

Research Matters Winter 2020 — UNB Successes

UNB's Dr. Kelly Scott-Storey co-develops new online tool to support Canadian women experiencing intimate partner violence

Dr. Kelly Scott-Storey is a health researcher and associate professor in the faculty of Nursing, director of community research, scholarship and teaching at the Fredericton Downtown Community Health Centre, and a research fellow with the Muriel McQueen Fergusson Centre for Family Violence Research. Dr. Scott-Storey's research interests are in the intersection of violence, gender and health.

She is a co-Principal Investigator on a national randomized controlled trial (iCAN plan 4 safety; CIHR \$959,650) aimed at exploring the use of an innovative tailored and personalized on-line health and safety intervention for women experiencing intimate partner violence (IPV). Based on the success of the trial, the team sought to increase reach by transitioning the web-based platform to a more accessible app. The timeline to develop the app was expedited at the request of federal partners recognizing the urgent need for such a tool to support women experiencing IPV during COVID-19, when incidences of violence were increasing and access to supports and services were reduced. In response, the myPlan Canada app was launched in



Dr. Kelly Scott-Storey

July 2020, and is available free of charge in Canada through the Apple Store and Google Play.

Dr. Scott-Storey holds approximately \$4.5 million in research funding, and in addition to the iCAN trial is also a PI on a large, multi-provincial randomized controlled trial (the iHEAL study) aimed at testing the effectiveness of a nurse-led health promotion intervention for women who have experienced IPV. Additionally, she is a PI on a 5-year CIHR Operating Grant and two NBHRF grants examining men's experiences of cumulative lifetime violence and the intersection of gender and health. She has been actively involved in trying to better measure and capture experiences of interpersonal violence for both women and men, and is part of an international team who developed a short version of the Composite Abuse Scale (CAS_R-SF) which is currently being used by Statistics Canada.

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For this issue, we are catching up on the exciting research awards, grants and projects received by the University of New Brunswick researchers, from November 1, 2019 to October 31st, 2020.

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University Research Scholars 2020 (1 of 3)

The award of University Research Scholar (URS) is intended for University of New Brunswick researchers who have demonstrated a consistently high level of scholarship, and whose research is, or has the potential to be, of international stature. The award shall honour leading researchers at the University. Recommendations for this award are made by a selection committee and approved by the Board of Governors.

Dr. Lucia O'Sullivan, Faculty of Arts (Fredericton)

Dr. O'Sullivan is a senior faculty member and Full Professor at UNB. She has a PhD in Experimental Psychology specializing in Social Psychology. She held a Canada Research Chair in Adolescents' Sexual Health Behavior at UNB from 2006-2016.

Dr. Lucia O'Sullivan is an outstanding, creative and highly productive researcher whose work is acclaimed nationally and internationally. Indeed, she is seen as a leader in her field. Her research addresses the interface of sexuality and intimate relationships, including sexual health, risk behavior, communication and decision-making, and the impact of new digital technologies, with a primary focus on adolescents and young adults. In addition, the results of her work has important implications for helping to ensure the health and well-being of young people.

She has published over 110 peer-reviewed articles in a variety of prestigious scholarly journals in her field, 20 book chapters, eight book reviews, and three research reports, and has co-edited a book. Her published work has been cited over 4,700 times in the research literature. She has received numerous invitations to give research talks internationally (e.g., Prague, Johannesburg, Philadelphia, Warwick), and has presented at hundreds of national and international research conferences over the course of her career.

However, her research dissemination goes much further: She has appeared many times in media (e.g., the *Globe & Mail, National Post, BBC, CBC Atlantic*), including front page features of her research, where messages have a significant impact. She was invited to maintain a Psychology Today blog (a leading blog in the field), and she regularly contributes to the research blog, *Science of Relationships*, and the academic blog, *The Conversation*, both of which receive an average of several thousand views per day, and millions of views to date.

With her URS, Dr. O'Sullivan will explore strategies and communication that sexual predators use to overcome resistance of unwilling partners, bridging her two areas of research focus. The research world has focused intently on the experiences of coercion, risk factors, and consequences, but has largely overlooked research examining perpetrators themselves. To date, they have been considered near impossible to reach using traditional survey methods. However, the anonymity afforded to participants via online survey techniques now, as well as the features that can be embedded into surveys to ensure valid responding, means that we are able to finally gain insights into the motivations of men who knowingly commit sexual assault. Dr. O'Sullivan will conduct highly innovative research that taps new technologies - research that has the promise of providing insights that are essential for finally making inroads into reductions in sexual assault rates. Her findings will have important implications for policy, education, and therapy by addressing one of the most heinous crimes plaguing the lives of young people (and others).



Dr. Lucia O'Sullivan

University Research Scholars 2020 (2 of 3)

Dr. Ted McDonald, NB-IRDT / Faculty of Arts (Fredericton)

Dr. Ted McDonald is a professor of economics at UNB in Fredericton, and is the founding Director of the NB institute for Research, Data and Training (NB-IRDT), New Brunswick's only provincial administrative data centre. Launched in 2015, NB-IRDT is the first and only facility of its kind in New Brunswick and is the product of almost ten years of close collaboration between Dr. McDonald and his team and multiple government departments and public bodies in NB.

Under Dr. McDonald's Leadership, NB-IRDT evolved from an idea that NB should use the data the government currently collects in the course of delivering programs and services to inform policymaking, into a facility that employs 25 people and has close to \$3M in grant and contract revenue in 2019-2020. A significant part of that revenue comes from large, multi-year research contracts with various provincial government departments involving research and program evaluation undertaken by NB-IRDT's highly trained research team to help inform government's decisions around social, education and health policy.

A key achievement that provides clear evidence of the trust that the government of NB puts in Dr. McDonald is the passing of provincial legislation in 2017 and 2019. Entitled An Act Respecting Research, it modified privacy and other legislation to define a clear legal pathway through which the Government can share with NB-IRDT all research-relevant data from across government operations, including health, social support, justice and public safety, education, training and labour among other areas. Dr. McDonald was instrumental in the design and implementation of the Act. Partly in recognition of these efforts, he was co-winner of the Mike McCracken Award for Economic Statistics awarded by the Canadian Economics Association in 2019. The committee noted that while his nomination listed many academic accomplishments, it emphasized the magnitude of his effort and accomplishment towards changing legislation in New Brunswick to permit research access to provincial microdata, a development many researchers hope will be copied by other provinces.

Dr. McDonald is also a leader at the national level, where he continues to advance the case for a more integrated and collaborative administrative data strategy. He is currently the Chair of the Canadian Research Data Centre Network

Academic Council and he sits on the CRDCN board. He is on the executive of the SPOR Canadian Data Platform, led by Kim McGrail of UBC (and funded with \$37m from CIHR) and is the NB principal applicant for the Maritime SPOR SUPPORT Unit. Furthermore, he has been invited to participate on a number of other national boards and working groups including the AI4H (AI for Health) task force and the health economics advisory committee of the Canadian Partnership against Cancer. Dr. McDonald's leadership in establishing NB-IRDT has also meant NB is now part of other national research collaborations such as CanREVALUE, a federally-funded project led by Dr. Kelvin Chan of the University of Toronto on real-world evidence in cancer drug efficacy.

While undertaking this work, Dr. McDonald continues to maintain a high level of academic productivity. Since 2014, he has published 18 refereed journal articles and book chapters, and has 3 other papers that have recently been revised and resubmitted to international journals. He has given approximately 50 presentations since 2014 including conferences, invited lectures, keynotes, and expert testimony. In terms of national and international service he has served on a number of CIHR grant adjudication committees including the Foundation grant scheme and he has reviewed for SSHRC, the Australian Research Council and the Luxembourg National Research Fund.



Dr. Ted McDonald

University Research Scholars 2020 (3 of 3)

Dr. Stephan Dombrowski, Faculty of Kinesiology

Dr. Dombrowski came to UNB in 2018 from a highly successful career at the University of Stirling, UK. Imagine leaving the beautiful UK for all this snow.

Dr. Dombrowski is an expert in the development, testing and application of behavior change theory and interventions for health. His research program to date has received awards from the European Health Psychology Society, the British Psychological Society and the UK Society of Behavioural Medicine. He is particularly interested in aspects concerning maintenance of behavior change, and the use of evidence-based behavior change techniques for long-term change. He is the Associate Editor for *Applied Psychology: Health and Wellbeing* and the *British Journal of Health Psychology.*

Dr. Dombrowski came to UNB having had substantial success in acquiring external funding to support his research, including large international team grants. He has obtained funding from all major UK and Scottish governmental funding bodies, including the UK National Institute for Health Research and the Chief Scientist Office Scotland. Since arriving at UNB in 2018, he has been part of successful funding applications to CIHR and NBHRF. Management of these larger grants is associated with international collaborations which increases the scope and impact of the research findings as well as providing a strong network for students involved with the projects.

To date, Dr. Dombrowski has supervised 72 undergraduate and graduate research students, and has supervised two PhD students to completion, with another four currently ongoing.

He has five papers with over 100 citations each, as recorded in Scopus, including his seminal work on a refined taxonomy of behavior change techniques, and his systematic review on long-term maintenance of weight loss interventions, published in the *British Medical Journal*.

This URS will assist Dr. Dombrowski in transitioning his research programs to the Canadian context by solidifying collaborations within UNB and with other Canadian scholars. Dr. Dombrowski has two main themes for his proposed research related: the first builds on his recent review in *The*

Lancet highlighting the urgent need for behavior change interventions during the preconception period to prevent the origins of disease and inequality, while the second addresses gender sensitized approaches to weight management, a major health concern in North America. Both have the potential for significant societal impact. He will undoubtedly be a major figure internationally in health psychology.

In closing, I would like to share with you a quote from one of his colleagues, "You are very fortunate to have him and if I were you, I would do all I could to keep him!".



Dr. Stephan Dombrowski

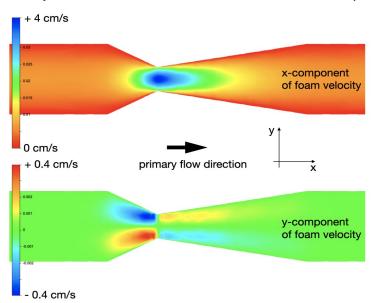
Summer Undergraduate Research Experience (SURE)

The Summer Undergraduate Research Experience (SURE) Award for 2020 was won by Sebastian Richard. Sebastian is in the Applied Physics program and chose to use this opportunity to research at the <u>UNB MRI Centre</u>.

Sebastian's project focused on the simulation of flowing foams. "Foams in motion are used as fire retardants, and have applications in the processing of food materials and in the petroleum transport industry. However, foam flows are difficult to model from a conceptual

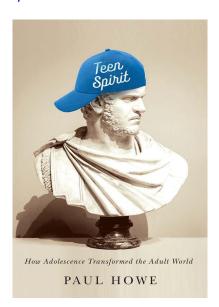
point of view," he explains. Sebastian used computational fluid dynamics (CFD) to calculate the flow of foam through a contracting and expanding pipe for comparison with MRI measurements. For computational efficiency, Sebastian chose to model the foam as a homogeneous visco-plastic shear-thinning fluid. "This type of fluid has the property that it needs to be subjected to a minimum stress threshold before it will begin to flow. Once it begins to flow, the viscosity will decrease as the shear rate increases. Ketchup, for example, is a fluid that exhibits these properties. A bottle of ketchup needs to be shaken for the ketchup to start to move, and the harder you shake the more the ketchup will flow."

The 2020 SURE Award is the first of its kind and was made possible by a generous, anonymous donation to the Faculty of Science.



Teen Spirit: How Adolescence Transformed the Adult World

Broadly interested in political culture, voting behaviour, and citizenship, Paul Howe went back to the turn of the twentieth century and the invention of adolescence in order to understand our contemporary world that is at once immature and creative. The end result is <u>Teen Spirit: How Adolescence Transformed the Adult World</u>, published by Cornell University Press.



The initial reviews were enthusiastic, if not ecstatic. Laurence Steinberg, a world expert on adolescence, said that while many authors "have chronicled the ways in which the history of adolescence has been shaped by the adults responsible for raising, teaching, and mentoring the next generation," Howe has turned "this narrative on its head, explaining how adulthood itself has been transformed by the changing character of adolescence." In short, "*Teen Spirit* is provocative, original, and utterly fascinating."

When asked what led him to study the far-reaching impacts of adolescence on everything from consumer behaviour to social trust to democracy, Dr. Howe said, "I've always been interested in interdisciplinary approaches that bring together perspectives from across the social sciences to help us better understand past trends and current challenges – which is what I've aimed to do in this book."

Dr. Howe is a professor in the department of political science. He is the author of *Citizens Adrift:* The Democratic Disengagement of Young Canadians, winner of the 2011 Donald Smiley Prize awarded by the Canadian Political Association to the best book, in English or in French, in Canadian politics.

Uneven Landscapes of Violence: Law and Accumulation in Mexico

Dr. Hepzibah Muñoz Martinez is an associate professor of comparative politics in the department of history and politics in Saint John. Her first book, *Uneven Landscapes of Violence: Law and Accumulation in Mexico*, was published this Fall with Brill (Leiden). The book draws from her 10 years of ethnographic work on one of the most violent areas of northeastern Mexico.

By the late 2000s and early 2010s, levels of violence by state and non-state forces in contemporary Mexico reached levels comparable to war-torn countries such as Syria, Afghanistan and Iraq. In contrast to the mainstream literature that views systemic violence in Mexico as simply the result of drugs and criminality, a deviation of a well-functioning market economy and/or a failing and corrupt state, in this book Dr. Muñoz argues that the nexus of criminality, illegality and violence are an integral and defining features of neoliberal state formation in the country after 2000. Dispossession after 2000 took the form of forced displacement, extortion and private appropriation of public funds, while disappearances and the latent threat of violence in cities became strategies of social control. At the same time, the emphasis of the neoliberal agenda on the rule of law to protect private property and contracts reshaped the boundaries between legality and illegality, further disguising the illegal, criminal and violent origins of financial gain and providing the latter with legitimacy behind an appearance of lawfulness. Dispossession taking place in the country illegally and violently, therefore, was transformed into legal economic activity through integration into global markets and the neoliberal rule of law. Dr. Muñoz's work presents a new way of understanding the connections between domestic politics and the global economy.

Dr. Muñoz has presented at a number of international and national conferences and published several peer-reviewed articles and book chapters as well as key reports on Mexico's political economy, North American trade relations, neo-liberalism and the role of derivatives, violence as social control, enforced disappearances and militarization in Mexico, and women's health.

Currently, Dr. Muñoz is the principal investigator of the SSHRC funded project *(In) Securities in Development: Crises and Financial Derivatives in Mexico*, and she is coapplicant in the SSRHC funded project *Civil Society in North America* (with Carleton University, University of Vermont and University of Texas at El Paso). She is also working with



Dr. Hepzibah Muñoz Martinez

El Colegio de San Luis in Mexico on the project *Canadian Mining in Mexico*. She created and collaborates in the blog nomorebloodinmexico.org, which documents the struggles of the families of the disappeared in Mexico. Her teaching draws strongly on her research and involves a number of experiential learning initiatives such as the Latin American Film Festival, Simulated Refugee Camp, Day of the Dead at the Saint John campus, and tactical urbanism in Saint John among other projects.

COVID-19 research: Dr. Hadi Eslami and Dr. Mercy Oyet

Dr. Hadi Eslami and Dr. Mercy Oyet (Business, Saint John) are leading one of 13 COVID-19 research projects funded by NBIF, NBHRF and ACOA. They are investigating the effectiveness of the Province of New Brunswick's public health communication strategies in ensuring New Brunswickers' compliance with COVID-19 protocols like physical distancing and handwashing.

"We want to understand why New Brunswickers comply or don't comply with these preventative protocols. We are particularly interested in exploring and understanding whether and how differences within diverse groups in the province influence compliance."

Their research will survey New Brunswickers, then use statistical models to make comparisons between the diverse groups in the province regarding each groups' levels of adherence to provincial COVID-19 protocols.

From this, they hope to better understand how effective the government's public health communication strategy has been in ensuring compliance with protocols aimed at preventing the spread of the virus.

"We also hope to identify factors that influence New Brunswickers' perceptions of, and responses to, the province's COVID-19 messaging. Ultimately, we hope this knowledge will help the provincial government develop more effective communications strategies for the current pandemic and for future public health situations."

Read the full post on a new Research stories blog.

Hannah Stewart, Ph.D. Candidate in Clinical Psychology

Ms. Stewart is currently is completing her predoctoral clinical residency with Nova Scotia Health's Mental Health and Addictions Program, with rotations specializing in areas of forensic rehabilitation, risk management and problematic sexual behaviours. Utilizing a scientist-practitioner model, Ms. Stewart's professional interests have broadly focused on how systems deal with marginalized, underserved, and stigmatized members of society. Her research explores the "grey area" of diverse forensic-psychological and criminological issues including forensic mental health, high-risk criminal offenders, sexual offending, processes of change and forensic intervention and rehabilitation. She believes that the reasons behind deviancy should be explored to reduce tendencies to demonize people and thus enable effective solutions for problems at both individual and societal levels.



Hannah Stewart

This year, Ms. Stewart is honoured to be selected as a recipient for both the American Academy of Forensic Psychology Dissertation Grant and the Psi Chi Mamie Phipps Clark Diversity Research Grant. Both grants were received in support of her dissertation research project entitled *Characteristics of Minor-attracted Persons in the Community: Developing a Biopsychosocial-sexual Typology of Men with Sexual Interests in Children.* Under the supervision of Dr. Mary Ann Campbell, online recruitment strategies were used to recruit self-identified minor-attracted persons in the community with the goal of identifying patterns in their characteristics. Preliminary results suggest that these men may be grouped in terms of exhibiting low vulnerability, moderate vulnerability, or high vulnerability across characteristics of psychosocial wellness or distress and indicators associated with risk for criminal behaviour. By understanding similarities and differences among community men with sexual interest toward minors, including ways that these sexual interests are managed, Ms. Stewart hopes her research will help to inform evidence-based approaches for mental health intervention with minor attracted men prior to contact with the criminal justice system that ultimately contributes to prevention of child sexual abuse.

UNB Researchers Study Housing Situation of Syrian Refugees

A SSHRC Insight Grant-funded project is looking into the housing situation experienced by Syrian refugees who arrived in Canada between November 2015 and February 2016. This multi-site project is led by Dr. Abe Oudshoorn from Western University and brings together teams of researchers based in Fredericton, London (Ont.), and Calgary. At UNB, the team is composed of Dr. Cindy Brown, research associate in the department of history, and Dr. Luc Theriault, professor in the department of sociology. They are supported by two Arabic -speaking graduate research assistants, Mohammad Bakhash (MA economics program) and Sagda Elnihum (MIDST program).

The project seeks to identify the facilitating and inhibiting factors that are at play when Syrian refugees try to secure housing in Canadian cities, in view of the existing housing policies and programs in these various jurisdictions. The grounded theory methodology used

takes an inductive approach, with the special component of being longitudinal in nature, as the purpose is to understand housing challenges or successes over time.

In Fredericton, the project team has engaged with 14 families, who have participated in three waves of interview already. The last round was affected by the COVID-19 crisis, which disturbed the normal data-collection process but also offered a unique opportunity to take into account the effect of an emergency period on the housing conditions of Syrian refugee families.

The researchers from the three sites are now starting to analyze the data, both within and across the provinces, and plan to submit articles for publication soon. They hope that a better understanding of housing (in)stability over time for Syrian refugees to Canada will help to optimize settlement outcomes for all newcomers to Canada.



Dr. Cindy Brown

Dr. Luc Theriault

Dr. Mayur Milan Kale — a water and sanitation (WatSan) expert

Having a strong desire to help lift up communities in crises, Dr. Mayur Milan Kale (PhD'15, civil engineering, UNB), a water and sanitation (WatSan) expert, joined Nobel laureate Médecins Sans Frontières (MSF), an international, independent, medical humanitarian organization that delivers emergency aid. His role as a WatSan expert is to ensure beneficiaries have safe water for drinking and washing and adequate sanitation resources (latrine design and construction), to help prevent the spread of communicable diseases by hygiene promotion and community engagement, to undertake medical waste treatment and management, as well as to support infection prevention and control strategies in the MSF hospitals.

Dr. Kale has worked in six different countries over the course of five years with MSF. His experience is rich and varied, including managing water, sanitation and hygiene (WASH) needs in South Sudan, where there are approximately 130,000 internally displaced beneficiaries in a UN civilians protection camp. He has worked to address a cholera emergency in Yemen by designing the day to day operation for a cholera treatment center/unit handling 400 patients per day. Dr. Kale has provided logistic management in a high security context in Nigeria by constructing components of water and waste water network systems in a secondary level hospital. In Bangladesh, his team helped more than 600,000 displaced Rohingya refugees by building more than 200 emergency latrines, washrooms and 10 borewells to stem a Diphtheria outbreak. In Jordan, he was a project coordinator in an noncommunicable disease clinic catering to Syrian refugees, and in Mumbai, India, he worked on a COVID-19 project by supporting WatSan and community engagement efforts in one of the India's biggest slums.

Currently, Dr. Kale is working as a Project Coordinator, managing the MSF-run 100-bed COVID-19 treatment center housed in the remodeled Patliputra Sports Complex Indoor Stadium in Patna, India. With over 130 MSF staff, the center offers free inpatient care, health education, mental health support and access to all essential drugs and medical supplies needed to treat moderate cases of COVID-19.

Dr. Kale received his PhD in civil engineering in 2015 under the guidance of Dr. Kripa Singh. As part of his doctoral thesis, he developed an innovative anaerobic membrane bioreactor with a very high potential of producing bio-energy while performing superior quality of treatment for high strength industrial waste. He received several awards including scholarships from ADI (Industrial Wastewater Treatment Graduate Scholarship) and the Chemical Institute of Canada.



Dr. Mayur Kale (front row right) works internationally with Médecins Sans Frontières (MSF) as a water and sanitation (WatSan) expert

Religion and Violence E-Learning (RAVE) team

Since 2007, the Religion and Violence E-Learning (RAVE) team has been developing resources to help "build the bridge from steeple to shelter" for women of faith experiencing domestic/intimate partner violence (D/IPV). The RAVE Project is the result of collaborations among researchers, religious leaders, survivors of D/IPV and frontline workers to harness the strengths of both faith communities and secular services in responding to and preventing D/IPV. When Emma began her master's degree in sociology, and later joined the RAVE Team, she saw great potential in taking a similar approach to addressing sexual violence in Evangelical Christian communities.

In 2017, Emma Robinson received a SSHRC grant to conduct her thesis research exploring the relationship between sexual purity codes (premarital abstinence and modest behaviour/clothing for women) and attitudes toward sexual assault in the Evangelical context. Her thesis consisted of a multi-stage qualitative study that began with a content analysis of Evangelical abstinence



Emma Robinson

books and concluded with a series of focus groups and follow-up interviews with Evangelical young adults in New Brunswick.

Among Evangelical young adults, sexual purity codes seemed to be associated with attitudes toward sexual assault to some degree, but only for a minority of participants who expressed their explicit support for "sexual purity". In response to a series of fictional vignettes, these participants engaged in victim blame when the victim had not adhered to sexual purity codes and excused the perpetrator regardless of the victim's purity adherence – often invoking the traditional heterosexual script, which positions men as sexual aggressors and women as gatekeepers, as justification. In contrast, most participants expressed criticism or ambivalence toward "sexual purity" – which they also associated with the traditional heterosexual script – even when they held to a conservative sexual ethic themselves. These participants generally did not engage in victim blame and consistently assigned full responsibility for the sexual assault to the perpetrator. Based on these findings, it appears that challenging certain "sexual purity" beliefs, like the traditional heterosexual script, may be a fruitful way to challenge harmful attitudes toward sexual assault in the Evangelical context.

Following the successful defense of her master's thesis, Emma is excited to continue collaborating with the RAVE Team to develop resources for Evangelical youth and young adults on sexual assault and consent – with a specific focus on using relevant, religious language to challenge the traditional heterosexual script. Dr. Catherine Holtmann, director of the Muriel McQueen Fergusson Centre for Family Violence Research, academic chair of the RAVE Team and Emma's supervisor, is confident that the results of this research will provide a foundation for development of online resources that can assist religious leaders in promoting a just sexual ethic and challenging rape myths in their churches.

COVID-19 research: Dr. Rob Moir

Dr. Rob Moir (Faculty of Business, Saint John) is leading one of 13 COVID-19 research projects funded by NBIF, NBHRF and ACOA. His research aims to support a group of students in gaining access to the tools and knowledge they need to thrive in an online, remote learning setting.

"In these times, teaching delivery has necessarily adopted a computer-mediated model, with the student learning taking place in the home in order to maintain physical-distancing. For those with income shortages, this serves only to increase the digital divide. This is especially problematic in a province that seeks to develop and leverage knowledge economy skills, and to develop itself as a research and entrepreneurial hub for cybersecurity."

This project builds on an initiative led by Mr. Daniel Doiron, a senior teaching associate in the faculty, who had previously secured funding to provide a number of laptops to grade 11 and 12 students in some of Saint John's priority neighbourhoods.

To carry out this project, Dr. Moir is working with community partners including the Teen Resource Centre, Brilliant Labs, CyberNB, and UNB's Office of Experiential Education. These partners will help connect students with resources and provide meaningful learning opportunities for UNB students.

Read the **full post** on the Research stories blog.

Dr. Murshed Chowdhury: collaborative research

Dr. Murshed Chowdhury is an associate professor of economics at UNB in Fredericton. His research interest lies in open economy macroeconomics, financial regulations and migration. Dr. Chowdhury is very active in collaborative research. Recently, he supervised a graduate student, Robert Stewart, from the University of West Indies, St. Augustine, Trinidad and Tobago. Robert came to Canada as a recipient of the Canada-CARICOM Leadership Scholarship program, which provided him a 6-month research grant at UNB under the supervision of Dr. Chowdhury. During Robert's stay, he took one reading course with Dr. Chowdhury and made good progress towards developing research themes. Despite Robert's limited time at UNB as part of the fellowship program, Dr. Chowdhury and Robert have developed a working relationship which leads them to continue working on several collaborative research projects. Through collaboration, Dr. Chowdhury and Robert were able to accomplish valuable research output, which led Robert to make a presentation at the UNB economics departmental seminar series as well as at the Annual Atlantic Canada Economic conference. They also published a working paper, "Does Bank Stability Promote Economic Resilience: Evidence from Panel Data" at the Social Science Research Network (SSRN).

Since Robert's departure, he and Dr. Chowdhury have continued to collaborate, and to date, they have published one paper in a top-notch journal in the field of economics, *Empirical Economics*, published by Springer. In that paper, "Bank Stability and Economic Growth: Trade-offs or Opportunities?," they, along with Dr. Vaalmikki, examine the possibility of a trade-off between bank stability and economic growth. They employed a Generalized Method of Moments (GMM) on a global panel over 100 countries for a period of 1995–2015. Contrary to a trade-off, they observe a positive relationship between bank stability and economic growth. They introduced an innovative trade-off metric to examine the validity of the observed relationship between bank stability and economic growth which reiterates their findings based on the GMM model. Furthermore, their findings assert the role of regulatory capital in simultaneously enhancing high levels of economic output and banking stability. The introduction of a trade-off metric is an important contribution in the finance-led growth literature. A sequel of their published work, "interdependencies between regulatory capital, credit extension, and economic growth" is currently under review in a well-reputed journal in economics and finance. In that paper, they examine the channels through which regulatory capital can influence economic growth. Their findings suggest that unstable funding (credit extension) could lead to negative economic growth. Their findings provide strong support for the Basel III changes which have put more emphasis on Tier 1 capital and stable funding.

Dr. Chowdhury's research interests also expand to areas of international and internal migration. Employing various administrative da-

tasets as well as data from Statistics Canada, he is currently working on several research projects to measure the retention rate and economic performance of movers, stayers, and return migrants in New Brunswick. Some of his projects are funded by the New Brunswick Innovation Foundation (NBIF). Dr. Chowdhury is also working on a number of collaborative projects with the faculty members from other institutions to measure the labour force participation of immigrants with different ethnicity in Canada in the short- and long-run. Dr. Chowdhury is active in supervising graduate students with a wide range of research interests.



Dr. Murshed Chowdhury

Dr. Barry Watson: The impact of economic insecurity on Canadian health outcomes

Over the past year, Dr. Barry Watson has published a series of papers examining the impact of economic insecurity on Canadian health outcomes. In particular, his findings suggest that it is the increased risk of a negative economic event, as opposed to the event itself, which is predictive of worsening mental health. Additionally, such risk produces negative flow on effects including a heightened risk of obesity - particularly among low-educated males. In line with prospect theory, Dr. Watson also notes that subsequent returns to security do not fully reverse the mental health implications of initial negative shocks, suggesting there is a 'scarring effect.'

In addition to his national-level research, Dr. Watson has also been studying the impact of economic insecurity on populist attitudes among our neighbours to the south. In particular, he has found that perceptions of a poor macroeconomy are associated with increased levels of political distrust, accompanied by a rising interest in authoritarianism. These feelings appear to manifest in antagonistic feelings toward so-called "out-groups" (e.g. Muslims, the LGBTQ+ community, feminists, immigrants) along with movement away from the Democrat party, given reduced affinity for Hilary Clinton, and roughly equaling the rise in support for Donald Trump.

Closer to home, Dr. Watson was appointed president of the Atlantic Canada Economics Association in October 2019 and recently hosted their inaugural virtual seminar series. Furthermore, he has been working with several local organizations, including Dialogue NB, where he is an expert-in-residence. Additionally, he received a Mitacs award in September 2020 to further investigate the economic impact of social cohesion in New Brunswick. He is using these funds to hire a UNB graduate student, who will be conducting a systematic review of the current literature while running a series of quantitative tests to examine this relationship. Barry is also working with a local organi-

zation, Art4Life, as they explore the health effects from participation in the arts among seniors

in the community. As Dr. Watson recently suggested:

Although father time remains undefeated, people strive to improve the human condition in their pursuit, as Groucho Marx puts it, "to live forever or die trying". Based on the creative aging hypothesis, we posit that this art programme will improve the mental health of our participants after all, earth without art is simply 'eh'.

Finally, Dr. Watson's next generation of studies will incorporate economic circumstances and social welfare functions, providing a more fulsome way of examining well-being in Canada. His goal is to advance existing inequality of opportunity methods, while exploring new avenues that will alter how economists approach topics such as the social gradients in health and education. In particular, his most recent findings suggest that aspirations for a post-secondary education are lower among those in poverty, regardless of their performance in school, which creates a very troubling inequality of opportunity concerning our Canadian youth.



Dr. Barry Watson



(L-R): Daneka Headley (MASRS Student), Dr. Terri Byers (Principal Investigator), Philip Lunga (PhD IDST Student).

Terri Byers - The Sport Innovation Lab: Increasing Social Inclusion through

Social inclusion is vital for economic productivity and quality of life. Sport organizations are a vital component to increasing inclusion through offering physical activity and sport participation and volunteering opportunities to all members of the population in New Brunswick. Yet, research evidence shows that sport organizations are significantly challenged, in capacity and in knowledge, to embrace innovative practices to fully include a diverse range of participants. Dr. Byers's project presents The Sport Innovation Lab (SIL) as a significant intervention to increasing innovation and social inclusion of disadvantaged communities in sport and in society. The project will incorporate virtual focus groups and interviews in 2020 and some face to face use of virtual reality training tools and assessment in 2021. Sport and diversity related organizations will be invited to participate. The project will have a significant impact on the capacity of sport organizations to embrace diversity (e.g. race, nationality, gender, disability) and increase sport participation of diverse populations.

Page 11 **UNB Successes**

New Collaborative Teacher Education Research Project for the Second Language Research Institute of Canada (L₂RIC) at UNB

The Second Language Research Institute of Canada (L₂RIC), housed within the faculty of education, has recently signed a research contract with colleagues in teacher education at the University of Ottawa and the University of British Columbia. This project, entitled "Identifying Requirements and Gaps in French as a Second Language (FSL) Teacher Education: Recommendations and Guidelines," is funded by a research grant from the Canadian Association of Second Language Teachers (CASLT).

The purpose of this project is to counter the teacher shortage in Canadian French as a second language (FSL) programs by establishing a pan-Canadian overview of present practices and standards in basic education (Kindergarten to Grade 12) FSL teacher pre-service training, its alignment with provincial teacher certification requirements and employer requirements, and its effect on FSL teacher attrition and/or retention.

All members of the L_2 RIC research team are involved in aspects of this two-year collaborative study: Dr. Joseph Dicks, L_2 RIC director; Dr. Paula Kristmanson, professor; Dr. Karla Culligan and Dr. Josée Le Bouthillier, research associates; and Lisa Michaud, faculty associate. We wish to particularly recognize the contributions of Ms. Michaud, an NB French immersion teacher who is currently completing her M.Ed. thesis and is on a one-year secondment working with L_2 RIC. Her involvement in this study, as well as other pedagogical projects currently underway at the institute, is an example of the kind of exemplary accomplishments of graduate students at UNB.

More information about this and other L_2RIC projects can be found on their recently redesigned <u>website</u>. L_2RIC 's mission is to play a pivotal role in second language education in Canada and abroad, including teacher preparation, research, bilingual program evaluation, and policy development.

Additionally, L_2RIC 's director, Dr. Joseph Dicks, is being recognized for his contributions to French immersion education by the *Association canadienne des professionels de l'immersion*, with the Association's award of excellence, *Le Prix André Obadia*. The award recognizes the important research and advocacy role that Dr. Dicks has played during his career as an academic. All the members of L_2RIC 's team wish to join together in congratulating their director on this special recognition.



Photo of consortium members

Professor Emeriti & Honorary Research Professor — Research Success Stories

Thinking Historically for Canada's Future

Dr. Alan Sears continues his scholarship in the areas of history and civic education. He is a coinvestigator and member of the executive committee for the seven-year, SSHRC-funded partnership project, Thinking Historically for Canada's Future.

In September 2020 he published his latest book, *The Arts and the Teaching of History: Historical F(r)ictions* coauthored with Dr. Penney Clark of UBC.



Alan Sears, Honorary Research Professor

"This book is essential reading for academics, professionals, and others. Diverse and dynamic, coherent and focused, Sears and Clark raise fascinating issues about how art is created and what it can tell us about ourselves and others in the past and present," says Dr. Ian Davies, professor in the department of education, University of York, UK. "Every history teacher will want to read this book, which is without question the most thoughtful and complex treatment of the arts in teaching history. Numerous compelling and in-depth examples show how fiction and the visual arts can develop sophisticated understandings of the nature of historical interpretation. The authors' attention to Indigenous perspectives, marginalized voices, and collective memory further enhances the reach and significance of this indispensable contribution to history education."

More information about the book, including a free preview, can be found at palgrave.

He is currently working on a new book tentatively titled, *Rescuing Reason: The Democratic Mission of History Education.*

Dr. Esam Hussein, professor emeritus, named Fellow of the Canadian Society of Senior Engineers

Dr. Esam Hussein, professor emeritus in mechanical engineering, was named a <u>Fellow</u> of the Canadian Society of Senior Engineers (CSSE). The 2020 AGM and Awards Dinner was scheduled to be held in early June in Edmonton, however COVID-19 restrictions forced the cancellation of the event, and a virtual AGM was held July 4 instead. At that meeting, Fellowship awards were confirmed upon 11 new Fellows of the Society. Other CSSE fellows from UNB include Dr. Wolfgang Faig and Dr. John D McLaughlin.

Dr. Hussein obtained a B.Sc. and a M.Sc. in nuclear engineering from Alexandria University and was awarded a PhD in nuclear engineering from McMaster University in 1983. He initially worked with Ontario Hydro, then in 1986 joined the faculty of engineering at the University of New Brunswick. At UNB, he held many positions including teaching in the departments of chemical and mechanical engineering, was chair of mechanical engineering, associate dean of engineering, vice president of the UNB Teachers Association, member of the senate and of the board of governors, and is now professor emeritus.

Dr. Hussein has also written a comprehensive critical review on <u>emerging small modular nuclear power</u> <u>reactors</u>, which was highlighted in a story entitled "<u>Assessing the viability of small modular nuclear reactors</u>".



Esam Hussein, Professor Emeritus

"Small modular nuclear-fission reactors, known as SMRs, have been hailed as being transformative at many fronts. They are seen as the way to overcome the cost overruns and construction delays that plagued an industry dominated by large nuclear power reactors. They can also help alleviate the nuclear-waste disposal problem by burning spent fuel and nuclear waste. Modern designs offer inherent and passive safety features, reducing the risk of severe accidents. Moreover, SMRs can play a significant role in tackling the challenge of climate change by providing a low carbon-emission reliable source of base-load electricity. They can play a role in social justice by supplying isolated and deprived communities, and those with limited financial resources, with electricity and heat, and in some cases with water desalination. SMRs designed to burn plutonium can help the world get rid of weapon-grade plutonium, and those with breeding ability can sustain nuclear fuel production indefinitely. In essence, SMRs support the economic, environmental and social pillars of sustainable development."

Professor Emeriti & Honorary Research Professor — Research Success Stories

Dr. Virendrakumar Bhavsar, Professor Emeritus and Honorary Research Professor Research in Artificial intelligence and High Performance Computing

Dr. Virendrakumar Bhavsar, faculty of computer science, has been carrying out research in various areas of artificial intelligence and high performance computing for many decades. In 2019–20, he published a paper in *Virtual Reality* (Springer) entitled "Virtual Reality: An aid as Cognitive Learning Environment – a case study of Hindi Language." Another paper, "Evaluation of Automatic Text Visualization Systems: A Case Study" was published in the proceedings of an international conference. The work presented in these papers has been carried out with researchers from the Center for Development of Advanced Computing (C-DAC), Pune, India and North Mahrashtra University, Jalgaon, India. In this work, they developed a novel software system, named Preksha, to automatically convert a given text in Hindi (one of the two official languages in India) into a scene (picture). This is the first system in the world to visualize an Indian Language. Further, the system also demonstrates how an automatic text visualizer with a learning paradigm can be used in a virtual environment. One of his earlier published papers in the *International Journal of Cognitive Informatics and Natural Intelligence (IJCINI)* was selected to be included as a chapter of the book *Deep Learning and Neural Networks: Concepts, Methodologies, Tools, and Applications'* published by Information Resources Management Association (USA).

He has been also carrying out work with UNB's Dr. Suprio Ray (faculty of computer science) in the areas of spatial and temporal data-bases for handling Big Data on high performance computers. He published one conference paper in this area.

He was invited as a visiting professor at the Indian Institute of Technology, Dharwad (IITDh) from December 2019 to March 2020. UNB has signed an agreement with IITDh. He interacted with several members at IITDh carrying out research work in the areas of Artificial Intelligence as well as the High Performance Computing. He also team taught a course on 'High Performance Computing and Applications' to undergraduate and graduate students. While Invited as the Chief Guest for the 'International Conference on Innovative Trends In Information Technology (ICITIIT-20)' organized by the Indian Institute of Information Technology Kottayam, Kerala, India, Feb. 13-14, 2020. He gave the inaugural address by video conference call (due to COVID-19) from IITDh on February 13, 2020.

He was invited to speak at a session on 'High Performance Computing and Applications', Vaishwik Bharatiya Vaigyanik (VAIBHAV) Summit - Global Summit of Overseas and Resident Indian Scientists and Academicians, October 4, 2020. This was an initiative organized by the Government of India. The VAIBHAV initiative aims to bring out the comprehensive roadmap to leverage the expertise and knowledge of global Indian researchers for solving emerging challenges. By bringing Indian overseas and resident academics and scientists together, a structure of association will be evolved. The aim of summit is to reflect in-depth on the collaboration and cooperation instruments with academia and scientists in India, with a goal of creating an ecosystem of knowledge and innovation in India through global outreach.

He was the invited participant for the online National Science Foundation (NSF) Institute Planning Workshop on 'Parallel and Distributed Computing (PDC) Education' in July 2020. This workshop was funded by NSF for planning an institute that can help eliminate the longstanding barrier of the sequential computing paradigm such that, analogous to the establishment of the object oriented paradigm, the PDC paradigm is naturally integrated into CS and CE curricula across various institutions as recommended by the 2013 ACM/IEEE

Computer Science Curricula and now by ABET. He was the only invited participant from Canada.

He has been a member of the Awards Committee of the Canadian Association of Computer Science (CACS) / Association Informatique Canadienne (AIC), which became Computer Science Canada | Informatique Canada (CS-Can|Info-Can) in 2016. The Awards Committee awarded several Lifetime Achievement in Computer Science and Outstanding Young Computer Science Researcher awards during 2019-20. He also served as a member on the UNB Governor General's Gold Medal Committee, September, 2020.



Dr. Bhavsar giving the inaugural address as the Chief Guest for the International Conference on Innovative Trends In Information Technology (ICITIIT-20).

Professor Emeriti & Honorary Research Professor — Research Success Stories

Professor Emerita, Dr. Linda C Neilson, Research Associate of the Muriel McQueen Fergusson Centre for Family Violence Research (MMFCFVR), reports another productive 'retirement' year:

Publication of the second edition of Linda C. Neilson (2020, 2nd ed.) Responding to Domestic Violence in Family Law, Civil Protection & Child Protection Cases (Ottawa: Canadian Legal Information Institute, CanLII). This e-book is a revised version of three editions of the national domestic violence bench book (2009, 2011 and 2015) Dr. Neilson wrote for Canadian judges on behalf of the National Judicial Institute. The CanLII e-book is designed to operate as a practice manual for law practitioners and service providers. The Muriel McQueen Fergusson Centre has placed the 39-page table of contents in the UNB Scholar research repository to help readers navigate the e-book on the CanLII website.

Drawing upon her invited participation in Canadian Senate proceedings in connection with proposed changes to the *Divorce Act* and in anticipation of implementation of changes in 2021, Dr. Neilson and Susan B. Boyd, with review comments by Hon. Donna Martinson, wrote (2020) *Interpreting the New Divorce Act, Rules of Statutory Interpretation & Senate Observations* (Vancouver: FREDA Center for Research on Violence Against Women) to support law practitioner and service provider interpretations of the *Act*.

In Linda C. Neilson with Joan Meier, Elizabeth Sheehy, Margaret Jackson, Ruth Halperin-Kaddari, Susan Boyd, Peter Jaffe, and Simon Lapierre (2019)'s Collective Memo of Concern to: World Health Organization (London, Ontario: Learning to End Abuse, Western University), they alerted the World Health Organization to research credibility and family law problems associated with inclusion of references to 'parental alienation' in the index of WHO's forthcoming ICD-11 diagnostic manual. The Collective Memo of Concern was endorsed by over 352 leading experts in the fields of family law, family violence and child abuse as well as 764 concerned individuals from 36 countries around the world. WHO is removing the term from the index.

Dr. Neilson is co-principal investigator with Joanne Boucher, coordinator of the Provincial Court, Domestic Violence cases Moncton, of a collaborative project with the government of New Brunswick, entitled *Collaborative Design of a Research-Informed, Coordinated Provincial / Queen's Bench Family Violence Court Model*, funded by a three-year contribution grant from Justice Canada. Their judicial advisers are Justice Brigitte Robichaud, Court of Queen's Bench, Family Division (Supernumerary) and Judge Anne Dugas-Horsman, Provincial Court (Supernumerary). The project, now in its second year, will document the collaborative design of Canada's first coordinated family violence court model spanning the criminal, civil-intimate-partner protection, family-law and child-protection systems. Anticipated outcomes include enhanced adult and child safety, reduced duplication of information and evidence, and improved coordination of court orders and agreements. They are currently nearing completion of an analysis of focus group and multi-sector court file data. More information is available from the Muriel McQueen Fergusson Centre for Family Violence Research.

Dr. Neilson organized and chaired an international (United States, the United Kingdom and Canada) panel on alienation titled "The World Wide Parental Alienation/Family Violence Crisis in Family Law" (slide one, slide two) during the Research Centre's Ending Gender Based Violence: Harnessing Research & Action for Social Change Conference in October of 2019.

UNB Awards

Name	Faculty / Department	Award	Award Description
		Royal Society of Canada - Academy of Arts and the	The fellowship of the RSC comprises over 2000 Canadian scholars, artists, and scientists, peer-elected as the best in their field. These are distinguished men and women from all branches of learning who have made remarkable contributions in the arts, the humanities and the sciences, as well as in Canadian
Gary Waite	Department of History	Humanities	public life.
Funké Aladejebi (primary applicant); Wendy Churchill		Royal Society of Canada Atlantic	Dr. Barrington Walker (Professor, Wilfrid Laurier University), "The Honourable Leonard Braithwaite: Black Canadians and Civic Belonging in Postwar Ontario." Department of History's 4th Annual Black
(co-applicant)	Department of History	Open Academy	History Month Public Lecture. Foreign Practices: Physician Immigration and History
Sasha Mullally	Department of History	Busteed	of Medicare in Canada
Funke Aladejebi	Department of History	Arts Faculty Development Fund	Exploring the Changing Same: Race, Gender and Educational History in 20 C. Canada
Sarah-Jane Corke	Department of History	Arts Faculty Development Fund	North American Society for Intelligence History
Wendy Churchill	Department of History	Arts Faculty Development Fund	Resiliency, Adaptability, and 'Place' in the Careers and Lives of British Military Medical Practitioners and Engineers , circa 1775-1830
Stefanie Hunt-Kennedy	Department of History	Arts Faculty Development Fund	Bodies, Disability, and Debility: Global and Transnational Perspectives
Lisa Todd	Department of History	Arts Faculty Development Fund	I swear that her appearance is coloured: Racial and Sexual Segregation in German Southwest Africa, 1900-1915
Elizabeth Mancke	Department of History	20 Week Work Study	Researcher on Atlantic Canadian Militias
Yuri Yevdokimov	Department of Economics	Environmental Trust Fund Project	The impact of climate change on residential electricity in the province of New Brunswick
hudith Whost	Escultive of Nurseing	27th Muriel McQueen Fergusson	The Muriel McQueen Fergusson Foundation Award was created in 1992 to recognize outstanding contributions toward preventing and eliminating family violence in Canada.
Judith Wuest	Faculty of Nursing	Foundation Award Fellow of the Society for the	violence in Canada.
Lucia O'Sullivan	Department of Psychology	Scientific Study of Sexuality in 2020	
Lucia O'Sullivan	Department of Psychology	UNB University Research Scholar for 2020–2022	
Mark Jarman	Department of English	Constance Rooke Creative Nonfiction Prize	Finalist in 2019 for this annual prize, offered by The Malahat Review
Mark Jarman	Department of English	The Pushcart Prize	Nominated in 2019 and 2020 for this annual prize, offered by Pushcart Press (U.S.) for the best literary work published in small presses.
			The J.M. Abraham Award recognizes the most outstanding book of poetry published by an Atlantic Canadian author in a given year and is adjudicated
Lucas Crawford	Department of English	J.M. Abraham Award	by the WFNS (Writers' Federation of Nova Scotia). The annual NB Book Awards recognize the best book
Lucas Crawford	Department of English	NB Book Awards (poetry category)	(in a given genre) published by a New Brunswick author. Short lists generally consist of three books.

UNB Grants (not recorded by ORS) - page 1 of 3

Name	Faculty / Department	Grant	Project Description
Jonathon Edwards	Faculty of Kinesiology	Coaching Association of Canada	A 'Scoping' Review of the Relevant Literature on the National Coaching Certification Program (NCCP)
Jonathon Edwards, Kate Kloos**, Tim Konoval*	Faculty of Kinesiology, IDST**, Deakin University*	Coaching Association of Canada	A Scoping Review. Examining the Research on Blended Learning and Online Delivery for Effective NCCP Delivery
Danielle Bouchard	Faculty of Kinesiology	Heart and Stroke NB	Proposing a Novel Exercise Program for Men living with Obesity
Danielle Bouchard	Faculty of Kinesiology	BandFRAIL	Implementing an Exercise Program for people liv- ing with diabetes and frailty
Danielle Bouchard (co- investigator)	Faculty of Kinesiology	Public Agency of Canada/ Government of New Brunswick	Synchronizing Exercises, Remedies in Gait and Cognition at Home: Feasibility of a home-based double-blind randomized controlled trial to improve gait and cognition in individuals at risk for dementia
Danielle Bouchard	Faculty of Kinesiology	Canadian Institute of Health Research	Stand When You Can: Feasibility of a multi-level intervention to modify sedentary behaviour among older adults in assisted living
Danielle Bouchard	Faculty of Kinesiology	NBHRF	Stand While you Can
Stephan Dombrowski (Co-investigator)	Faculty of Kinesiology	National Institute for Health Research (NIHR)	The effectiveness and cost-effectiveness of Assets- based feeding help Before and After birth (ABA- feed) for improving breastfeeding initiation and continuation
Stephan Dombrowski (Co-investigator)	Faculty of Kinesiology	National Institute for Health Research (NIHR)	Effectiveness and cost effectiveness of text message and endowment incentives for weight management in men with obesity: the Game of Stones randomized controlled trial
Stephan Dombrowski (Co-investigator)	Faculty of Kinesiology	New Frontiers in Research Fund	The art of creation project
Stephan Dombrowski	Faculty of Kinesiology	NBHRF Summer Studentships	A Theoretical Domains Framework based interview study of pre-conception perceptions and support needs in New Brunswick women and their partners'
Stephan Dombrowski (Co- investigator)	Faculty of Kinesiology	Scottish Government: Chief Scientist Office (CSO)	Promoting physical activity and exercise after stroke using a text messaging intervention
			NBIF provides funding for hiring outstanding pro- fessors and researchers and investing in some of the resources they will need to succeed. Most grants are made in the range of \$25,000 - \$50,000 and go towards the purchase of infrastructure
Chris Smith	Faculty of Business	NBIF Start-Up	needed to kick-start the applied research program.
Hanna Stewart	Department of Psychology	Dissertation Grant, American Academy of Forensic Psychology (AAFP)	For dissertation entitled Characteristics of minor- attracted persons in the community: Developing a biopsychosocial-sexual typology of men with sexu- al interests in children

UNB Grants (not recorded by ORS) - page 2 of 3

Name	Faculty / Department	Grant	Project Description
Mohammad Zadeh	Faculty of Business	NBIF Start-Up	NBIF provides funding for hiring outstanding professors and researchers and investing in some of the resources they will need to succeed. Most grants are made in the range of \$25,000 - \$50,000 and go towards the purchase of infrastructure needed to kickstart the applied research program.
Jacqueline Low, Gary Bowden	Department of Sociology	SSRHC connection	The 36th Qualitative Analysis Conference The Transdisciplinary Efficacy of Qualitative Methods: Studying Everyday Life, the Empirical Tradition Con- tinues
Cathy Holtmann	Department of Sociology	SSHRC funded national study	Led by the Flourishing Congregations Institute, conducting case studies of congregations in the Atlantic region. As part of that project, a small group of us got \$30,000 USD from the Council for Christian Colleges and Universities (CCCU). Some of that funding will go towards the case studies in the Atlantic region.
Jason Hickey, Amanda Myran	Faculty of Nursing	Government of New Brunswick Post- Secondary Education, Training and Labour Access and Success Program	To foster an environment of cultural safety in the Faculty of Nursing and to better serve Indigenous nursing students and foster allyship with non-Indigenous students and faculty
Co-Principal Investigator: Kelly Scott-Storey, Co- investigators: Sue O'Donnell, Petrea Taylor, Judy Wuest, David Busolo, and Enrico DiTo- masso.	Faculty of Nursing	NBHRF Bridge Grant Fund.	Research Funding: Variation in Men's Health by Cu- mulative Lifetime Violence Severity and Social Deter- minants of Health: A Longitudinal Exploratory Study.
Principal Investigator: Sue O'Donnell, Co-investigators: Kelly Scott-Storey, Petrea Taylor, Judy Wuest, David Bu- solo	Faculty of Nursing	(NBHRF) Bridge Grant Fund	Research Funding: Variation in Men's Health by Cu- mulative Lifetime Violence Severity and Social Deter- minants of Health: A Longitudinal Exploratory Study.
Principal Applicant: Sue O'Donnell	Faculty of Nursing	GNB Nursing Resource Strategy Fund	GNB Funds to host NB RN Prescribing Forum
Cindy Brown	Department of History	URF	Syrian Oral History Project
Sarah-Jane Corke	Department of History	Forest Protection Limited	The History of Forest Protection Limited and It's Role in the New Brunswick Forestry Industry
Hanna Stewart	Department of Psychology	Mamie Phipps Clark Di- versity Research Grant, Psi Chi -	For dissertation entitled Characteristics of minor- attracted persons in the community: Developing a biopsychosocial-sexual typology of men with sexual interests in children

UNB Grants (not recorded by ORS) - page 3 of 3

Name	Faculty / Department	Grant	Project Description
Len Falkenstein	Department of English	City of Fredericton Community Grant	\$4000 to support 2020 NotaBle Acts Theatre Festival
Len Falkenstein	Department of English	City of Fredericton Arts, Culture and Heritage Grant	\$4500 to support 2020 NotaBle Acts Theatre Festival
Len Falkenstein	Department of English	Department of Canadian Heritage Building Communities Through Arts and Heritage Grant	\$6200 to support 2020 NotaBle Acts Theatre Festival
Len Falkenstein	Department of English	Province of New Brunswick Depart- ment of Tourism, Heritage and Culture	\$14000 in operational funding to support annual work of NotaBle Acts Theatre Company
	Department of English	Artsnb Artist in Residence Grant	\$4000 to support 2020 NotaBle Acts Theatre Festival
Sue Sinclair	Department of English	Canada Council Journal Operating Grant	\$65,000 to support publication of literary journal The Fiddlehead
Sue Sinclair	Department of English	ArtsNB Operating Grant	\$20,640 to support publication of literary journal The Fiddlehead

UNB Grants (recorded by ORS) - page 1 of 11

Principal Investigator	Agency	Project Title
James Watmough	Atlantic Association for Research in the Mathematical Sciences	Borders in Public Health and Mathematical Epidemiology
Isdore Chola Shamputa	Atlantic Region Canadian Assoc. of University Nursing Schools	Exploring Interprofessional Practice and Collaboration Experiences of Post-Licensure Graduates from the Tucker Park Health Professions Programs
Anthony Reiman	Beatrice Hunter Cancer Research Insti- tute	Combinatorial Therapeutic Approaches Using Potent Caffeic Acid Phenethyl Ester (CAPE) Analogs for Multiple Myloma
Eric Weissman	BioNB	Applied Cannabis Project
Allen Curry	BioTalent Canada	BioTalent Canada's Science Horizons Youth Internship Program
Tommi Linnansaari	BioTalent Canada	Asst. Environmental Manager
Ben Speers-Roesch	Canada Foundation for Innovation	Marine & Coastal Organismal Responses to Environmental Change Laboratory
Clodualdo Aranas	Canada Foundation for Innovation	Thermomechanical Simulator for Alloy Design Research Activities
Catherine Holtmann	Canadian Institutes of Health Research	Sub from SMU: Violence Against Women Migrants and Refugees: Analyzing Causes and Effective Policy Response
Janine Olthuis	Canadian Institutes of Health Research	COVID-19 Mental Health & Substance Use Service Needs and Delivery
Jason Hickey	Canadian Institutes of Health Research	Sub from Dalhousie: Atlantic Indigenous Mentorship Network
Julia Woodhall-Melnik	Canadian Institutes of Health Research	The Maritime Community Health and Housing Initiative: Investigating the Impact of Public Housing Interventions on Mental Health and Healthcare Use in Low-Income Households in New Brunswick
Neeru Gupta	Canadian Institutes of Health Research	Neighbourhood Environments as a Determinant of Physical and Mental Health Outcomes in a Context of Smaller Urban and Rural Settlements
Sanjeev Seahra	Canadian Institutes of Health Research	Sub from U of Toronto: Agent-Based and Multi-Scale Mathematical Modelling of COVID-19 for Assessments of Sustained Transmission risk and Effectiveness of Countermeasures
Ziba Vaghri	Canadian Institutes of Health Research	Sub from U of Victoria: Global Child; a Rights-Based Approach to Enhancing the Health and Development of Canadian Children
P.T. Jayachandran	Canadian Space Agency	Development of a Low Power, Active HF System Intended for Arctic and Space Based Ionospheric Measurements
P.T. Jayachandran	Canadian Space Agency	Arctic Ionosphere Monitoring – Canadian High Arctic Ionospheric Network (AIM-CHAIN)
Yun Zhang	Canadian Space Agency	Novel Technology to Increase the Spatial Resolution of WaterSat Hyper-Spectral Imaging by 10 Times and Simulated Flight to Vali- date the Spatial and Spectral Fidelity
Michelle Gray	Clean Foundation	Freshwater Mussel Conservation Researcher
Myriam Barbeau	Clean Foundation	Stipend Support for Studying the Salt Marsh Engineer Spartina Alterniflora.
Jonathon Edwards	Coaching Association of Canada	Blended and Distance Training literature review
Tom Beckley	Community Forests International	Partnership for Acadian Forest Restoration on Private Land in the Maritimes
Daniel Dutton	Dalhousie University	Policy Innovation Lab: Enhancing Adoption & Scale of Technologies to Support Healthy Aging

UNB Grants (recorded by ORS) - page 2 of 11

Principal Investigator	Agency	Project Title
Lee Windsor	Department of National Defense	Enhanced Learning for Combat Team Command Readiness
Pamela Pastirik	Employment & Social Develop- ment Canada	Healing HeARTS for Youth
Zhen Lei	Envision Integrated Building Tech- nologies Inc.	An Integrated Virtual Design and Construction (VDC) Framework for Offsite Construction
Laura Romero-Zeron	Fredrik & Catherine Eaton	Formulation of Advanced Dermal Insect Repellents using Natural Biochemical Components
Anne Cremazy	French Embassy in Canada	L. stagnalis Shells as Potential Recorders of Metal Aqueous Pollution History
Jeffrey Landine	Futureworx	Validating a Formative Approach to Developing and Assessing Employability Skills
Scott Pavey	GENOME CANADA	Sub from University of Windsor: Environmental DNA ("eDNA"), Meta- Barcoding and Transcriptional Profiling to Improve Sustainability of Fresh- water Fisheries and Fish Culture
Ken Kent	Google LLC	An Odin-II Partial Maper for Yosys
Brian Hayden	Grand Lake Meadows	Life Under Meadows of Ice
Joseph Nocera	Grand Lake Meadows	Nesting Habitat Use and Availability for Cavity-Nesting Ducks in the GLM Area
Michael Duffy	Grand Lake Meadows	Freshwater Mussel Glochidia & Other Ectosymbionts of Fishes in the Grand Lake Meadows
Michelle Gray	Grand Lake Meadows	Ethnobotany and the Seed Bank: Pairing Genomics with Indigenous Knowledge (Phase II)
Philip Harrison	Grand Lake Meadows	Burbot Connectivity and Use of Grand Lake Meadows Habitats
Scott Bateman	Kognitiv Spark Inc.	Reducing Cognitive Load and Increasing Usability in Mixed Reality Collaboration
Yonghao Ni	Lake Utopia Paper	Development of Kinetics of the Neutral Sulfite Semi-Chemical (NSSC) Pulping for the Production of High Quality Corrugating Medium
Bruce G. Colpitts	McCain Foundation, The	McCain Foundation Postdoctoral Fellow in Innovation
David Lentz	McCain Foundation, The	McCain Foundation Postdoctoral Fellow in Innovation - Mohammad Parsasadr
Eduardo Castillo Guer- ra	McCain Foundation, The	McCain Postdoctoral Fellows in Innovation - Ahmad Mezher
Gobinda Saha	MDS Coating Technologies Corporation	Fluid Erosion and Dynamic Fatigue Characteristics of High-Pressure Cold Sprayed Aerospace Gas Turbine Engines
Alan Lloyd	Mitacs	Temperature dependent performance of high load multirotational bridge bearings
Ali Ghorbani	Mitacs	Trust & Legitimacy: Using Machine Learning to Determine the Legitimacy of Domains
Allen Curry	Mitacs	Quantitative Modelling of habitats for Fish, Macroinvertebrates, and Macrophytes: Assessing Potential Impacts of Hydropower's Proposed Environmental Flows and Climate Change in the Saint John River
Anna Ignaszak	Mitacs	Outbound: Development of a Comprehensive HIV Management System
Brigitte Leblon	Mitacs	Use of UAV Imagery for Eelgrass Mapping
Bruce J. Balcom	Mitacs	Design and Fabrication of a Single-Sided Magnetic Resonance Device

UNB Grants (recorded by ORS) - page 3 of 11

Principal Investigator	Agency	Project Title	
Elizabeth A. Sloat	Mitacs	Using Data to Create Psychologically Safe Workplaces	
Erik Scheme	Mitacs	Machine Learning for Breath Based Cancer Diagnosis	
Janine Olthuis	Mitacs	Developing, Implementing, and Evaluating internet-based Cognitive Behavioural Therapy for Anxiety and Depression	
Joanna Everitt	Mitacs	Succeed and Stay	
Kenneth Kent	Mitacs	High Performance Clustered Secure Storage Solution	
Lloyg Waugh	Mitacs	Advanced photogrammetric data capture and data analysis for improved rehabilitation planning and infrastructure spending	
Michael Duffy	Mitacs	Determining The Species of Glochidia Parasitizing American Eels in The St. John River Using Molecular Techniques	
Michael Thomas	Mitacs	Recyclability of Concrete Wastewater	
Michel F. Couturier	Mitacs	Water Quality and Waste Solids Dewatering at a Zero Exchange Recirculating Aquaculture System	
Michelle Gray	Mitacs	Eradication of the Invasive Smallmouth Bass from Miramichi Lake	
Michelle Gray	Mitacs	Development of Research Strategies for Relocation and Recovery of Freshwater Mussels	
Patrician Evans	Mitacs	Forestry Cloud App Project	
Renjun Ma	Mitacs	Understanding the Spatial Changes of Atlantic cod, Haddock and Yellowtail Flounder Across Canada/U.S. Boundary on Georges Bank	
Rongxing Lu	Mitacs	Efficient Privacy-Preserving Healthcare Monitoring System over Encrypted Time Series Data	
Shabnam Jabari	Mitacs	3D Model-Integrated Automatic Change Detection	
Shelley Doucet	Mitacs	A Needs Assessment of Community Resources and Services for People with Cancer and Their Families in New Brunswick	
Tillmann Benfey	Mitacs	Testing the Reliability and Consistency of UNB's Recirculating Aquaculture Systems	
Tommi Linnansaari	Mitacs	Epigenetic Effects of Smolt to Adult Rearing in Atlantic Salmon	
Trevor Hanson	Mitacs	Towards a VisitAble Housing Policy in Fredericton and Regional Service Commission	
Wayne J. Albert	Mitacs	Cognitive and Physical Demands on Using Ergonomic Spinner Knobs	
William Cook	Mitacs	Casting and Production of HT9 for Advanced Reactor Fuel Cladding	
Xiomara A. Sanchez-Castillo	Mitacs	Review of Nova Scotia Pavement Rehabilitation Practices	
Yang Qu	Mitacs	Biochemical Characterization of the Stereoselectivity of Two Cytochrome P450 Monooxygenase Homologs for Producing Medicinal Natural Products in Yeast	
Yang Qu	Mitacs	Engineering Anti-Cancer Drug Vinblastine Production in Yeast by Synthetic Biology	
Yang Qu	Mitacs	Phytochemical and Bioinformatic Studies of the Biosynthesis of Non-Opioid, Analgesic Monoterpenoid Indole Alkaloids	
Zhen Lei	Mitacs	An Integrated Decision Support Framework for Off-Site Construction Supply Chain	
Zhen Lei	Mitacs	Work Improvement and Data Analytics for Industrial Steel Fabrication	

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Principal Investigator	Agency	Project Title
Ann Cameron	Muriel McQueen Fergusson Foundation Inc.	NBSTA Research Fund
Matthew Rogers	Muriel McQueen Fergusson Foundation Inc.	Exploring Stakeholders' Responses to New Brunswick Educational Reforms During and After the Covid-19 Pandemic
Ali Ghorbani	Natural Sciences and Engineering Research Council	Human-Centric Cybersecurity
Allen Curry	Natural Sciences and Engineering Research Council	Mactaquac Aquatic Ecosystem Study Phase 2 - Aquatic Sciences in Support of Refurbishing a Hydropower Dam
Cassidy D'Aloia	Natural Sciences and Engineering Research Council	Larval Dispersal in a Changing Ocean: Patterns, Causes, and Consequences
Charles P.A. Bourque	Natural Sciences and Engineering Research Council	Flooding in New Brunswick Under Near-to-Medium Term Regional Climate Change
Chris Diduch	Natural Sciences and Engineering Research Council	Worlds UNBound
David Bremmer	Natural Sciences and Engineering Research Council	Novel Constraint Synthesis Methods for Integer Programs
Erik Scheme	Natural Sciences and Engineering Research Council	Pattern Recognition Based Myoelectric Control for Emerging Human- Machine Interfaces
Gobinda Saha	Natural Sciences and Engineering Research Council	Biomass-Driven Nanocomposite Fabric Materials with Hydrophilic Charge Properties Development in Vacuum-Assisted Filtration Method (COVID- 19)
Habibi Lashkari Arash	Natural Sciences and Engineering Research Council	Intelligence-Driven Malware Detection System
Heather Hunt	Natural Sciences and Engineering Research Council	Ecology of Coastal Benthic Communities in a Changing Ocean
Ian Church	Natural Sciences and Engineering Research Council	Automated Processing and Error Detection in Multibeam Sonar Data
Jeff Houlahan	Natural Sciences and Engineering Research Council	Estimating the Direct and Indirect Impacts of Climate Change on Small Wetland Ecosystems
Jonathan Wilbiks	Natural Sciences and Engineering Research Council	Investigating the Independent Effects of Endogenous and Exogenous Attention on the Capacity of Audiovisual Integration
Karl Butler	Natural Sciences and Engineering Research Council	Remote Monitoring of Subsurface Fluid Flow
Keshav Dahal	Natural Sciences and Engineering Research Council	Improving Crop Stress Tolerance Under Climate Change
Lin Wang	Natural Sciences and Engineering Research Council	Modelling the Effects of Dispersal on Metacommunity Dynamics
Loic D'Orangeville	Natural Sciences and Engineering Research Council	Leveraging the 2018 Balsam Fir Dieback in the Acadian Forest to Quantify Forest Vulnerability to Increasing Climate Anomalies (Resubmission)
Michael Flemming	Natural Sciences and Engineering Research Council	An Adaptable Natural Language Understanding Module for Conversational Agents
Myriam Barbeau	Natural Sciences and Engineering Research Council	Ecological Comparisons of Salt Marshes and Mudflats in Contrasting Tidal Regimes

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Principal Investigator	Agency	Project Title
· · · · · · · · · · · · · · · · · · ·	Natural Sciences and Engineering Research Council	Random Effects Modelling and Inference for Skewed Data of Complex Correlation Structures
Rickey Dubay	Natural Sciences and Engineering Research Council	A Learning Force Control Strategy for Robotic Gripping and a Mobile Robot Inspector System for Intelligent Factories
Rickey Dubay	Natural Sciences and Engineering Research Council	Automated Detection and Monitoring of Health Risk, Such as COVID-19
Sanjeev Seahra	Natural Sciences and Engineering Research Council	Beyond General Relativity
Scott Bateman	Natural Sciences and Engineering Research Council	Reducing Cognitive Load and Increasing Usability in Mixed Reality Collaboration
Scott Bateman	Natural Sciences and Engineering Research Council	Mixed Reality Groupware to Support Physical Collaborations
	Natural Sciences and Engineering Research Council	Generating and Maintaining Multi-Level 3D City Models Using Advanced Multi-Model Image Processing
=	Natural Sciences and Engineering Research Council	Strong Electron Correlations in Quantum Chemistry: New Approaches From Machine Learning, Quantum Computing and Time-dependent Quantum Control
Tiger Jeans	Natural Sciences and Engineering Research Council	Reducing Risks and Costs of In-Stream Tidal Energy Using Multi-Scale Computational Fluid Dynamic Simulation
Yang Qu	Natural Sciences and Engineering Research Council	Characterization and Engineering of the Biosynthesis of Alternative Pain- killing Natural Products
Yonghao Ni	Natural Sciences and Engineering Research Council	Development of Kinetics of the Neutral Sulfite Semi-Chemical (NSSC) Pulping for the Production of High Quality Corrugating Medium
Zhen Lei	Natural Sciences and Engineering Research Council	Digitalization and Data Analytics in Off-Site Construction
Zhen Lei	Natural Sciences and Engineering Research Council	An Integrated Virtual Design and Construction (VDC) Framework for Offsite Construction
Joseph Nocera	Nature Trust of New Brunswick	Identifying Key Roost Sites for Three At-risk Aerial Insectivores to Focus Stewardship in New Brunswick Priority Places
Elizabeth Effinger	NB Arts Board	Publishing I or Us by the Erasing Frankenstein Collective, Part of the Erasing Frankenstein Project
Gobinda Saha	NB BioMatrix	Biomass-Driven Nanocomposite Fabric Materials with Hydrophilic Charge Properties Development in Vacuum-Assisted Filtration Method (COVID-19)
David Lentz	NB Department of Natural Resources & Energy	U-Pb Geochronologic Evaluation of the Gold Mineralized Systems with Intrusive Rocks in the Clarence Stream Region of Southwestern New Brunswick
David Lentz	NB Department of Natural Resources & Energy	U-Pb Geochronology and Mineral-Chemical Analyses of Intrusive Igneous Rocks Associated with Gold Mineralization with Remote Predictive Mapping (RPM) in Gold Deposit Areas Throughout NB.
Graham Forbes	NB Department of Natural Resources & Energy	Invasive Alien Species Legislation & Policy Tools
Chris McGibbon	NB Department of Social Development	The New Brunswick Brain Health Initiative: Preventing Alzheimer's by Lessening Modifiable Risk (NB-PALM)
Greg Fleet	NB Department of Social Development	Sub from Art4Life Inc.: Participatory Arts for Older Adults: Benefits of Creative Aging
Lisa Best	NB Department of Social Development	Sub from Go Ahead Seniors: Creative Pathways for Healthy Aging: Seniors and Youth Engage

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Principal Investigator Info	Agency	Project Title
Martin Senechal	NB Department of Social Develop- ment	The Band-Frail Study: A Provincial Intervention to Outweigh Diabetes & Frailty in New Brunswick
Shelley Doucet	NB Department of Social Develop- ment	Co-Designing Dementia Care in New Brunswick: Building the Future Together
Tracey Rickards	NB Department of Social Develop- ment	Mobile Senior's Wellness Network: Reaching Rural New Brunswickers
Arun J. Valsangkar		Instrumentation and Monitoring of Grant Brook # 1 Integral Abutment Bridge Structure
Arun J. Valsangkar	NB Department of Transportation & Infrastructure	Instrumentation and Monitoring of CSP Culverts at Perry Settlement Road, Site B4KK
Alison Luke	NB Health Research Foundation	Evaluating the Process of a Pediatric Patient-Navigation Centre in New Brunswick
Anthony Reiman	NB Health Research Foundation	Identifying Alternative Targets for Individualized Multiple Myeloma Immunotherapy
Christopher Baker	NB Health Research Foundation	Occupational Health: Job Title Cleaning by Algorithm
Dawn MacIsaac Dawn	NB Health Research Foundation	Workplace Monitoring of Surface Electromyography
Janine Olthuis	NB Health Research Foundation	A Brief Workplace Intervention for Anxiety Sensitivity: Reducing Risk for Anxiety, Depression and Posttraumatic Stress Disorder in First Responders
Janine Olthuis	NB Health Research Foundation	COVID-19 Mental Health & Substance Use Service Needs and Delivery
Jason Hickey	NB Health Research Foundation	Impact of Culture on Wellbeing of Indigenous Youths in Foster Care
Jon Sensinger	NB Health Research Foundation	Development of a Rehabilitation Model for Use with Adaptive Optimal Control
Kelly Scott-Storey	NB Health Research Foundation	Variation in Men's Health by Cumulative Lifetime Violence Severity and Social Determinants of Health: A Longitudinal Study
Martin Senechal	NB Health Research Foundation	Exercise Response in Prediabetic Individuals (Bradley McMullin)
Neeru Gupta	NB Health Research Foundation	International Health Workforce Collaborative (IHWC) 18th Conference
Petra Kienesberger Petra	NB Health Research Foundation	The Effect of Dietary Peptides on Obesity-in Insulin Resistance
Sanjeev Seahra	NB Health Research Foundation	Sub from U of Toronto: Agent-Based and Multi-Scale Mathematical Modelling of COVID-19 for Assessments of Sustained Transmission risk and Effectiveness of Countermeasures
Sara Eisler	NB Health Research Foundation	Identifying Lyme Markers with Fluorescent Sensors
Shelley Doucet	NB Health Research Foundation	Innovating Pediatric Behavioural Assessments and Care Pathways
Stephan Dombrowski	NB Health Research Foundation	A Theoretical Domains Framework Based Interview Study of Pre- Conception Perceptions and Support Needs in New Brunswick Women and their Partners
Thomas Pulinilkunnil	NB Health Research Foundation	Role of KLF15 in Triple Negative Breast Cancer
Adam Wilson	NB Innovation Foundation	Investigate existing voice command recognition and control technologies
Allen Curry	NB Innovation Foundation	Fish Passage Specialist: Mactaquac Aquatic Ecosystem Study Phase 2
Alli Murugesan	NB Innovation Foundation	Developing Novel Anti-blood Cancer Drug Candidate(s) through Evaluation of Nature-inspired Caffeic Acid Phenethyl Ester (CAPE) Analogs
Anna Ignaszak	NB Innovation Foundation	Electrochemical Sensor for Early Detection of Lyme Disease

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Principal Investigator Info	Agency	Project Title
Anna Ignaszak	NB Innovation Foundation	Portable Impedimetric Sensor for COVID-19 Detection
Barry Blight	NB Innovation Foundation	Tandem Solid Extraction/Analysis of Cannabis Materials
Ben Speers-Roesch	NB Innovation Foundation	Marine & Coastal Organismal Responses to Environmental Change Laboratory
Charles P.A. Bourque	NB Innovation Foundation	Airborne Contagion Modelling for Event Safety
Clodualdo Aranas	NB Innovation Foundation	Thermomechanical Simulator for Alloy Design Research Activities
Clodualdo Aranas	NB Innovation Foundation	High-Speed Impact Response of Inconel-625 Manufactured Via Laser Powder Bed Fusion
Daniel Dutton	NB Innovation Foundation	Policy Innovation Lab: Enhancing Adoption & Scale of Technologies to Support Healthy Aging
David Bremmer	NB Innovation Foundation	Industrial-scale Benchmarking Server
David Busolo	NB Innovation Foundation	Innovating Clinical Nursing Education using Zoom to Combat the Effects Covid-19
Erik Scheme	NB Innovation Foundation	Designing Breathing Games to Support Remote and Virtual Recovery of COVID-19
Erik Scheme	NB Innovation Foundation	A Novel Intention-Based Tool for the Assessment of Motor Function
Erik Scheme	NB Innovation Foundation	Development of a Pressure-Based Gait Authentication Access Control System for Identity Verification
Felipe Chibante	NB Innovation Foundation	Airborne Pathogen Mitigation with Nano-Coatings
Gobinda Saha	NB Innovation Foundation	Surface-Activated Virus Protective Organo-Metallic Nanocomposite Materials/Methodologies Development
Gobinda Saha	NB Innovation Foundation	Fluid Erosion and Dynamic Fatigue Characteristics of High-Pressure Cold Sprayed Aerospace Gas Turbine Engines
Gobinda Saha	NB Innovation Foundation	Polymer-Based Surface Activated Additive/Coating Solutions for Plastics-Based Packing Materials
Hadi Eslaminosratabadi	NB Innovation Foundation	Public Health Communication in the Era of COVID-19: A Case Study of New Brunswick's Public Health Communication Strategy
Herbert Emery	NB Innovation Foundation	The Economics of Emerging from the COVID-19 Lockdown in New Brunswick
Huining Xiao	NB Innovation Foundation	Emerging Technologies for Creating Cellulose-Based Packaging with Multi-Barrier Functionality
John A. Kershaw	NB Innovation Foundation	An Imputation/Copula Individual Tree Growth Model to Assess Effects of Climate Change on NB Annual Allowable Cut Risk
Jon Sensinger	NB Innovation Foundation	Research Therapist to Support IBME's Clinical Research Director
Julia Woodhall-Melnik	NB Innovation Foundation	Capturing Lives and Changing Minds: Bridging the Gap Between Youth, Service Providers and Community Using Innovative Photovice Methods
Kenneth Kent	NB Innovation Foundation	R3 Star Mentor
Kush Bubbar	NB Innovation Foundation	Custom models or multi-physics vehicle modelling;
Lloyg Waugh	NB Innovation Foundation	Use of Virtual Reality and 3D Modeling to Minimize the Spread of COVID-19 on Construction Sites
Mahdi Hosseini	NB Innovation Foundation	NBIF Start-Up Application
Marcelo Santos	NB Innovation Foundation	Development of a GNSS-Based System for Water Level and Flood Monitoring

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Principal Investigator Info	Agency	Project Title	
Matthew Rogers		Exploring Stakeholders' Responses to New Brunswick Educational Reforms During and After the Covid-19 Pandemic	
Meng Gong	NB Innovation Foundation	Use of Lightweight Wood-based Sandwich Panels for Structural Applications	
Mohsen Moham- madi	NB Innovation Foundation	Additive Manufacturing Innovation Challenge	
Sandra Magalhaes		Planning for Community Resiliency in Recovery from COVID-19 in NB	
Scott Pavey		Sub from University of Windsor: Environmental DNA ("eDNA"), Meta-Barcoding and Transcriptional Profiling to Improve Sustainability of Freshwater Fisheries and Fish Culture	
Shawn MacLellan		Production of COVID-19 Antigens for Rapid and Extensive NB Community Resting Initiatives	
Shelley Doucet		Evaluating the Usefulness of a Mental Health Artificial Intelligence (A.I) Chatbot in a Healthcare Setting	
Shelley Doucet		Occupational Disruption During a Pandemic: Exploring the Experiences of Individuals Living with Chronic Disease	
Ted D. Needham		Mobilizing Two-Eyed Seeing to Investigate Socio-Economic Impacts of the Emerald Ash Borer on New Brunswick Mi'kmaq Communities	
Ted McDonald	NB Innovation Foundation	Statistics on incidence, survival and economic burden of lung cancer	
Terri Byers		The Sport Innovation Lab: Impacts of Virtual Reality and Technological Innovation in Increasing Social Inclusion and Diversity in New Brunswick	
Tommi Linnansaari		Forest Hydrology Project: Sustainable Co-Management of New Brunswick's Forests, Water and Atlantic Salmon	
William Cook	NB Innovation Foundation	Advanced Small Modular Reactor (SMR) Research Equipment	
Yonghao Ni		Conversion of Cannabis Biomass to Pulp Fibers and Manufacturing of Molded Cellulose Pulp Products From Them	
Yonghao Ni		Development of Kinetics of the Neutral Sulfite Semi-Chemical (NSSC) Pulping for the Production of High-Quality Corrugating Medium	
Zhen Lei	NB Innovation Foundation	Digital Technology Advancement in Construction Industry	
Allen Curry		Mactaquac Aquatic Ecosystem Study Phase 2 - Aquatic Sciences in Support of Refurbishing a Hydropower Dam	
Janine Olthuis		A Brief Workplace Intervention for Anxiety Sensitivity: Reducing Risk for Anxiety, Depression and Posttraumatic Stress Disorder in First Responders	
Lisa Best	NB WorkSafe	Cancer in the Workplace: The Effects of a Diagnosis on Employment	
Sandra Magalhaes	NB WorkSafe	Drivers of Occupational Health and Safety Vulnerability in New Brunswick	
Wayne J. Albert	NB WorkSafe	Active Sitting and Standing to Improve Office Worker	
Audrey Limoges		Monitoring Natural Hazards During Coastal to Offshore Sediment Remobilization and its Impacts on Primary Productivity Dynamics in the Lower St. Lawrence Estuary	
Chris McGibbon		Outcomes in Frail Older Adults with Isolated Hip Fractures in New Brunswick	
Daniel Dutton	Networks of Centers of Excellence	Advancing Policies and Practices in Technology and Aging (APPTA)	
Danielle Bouchard		An Investigation of the Long Term Benefits Associated with a Standing Intervention for Residents Living in Long Term Care (Fellowship for Molly Gallibois)	
Tommi Linnansaari	NS Department of Fisher- ies and Aquaculture	Lake Trout Occurrence Throughout Nova Scotia and New Brunswick	

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Principal Investigator Info	Agency	Project Title
Funke Aladejebi	Royal Society of Canada	The Honorable Leonard Braithwaite: Black Canadians & Civic Belonging in Postwar Ontario
Ted McDonald	Saint John Regional Hospital Foundation	Sub from HHN: Support the Development of an Evaluation Plan and Logic Model of the Parent-Child Assistance Program (PCAP)
Alison Luke	Social Sciences and Humanities Research Council	The Inaugural Canadian Healthcare Navigation Conference
Amy Scott	Social Sciences and Humanities Research Council	From Womb to Tomb: An Bioarcheological Exploration of Childhood Health in 19th and 19th Century Halifax, Canada
Ann Cameron	Social Sciences and Humanities Research Council	Sub from UBC: The Origin of Academic Cheating in Early School Years
Burkholder Casey	Social Sciences and Humanities Research Council	Think / Exhibit / Archive / Change / Help: Atlantic Canadian Queer, Trans & Non-Binary Youth in Archiving and Exhibiting Participatory Media
Carmen Gill	Social Sciences and Humanities Research Council	Coercive Control, Risk Assessment and Evidence of Intimate Partner Violence: Police Response
Casey Burkholder	Social Sciences and Humanities Research Council	Supports and Barriers in Teaching Sex Education in New Brunswick Schools
Catherine Holtmann	Social Sciences and Humanities Research Council	A Culturally Integrative Approach to Muslim Family Safety
Elaine Perunovic	Social Sciences and Humanities Research Council	How do People Present Themselves Online to Attract Potential Romantic Partners? Cultural Differences in Online Dating Profile Content
Hilary Young	Social Sciences and Humanities Research Council	Speech Injunctions in the Digital Age
Hsin-Chen Lin		An Examination of Consumer and Managerial perspectives on Sponsorship Signaling Processes
Jackie Oncescu	Social Sciences and Humanities Research Council	Partnering with Mary Sweetman (Acadia) & Rachel Bedingfield (Kentville), Jackie worked with them to help the town design & deliver the services provided by the Recreation Dept., differently under the COVID protocol. This research funding will allow them to evaluate their experience for rural low-income mothers.
Janet Austin	Social Sciences and Humanities Research Council	Incentives for Whistleblowers - Current Perspectives Conference
Jeffrey Landine Jeffrey	Social Sciences and Humanities Research Council	Validating a Formative Approach to Developing and Assessing Employability Skills
Julia Woodhall-Melnik	Social Sciences and Humanities Research Council	Sub from U of Alberta: Community Housing Canada: Partners in Resilience
Neeru Gupta	Social Sciences and Humanities Research Council	Gender Pay Gaps in the Health Professions: Do Health Systems Reflect the Social Inequalities they are Meant to Address?
Neeru Gupta	Social Sciences and Humanities Research Council	Sub from McGill: Consortium on Analytics for Data-Driven Decision-Making (CAnD3): Developing Talent for Population Analytics in Aging Sciences
Patrick Bruning	Social Sciences and Humanities Research Council	An Examination of Job Crafting Competencies and Performance/Well-being Tradeoffs
Stefanie Kennedy	Social Sciences and Humanities Research Council	The Slave Law Project
Ted McDonald	Social Sciences and Humanities Research Council	DataNB Training Partnership with the Government of New Brunswick
Tom Beckley	Social Sciences and Humanities Research Council	Partnership for Acadian Forest Restoration on Private Land in the Maritimes

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Principal Investigator Info	Agency	Project Title
	Social Sciences and Humani-	Exploring Meta-organization and Collective Action for Sustainable Devel-
	ties Research Council	opment
Deepa Pureswaran	Spray Efficacy Research	Sub from FPL: Long Term Monitoring of Northward Range Expansion, Pop-
	Group	ulation Dynamics and Adaption of Spruce Budworm Populations
Dhirendra Shukla	Springboard Atlantic	Balancing Personal Privacy when Fighting an Epidemic
Rickey Dubay	Springboard Atlantic	Practical Model Predictive Control Schemes for Advanced Automation
Gobinda Saha	Thermopak	Biomass-Driven Nanocomposite Fabric Materials with Hydrophilic Charge Properties Development in Vacuum-Assisted Filtration Method (COVID-19)
Lisa Keeping-Burke	University of Adelaide	The University of New Brunswick (UNB) Saint John Collaboration for Evidence-Informed Healthcare: A JBI Centre of Excellence
Veronica Whitford	University of Michigan	Reading in Bilingual Older Adults: An Eye-Tracking Investigation
Chola Shamputa Isdore	University of New Brunswick	Proposal for the First Phase of a Latent Tuberculosis Infection Screening Program for Newcomers in Southern New Brunswick Using Community-Led Champions
Cindy Brown	University of New Brunswick	The Experience of Syrian Refugees from Conflict Zone to Canada
Clodualdo Aranas	University of New Brunswick	Thermomechanical Simulator for Alloy Design Research Activities
Connie Stewart	University of New Brunswick	New Methods for Compositional Data Analysis with Application to QFASA
Danielle Bouchard	University of New Brunswick	Cancer and Exercise Workshop
Dawn MacIsaac	University of New Brunswick	Machine Learning Applied to Surface Electromyography
Edith Snook	University of New Brunswick	Early Modern Maritime Recipes Public Event
Habibi Lashkari Arash	University of New Brunswick	SAGETEA Low Code AI Security Verification Process and System
Hadi Eslaminosratabadi	University of New Brunswick	Alliance Portfolios and SMEs' Innovation Performance: The Role of Internal Knowledge
Jen Rowett	University of New Brunswick	Understanding and Responding to the Wholistic Wellness Needs of Urban Indigenous Peoples in New Brunswick
Jennifer Andrews	University of New Brunswick	How Americans Perceive Canada: Making Exceptions, Taking Refuge
Kathryn Weaver	University of New Brunswick	Use of Cannabis in Recovering from an Eating Disorder
Kenneth Kent	•	A Secure High-Density Storage Solution
Lucia O'Sullivan	University of New Brunswick	University Research Scholar Award 2020-22
Lyle Hamm		Developing Cultural Competency in "Second Chair" Leaders: Challenges and Mentoring Needs of Vice Principals in Diverse Schools in New Brunswick
Maria Papaioannou	University of New Brunswick	3D Visualization Theories of an Insula of Houses at Abdera and a Basilica on Kalymnos
Pamela Malins	University of New Brunswick	Literature and Play Across All Genders in Early Childhood Education
Patrick Eldridge	University of New Brunswick	Shared Remembrance: Husserl on the Intersubjectivity of Memory
Petrea Taylor	University of New Brunswick	Women's Health Promotion in the Context of Suicidality: A Grounded Theory and Photovoice Study
Rongxing Lu	University of New Brunswick	Research on Blockchain-based Privacy-preserving Outsourcing Computation
Sabine LeBel	University of New Brunswick	Queer Environmental Futures
Scott Pavey	University of New Brunswick	Sub from University of Windsor: Environmental DNA ("eDNA"), Meta- Barcoding and Transcriptional Profiling to Improve Sustainability of Fresh- water Fisheries and Fish Culture

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Principal Investigator Info	Agency	Project Title
Scott Ronis	University of New Brunswick	Characteristics of Individual and Interpersonal Adjustment Among Intimate Partners of Individuals With Histories of Sexual Aggression
Stephan Dombrowski	University of New Brunswick	University Research Scholar Award 2020-22
Tajbakhsh Alireza	University of New Brunswick	The 4Ps of Sustainable Forestry in New Brunswick
Tatiana Zaraiskaya	University of New Brunswick	Building a Community of Practice for Research Data Services at UNB
Ted McDonald	University of New Brunswick	University Research Scholar Award 2020-22
Tracey Rickards	University of New Brunswick	A Focus Group Study to Understand COPD Management Needs of Patients & Providers and Specification & Feasibility of an eHealth COPD Intervention
Usha Kuruganti Usha	University of New Brunswick	Improved Myoelectric Control for Advanced Prosthetic Function
Yonghao Ni	University of New Brunswick	Development of Kinetics of the Neutral Sulfite Semi-Chemical (NSSC) Pulping for the Production of High-Quality Corrugating Medium
Christopher Baker	University of Toronto	Occupational Health: Job Title Cleaning by Algorithm