mr. Lewis, now 75. "I was lucky... the put me on a trial of a new drug. After 16-month monthly injections and, within three months, my vision had started to improve. By the end of one year of treatment, my vision was almost normal. It's been fine ever since."

Mr. Lewis is now one of the longest recurrence-free wet AMD patients in the world. "The team at the Eye Care Centre is exceptional," he says, "and that staff led by Tracy MacCormack and Andrea Dean (pictured above) have been a steady support since the beginning... I come back every three months for a thorough checkup with Dr. Alan Charles. Now his eyes are in excellent hands."

In an effort to show his gratitude to the Eye Care Centre for its diligent care, Mr. Lewis, a freeman, teamed up with the QEP Foundation and the Heinen Foundation to make him his own macular degeneration retina scanner. Now his eyes are scanned using equipment he helped fund. "I owe them so much. It was the best I could do."

ophthalmology

## Research Focus: Ophthalmology

The newest edition of *Research Focus* has been released. Read a collection of stories about research that is happening in the Department of Ophthalmology & Visual Sciences in print or online.

If you would like a printed copy of the report, please contact: [amy.wilson@nshealth.ca](mailto:amy.wilson@nshealth.ca)

The report is also available at:  
<http://www.cdha.nshealth.ca/discovery-innovation/focus-research-areas>

# Educational Opportunities

Date/Time	Series/Topic	Presenter	To Register/More Info
<b>June 20-23, 2017</b> <i>various times</i>	Grant Applications: Peer Review Observer	Nova Scotia Health Research Foundation	<a href="http://www.nshrf.ca/observer">http://www.nshrf.ca/observer</a>
<b>June 21, 2017</b> <i>12:00noon- 1:00pm</i> <i>RMU Room</i>	Research Education Program, Building Research Capacity- <i>Systematic Review</i>	Dr. Jill Hayden	email: <a href="mailto:elaine.strohm@nshealth.ca">elaine.strohm@nshealth.ca</a>
<b>Sept 28-29, 2017</b>	<i>Sink or Swim</i> - A workshop focusing on the practical application of Health Canada's Regulations and Standards to the conduct of research.	Andrea Dean	email: <a href="mailto:andrea.dean@nshealth.ca">andrea.dean@nshealth.ca</a>
<b>TBD</b>	<i>ICH-GCP/ Division 5 Training- Group Sessions Available</i>	Andrea Dean	email: <a href="mailto:andrea.dean@nshealth.ca">andrea.dean@nshealth.ca</a>

## Not available to come in person? Have Lync?

You may be able to join an education session remotely! Please send a note to the registration email next to each session to enquire 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](mailto:amy.wilson@nshealth.ca)

## Follow Us on Social Media!



Stay up to date on funding opportunities, education sessions, publication releases and more.

Twitter: [@nsharesearch](https://twitter.com/nsharesearch) Facebook: [facebook.com/NSHAResearch](https://facebook.com/NSHAResearch)

# Internal Funding Opportunities

Deadline	Program Name	Agency	More Information
June 15, 2017	Fibromyalgia Funding	QEII Foundation	email: jennifer.thurlow@nshealth.ca
September 15, 2017	NSHA Research Fund (NSHA RF)	NSHA	<a href="http://www.cdha.nshealth.ca/discovery-innovation/research-fund-competiton">http://www.cdha.nshealth.ca/discovery-innovation/research-fund-competiton</a>
November 1, 2017	Translating Research Into Care (TRIC)	QEII Foundation	<a href="http://www.cdha.nshealth.ca/discovery-innovation/qeii-fdn-tric-grants">http://www.cdha.nshealth.ca/discovery-innovation/qeii-fdn-tric-grants</a>

## Congratulations TRIC Award Recipients!

The Translating Research Into Care (TRIC) program was established in 2013 at the QEII Health Sciences Centre and the IWK Health Centre to support research that will provide evidence and facilitate the translation of clinical science into improved healthcare policy, service delivery and patient care. In 2017, eligibility for the program was expanded to include all of Nova Scotia Health Authority (NSHA).

## November 2016 TRIC Award Recipients

Name	Award	Research Description
Virender Bhan & Trudy Campbell	Level 1 \$2,998	Identifying and Incorporating Patient and Provider Preferences into a Comprehensive Nursing Assessment for Follow-up MS Care
Michael Vallis & Tara Sampalli	Level 2 \$29,714	Changing Systems to Integrate Health Behaviour Change Competencies into Primary Health Care
Jill Hayden & Samuel Campbell & Susan Delaney	Level 3 \$59,120	Reducing Inappropriate Diagnostic Imaging for Low Back Pain in the QEII Emergency Department
Alix Carter & Peter M MacDougall	Level 3 \$59,579	A Notification System to Reduce Interventions for Patients Receiving Palliative Care Transported by Ambulance to the Emergency Department
Jai Shankar & Vicki Sorhaindo	Level 3 \$60,000	Implementation of "Rapid" Endovascular Thrombectomy (EVT) for Treatment of Acute Ischemic Stroke (AIS) - Prospective Evaluation

# 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 success: [amy.wilson@nshealth.ca](mailto: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>



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

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