Annual Report

2017-2018 / www.nbhrf.com

New Brunswick
Health Research
Foundation

Fondation de la
recherche en santé
du Nouveau-Brunswick

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FINANCIAL HIGHLIGHTS OF 2017-2018

A year of continued growth

Financing Profile	2017-2018	Change from prior year
Funds received from GNB	$5,076,592	+30.70%
Direct Investment by NBHRF through Grants and Awards	$3,960,906	+44.76%
Matching and Leveraging from Partners	$5,692,217	+13.0%
Total Funds invested as Salary Awards and Operating Grants by NBHRF and Partners	$9,653,123	+24.18%
Total Funds raised as Salary Awards and Operating Grants by New Brunswick Health Researchers by themselves	$2,717,245	+4.10%
Overall Investments in the New Brunswick Health Research Enterprise	**$12,370,368**	**+19.13%**
Trainees and Highly Qualified Personnel Supported by NBHRF in 2017-2018		
Summer Studentships	19	-48%
MSc Studentships	7	-0.1%
PhD Studentships	5	-0.4%
Post-doctoral Fellowships	12	+14%
Clinical Scholarships	3	Even
Health Research Chairs	12	Even

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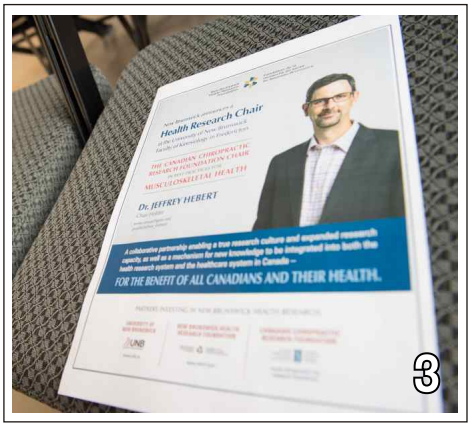


Message from the Chairperson

Ten years. Ten years have passed since the creation of the New Brunswick Health Research Foundation (NBHRF). In those ten years we have created something special. We have created an innovative organization that promotes, coordinates and supports all aspects of health research.

Our roots are in the provincial health plan entitled *"Transforming New Brunswick's Healthcare System: The Provincial Health Plan 2008-2012"* which gave us our initial guidance. From there, we have gone from an initial investment of just over $800,000 to coordinating over $12,000,000 in investments.

We have had opportunities to align research funding with the population needs of the province. We have researchers like Dr. Carole Goodine focused on our aging population. We have researchers like Andrew Garsch focused on our military personnel. We have researchers like Dr. Danielle Bouchard focused on chronic conditions.

We have had opportunities to build capacity in people and infrastructure. We have Health Research Chairs like Dr. Jeff Hébert, the Research Chair in Musculoskeletal Health. We have networks like the MSSU that is focused on providing infrastructure and data analysis to facilitate more patient-oriented health research. We have new recruits like Dr. Daniel A. Nagel who is co-leading a review of evaluation frameworks for community health centres.

We have had opportunities to increase support for clinical health research. We have Chairs like Dr. Tony Reiman, the Innovative Clinical Trials Chair. We have emerging leaders like Dr. Petra Kienesberger who recently was awarded a large CIHR operating grant. We have Rising Stars like Dr. Stacy Grieve who presented at the 9th Annual New Brunswick Health Research Conference.

These opportunities are made possible through collaboration and partnerships. We are grateful to the Government of New Brunswick and its Regional Development Corporation for providing growing support over the past ten years. We have been able to leverage this support into additional financial support for the provincial health research community.

The numbers show strong growth over the past ten years, a trend we are pleased to see continuing this fiscal year. At NBHRF we are not only pleased to see an increase in the "big" grants, and the large dollars they bring into the research enterprise, we are just as happy to see that our internal programs like our Summer Studentships – a program designed to give students exposure to research – are oversubscribed each year. Our various MSc, PhD, and Post-doctoral programs are seeing larger numbers of applicants. Through these programs we are helping to ensure that we are developing the researchers of the future. We look forward to continuing to focus on promoting, coordinating and supporting all aspects of health research in the Province.

The Foundation will continue to focus on specific areas of research, continue to collaborate with partners and continue to be accountable to our stakeholders.

We encourage you to look through the articles in our report highlighting the research our researchers are involved with and leading, and hope you will celebrate with us the successes of the past year.

Dr. Jeff Hébert

Musculoskeletal Health Research Chair

As the Canadian Chiropractic Research Foundation Chair in Best Practices for Musculoskeletal Health at the University of New Brunswick, Dr. Jeff Hébert's focus is on health research aimed at improving lives.

“Back pain by itself is the number one cause of disability worldwide,” says Hébert. “When we combine all forms of spinal pain, like neck and back pain, and we include other musculoskeletal problems like osteoarthritis, it's very clear that these health problems pose a substantial burden on individuals and on society.”

Along with colleagues in Canada, Denmark and Australia, Hebert is focused on three areas of research.

First, they are trying to identify the ways musculoskeletal problems relate to other important health problems, such as cardiovascular issues.

“While spinal pain is the leading cause of disability, cardiovascular disease is the leading cause of mortality. Surprisingly, relatively little is known about the way these diseases relate to each other,” he says. Spinal pain may cause people to become more sedentary, and that sedentary behaviour may increase their risk for certain diseases and cardiovascular issues. Alternatively, there is some evidence that plaque in the arteries and arterial disease itself may cause some forms of back pain, or that certain medications used for musculoskeletal pain increase the risk for cardiovascular events.

A second area of research involves investigating the clinical outcomes experienced by patients who undergo treatments for musculoskeletal disorders.

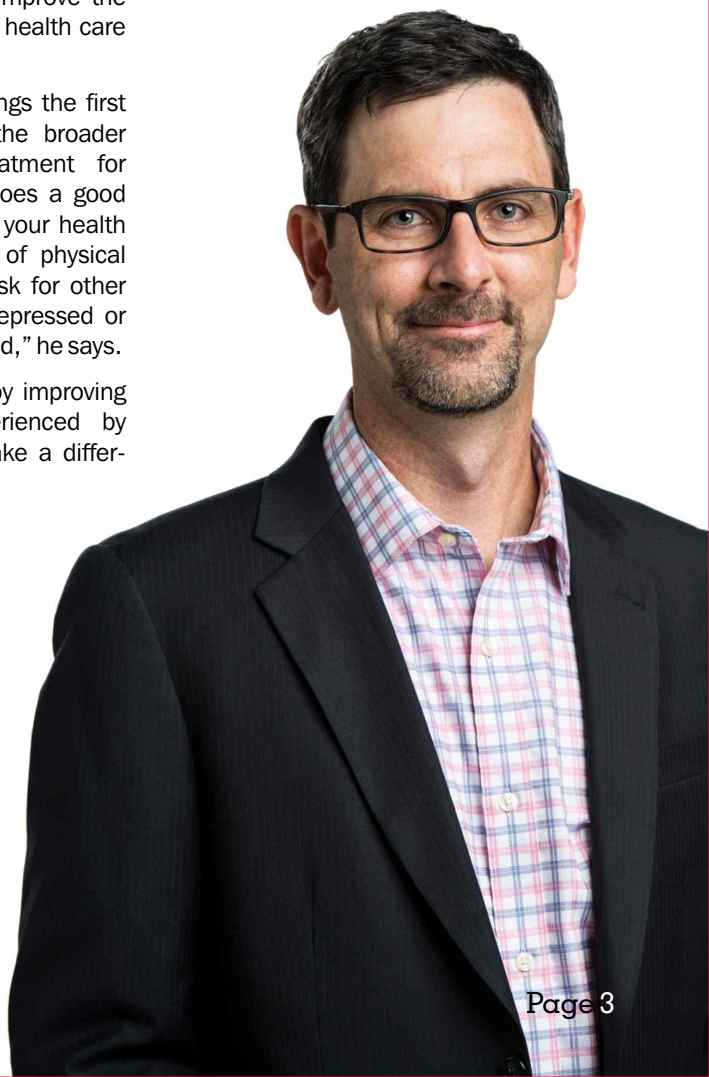
“Typically, the success of these procedures has been judged by the average outcome experienced by patients. The problem here is that not all patients experience the average outcome,” he says. They are attempting to identify individual outcomes and, more importantly, the factors that predict the outcomes in order to set appropriate expectations and select potentially the best therapies for people with various problems.

This is part of a larger approach called precision medicine. The goal of precision or personalized medicine is to identify the right treatment for the right patient at the right time, says Hébert. “If we can do that, there is a lot of potential to improve the efficiency and effectiveness of health care delivery.”

The third area of research brings the first two together and looks at the broader health ramifications of treatment for musculoskeletal disorders. “Does a good outcome result in changes to your health behavior, such as your level of physical activity? Does it lower your risk for other diseases? Do you feel less depressed or are you less prone to lower mood,” he says.

Hébert says he is motivated by improving the clinical outcomes experienced by patients. “I think to really make a difference, it's important that we not only focus on the area that we happen to have a particular expertise in, we need to consider the whole person. And I think if we can do that, we'll probably be more effective as clinicians and our research discoveries will be more impactful.”

Hébert and his family relocated to New Brunswick from Australia last year, thanks to support from the New Brunswick Health Research Foundation along with the Canadian Chiropractic Research Foundation and the UNB Faculty of Kinesiology.



Dr. Tony Reiman:

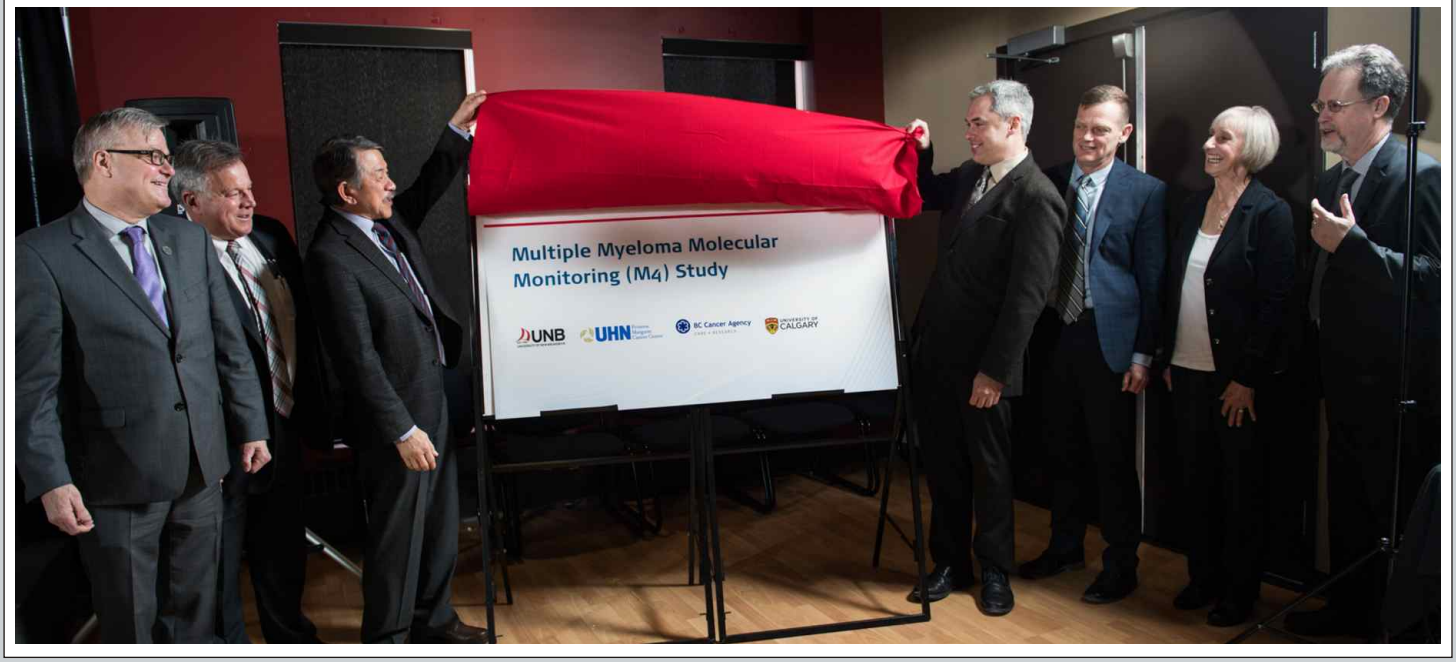
Terry Fox Project and Innovative Clinical Trials Chair

As a medical oncologist at the Saint John Regional Hospital, Assistant Dean Research at Dalhousie Medicine New Brunswick and the Canadian Cancer Society Research Chair at the University of New Brunswick, Dr. Tony Reiman specializes in researching cancer drug treatment. One aspect of his research is clinical trials.

"The willingness of the hospital, the medical school and UNB to collaborate in supporting this research is really a foundational element of our work. We work with other cancer centres across Canada and around the world, and with companies that make new cancer drugs to try those and determine the best way of using them for our patients," says Dr. Reiman. "It brings new treatments to our patients, often years before they are routinely available."

He is part of the Canadian Cancer Trials Group, which runs a lot of the physician-led trials in Canada. "We're getting ready to open a new clinical trial across Canada for a cancer called multiple myeloma through that group that I'm leading. This one is a study that brings new treatment to our patients."

This project is related to another one he is lead on through the Terry Fox Research Institute looking at improving treatment of people living with multiple myeloma. It involves 250 multiple myeloma patients from across Canada. He and his team are



researching how to treat an individual's cancer by measuring, characterizing and targeting cancer cells that do not respond to initial treatment.

"That study is up and running. We just started accruing patients for the study in May, so we are about to put our fifth patient on. We have patients on already from Calgary, Toronto, Halifax and Saint John," says Dr. Reiman.

The other component of his research is lab-based. "In our lab, we're trying to develop new ways to treat cancers and to try and develop tools in the lab that help us understand which of the available treatments might be the best for a given patient."

The New Brunswick Health Research Foundation plays an important role in the work Dr. Reiman and his team does. He says they have been fortunate to receive a fair bit of research funding from the NBHRF.

"There is a research program from the Canadian Institute of Health Research (CIHR) called the Strategy for Patient-Oriented Research. This is a stream of funding from Canada's federal health funding agency to support research that will have more immediate impacts on patient outcomes as opposed to things that might be going on in research labs that could take years to come to the clinic," says Dr. Reiman.

The CIHR project he is working on involves matching funds from NBHRF.

"The grant is a five-year, $1 million total funding envelope from the two funders to help us develop our capacity to do innovative cancer clinical trials. We're using this funding to train graduate students and existing clinical trials research staff on our team to take us to the next level in terms of what we're able to do," he says.

"We have historically been a place where we participate in clinical trials that are led by others, and we're trying to improve our capacity to generate clinical trials research that is led from here in conjunction with our colleagues."

This is just one of the many projects that Dr. Reiman is a part of, though he is quick to point out he doesn't do it alone. "I am fortunate to have a lot of good people to work with. This is a real team effort."

What motivates him is his patients. "When I have to sit in front of a patient and say we're really running out of treatment options for you and there's not much more we can do to control your cancer – I would like to be having fewer of those conversations, and for people to be living longer and better with their cancer," he says.

Research projects can have immediate benefits for the participant, bringing new technologies and therapies to them in the clinical setting, says Dr. Reiman, as well as hopefully benefitting future patients.

"As research shows those new approaches to be effective, then they start to become part of the routine standard of care that we give to people. Yesterday's research becomes tomorrow's care."

Plus, the research being done in Saint John isn't just helping locally. It is connecting researchers to colleagues across Canada and around the world, keeping them on the leading edge so they can give patients the best possible treatment.

New Brunswick Senior's Care-Strategic Innovation Fund:

Dr. Carole Goodine

The last year has been an eventful one for Carole Goodine and the team working on the Polypharmacy App to improve health outcomes for older adults. "A lot of the work we've been doing has been to obtain funding for our project. AGE-WELL is funding my post doc fellowship in collaboration with the New Brunswick Health Research Foundation. The Centre for Aging and Brain Health Innovation, and the NBHRF are funding the actual project development," she said. In April, the project also received funding from the New Brunswick Innovation Foundation as part of the 2018 R3 competition.

The Polypharmacy App is still very much in the developing stages, said Goodine, but they've refined their concept and have developed a number of partnerships and collaborations, including an exciting one with Dr. Todd Lee and Dr. Emily McDonald, part of the research team from the McGill University Health Centre who are developing a software program called MedSafer.

"There are several resources and tools that are available that list medications that are potentially problematic in older adults, but they are all sort of paper-based," said Goodine. "What the group in Montreal have done is they've taken that first step to develop software to identify the medications that are problematic and they've taken it even a step further because they cross-referenced the person's medical conditions with their medications to come up with individualized recommendations."

"What's unique about New Brunswick is all of the province's nursing homes are doing a monthly assessment on residents. This assessment includes a resident's medical diagnosis, medications, and how they're functioning physically and mentally, as well as how they've been eating and moving. This means that we have all of the information in an electronic database," said Goodine.

The question is, can they come up with a system that will allow MedSafer to analyze their information.

"We're collaborating with the New Brunswick Community College Chair in Mobile First Technology. They're working on those links between our assessment data and the MedSafer software," she said. "We'll also be looking at how that data could be transferred and making sure that we're protecting privacy and following all of the Canadian rules and regulations."

There's a strong worldwide movement about medication safety and use of medications in older adults, said Goodine.

"Our end goal is to help reduce harm from medication and to increase awareness of some of the concerns that we have with certain medications as people age, and the importance of reassessing and re-evaluating medications as people age and their health status changes."

New Brunswick Senior's Care-Strategic Innovation Fund:

Dr. Erik Scheme & Dr. Emily Read

Innovation might not be the first word that comes to mind when you think of senior care, but maybe it should be. Researchers, like Dr. Erik Scheme and Dr. Emily Read, are focusing their skills on products, services and practices that address the needs of aging adults and the challenges that come with an aging population. One such product is eChart.

As NB Innovation Research Chair in Medical Devices and Technologies, Dr. Scheme has a mandate to work with industry and government to help build the health technology sector in the province. Dr. Read is a close colleague in nursing and an expert in employee health and wellbeing, healthy aging, health promotion, and the use of technology.

eChart Healthcare Inc., founded by Amanda Betts, is an electronic medical record for long-term care facilities. Many facilities are still charting on paper and Amanda saw a market for the appropriately sized software platform for managing that.

One challenge in creating a platform that works is integrating it into the workflow at long-term care facilities. Personal support workers, though they do an important job, don't tend to be trained with technology. "It's got to be a combination of technology that can help facilitate things and reduce the burden on the actual employees without being too overbearing," says Dr. Scheme. "So that's eChart."

The research will help to scale and validate the impact of using the eChart digital health platform for long-term care facilities.

"The idea is to work with the company as they onboard new care facilities and to do a baseline assessment of the teams themselves. We have a number of validated questionnaires around preparedness to work, burnout and stress, and other aspects of the employees. They'll use the platform and then we'll do reassessments after three and six months," says Dr. Scheme.

"Not only are we asking questions that will validate the impact of switching to a platform like this, but we'll also be getting really interesting data from the incoming baseline assessments about how this workforce feels within the workplace," he says.

They're also learning all kinds of interesting things about being technology companies and researchers interacting with a traditionally non-technical seniors and caregiver sector.

Dr. Scheme considers the New Brunswick Health Research Foundation an important resource for the province.

"First, NBHRF gives us a regional ability to get projects off the ground, to build them to the point where we can then leverage that through larger federal funding," he says. "Second, the NBHRF actively partners with national organizations to help bring more focus to the province. Their support has really been instrumental in building my research program and networks."

New Brunswick Senior's Care-Strategic Innovation Fund:

Dr. Sarah Pakzad

Imagine the difference it could make to individuals, families and the health care system if medical professionals were better able to predict the risk of dementia.

Currently, there is no way to do that, but that could soon change thanks to Dr. Sarah Pakzad, a professor of clinical neuropsychology at the Université de Moncton.

Dr. Pakzad's project, the Development and Validation of the NFI (Neurocongnitive Frailty Index) Prototype Application to facilitate the Early Detection of Dementia in the Elderly, was one of the recipients of funding through the Senior's Care Strategic Innovation Fund, a partnership between the Centre for Aging and Brain Health Innovation (CABHI) and the New Brunswick Health Research Foundation.

This is a project Dr. Pakzad has been working on for seven years, determined to create a tool the medical community can use in order to predict the risk of developing dementia in the elderly.

NFI draws on a database of more than 10,000 Canadian patients over the age of 50 to better predict the risk of dementia, while considering things such as physical health and the ability to multi-task and remember. Testing has proven the application to be over 90 per cent accurate.

Now in it's final stages of development, NFI will soon be made into a mobile app that can be used by doctors and nurse practitioners to predict the percentage of probability that a patient will develop dementia.

Knowing whether or not a patient is at high risk will help medical practitioners determine their course of action and know if a referral to a specialist is necessary, which in turn could help reduce long waiting lists. That is especially important in a province like New Brunswick where there are fewer specialists and an aging population, with almost 20 per cent of residents over the age of 65.

Early identification of dementia means there can be treatment options and the hope of slowing the progression of the disease.

As well, being able to determine early on that a patient isn't at risk for dementia will allow medical professionals to explore other illnesses that have similar symptoms and are often treatable.

This app is more than just a tool for medical professionals – NFI has the potential to improve quality of life and bring peace of mind to patients.

New Brunswick Senior's Care-Strategic Innovation Fund:

Dr. Dhirendra Shukla & Vikram Aditya Devagutapu

Being a caregiver to a senior can be overwhelming, especially when you're trying to find information, services or other resources.

Recognizing this is a problem more and more people are facing, Vikram Aditya Devaguptapu, founder of ServUs Health Inc., began working on a solution as part of his master's degree. Now he is focused on it full-time, developing and commercializing the research-based product through the J Herbert Smith Centre for Technology Management & Entrepreneurship program at the University of New Brunswick. Dr. Dhirendra Shukla is the program chair.

The ServUs project Devaguptapu is working on with Dr. Shukla is connecting family caregivers of seniors with information and resources to support their daily care giving tasks and responsibilities.

Devaguptapu says they are creating a platform that is a multi-user interface to help seniors and caregivers navigate through health care, social services and government programs.

"People are overwhelmed with the amount of information and knowledge, and don't know how to navigate, don't know what to do, don't know where to go, and as a result, they're stuck," says Dr. Shukla. "What this platform does in a very simple way is it enables them to engage and interact with information and knowledge that is relevant for them and what they need."

"The platform also allows the caregiver to bring together their care team and communicate with them, much like they would through a group chat," says Devaguptapu.

"That could include some health care professionals, a home care provider, friends and family members. The platform can enhance the coordination between your care team, which is another major issue people are dealing with," he says.

"Similar to precision medicine, this tool can be customized around the care team and what they need to support them," says Dr. Shukla.

Their project has two goals. The first is to develop the tool, the second is to make sure it is doing what they want it to. That means measuring its ability to solve the problem it was designed for.

"The Alzhiemers Society and York Care Centre have played a big role in supporting this," says Devaguptapu, partnering with him and giving him access to their clients network.

Also playing a critical role in the project is the NBHRF.

"They are thought leaders and they are willing to take risks where they see meaningful contributions to society and community," says Dr. Shukla.

The NBHRF has boosted his confidence, says Devaguptapu, as well as giving the project validation and support.

The foundation has given him a voice, enabling him to do several demonstrations and presentations. The result is more people are aware of the platform and that increased awareness has helped open more doors for the researchers.

"It's a great opportunity and a wonderful partnership," says Dr. Shukla. "I think it's worthwhile talking about and thinking about what's next in terms of the partnership and how can we collaborate in a deeper way and how do we move the research forward, beyond what the scope is right now."

Shaping Purpose: Thank you for your service

Adjustment to Civilian Life

Life is filled with change, but sometimes the big transitions can leave us unable to figure out what to do next. That is the position Andrew Garsch found himself in five years ago when he was medically released from the military after 12 years.

"I was clinically depressed and my world was terrible," he says. "I couldn't move forward."

Garsch isn't alone. In a 2016 Life After Service Study conducted by Veterans Affairs Canada, 32 percent of veterans surveyed experienced a difficult transition, with 42 per cent of veterans released from the military from 2012-2015 experiencing a difficult transition.

When Garsch finally came across Shaping Purpose, a program that helps people find clarity in their lives, he didn't have high expectations. But by day two he was able to figure out a lot of different aspects of life necessary for him to be happier and move forward.

Three or four months after finishing the program, he approached the founder about doing Shaping Purpose on a large scale with military people. Now Garsch is part of a research study that is quantifying and qualifying the impact of Shaping Purpose. It is a partnership between Irving Shipbuilding, Desjardins Group, the New Brunswick Health Research Foundation and the Saint John Regional Hospital Foundation.

"The overall goal of the project is to get a better understanding of what individuals face when they are going through the military transition and to try to identify the different ways that programs can be geared towards helping them and also to understand the efficacy of Shaping Purpose," he says. "The end goal is that we're able to contribute not just theoretical knowledge but to also be able to provide programs that are beneficial to soldiers."

Dr. Amy Palmer is the quantitative researcher on the project and Dr. Duncan Shields is the qualitative researcher.

The quantitative side is largely survey based, with surveys being sent to participants prior to them starting the program, then one week, three months, six months and one year after completing the program.

The first was a demographic survey that collected basic information, such as gender, marital status, military history and what type of deployments they were on.

“That can help us really carve apart the data and see if factors like that can contribute to a more or less successful transition,” says Dr. Palmer.

They also have questionnaires that look at physical and mental health and wellbeing, as well as anxiety and depressive symptoms.

The quantitative piece adds a really well validated and concrete metric of the participant's wellbeing from a psychological and a physical perspective, she says.

They are doing this for four separate workshops with a total of 88 participants. The workshops took place in Moncton, NB, Kingston, Ont., Edmonton, Alta., and Oakville, Ont., between May and November 2017.

The quantitative researchers are also enrolling control participants and will interview them at time zero, two weeks after and six months after. They will compare the results against those taking part in the program to make sure any differences seen in participants aren't just the result of time passing, she says.

“Hopefully we will be able to prove our case that this is effective and that way get more funding so that we can offer the program to those controls once they finish the six months of survey follow-up,” says Dr. Palmer.

The qualitative portion involves a CIPP evaluation, says Dr. Shields, which goes beyond a traditional program evaluation.

“It really provides a lot of information to program developers to let them know whether they're on track, whether they've captured the problem, whether their ideas about the problem match, in this case, what these veterans define as their problem. And then it can feed back that information for a formative evaluation, and then looking at their curriculum and their ability to deliver it,” he says.

Dr. Shields and his research assistant recruited 60 veterans and conducted in-depth interviews with them prior to their taking part in the program. “We were incredibly privileged. They were really forthright and generous with their stories, both the good and the really difficult moments as well,” he says.

They also looked at 27 other stakeholders, including Veterans Affairs, nurse case managers from the Canadian Armed Forces medical services, and the transition case managers from the integrated health support units, to get their perspective on what they see as the greatest challenges associated with transition and who does and doesn't succeed.

“We really got a great sense of what people were struggling with and what some of the pitfalls in the transition process were,” he says.

The qualitative researchers also sat through each of the four programs, so were able to talk with people throughout the process and get their feedback, then two weeks later, they followed up with 40 of the original 60 interviewed. They're now in the process of doing six-month follow-up interviews.

“They are going to be 60-40-20. With qualitative interviewing, you're really selecting people who are going to give you a lot of information because you're not generalizing to the population, you're really informing theory,” says Dr. Shields, noting that there are a handful of participants that are a year out now who are also giving some information.

Having both qualitative and quantitative research plays an important role in this project.

“When you've got a mixed methods design, you can look at both the quantitative impact on the generalizable details and what the numbers tell you, but you've also got the benefit of kind of restoring processes of meaning making, individual narratives, stories,” says Dr. Shields. “The way we make our stories has a profound impact on how we navigate through life. A program like this is one attempts to help people imagine their future self, so they can then write it and live it.”

Though the study is still underway, preliminary results are already giving the researchers a better understand of the transition process for those leaving the military and establishing themselves in civilian life. As well, Garsch is receiving positive feedback from participants.

“It's phenomenal the kind of stuff that I'm hearing from people now. It makes everything worthwhile.”

AGEWELL Innovation Hub:

Advancing Policies and Practices in Technology and Aging (APPTA)

The team behind the AGE-WELL National Innovation Hub: Advancing Policies and Practices in Technology and Aging (APPTA) is taking a novel approach to addressing the challenges faced by governments, researchers and innovators.

"Governments are coming up to a time when resource needs are getting ready to really grow because of the way our population is transitioning from the under 65 to the over 65," says Kevin Harter, the executive director of the APPTA Hub.

At the same time, innovators and researchers are coming up with great solutions but are faced with the challenge of getting them into the right hands.

That's where the APPTA Hub comes in. They are trying to bridge the gap between governments and the work being done by researchers and innovators across the country.

The roots for this project can be traced back a couple years to when AGE-WELL and the New Brunswick Health Research Foundation began formulating an idea of what a centre in Atlantic Canada focused on policies for technology and aging would look like. Together the two organizations funded the creation of the first AGE-WELL National Innovation Hub APPTA. Since then, two more AGE-WELL National Innovation Hubs have been created.

The APPTA Hub was announced in May 2017, so it is still in the early stages of development. Helping Harter get things up and running are Jenna Roddick, the Knowledge Acquisition and Stakeholder Engagement Coordinator; Leigh-Anne Gillespie, Post-doctoral Fellow; and Candice Pollack, Knowledge Acquisition and Stakeholder Engagement Manager.

Roddick's role involves connecting with researchers across the country, to try to identify solutions to gaps in policy for the aging population.

"There is a technology piece and focus to that," she says. "I'm trying to build a network in which it will make it a lot easier to identify those solutions and keep those communications going."

Her work is closely connected to the work being done by Pollack. "My role is first as Manager of the HUB and helping run the process here, but my focus is primarily on government outreach and government engagement," says Pollack, who aims to build networks with government representatives in every province and territory, as well as the federal government.

To date, they have been successful in building relationships with at least 10 of the 14 partners they're looking to make, she says, focusing on representatives from both the director/assistant deputy minister level and the policy analyst level, to help build up knowledge exchange.

They bring each group together once a year so they can have frank conversations with each other about leading practices in their jurisdictions, challenges they are having in relation to an aging population, and how they can learn from each other and scale solutions that are happening in other areas of the country, says Pollack.

"This is really important because we are hearing from them that they don't get this opportunity to connect with their peers across the country very often and that they find it challenging to find the right person as a counterpart in other jurisdictions where they're not necessarily structured the same way," she says.

These annual meetings are also an opportunity for the APPTA Hub team to explore what they can do to help governments find solutions.

"When we talk about solutions, we don't mean that we'll be creating technologies within the Hub to address a particular issue. We mean that we are going to look for what exists as potential options and we're going to package it and bring it back to governments in a way that they have all the evidence they need to make an informed decision on whether or not it will work for them," says Pollack.

That's where Roddick's networking with the research community fits in, allowing the Hub to connect government with a national collection of leading practices and evidence-based solutions.

"Leigh-Anne is a postdoc and her job here is to help both Candice and Jenna in the research and analysis of the issues, to structure possible solutions out there," says Harter, so they can develop a solution to take back to government. "It's got a business case written for it, it has the implementation model written, it's got the policy briefing – it's got everything for the government without having to spend a lot of time debating it. They can decide yes or no if that's the solution for them."

Gillespie says her role with the Hub isn't traditionally what a postdoc would be doing as she's not strictly doing research.

"I'm helping with a lot of already established activities and helping put tools and evidence in our stakeholders' hands to form those decisions, so I bring research methods and policy methods to help support our work," she says.

Also supporting their work in a number of ways is the NBHRF. "They have done a great job at allowing us to connect with various government departments and researchers and research organizations, to be able to start to develop that network that is so important to our mission here," says Harter.

MARITIME SPOR SUPPORT UNIT /

New Brunswick Institute for Research, Data and Training

Just as MSSU masks a complex acronym of acronyms - The Maritime SPOR SUPPORT Unit is the Maritime Support for People and Patient-Oriented Research and Trials (SUPPORT) Unit under the Canadian Institutes of Health Research's program of Strategy for Patient-Oriented Research (SPOR) MSSU represents a complex and wide-ranging partnership involving universities, health authorities, governments, patients, health foundations and other stakeholders across the three Maritime provinces.

“Simply put, the unit is about supporting research that will improve patient care in the Maritimes,” says Dr. Ted McDonald, the NB MSSU lead. “The SPOR strategy is about making patients part of the decision making and orienting research around patient outcome.”

The SUPPORT Unit model varies from province to province but the MSSU is primarily about providing health research infrastructure to facilitate more patient-oriented health research. It does this by supporting researcher access to health data and helping researchers with research methods, privacy and ethics, knowledge translation, and patient engagement. MSSU also helps fund and train the next generation of health researchers through scholarships and fellowships.

The MSSU is a collaboration involving Prince Edward Island, Nova Scotia and New Brunswick, and within New Brunswick, it is a further collaboration involving organizations in Fredericton, Moncton and Saint John. Key health-oriented groups in NB who are part of the structure are the University of New Brunswick, the Université de Moncton, the two medical schools, both regional health authorities, the Province of New Brunswick, funding partners and NBHRF.

“It's really all the major stakeholders involved in health research they are all affiliated in some way with MSSU. From a researcher point of view, it provides research infrastructure for clinical and academic researchers and connects them with decision makers and patients to ensure that the research we do will have real impact on health-care delivery and patient outcomes.”

There is power in bringing all these groups together, but it also makes things very complex.

“I think one of the reasons that the MSSU has impressed people is that we have demonstrated the power of collaboration and cooperation while managing the complexity of such a diverse group of stakeholders. We are making it work,” says McDonald.

He believes one of the reasons for their success is that being a small region they don't have the luxury of developing independently. They have to collaborate in order to get returns to scale.

“A core component of every SUPPORT Unit in Canada is facilitating researcher access to administrative health data for research. In New Brunswick that is achieved through the New Brunswick Institute for Research, Data and Training (NB-IRT) on the UNB Fredericton campus. NB-IRDT is itself a

close collaboration with the Province of New Brunswick. NB-IRDT hosts a large number of de-identified but linkable health data sets and makes them available to researchers in a highly secure environment. This means that a wide range of data-based health research can be conducted while ensuring the privacy and confidentiality of New Brunswick residents."

MSSU has supported or been part of more than 106 research projects to date in New Brunswick, more than 20 of which have used or are using data accessed through NB-IRDT. The research is already having an impact on health-care policy and practice in New Brunswick.

"The New Brunswick Health Research Foundation has been extremely supportive of MSSU in New Brunswick in terms of supporting our development and expansion," says McDonald.

Through NBHRF, MSSU is also supporting the next generation of researchers in New Brunswick.

A big part of MSSU is funding trainees, including post-doctoral fellows, PhD students and masters students, says McDonald. Eighteen MSSU/NBHRF studentships have been funded since 2014, many from other parts of Canada who have moved to New Brunswick for the opportunities MSSU provides.

The overarching theme of MSSU is when you invest in health research infrastructure it allows our health researchers to leverage additional resources and markedly scale up our level of research activity in the province compared to what would otherwise have been the case. MSSU is changing the landscape of health research in New Brunswick for the better.

EMERGING SCIENCE AND LEADERS:

Dr. Luc Boudreau

Platelets are small cells best known to play an important role in wound healing. It turns out they are also active participants in auto-immune diseases.

"Since they're the second most abundant cells in circulation, it's not that surprising that they might have an important role in regulating the immune system," says Dr. Luc Boudreau, assistant professor with the department of chemistry and biochemistry at the Université de Moncton. He and his team have a special interest in the role platelets play in inflammatory diseases, specifically rheumatoid arthritis.

"The originality of our research here is that those platelets can release small cells of themselves – we call them microvesicles or microparticles – in the bloodstream," he says. These particles contain a lot of bioactive material, including mitochondria.

"Mitochondria are known as the power-house of the cells. They provide energy to the cells so the cells can do their normal function," he says. "What we've shown in our research is that cells that may have deficiency in producing energy for themselves can acquire that mechanism through the transfer of mitochondria from other cells." When the bioactive content is transferred, it changes the profile of the recipient cell, increasing the inflammatory potential of the cell.

Healthy immune cells eventually die, a process known as apoptosis. However, there are cases, such as with rheumatoid arthritis, where some cells have a prolonged life.

"The goal of our research is to demonstrate that it's actually due to a transfer of mitochondria from the platelets to those cells that prolong the lifespan," he says. "By prolonging the immune cell's lifespan, they continuously release inflammatory mediators that are associated with increased inflammation which results in an accumulation of cells to the area that's affected, and consequently, an increase of pain to the person that has rheumatoid arthritis."

Dr. Boudreau has always wanted to return to New Brunswick. "One of the things that people don't realize is that New Brunswick has the third highest incidence of arthritis in Canada," he says, yet little arthritis research is being done here. "It was really personal to me to try and get to do something about it." Arthritis is one of the top causes of disability in Canada and the costs associated to the disease are in the billions.

"Unfortunately, there is no cure for the disease, but if we better understand the fundamental mechanism that's implicated in rheumatoid arthritis we could develop better treatments to help those people who do have rheumatoid arthritis to at least live symptom free for the rest of their lives."

The New Brunswick Health Research Foundation plays an important role in helping researchers like Dr. Boudreau reach their goals, providing invaluable assistance with everything from summer and graduate scholarships for students to work in labs to bridge grants that help researchers build their programs so they can compete on a national level.

"I think there is an opportunity here in New Brunswick for very good research to come in future years and the NBHRF is definitely going to be an important part of this."

EMERGING SCIENCE AND LEADERS:

Dr. Jocelyn Paré

It's a busy time for Dr. Jocelyn Paré, the NBIF Innovation Research Chair in Medical Technologies, with lots going on in his lab at the Atlantic Cancer Research Institute. Dr. Paré and his team are working on microwave assisted ablation of tissues.

"Basically, the idea is to use a source of energy to heat tissues as locally as we can, so as to selectively destroy the target tissue, in our case the tumour tissues," he says. "We're trying to make this more controllable than what is currently done. To do so we have developed a technology where we don't only use the effect of heat, but we're combining it with the ability to perform chemical ablation at the same time."

Conventionally, the energy is introduced through a needle made up of a number of components. At minimum, the needle contains two coaxial cylindrical rods that run the length of the needle and are isolated to ensure they don't short circuit one another.

The needle needs to be very small to be as minimally invasive as they can to the human body. Typically, the needles are less than 1.2 millimetres overall in diameter and they are working toward making them even smaller.

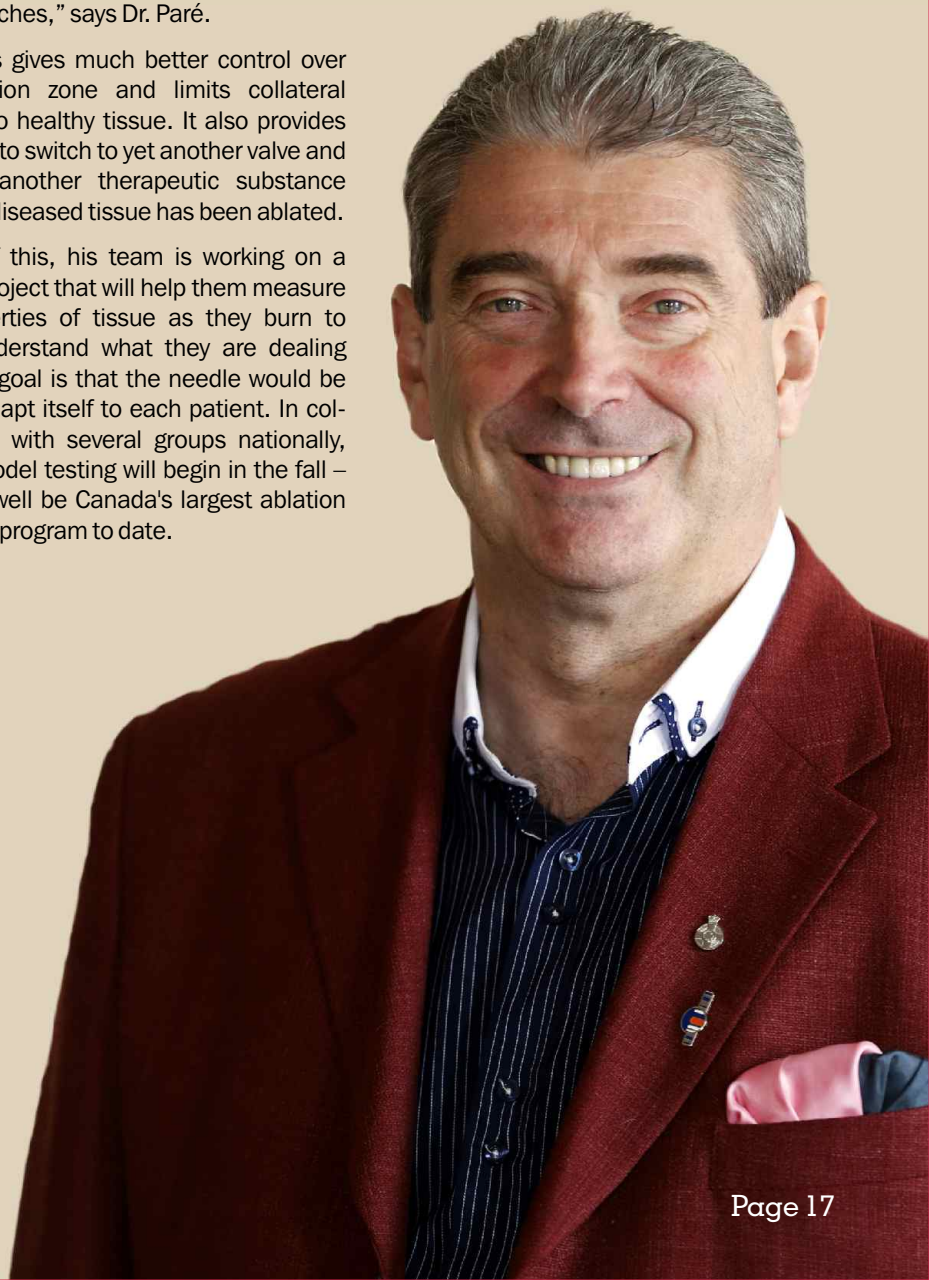
While microwaves are sensitive and selective, the challenge is that the target tissue changes once you start burning it and the needle begins losing its efficiency. To solve this, two more tubes are usually added inside the needle to run water in and out. The water removes the heat along the shaft of the needle.

"What we did with our technology is we have added one more cylindrical conduit in the centre of the coaxial emitting component such that it can be used to dispense some materials that can be an ablation agent, a drug, a substance to help healing, reduce pain or build immune system strength, or even other materials to combine further treatment with other therapeutic approaches," says Dr. Paré.

Doing this gives much better control over the ablation zone and limits collateral damage to healthy tissue. It also provides the ability to switch to yet another valve and disperse another therapeutic substance once the diseased tissue has been ablated.

On top of this, his team is working on a parallel project that will help them measure the properties of tissue as they burn to better understand what they are dealing with. The goal is that the needle would be able to adapt itself to each patient. In collaboration with several groups nationally, animal model testing will begin in the fall – this may well be Canada's largest ablation validation program to date.

Dr. Paré is inspired by the idea of using microwave technology to help people have a better post-treatment quality of life, he says, "because of the significantly reduced invasion their body has suffered compared to more traditional surgical removal of their tumoural tissues."



EMERGING SCIENCE AND LEADERS:

Dr. Danielle Bouchard

Dr. Danielle Bouchard understands that there is power in movement.

The associate professor with the Faculty of Kinesiology at the University of New Brunswick is researching many aspects related to the functional benefits of physical activity mostly with older adults and people living with chronic conditions such as obesity and cancer.

Currently in some areas of New Brunswick, if you are diagnosed with cancer and there is money available, Horizon Health runs an exercise program through the YMCA. Bouchard and her colleagues, researchers from Prince Edward Island, Nova Scotia, and Newfoundland and Labrador, believe that this kind of program should be available across Atlantic Canada. In order to do so, she has received funding from NBHRF, the Quebec Breast Cancer Foundation and Ultramar.

“When someone receives a diagnostic of cancer, there is enough scientific evidence showing the benefits throughout the cancer journey to convince health authorities that exercise should be part of standard care,” says Bouchard.

The main objectives of this project are to build capacity and create a relationship among Atlantic provinces and health authorities to contribute to cancer care through exercise. The funding is being used to develop a sustainable model that could be picked up across all four Maritime provinces. "In New Brunswick, we are focusing on functional capacity, which is also predictive of quality of life and cancer recurrence," she says.

Functional capacity can also be measured in senior care homes. “For example people who live in a nursing home, they might tell you they would like to be able to go and have their shower by themselves. One of the projects we have right now is trying to see how we can get older adults living in a nursing home to stand more often. And the impact that it has."

Last summer, her team measured the movement of a group of 20 residents at York Care Centre to determine how much sitting and standing they did. This summer, they are returning with a standing table. “The goal is not for them to lean on the table, but to gather around it. We'll go to the unit four times a week, three times a day for 10 weeks. Morning, afternoon and evening. We want them to stand for 10 minutes each time.”

To encourage them to stand around the table, they plan to discuss the news, tell a joke of the day, provide a snack and talk about a topic of the day.

They will quantify things such as attendance. “We want to see what their enablers and barriers are to standing more often in such a setting. Basically, we want to have a better sense of what would make this work.”

From there, Bouchard has plans to apply for a grant to do a control trial, with a goal to improve walking speed. “The speed you are able to generate when you walk is giving us a sense of your mobility and predicts important outcomes such as hospital admission rate and even mortality risk,” she says.

EMERGING SCIENCE AND LEADERS:

Dr. Petra Kienesberger

The heart is literally at the heart of Dr. Petra Kienesberger's research - specifically how fat molecules signal to the heart and its cells to influence cardiovascular disease.

"I'm interested in a specific subgroup of fat molecules that are being released called lysophosphatidic acid or LPA," she says. "We've found in human studies, as well as our animal models, that obesity and diabetes and metabolic dysfunction in general are associated with an increased production of these molecules."

We know that obesity and metabolic dysfunction are connected to cardiovascular disease, specifically heart muscle weakening. What her team is trying to understand is whether these fat molecules that are increased in this environment are actually contributing to this effect.

"In a nutshell we look at the connection between obesity and metabolic disease and cardiovascular disease, and we look at fat signaling molecules as a contributing or a key signaling pathway by which obesity is actually leading to cardiovascular disease."

Soon after she became an assistant professor at Dalhousie University, based at Dalhousie Medicine New Brunswick, in 2013, a collaboration with an investigator at the University of Pittsburgh produced clinical data that showed that the fat molecule and its machinery that produces the fat molecule are increased in metabolically dysfunctional individuals. "We just dug deeper and found that this molecule really is a very key contributor to obesity and heart muscle weakening."

This research could have a big impact for those with cardiovascular issues.

"We already have drugs in development and also some of them approved for targeting this LPA signaling machinery. There is a potential for some of these drugs that are already approved to quickly be repurposed or to expand their use towards cardiomyopathy or heart muscle weakening."

Her team is running pre-clinical trials now to specifically target this pathway. "That should give us a good idea whether in an obese animal where we already have metabolic dysfunction established, when we inhibit this pathway, whether we can actually reverse the metabolic dysfunction in the heart and also restore its capability to properly pump the blood or contract," says Kienesberger.

"I am happy to say I was very recently awarded an CIHR operating grant. The bridge grant I got from NBHRF actually helped me with preliminary data for this proposal," she says. "It is an important stepping stone to reach higher levels. NBHRF funding has been quite important, especially in an environment where the success rates for government-based funding as well as charity-based funding have been very low."

New Brunswick Health Research Recruits

Dr. Daniel A. NAGEL

RN, PhD, Assistant Professor, UNBSJ – Nursing and Health Sciences

After 27 years of nursing practice, mainly in community health settings, Dr. Daniel (Dan) Nagel completed his PhD in 2017 and is now Assistant Professor at UNB Saint John. Although his dissertation focus was on the use of telehealth technologies by nurses in the delivery of health care, Dan has returned to his interests in primary health care, community development and work with vulnerable populations.

Being new to the Maritimes, the first year of Dan's role has been gaining an appreciation for the healthcare system in New Brunswick, the community partnerships in the priority neighborhoods and gaps in access to care for underserved populations. Of particular interest for Dan is development of innovative evidence-informed programs that enhance access to health care to vulnerable populations, and the evaluation of these services and their outcomes.

Dan is currently co-leading a significant scoping review of evaluation frameworks for community health centres, as well as a research project on transition of women to stable housing. Dan's methodology expertise is grounded theory and other qualitative research approaches, and he is co-lead of QUEST-SJ, a qualitative health research collaborative based in Saint John.

Dr. Barry A. BLIGHT

PhD, Assistant Professor, Department of Chemistry, University of New Brunswick

Dr. Barry Blight, originally from New Brunswick, completed his BSc at Mount Allison University in 2003 followed by the completion of his PhD in Organic Chemistry at the University of Western Ontario (2008).

After two successful research fellowships (University of Edinburgh, UK (2010) and Queen's University, Canada (2012)), Barry accepted his first faculty position at the University of Kent, in Canterbury, UK. It was there where he established a multidisciplinary research program developing new functional materials in applications ranging from optoelectronic materials to defence science technology to extraction therapeutics.

In 2016, Dr Blight accepted a position at the University of New Brunswick, Fredericton and relocated his research group and family back to New Brunswick in spring 2017.

In health research, the Blight Research Group is developing biologically benign polymer materials for use in extraction therapeutics, drug delivery, and nitric oxide infusion monoliths for cancer therapy.

New Brunswick Health Research Recruits

Dr. Khaldoun M. ALDIABAT

RN, MSN, Ph.D, Assistant Professor,
Faculty of Nursing
University of New Brunswick

Dr. Caroline GIBBONS

IA/RN, Ph.D. Assistant Professor
School of Nursing Studies,
Université de Moncton

Dr. Aldiabat was born and grew up in the Kingdom of Jordan and completed his undergraduate and Masters degrees at Jordan University of Science and Technology [JUST]. He continued his graduate education at the University of Calgary and received his Ph. D in Mental Health and Smoking Behavior Addiction in 2010.

In 2016, he joined University of New Brunswick – Faculty of Nursing – Moncton Site as Assistant Professor. Prior to that, he was Assistant Professor at University of Northern British Columbia and at Taibah University Saudi Arabia.

His research crosscuts a range of areas in Mental Health and Addiction, Gerontology, Nursing Education, Refugees and Immigrants Health, Community Health, Quantitative and Qualitative methodologies, Quality of Life and Symbolic Interactionism Philosophy. In New Brunswick, his overarching goals are to understand and explore the lived experiences and factors that shape and influence the quality of life of the population. The results of his research programs will be used to enhance the quality of life for New Brunswick population through enhancing measures of health promotion and disease prevention and treatment.

His future research in New Brunswick will continue to focus on prioritized research areas in gerontology and mental health issues in the province using innovative research methodologies, collaborating with expert researchers from national and international research centres, and applying for more local and national research funding.

Dr. Caroline Gibbons specialty is cardiology in nursing. Her teaching experience began in 2001 and she loves teaching adult care. In 2006, she graduated with a Masters Degree in Nursing Science and was interested in the functional capacity, psychological well-being and specifically self-care behaviors of people with coronary heart disease in Phase IV rehabilitation.

In January 2017 she graduated with a doctoral degree in Education and the aim of her doctoral thesis was to develop a reading club for nursing students and to assess the effect on personal effectiveness, expectations and intentions through evidence-based research. Promoting and popularizing the integration of evidence-based results into nursing practice is an area of great interest for her. As well, she is interested in evaluating the fidelity of an intervention.

Currently, she is acting as a co-investigator in a retrospective analysis whose purpose is to examine the academic variables of nursing students and to determine factors related to success in the NCLEX-RN® exam. As well, she is a member of a simulated home care research group, in partnership with the Dieppe Family Medicine Unit, the NB Medical Training Center and the School of Nursing Science at the Université de Moncton.

9th Annual New Brunswick Health Research Conference

Personalized Medicine Done Right

La médecine personalisée bien faite

From Left to Right: Monique Imbeault, NBHRF Chairperson; Dr. Gilles Robichaud, 2017 Local Organizing Committee President; and Dr. June Carroll, Keynote Speaker

Dr. Stacy Grieve, January 2017 NBHRF Rising Star

From Left to Right: Dr. Daniel Mueller, Keynote Speaker; Dr. Anne Snowdon, Keynote Speaker; Dr. Marc Surette, Local Organizing Committee Member

ANNUAL CONFERENCE IN NUMBERS:

- **228** Registered Attendees
- **15** Companies Attended
- **48** Institutions & Health Charities Represented
- **92** Poster Presentations
- **12** Plenaries & Workshops
- **6** Keynote Speakers

CONFERENCE SPONSORS:

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9TH ANNUAL NEW BRUNSWICK HEALTH RESEARCH CONFERENCE

GALA OF EXCELLENCE

Bob Simpson, NBHRF Past Executive Director

From Left to Right: Monique Imbeault, NBHRF Chairperson; Nancy Roberts, Department of Health, Mark Weis, Assistant Deputy Minister, Department of Health; Dr. David MaGee, Vice President (Research), UNB

Pamela Fralick, President, Innovative Medicines Canada

9th Annual Conference Best Scientific Poster Presentation Awardees

2017 BEST SCIENTIFIC PUBLICATION BY A NEW BRUNSWICK RISING HEALTH RESEARCHER

New Brunswick Health Research Foundation | Fondation de la recherche en santé du Nouveau-Brunswick

RISING STARS

Publication in Nature Communications
www.nature.com/articles/ncomms10666

Dr. Jeremy Roy

researching at

Mentor: Dr. Rodney Ouellette

2017 25 Pre-Selected Nominees

(Photos of those present at the time of the Gala)

Post-Doctoral Fellows

Health Research Professionals

Masters

Doctoral Candidates

5th Gala of Excellence

SPONSORED BY MERCK *Be well*

www.nbhrf.com/en/researchers-month

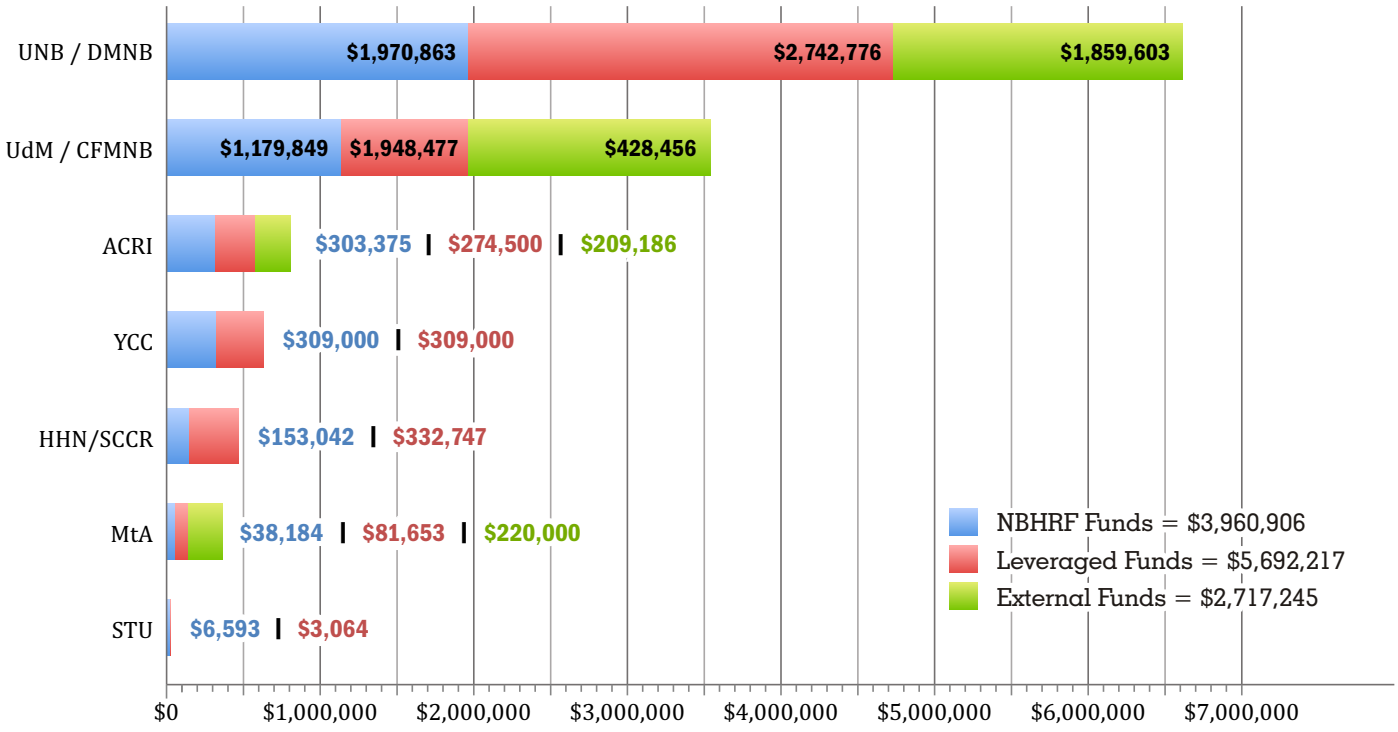
Total Funds Allocated and Leveraged in 2017-2018

The table below presents the revenues and allocated funds by NBHRF. Funds are invested via two categories: Salary Awards & Operating Grants.

	Financing Profile	2015-16	2016-17	2017-18
A	Funds received from GNB			
	GNB-RDC (Total Development Fund)	$3,450,000	$ 3,484,040	$ 4,300,000
	GNB-DoH (Fund for Research)	$ 400,000	$ 400,000	$ 540,200
	GNB-DSD (Wellness Research Fund)	$ 200,000	$ 0	$ 161,393
	GNB-DSD (CABHI-SC-SIF & NCE-CFN-FARE)			$ 74,997
	TOTAL	**$4,050,000** ($5.40 per capita)	**$ 3,884,040** ($5.20 per capita)	**$ 5,076,592** ($6.61 per capita)
B	NBHRF Directed Funds **INVESTED** in Salary Awards and Operating Grants	$2,683,963	$ 2,736,165	**$ 3,960,906**
C	Additional Funds **Matched and/or Leveraged** through partnering with NBHRF			
	Federal Tri-Councils:	$ 1,487,097	$ 1,506,073	$ 1,502,589
	CIHR	$ 1,487,097	$ 1,506,073	$ 1,502,589
	NSERC	$ 0	$ 0	$ 0
	SSHRC	$ 0	$ 0	$ 0
	Canada Foundation for Innovation (CFI)	$ 0	$ 104,620	$ 0
	Canada Research Chair (CRC)	$ 0	$ 100,000	$ 100,000
	Networks of Centres of Excellence (NCE)	$ 0	$ 93,264	$ 297,000
	Health Charities & Foundations	$ 1,111,139	$ 1,838,267	$ 2,402,266
	Private Sector	$ 861,769	$ 857,993	$ 880,553
	Various Other Public Sector	$ 148,250	$ 537,000	$ 509,809
	TOTAL	**$3,608,255**	**$ 5,037,217**	**$ 5,692,217**
D	Total Funds invested as Salary Awards and Operating Grants by NBHRF and PARTNERS (B+C)	$6,292,218	$ 7,773,382	**$9,653,123**
E	Total Funds raised as Salary Awards and Operating Grants by New Brunswick Health Researchers **by Themselves (see Table 15 for details)**			
	Federal Tri-Councils:	$ 1,198,413	$ 1,248,267	$ 996,322
	CIHR	$ 229,163	$ 175,951	$ 363,097
	NSERC	$ 969,250	$ 1,039,621	$ 509,620
	SSHRC	$ 0	$ 32,695	$ 123,605
	Canada Foundation for Innovation (CFI)	$ 110,722	$ 50,000	$ 50,000
	Networks of Centres of Excellence (NCE)	$ 0	$ 0	$ 0
	Health Charities & Foundations	$ 1,316,398	$ 1,311,925	$ 1,670,923
	TOTAL	**$2,625,533**	**$ 2,610,192**	**$ 2,717,245**
F	Total Funding invested into the **New Brunswick Health Research Enterprise**	$ 8,917,751	$10,383,575	**$12,370,368**
G	NBHRF expenditures			
	Administrative salaries & benefits	$ 237,468	$ 245,588	$ 259,625
	Research programming salaries & benefits	$ 195,730	$ 225,868	$ 231,504
	Balance administration & operations	$ 386,979	$ 344,406	$ 589,604
	TOTAL	**$ 820,177**	**$ 815,862**	**$ 1,080,733**
	% of A	20.3 %	21.0 %	21.3 %
	% of D	13.0 %	10.5 %	11.2 %
	% of F	9.2 %	7.9 %	8.8 %

Distribution of Health Research Funding across New Brunswick

Profile of total Health Research Funding in New Brunswick



3rd Annual Breakfast with the MLAs

On March 21, 2018 New Brunswick MLAs, health researchers, CEOs, Presidents, Vice Presidents and Executive Directors came together to get an inside look at some of the outstanding health research happening in New Brunswick. NBHRF co-hosted the 3rd Annual Breakfast with the MLAs with the Minister of Health, the Honourable Benoît Bourque.

Attendees heard from five keynote speakers, each a specialist in their own field of health research. Researchers who presented included:

- Dr. Danielle Bouchard, Faculty of Kinesiology, University of New Brunswick;
- Dr. Anil Adisesh, JD Irving Limited Research Chair in Occupational Medicine; Faculty of Business, University of New Brunswick-Saint John; Dalhousie Medicine New Brunswick;
- Dr. Sarah Pakzad, Faculty of Health Sciences and Community Services, Université de Moncton;
- Dr. Keith Brunt, Faculty of Business, University of New Brunswick-Saint John; Dalhousie Medicine New Brunswick; New Brunswick Heart Centre; and
- Dr. Etienne Hébert Chatelain, Faculty of Sciences, Université de Moncton.

Health Research Programs (HRP) / SALARY AWARDS

2017-18 SUMMER STUDENTSHIPS

Student	Supervisor	Affiliation	Project Title	Pillars	NBHRF Funding
Elizabeth Dreise	M. LaFrance	STU	Informal caregiving of older adults: Unpacking the experiences and meanings of 'home care' in rural and urban New Brunswick	4	$4,944
Khoi Thien Dao	T. Pulinilkunnil	UNB	Role of branch chain amino acid metabolizing enzyme in myocardial insulin resistance and glucolipotoxicity	1	$6,592
Cody Davenport	J. Hébert	UNB	The spinal Stenosis Surgical Outcomes Study (Stenosis SOS)	1	$6,592
Mansa Agbaku	P. Jarrett	HHN	1. Timed Up and Go (TUG) Test for Discriminating Between Pre-Frailty and Cognitive Impairment 2. Experience of Caregivers with Dementia: What They Say is Important and Meaningful to Them	2	$6,592
Anna Gallagher	J. Olthuis	UNB	(1) Comparing CBT for anxiety sensitivity to disorder-specific CBT in reducing mental health symptoms: An RCT & (2) Learn to run for anxiety sensitivity	2	$4,944
Benjamin Colpitts	M. Sénéchal	UNB	Metabolic Inflexibility in Individuals living with Obesity during Sprint Interval Training: Insulin sensitivity and Metabolic FLEXibility Study	4	$6,592
Luke MacLeod	M. Sénéchal	UNB	Irisin-cardio-Metabolic Exercise Training: The iMET Study	4	$6,592
Jeremy Slayter	C. O'Connell	SCCR	Spinal Cord Injury Knowledge Mobilization Network Prospective Study	4	$6,592
Emily Poole	K. Crosby	MtA	Effect of intra-hypothalamic administration of endocannabinoids and nitric oxide on consumption of high fat diet in rats	1	$6,592
Alissa Moore	C. Poulin	UNB	Women Firefighters' Perception of Occupational Cancer Risk	4	$6,592
Madison Blake	D. Bouchard	UNB	Evaluate the Benefits for Older Adults Participating in a Peer-led Exercise Program	4	$6,592
Evan Campbell	E. Scheme	UNB	Practical Emotion Classification Through Physiological Signals	1	$6,592
Oscar Angulo	K. Englehart	UNB	Enhancing Pattern Recognition using Computational Motor Control	1	$3,296
Emily Leaman	T. Rickards	UNB	An analysis of the relationship between housing need, service usage, and health outcomes in a small city community health centre	4	$4,944
Adel Krementchutski	S. Eisler	UNB	Targeted Drug Delivery and Release: Multi-Functional Small Molecule Vectors	1	$6,592
Maxim Landry	S. Westcott	MtA	Combining Boron and Hot Peppers: A Recipe for Potential Bioactivity	1	$6,592
TOTAL					**$97,232**

2017-18 GRADUATE STUDENT HEALTH RESEARCH AWARDS

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding
Camille Champigny - MSc Studentship	UdM	Étude pilote randomizsée esplorant l'innocuité et l'effet synergique d'un traitement combiné lovastatine/minocycline sur le comportement des individus avec le syndrome du X fragile	1	Cognitive Impairment	$17,000
Sarah Balcom - PhD Studentship	UNB	All Together Now: An Exploration of Professionalism and Collegiality between Practical and Registered Nurses	3	Nursing	$24,500
Brandon Hannay - MSc Studentship	UdM	Caractérisation des ARNs circulaires de Pax-5 dans le cancer	1	Cancer	$17,000
Ishtar Al-Tahir - MSc Studentship	UNB	Modulation of User Feedback for Improved Training of Pattern Recognition-Based Myoelectric Control	2	Mobility	$17,000
Catherine Bigonnesse - PDF Studentship	UdM	Vieillir chez-soi dans les CLOSM: recherche participative pour favoriser l'acces aux services de proximite et de soutien communautaire chez les aines francophones du Nouveau-Brunswick	3	Senior's Health	$40,000
TOTAL					**$115,500**

2017-18 MSSU STUDENT HEALTH RESEARCH AWARDS

Researcher	Affiliation	Type	Project Title	Pillars	Areas	NBHRF Funding
Sherif Eltonsy	UdM	PDF	The impact of metformin and physical exercise interaction on HbA1c, lipid profile, functional capacity and micro and macrovascular patient-oriented outcomes	2	Obesity	$50,000
Patrick Abi Nader	CFMNB	PDF	Predictors of Adolescent Physical Activity	4	Obesity	$50,000
Anne Dezetter	UdM	PDF	Coûts et bénéfices du Projet ACCESS Esprits Ouverts, Nouveau-Brunswick : un programme de services de santé mentale pour les jeunes Néo-brunswickois	3	Mental Health	$50,000
Janet Forsyth	UNB	PDF	An integrated health sector information framework for better health sector decision support and big data analytics, with illustrations from New Brunswick and Ontario, 1991-2015	3	Mental Health	$20,000
Sandra Magalhaes	UNB	PDF	The Role of Environmental Air Pollution in Multiple Sclerosis Risk and Hospitalization: A Study Using Administrative Data from New Brunswick, Nova Scotia and Prince Edward Island	4	Health System Use	$50,000
Travis Hrubeniuk	UNB	PhD	Improving the proportion of exercise responders in individuals with prediabetes or Type 2 diabetes: administrative to empirical evidence	4	Diabetes	$24,500
Andrea Bowes	UNB	PDF	Making Contact: Post Traumatic Stress Disorder and the Armed Forces in Atlantic Canada	4	Mental Health	$50,000
Jean-Luc Jougleaux	UdM	PDF	Role of a novel platelet-derived microparticle in rheumatoid arthritis	1	Arthritis	$50,000
Ryan Murray	UdM	MSc	Utilisation de la méthode bayesienne afin de déterminer les effets des déterminants de la santé sur les probabilités de décrochage, de réussite scolaire et de santé mentale	4	Mental Health	$24,500
Jeremie Dupuis	UNB	PhD	Life After Service in New Brunswick: Examining high use of health care among New Brunswick military Veterans and their families	3	Health System Use	$17,500
TOTAL						**$386,500**

2017-18 BHCRI AWARDS & GRANTS

Researcher	Affiliation	Type	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Ayush Ray	UNB	CRTP-MSc	Chemotherapy Assessment in non-small cell lung cancer patient through exosomal microRNA	1	Cancer	$2,975	$2,975	$5,900
Nicholas LeBlanc	UdM	CRTP-PDF	Characterization of Pax-5 regulated miRNAs in breast cancer	1	Cancer	$5,950	$5,950	$11,900
Daniel Craig Ayre	ACRI	CRTP-PhD	The use of Extracellular Vesicles to Restore Sensitivity to Hormone-receptor Therapy in Triple Negative Breast Cancer	1	Cancer	$18,375	$18,375	$36,750
Logan Slade	UNB	CRTP-PhD	The regulation and metabolic role of Transcription Factor EB in breast cancer	1	Cancer	$10,710	$7,140	$17,850
Roxann Guerrette	UdM	CRTP-MSc	Functional Characterization of Mammaglobin-1 ioforms in Breast Cancer Aggressiveness	1	Cancer	$8,925	$8,925	$17,850
Luc Martin	UdM	Seed	Influence of Luteolin on Changes in Transcriptomic Profiles of Rat Tumor Leydig Cells Treated with Etoposide	1	Cancer	$5,000	$5,000	$10,000
TOTAL						**$51,935**	**$48,365**	**$100,300**

2017-18 CLINICAL SCOLARSHIPS

Researcher	Affiliation	Area of Research	Pillars	NBHRF Funding	Leveraged Funding	Total Funding
Colleen O'Connell	SCCR / HHN	Rehabilitation	1, 3	$35,500	$0	$35,500
Tracy Rickards	UNB	Marginalized Population Health	4	$25,000	$75,000	$100,000
Duyen Nguyen	UNB	Experiential learning at the Saint John Human Development Council	4	$24,000	$56,000	$80,000
TOTAL				**$84,500**	**$131,000**	**$215,500**

2017-18 RESEARCH CHAIRS

Chair Title	Affiliation	Funding Partner	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Interprofessional Patient Centred Care	UNB	The Jarislowsky Foundation	3,4	Patient Care	$100,000	$300,000	$400,000
Health and the Environment	UNB	Canada Research Chair	4	Population Health	$0	$100,000	$100,000
Interdisciplinary Chair in Child & Youth Mental Health	UdM	UdMoncton, Centre Formation Medicale du NB	4	Mental Health	$100,000	$400,000	$500,000
Canada Diabetes Association Research Chair	UNB	Canadian Diabetes Association	4	Diabetes	$100,000	$100,000	$200,000
CIHR-SPOR-iCT (Innovative Clincal Trials) Mentorship Chair in Innovative Clinical Trials	DMNB	CIHR	1,2,3	Clinical Care	$128,500	$128,500	$257,000
Canadian Chiropractic Association Chair in Musculoskeletal Health	UNB	Canadian Chiropractic Association	1,2,4	Musculoskeletal Health	$100,000	$100,000	$200,000
TOTAL					**$528,500**	**$1,128,500**	**$1,657,000**

Health Research Programs (HRP) / GRANTS

2017-18 ESTABLISHMENT GRANTS

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Martin Sénéchal	UNB	Personalized Exercise: Are Myokines a Response to our Problem in New Brunswick	2	Clinical Exercise	$49,000	$0	$49,000
Etienne Hebert-Chatelain	UdM	Mitochondrial Signaling and Physiopathology	1	Alzheimer's	$40,000	$0	$40,000
Erik Scheme	UNB	Myoelectric control	1	Mobility	$0	$25,000	$25,000
TOTAL					**$89,000**	**$25,000**	**$114,000**

2017-18 BRIDGE GRANTS

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Petra Kienesberger	DMNB	Autotaxin-lysophosphatidic acid signaling in obesity-related diabetic cardiomyopathy	1	Diabetes	$35,000	$0	$35,000
Étienne Hébert-Chatelain	UdM	Mitochondrial G protein signaling in the pathophysiology of cognitive processes: afocus on Alzheimer's disease	1	Alzheimer's	$35,000	$0	$35,000
Gilles Robichaud	UdM	Characterization and functional evaluation of novel Mammaglobin-1 gene products in breast cancer	1	Cancer	$25,000	$0	$25,000
Luc Boudreau	UdM	Cell-derived microvesicles amplify inflammation in rheumatoid arthritis	1	Arthritis	$35,000	$10,000	$45,000
Stephen Lewis	ACRI	Characterization of the mechanisms by which the translation initiation factor eIF3e regulates epithelial-to-mesenchymal transition	1	Cancer	$35,000	$0	$35,000
Thomas Pulinilkunnil	DMNB	Proteotoxic basis for diabetic cardiomyopathy	1	Diabetes	$0	$35,000	$35,000
TOTAL					**$165,000**	**$45,000**	**$210,000**

2017-18 WELLNESS RESEARCH FUND

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding
Patricia Peterson	UNB	New Brunswick Positive Workplace Initiative	4	Mental Health	$60,500
Danielle Bouchard	UNB	Comprehensive Assessment of the Peer Led Zoomers on the Go Program	4	Senior's Health	$100,000
TOTAL					**$160,500**

2017-18 WORKSHOP GRANTS

Researcher	Affiliation	Workshop Title	Number of Attendees	NBHRF Funding	Leveraged Funding	Total Funding
Barb D'Entremont	UNB	Sharing Evidence and Perspectives on the Impact of Preschool Autism Treatment	200	$4,275	$32,800	$37,075
Tushar Pishe	HHN	Atlantic Trauma and Emergency Medicine Conference	300	$5,000	$115,500	$120,500
TOTAL			**500**	**$9,275**	**$148,300**	**$157,575**

2017-18 TRAVEL GRANTS

Researcher	Affiliation	Conference Title	Number of Attendees	NBHRF Funding	Leveraged Funding	Total Funding
Daniel Landry	UdM	Canadian Society of Hospital Pharmacists Profession Practice Conference	400	$673	$1,346	$2,019
Luc Boudreau	UdM	Experimental Biology 2018	20,000	$1,500	$2,481	$3,981
Alli Murugesan	UNB	Canadian Mental Heatlh Association Mental Health for All National Conference 2017	575	$417	$835	$1,252
Andrea Mayo	UNB	American College of Sports Medicine's 65th Annual Meeting	5,000	$1,000	$1,680	$2,680
Gilles Robichaud	UdM	Experimental Biology 2018	20,000	$1,500	$2,419	$3,919
Marco Doucet	UdM	Experimental Biology 2018	20,000	$1,000	$1,295	$2,295
Brittany Rioux	UNB	American College of Sports Medicine's 65th Annual Meeting	6,000	$1,500	$1,500	$3,000
Patrick Abi Nder	UdM	International Society of Behavioral Nutrition and Physical Activity	900	$1,500	$1,500	$3,000
Kristine Gagnon	UdM	International Society for the Study of Fatty Acids and Lipids	1,000	$457	$1,749	$2,206
Danielle Connell	STU	International Cannabis Business Conference & Technical Mission	500	$1,649	$3,064	$4,713
TOTAL				**$11,196**	**$17,869**	**$29,065**

Health Research Initiatives

2017-18 CO-FUNDING WITH DIABETES CANADA

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Thomas Pulinilkunnil	DMNB	Role of the Lysosome nutrient sensor transcription factor EB in diabetic heart disease	1	Diabetes	$20,000	$99,989	$119,989
TOTAL					**$20,000**	**$99,989**	**$119,989**

2017-18 CO-FUNDING WITH CANADIAN FRAILTY NETWORK

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Amanda Lee	UNB	Exercise and aging	4	Senior's Health	$4,092	$2,500	$6,592
Alexa Kolyvas	UNB	Adult Day Program	3	Senior's Health	$4,092	$2,500	$6,592
Amanda Lee	UNB	Adult Day Centres	3	Senior's Health	$4,092	$2,500	$6,592
Dominique Hibbert	UNB	Intervention to Reduce Sedentary Time in Nursing Homes	2	Senior's Health	$12,500	$12,500	$25,000
TOTAL					**$24,776**	**$20,000**	**$44,776**

2017-18 CO-FUNDING WITH CABHI

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Carole Goodine	YCC-UNB	Polypharmacy App to Improve Health Outcomes in Older Adults	2	Polypharmacy	$50,000	$50,000	$100,000
Erik Scheme	UNB	Validation and Scaling of the Mobile eChart Healthcare Software Platform for Long-Term Care Facilities	3	Long Term Care	$49,994	$49,993	$99,987
D. Shukla	UNB	Connecting Family Caregivers of Seniors with Information and Resources to Support their Daily Care Giving Tasks and Responsibilities	3	Senior's Care	$49,940	$49,940	$99,880
Sarah Pakzad	UdM	Development and Validation of the NFI Prototype Application for Early Detection of Dementia in the Elderly	3	Dementia	$50,000	$50,000	$100,000
Sherry Law	YCC-UNB	Virtual Reality Interventions on Negative Mood	2	Dementia	$50,000	$50,000	$100,000
Eve Baird	YCC-UNB	The Sleep Kit: Alternative Sleep Therapies for Those Living with Dementia	2	Dementia	$50,000	$50,000	$100,000
TOTAL					**$299,934**	**$299,933**	**$599,867**

2017-18 CO-FUNDING WITH ALZHEIMER'S SOCIETY

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Étienne Hébert-Chatelain	UdM	Role of mitochondrial c-Src kinase in Alzheimer's disease	1	Alzheimer's Disease	$20,000	$55,000	$75,000
TOTAL					**$20,000**	**$55,000**	**$75,000**

2017-18 CO-FUNDING WITH AGEWELL

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Carole Goodine	UNB	A Polypharmacy App to Improve Outcomes for Seniors in Long Term Care	3	Senior's Health	$28,750	$28,750	$57,500
Kevin Harter	YCC	Innovation Hub - Policy and Practice	4	Senior's Health	$159,000	$159,000	$318,000
Kevin Harter	UNB	Innovation Hub - Policy and Practice	4	Senior's Health	$105,750	$89,250	$195,000
TOTAL					**$293,500**	**$277,000**	**$570,500**

2017-18 CO-FUNDING WITH SPOR

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Ted McDonald	UNB	Maritime SPOR Support Unit - NB Node - IRDT	All	Health	$330,300	$738,950	$1,069,250
Baukje Miedema / Shelley Doucet	UNB	Primary and Integrated Health Care Innovations Network	All	Primary Care	$100,000	$100,000	$200,000
Ann Beaton / Jimmy Bourque	UdM	ACCESS-NB (Transformational Research in Adolescent Mental Health)	All	Mental Health	$143,228	$120,000	$263,228
Sarah Pakzad	UdM	Memory Clinics (Canadian Consortium on Neurodegeneration and Aging)	3	Senior's Health	$110,028	$22,800	$132,828
Pam Jarrett	HHN	New Brunswick participation in the creation of a pan-Canadian set of cohorts of patients with various neurodegenerative diseases	2	Senior's Health	$51,608	$70,000	$121,608
Mathieu Belanger	UdM	Chronic Disease Network	4	Diabetes	$75,000	$73,224	$148,224
Shelley Doucet	UNB	Chronic Disease Network	4	Child Health	$50,000	$50,000	$100,000
Shelley Doucet	UNB	PIHCI Operating Grant	4	Primary Care	$15,625	$15,625	$31,250
Paul Peters/ Emily Read	UNB	Electronic Health Information Partnership Program	4	Senior's Health	$31,250	$45,883	$77,133
TOTAL					**$907,039**	**$1,236,502**	**$2,143,541**

2017-18 CO-FUNDING WITH PHSI GRANTS

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Helene Albert (Piat)	UdM	Mental Health Recovery Guidelines	3	Mental Health	$6,588	$6,588	$13,176
TOTAL					**$6,588**	**$6,588**	**$13,176**

2017-18 CO-FUNDING WITH PROSTATE CANCER CANADA

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Jalila Jbilou	UdM	Mind the Heart: Best Practices for Prevention, Early Identification and Treatment of Mood and Anxiety Disorders in Men with Heart Disease	2,3,4	Mental Health	$150,000	$1,102,700	$1,252,700
Anil Adisesh	UNB	Cadmium, arsenic and other metal exposures as determinantes of prostate cancer in the Canadian Atlantic Provinces	1	Cancer	$30,404	$91,212	$121,616
TOTAL					**$180,404**	**$1,193,912**	**$1,374,316**

2017-18 CO-FUNDING WITH KIDNEY FOUNDATION OF CANADA

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Sandra Turcotte	UdM	Studying the interaction between miR-2355 and the Sushi-domain-containing protein 4 to investigate a role for the complement system in VHL-inactivated renal cell carcinoma	1	Cancer	$30,000	$70,000	$100,000
TOTAL					**$30,000**	**$70,000**	**$100,000**

Strategic Investment in Health Research Innovations (SIHRI)

2017-18 STRATEGIC INITIATIVE GRANTS

Researcher	Affiliation	Project Title	Pillars	Areas	NBHRF Funding	Leveraged Funding	Total Funding
Rodney Ouellette	ACRI	Expansion of the Pan-Canadian Network in Precision Therapeutics in Cancer	1	Cancer	$250,000	$256,125	$506,125
Ted McDonald	UNB	New Brunswick Provincial Respiratory Health Information Platform	3	COPD	$100,000	$50,000	$150,000
Tony Reiman	DMNB	Analysis of volatile chemicals in the breath of lung cancer patients using infrared spectroscopy	1	Cancer	$51,000	$278,028	$329,028
Edward Yuzda	HHN	Shaping Purpose Program for Military Phase 2	3	Mental Health	$47,750	$147,247	$194,997
Christiana MacDougall	MtA	L.I.S.T.	3	Mental Health	$25,000	$81,653	$106,653
Jalila Jbilou	UdM	T.H.I.S - Truckers Health Improvement Strategy	3	Chronic Disease	$35,000	$7,500	$42,500
Danielle Bouchard	UNB	Do Physical Activity Levels Predict Functional Improvements following a structured Exercise Program for Women undergoing Breast Cancer Treatment?	3	Cancer	$29,990	$60,000	$89,990
TOTAL					**$538,740**	**$880,553**	**$1,419,293**

Funds Obtained Without NBHRF Contribution (Salary Awards and Grants)

Researcher	Affiliation	Program	Project Title	Pillars	Areas	Period	Duration	Total Funding	2017-18 Funding	Funding Year
Private Foundations / Health Charities / Non-Tri-Councils Federal Agencies										
Shelley Doucet & Rima Azar	UNB & MtA	New Brunswick Children Foundation	Strategic collaborative partnership for children with complex health needs	3 & 4	Children's Health	2014-15 to 2018-19	5 years	$750,000	$150,000	Y4
Thomas Pulinilkunnil	DMNB / UNB	NBIF grant	Development of a new zebrafish platform to support commercial screening of environmental and biomedical chemicals, pollutants, and toxins in New Brunswick	1	Environmental Health	2015-16 to 2018-19	4 years	$85,000	$21,250	Y3
Sandra Turcotte	UdM / ACRI	NB Chapter - Canadian Cancer Society, Health Research Chair	To characterize VHL function in autophagy to develop a therapeutic strategy based on synthetic lethality to target renal cancer cells	1,3	Cancer	2015-16 to 2019-20	2nd term 5 years renewal	$440,000	$110,000	Y3
Tony Reiman	UNB / HHN-SJRH / DMNB	NB Chapter - Canadian Cancer Society, Health Research Chair	To advance the quality of life and survival of patients receivng cancer drug therapy, focusing on lung cancer, lymphoma, and multiple myeloma by bridging the gap between the laboratory and the clinic	1,3	Cancer	2015-16 to 2019-20	2nd term 5 years renewal	$440,000	$110,000	Y3
Thomas Pulinilkunnil	DMNB	Canadian Diabetes Association	Role of the lysosome nutrient sensor transcription factor EB in diabetic heart disease	1	Diabetes	2015-16 to 2018-19	3 years	$279,967	$93,322	Y3
Tony Reiman	UNB / HHN-SJRH / DMNB	Terry Fox Research Institute	The Terry-Fox pan-Canadian Multiple Myeloma Molecular Monitoring Cohort Study	1	Cancer	2016-17 to 2020-21	5 years	$5,000,000	$1,000,000	Y2
Jalila Jbilou	CFMNB	Société Santé en Français	Maintien à domicile des aînés vulnérables: Plan d'intervention pour assurer la sécurité, le soutien et la qualité des sevices cliniques et sociaux	3	Seniors' Health	2016-17 to 2018-19	2 years	$80,000	$40,000	Y2
H. Vatanparast, M. Bélanger	CFMNB	Heart & Stroke Foundation of Canada	The impact of Healthy Start-Départ Santé intervention on improving dietary intake of 3-5 year old children attending childcare centres in Saskatchewan and NB	4	Obesity	2015-16 to 2018-19	4 years	$266,076	$66,519	Y3
C. Jose, P. George-Zwicker, C. Carroll, B. D'entremont, I. Smith, S. Zaiane Ghalia, et al	CFMNB	CNFS	Continuité des soins et des services pour les adultes vivant sur le spectre de l'autisme (Le project CONNECT)	3	Autism	2017-18	1 year	$16,000	$16,000	Y1
A. Leis, A. Froehlich Chow, D. Bouchard, D. Donovan, H. Vatanparast, H. Humbert, L. Sénéchal, M. Bélanger, N. Muhajarine, N. Sari, S. Ward	CFMNB	PHAC	Healthy Start/Départ Santé: A multi-level intervention to incrase physical activity and healthy eating among young children (ages 3 - 5) attending early learning programs PHASE III	4	Obesity	2017-18 to 2019-20	3 years	$161,496	$53,832	Y1
J. Simard, J. Jbilou, B. Maria, I. Andrulis, A. Antoniou, G. Bader, H. Burton, J. Castonguay, A. Chiarelli, J. Chiquette, N. De Marcellis-Warin, M. Dorval, A. Droit, D. Easton, G. Evans, W. Foulkes, G. Glendon, D. Goldgar, Y. Joly, S. Kamel-Reid, B. Lespérance, N. Pashayan, S. Tavtigian, M. Wolfson	CFMNB	Grnome Canada - CIHR	Personalised Risk Stratification for Prevention and Early Detection of Breast Cancer	1,4	Cancer	2013-14 to 2017-18	5 years	$50,000	$10,000	Y5
TOTAL FOUNDATIONS ETC.								**$7,568,539**	**$1,670,923**	

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Researcher	Affiliation	Program	Project Title	Pillars	Areas	Period	Duration	Total Funding	2017-18 Funding	Funding Year
CIHR										
Kelly Scott-Storey	UNB	Project Grant	Masculinities, Lifetime Violence and Health	4	Men's Health	2014-15 to 2018-19	5 years	$383,676	$76,765	Y4
Sandra Turcotte	UdM / ACRI	Project Grant	Exploiting synthetic lethality in Renal Cell Carcinoma: Targeting the loss of the von Hippel-Lindau tumor suppressor gene through autophagy for the development of anticancer therapy	1	Kidney Cancer	2014-15 to 2018-19	5 years	$495,930	$99,186	Y4
F. Legare, A. Bilodeau, L. Gosselin, E. Etheir, D. Prud'homme, S. Desroches, D. Stacey, F. Borduas, C. Monette, I. Auclair, M. Ouimet, G. Roch, V. Borde, C. Jose et al	CFMNB	Project Grant	MATRICES-F: Application des connaissances axée sur le genre et le sexe des personnes en contexte Francophone	4	Gender & Health	2017-18 to 2020-21	4 years	$150,000	$37,500	Y1
J. Olthuis	UNB		Comparing the efficacy of CBT for anxiety sensitivity to disorder-specific CBT in reducing mental health symptoms: A randomized controlled trial	1	Mental Health	2016-17 to 2018-19	3 years	$388,940	$129,646	Y2
P. Peters	UNB		Forecasting the burden of chronic disease in small-areas: a spatial epidemiological approach using linked micro data	4	Chronic Disease	2017-18	1 year	$20,000	$20,000	Y1
TOTAL CIHR								**$1,438,546**	**$363,097**	
CFI										
Keith Brunt	DMNB	Infrastructure Operating Fund	A new laboratory to create innovative experimental therapeutics and establish regenerative medicine capacity for cardiovascular disease in New Brunswick	1	Cardio-vascular Disease	2014-15 to 2018-19	5 years	$125,000	$25,000	Y4
Thomas Pulinilkunnil	DMNB	Infrastructure Operating Fund	A new laboratory aimed at establishing a Cardiac Metabolism and function pheotyping program at the Dalhousie Medicine New Brunswick Cardiovascular Research Center	1	Cardio-vascular Disease	2014-15 to 2018-19	5 years	$125,000	$25,000	Y4
TOTAL CFI								**$250,000**	**$50,000**	
SSHRC										
M. Bélanger, J. O'Loughlin, C. Sabiston, K. Gunnell, R. Vallerand, J. Brunet	CFMNB	Operating Grant	Monitoring Activities of Teenagers to Comprehend their Habits (MATCH): An eight-year study on sport participation and its determinants	4	Obesity	2015-16 to 2019-20	5 years	$200,562	$40,105	Y3
S. Dupuis-Blanchard	UdM	Operating Grant	Cohousing: an innovative approach for aging in place	4	Senior's Health	2017-18	1 year	$13,500	$13,500	Y1
A. Finnamore	UNB	Operating Grant	Worry and knowledge of community support services in older adults living in Canada	4	Senior's Health	2017-18	1 year	$17,500	$17,500	Y1
M. Arsenault	UdM	Operating Grant	Indicateurs de suivi de progrès en thérapie et changements dans le bien-être des clients	4	Senior's Health	2017-18	1 year	$17,500	$17,500	Y1
T. Fitzpatrick	UNB	Operating Grant	Barriers and enablers of physically active leisure and sport for soldiers with Post Traumatic Stress Disorder (PTSD)	4	Mental Health	2017-18	1 year	$17,500	$17,500	Y1
C. Fournier	UdM	Operating Grant	Psychothérapie individuelle et influences mutuelles entre conjoints : un examen des indicateurs de suivis de progrès	4	Mental Health	2017-18	1 year	$17,500	$17,500	Y1
TOTAL SSHRC								**$284,026**	**$123,605**	

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Researcher	Affiliation	Program	Project Title	Pillars	Areas	Period	Duration	Total Funding	2017-18 Funding	Funding Year
CIHR										
A. Wayne	UNB-Kinesiology	Discovery Grant	Manual material handling performance and fatigue	1	Mobility	2015-16 to 2019-20	5 years	$125,000	$22,620	Y3
S. Westcott	MtA	Discovery Grant	To B-E or not to B-E?: Developing New Boranes and Boration Reactions	1	Medicinal Chemistry	2015-16 to 2019-20	5 years	$300,000	$61,000	Y3
L. Boudreau	UdM	Engage Grants Program	Extraction optimization of the bioactive content from a series of New Brunswick's wildlife natural products	1	Natural Products	2017-18	1 year	$25,000	$25,000	Y1
V. Chester	UNB	Discovery Grants Program - Individual	The development of kinematic and kinetic multisegment foot models for gait analysis	1	Mobility	2017-18	1 year	$27,000	$27,000	Y1
D. Clark	UNB	Discovery Grants Program - Individual	Genome evolution through RNA-based gene duplication	1	Personalized Medicine	2017-18	1 year	$35,000	$35,000	Y1
K. Crosby	MtA	Discovery Grants Program - Individual	Cellular and Synaptic Physiology of the Dorsomedial Hypothalamus	1	Personalized Medicine	2017-18	1 year	$28,000	$28,000	Y1
K. Englehart	UNB	Discovery Grants Program - Individual	Myoelectric Control of Powered Upper Limb Prostheses	1	Mobility	2017-18	1 year	$30,000	$30,000	Y1
D. Fleming	MtA	Discovery Grants Program - Individual	Advances in x-ray spectrometry: new science through new sources	1	Diagnostics	2017-18	1 year	$27,000	$27,000	Y1
L. Hamilton	UNB	Discovery Grants Program - Individual	Physiological and psychological mechanisms in the relationship between stress and sexual response in humans	1	Stress	2017-18	1 year	$24,000	$24,000	Y1
E. Hebert Chatelain	UdM	Discovery Grants Program - Individual	Exploring the mitochondrial phosphoproteome during metabolic stress	1	Stress	2017-18	1 year	$32,000	$32,000	Y1
U. Kuruganti	UNB	Discovery Grants Program - Individual	Advanced Myoelectric Control for Improved Prosthetic Function	1	Mobility	2017-18	1 year	$22,000	$22,000	Y1
T. MacCormack	MtA	Discovery Grants Program - Individual	Coupling cardiovascular control and energy metabolism in fish: the influence of emerging (nanoparticle) toxicants	1	Heart Disease	2017-18	1 year	$29,000	$29,000	Y1
P. Morin	UdM	Discovery Grants Program - Individual	microRNA dynamics in a freeze tolerant insect	1	Personalized Medicine	2017-18	1 year	$29,000	$29,000	Y1
P. Parker	UNB	Discovery Grants Program - Individual	Simultaneous and proportional myoelectric control	1	Mobility	2017-18	1 year	$32,000	$32,000	Y1
E. Scheme	UNB	Discovery Grants Program - Individual	Improving the Performance, Robustness and Reliability of Myoelectric Control	1	Mobility	2017-18	1 year	$25,000	$25,000	Y1
J. Sensinger	UNB	Discovery Grants Program - Individual	Exploration of optimal prosthesis feedback information using computational motor control	1	Mobility	2017-18	1 year	$31,000	$31,000	Y1
M. Touaibia	UdM	Discovery Grants Program - Individual	Design and synthesis of phenolic acid analogues as inhibitors of fatty acid metabolism	1	Personalized Medicine	2017-18	1 year	$30,000	$30,000	Y1
TOTAL NSERC								**$851,000**	**$509,620**	
GRAND TOTAL								**$10,392,111**	**$2,717,245**	