

ANNUAL REPORT

OFFICE OF THE
VICE PRESIDENT RESEARCH

UNB FISCAL YEAR 2024-2025





REPORT PREPARED
DECEMBER 2025

FROM THE VICE PRESIDENT RESEARCH (VPR)

This past year was one of significant activity and accomplishments, both in our research community, and within my office.

Perhaps the most significant change in the office was the addition of a new, associate vice president research role - the first time in nearly two decades that the Office of the Vice President Research has had a second senior leadership role. Dr. Kelly Scott-Storey was appointed to the position in January 2025, where she will lead our external relationship efforts as Associate Vice President for Research, Innovation and Partnerships (AVPRIP). Dr. Scott-Storey, a faculty member in nursing, has long had a focus on knowledge mobilization and translation in her own research, and brings a wealth of valuable skills and knowledge to the role. Congratulations, Kelly!

Along with this new position, we also saw UNB's Strategic Partnerships team, led by Amy Batt, moved to report to the AVPRIP, emphasizing the importance of key partners in growing our research impact. The Research & Innovation Partnerships team was also moved to report to the AVPRIP. This team supports establishing and maintaining relationships with government, industry and non-profit groups, including technology and knowledge transfer and intellectual property protection.

As we continue toward 2030, and toward a vision of UNB as a university of influence and impact, research partnerships will continue to be increasingly essential in helping to move the needle on annual research funding and for our ability to make a positive difference in the world. I look forward to seeing what this transition brings to this important work.

We have also continued to focus on modernization of process and structure, which we hope will be reflected in simpler, easier administrative workflows for our staff and for researchers.

One significant move in this direction is the deployment of a researcher portal for our grants management database. This new platform enabled us to move our internal awards application process to an entirely digital platform, simplifying this process and reducing the amount of legwork required for it, and we are looking forward to other opportunities following this successful pilot project.

In this report, we also share just a few of the numerous and significant accomplishments of our UNB research community. I am incredibly proud of this community and of what they do, and I invite you to join me in congratulating and celebrating them, and our collective success.



Sincerely,

A handwritten signature in black ink, appearing to read "DR. DAVID MAGEE". The signature is fluid and cursive, with a blue and white pen visible in the bottom right corner of the signature area.

DR. DAVID MAGEE
Vice President Research

UNB'S RESEARCH COMMUNITY IS A CONSTANT HOTBED OF ACTIVITY



RESEARCH ACTIVITY

From securing funding for the next revolutionary idea, to putting in place supports and infrastructure enabling these efforts, to recognizing and celebrating the people that make it all happen, UNB's faculty, staff and students are hard at work building the future.



RESEARCH CELEBRATION WEEK

We hosted our fourth annual Research Celebration Week, applauding our research community with even more events, as well as with a special video showcasing a few of UNB's many impactful researchers.



CYBER ATTRIBUTION DATA CENTRE

In December 2024, the Government of Canada announced funding to establish a new Cyber Attribution Data Centre at the Canadian Institute of Cybersecurity at the University of New Brunswick, up to a total of \$10 million over five years.



RESEARCH FUNDING

Among the successful grant applications from federal funders were funds for research projects on increasing the visibility of Black and Indigenous writers from the Maritimes; incorporating disability in housing needs assessments; using AI models to help interpret ancient stone tablets; increasing privacy protections for machine learning; new materials manufacturing and testing; and much more.

FUNDING AND SUPPORT

The Canadian University of Business Offices (CAUBO), provides a standardized profile for university finances that allows for comparison across the sector.

CAUBO reporting does omit some research-related funding, particularly funds that provide support for UNB's institutional research mandate rather than direct support of research projects.

RESEARCH REVENUE

\$49.9 MILLION

CAUBO-standardized annual sponsored research revenue, FY 2024-2025

TRI-AGENCY SUCCESS

\$14.9 MILLION

Total tri-agency grants, FY 2024-2025



Cyber Attribution Data Centre Funding Announcement

UNB research activities were supported by a total of **\$14,859,720** in the 2024-2025 university fiscal year.

This amount comprised \$2.73 million in scholarships for graduate students, \$3.37 million for UNB's Research Support Fund and the remaining \$8.77 million in direct research grants.

PROJECT PARTNERSHIPS

159

NEW FUNDED
RESEARCH PROJECTS
**INVOLVING AT
LEAST ONE
EXTERNAL PARTNER**

Over the 2024-2025 federal fiscal year, UNB researchers started 159 projects with at least one external partner.

These partners include new startups, established companies, community groups, NGOs, government departments and arm's-length organizations. Partnerships span both long-standing collaborations entering new phases and newly formed ones.

Projects range from R&D contracts to technology commercialization and large-scale collaborative research. Strategic partners play a key role in driving this activity and impact.

RESEARCH SUCCESS

SUCCESSFULLY FUNDED RESEARCH PROPOSALS

758

Scholars across UNB submitted funding proposals during the 2024-2025 fiscal year.

RESEARCH
TEAMS SAW A
54%
COLLECTIVE
SUCCESS RATE

... WITH ...

409
GRANT
PROPOSALS
AWARDED
FUNDING

AMONG THOSE

40%
SUCCESS RATE

A NEAR

65 OF 168
WERE FUNDED
BY THE
TRI-AGENCIES

1,781

active research accounts,
representing ongoing
projects during the
university fiscal year.



COREHub Off-site Research Facility



NEW INFRASTRUCTURE

UNB's **COREHub** was a hub of activity over the past year; by the end of the reporting year, most of the renovations were completed, and two major lab spaces were fully operational, with the third approaching completion.

In Saint John, construction got well underway on the **Health and Social Innovation Centre**, a 65,000 square foot facility that will focus on integrated health.



UNB Health and Social Innovation Centre

RESEARCH EXCELLENCE

UNB's research impact and achievement is driven by its people: researchers who strive to deepen their understanding, to be among the leading minds in our world, to share this knowledge with their colleagues and our communities. Among our research goals, we seek to foster and grow a culture of celebration that recognizes the contributions of our people.

While there are a great many more who merit acknowledgment and celebration, some of those stories include:

Our 2025 **UNB University Research Scholar award** recipients were **Dr. M. Gabriel Hrynick**, an associate professor of anthropology specializing in pre-contact Eastern North America, and **Dr. Martha Paynter**, an assistant professor of nursing and internationally recognized abortion services and prisoner health scholar.

The **2024 UNB Award for Excellence in Research** was presented to **Dr. Kelly Scott-Storey**, a professor of nursing whose research focuses on intimate partner violence.



UNB'S RESEARCH IMPACT
AND ACHIEVEMENT
IS DRIVEN BY ITS **PEOPLE**



Dr. Kelly Scott-Storey | 2024 UNB Award for Excellence in Research



Dr. Martha Paynter | 2025 Research Scholar award recipient



Dr. M. Gabriel Hrynick | 2025 Research Scholar award recipient

INTERNAL AWARDS:

The Fredrik and Catherine Eaton Visitorship programs support scholarly exchanges and enable UNB to partner with other universities or research institutions around the globe. They are valued at up to \$10,000 per award.



Dr. Stephan Dombrowski

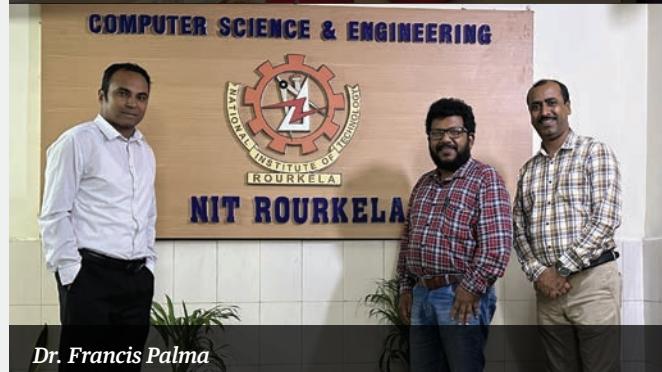
Dr. Alli Murugesan

2024-2025 RECIPIENTS UNDER THE FREDRIK AND CATHERINE EATON VISITORSHIP PROGRAMS:

- Dr. Clodualdo Aranas, mechanical engineering, who took up a visitorship at the University of the Phillipines (Diliman)
- Dr. Terri Byers, kinesiology, at Montpellier University, France
- Stephan Dombrowski, kinesiology, at the Queen's University of Belfast, Centre for Public Health
- Dr. Jeffery Hebert, kinesiology, at the University of Southern Denmark
- Dr. Alli Murugesan, nursing & health sciences/ SASE, at the Cleveland Clinic, Ohio, USA
- Dr. Aurora Nedelcu, biology, at Cornell University, New York
- Dr. Francis Palma, computer science, at NITR, India and KIIT, India
- Dr. Rick Wightman, computer science, at Durham University, UK
- Dr. Julia Woodhall-Melnik, social sciences, at the University of Adelaide and Melbourne University, Australia



Dr. Jeffery Hebert



Dr. Francis Palma



Dr. Julia Woodhall-Melnik



The **Grand Lake Meadows endowment fund** provides opportunities to undertake research projects within the area of the Grand Lake Meadows. Projects supported are intended to increase the appreciation, knowledge, and interest in the area through research of ecological, social and historical characteristics of the area.

2024-2025 RECIPIENT FOR
FUNDING UNDER THIS
PROGRAM:

Dr. Sue Blair, anthropology, for the project: Inventory and digitization of the Pelletier collection of Wabanaki Basketry.



Thanks to support from the **Harrison McCain Foundation**, we are able to offer funding to early career researchers through the Young Scholars award, and for the dissemination of knowledge through the Publication Grant.



**2024-2025 HARRISON McCAIN
FOUNDATION YOUNG
SCHOLARS RECIPIENTS**

- Dr. Liza Bolen, humanities & languages
- Dr. Andrea Bombak, sociology
- Dr. Rachel Bryant, humanities & languages
- Dr. Tobin LeBlanc Haley, social science
- Dr. Debasmita Mukherjee, electrical and computer engineering
- Dr. Maria Panezi, law
- Dr. Jan-Hendrik Pöhls, chemistry
- Dr. Christopher Rouse, electrical and computer engineering
- Dr. Erin Spinney, history and politics
- Dr. Alireza Tajbakhsh, management
- Dr. Veronica Whitford, psychology
- Dr. Alex Zimmer, biological sciences

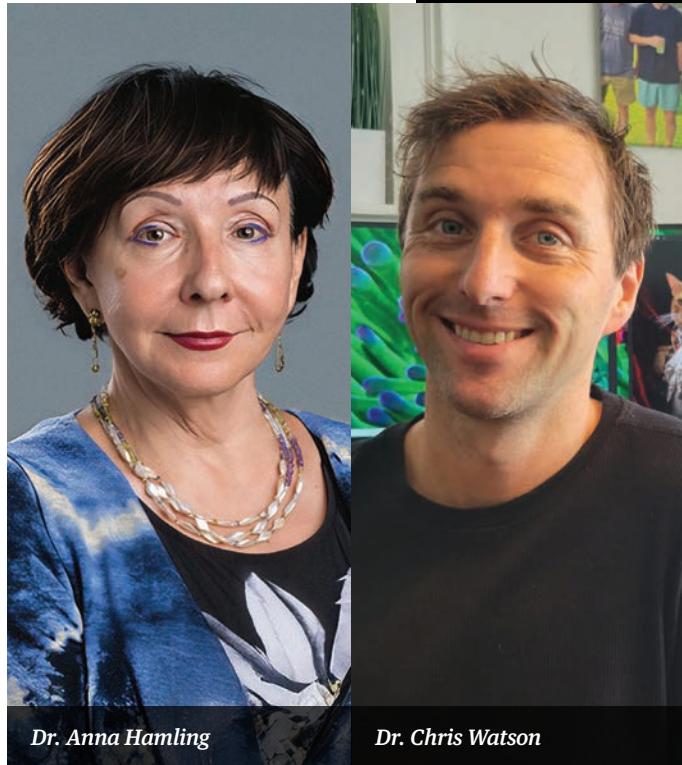
EXTERNAL RECOGNITION

Outside our institution, we saw researchers be recognized for their disciplinary leadership and expertise.

Dr. Anna Hamling, faculty member in the department of culture and media studies and a globally recognized scholar in nonviolence and peace studies, was recognized in the United States Institute of Peace's Peace Professors periodical.

Research scientist Dr. Chris Watson, who works in UNB's Radio and Space Physics Laboratory, was appointed to the Canadian Committee on Antarctic Research (CCAR). The CCAR is part of the Government of Canada's Polar Knowledge Canada body and provides advice and guidance to POLAR on Antarctic matters.

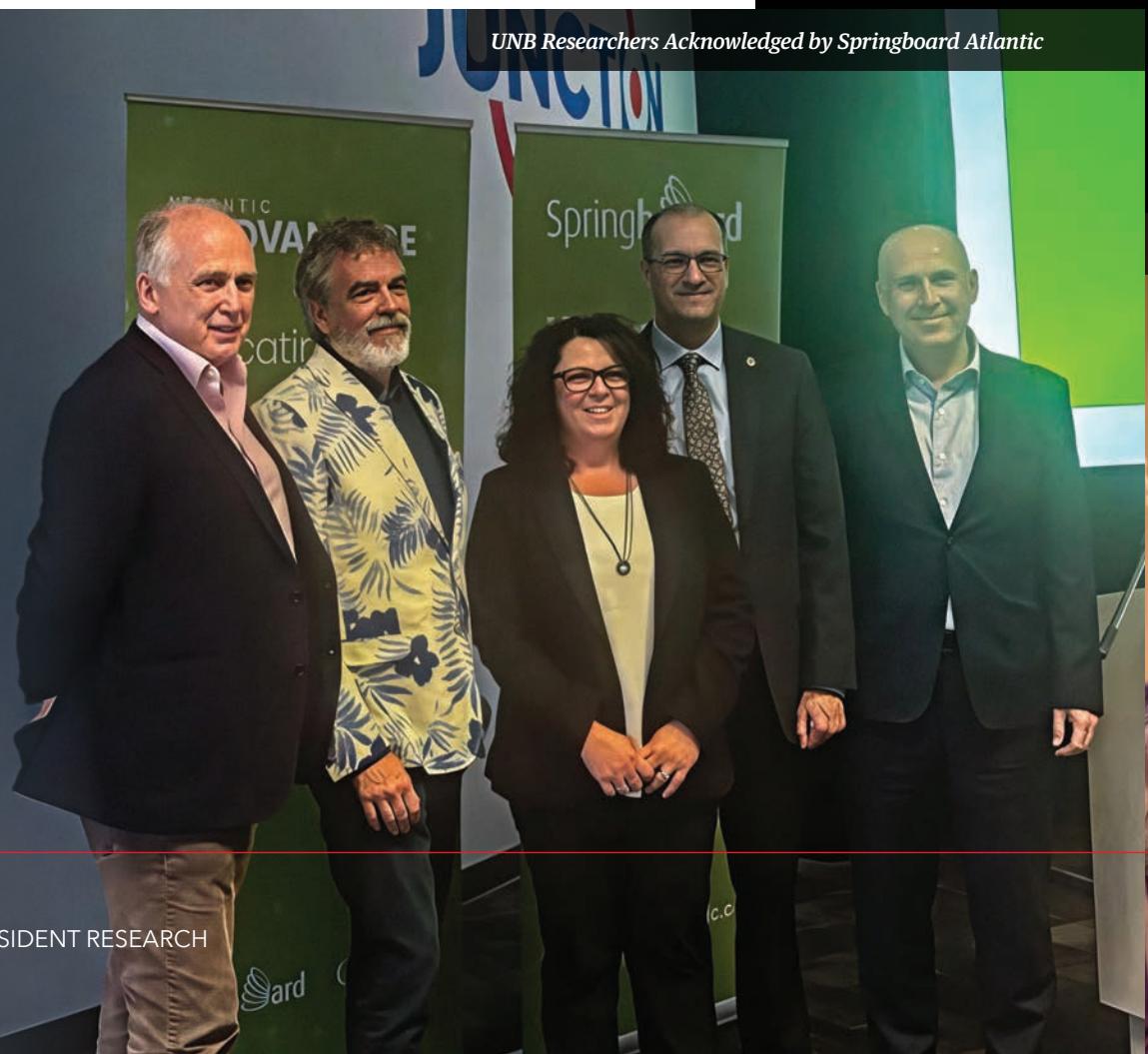
Graduate student Samuel Nemeroff earned second place at the Second International PopAging DataViz competition at Florida State University in late 2024. Nemeroff is conducting research on radicalization and right-wing extremism under the supervision of sociology professor Dr. David Hofmann.



We also saw three current and former UNB research administrators **recognized for their contributions to Springboard Atlantic** and its support for research and innovation in the region.

Hart Devitt, Tania Jones, and Dr. David Foord were applauded at Springboard's 20th anniversary meeting.

UNB Researchers Acknowledged by Springboard Atlantic



PEOPLE AND INSTITUTES

RESEARCH CHAIRS

29 ACTIVE RESEARCH CHAIRS TOTAL (2024-25)

9 CANADA RESEARCH CHAIRS + **20** OTHER FUNDED CHAIRS

The foundation of UNB's research ecosystem is composed of exceptional faculty and graduate students conducting leading research enabled by our world class research institutes, centres and labs.

Research chairs, including Canada Research Chairs (CRCs), strengthen UNB's research ecosystem by launching new initiatives, expanding areas of growth, and enhancing existing strengths. These world-class scholars elevate UNB's research excellence and drive positive impact locally, nationally, and globally.

NEW AND RENEWED RESEARCH CHAIRS

In 2024-2025, we welcomed two new industry-funded research chair: Dr. Sajjad Dadkhah joined UNB as the Mastercard IoT Research Chair, taking up the mantle from Dr. Rongxing Lu; and Dr. Alexis McGill was appointed as the Hon. Joan Kingston Research Chair in Health Innovation.

We also welcomed one new Canada Research Chair, as well as one renewed CRC.

Dr. Suchinta Arif, assistant professor in biological sciences and in mathematics and statistics, was named as CRC in Ecological Modelling.

Dr. Veronica Whitford's CRC in Cognitive Neuroscience of Bilingual Reading Across the Lifespan was renewed for a second term, which will continue to mid-2029.

Two chair terms also ended during the 2024-2025 federal fiscal year: The Parks Canada Chair in Aquatic Restoration, and the CIHR Indigenous Research Chair in Nursing.

Dr. Suchinta Arif



Dr. Sajjad Dadkhah



Dr. Alexis McGill



Dr. Veronica Whitford



RESEARCH FACULTY

In the 2024-2025 fiscal year, UNB's research community included 486 professoriate stream faculty and research associates.

Of those, around 25% are early career researchers in the first five years of their appointment at UNB.

486 ACTIVE
RESEARCH
FACULTY



ARE EARLY
CAREER
RESEARCHERS
IN THE FIRST
FIVE YEARS
OF THEIR
APPOINTMENT



Dr. Angela Tozer



UNB Institute of Population Health Launch

POSTDOCTORAL FELLOWS

In the 2024-2025 university fiscal year, we had 122 active postdoctoral fellows at UNB.

Approximately 77% of UNB's postdoctoral fellows came from outside of Canada to take up their position.

122 ACTIVE
POSTDOCTORAL
FELLOWS



CAME
FROM
OUTSIDE OF
CANADA
TO TAKE
UP THEIR
POSITION



Dr. Jennifer Russell and Dr. Emily Richard

GRADUATE STUDENTS

Among UNB's more than 1,800 graduate students, just over half are engaged in research-based programs (51.1% in FY 2024-2025).

These research-oriented graduate students include all 412 students enrolled in doctoral programs, and 526 master's students (more than one-third of that population), for a total of 938 students.

938

GRADUATE STUDENTS
RESEARCH-BASED

412

DOCTORAL PROGRAMS

526

MASTER'S STUDENTS

RESEARCH INSTITUTES

21 **CONSTITUTED RESEARCH CENTRES & INSTITUTES**

UNB's research centres and institutes represent areas of significant institutional strength in specific research areas. They support and enable world-class, discipline-leading research by bringing together scholars from across the institution and around the world.

During the 2024-2025 UNB fiscal year, we saw the launch of UNB's latest such centre, the **Institute of Population Health**, under the leadership of executive director Dr. Jennifer Russell, and scientific director Dr. Emily Richard, associate professor of nursing and associate dean of nursing at UNB's Moncton site.

The year was one of change for the **Atlantic Canada Studies Centre**. Following the passing of longtime director Dr. Elizabeth Mancke, the Faculty of Arts (Fredericton) explored what the centre's future could look like. In November, Dr. Angela Tozer took on the role of interim director, in which she worked to reestablish the centre's advisory board and update the centre's terms of reference. A search for a full-time director was launched in the spring.

A full list of centres and institutes is available on our website.

UNB'S RESEARCH CHANGES LIVES & **CHANGES THE WORLD**



RESEARCH **IMPACT**

The work that goes on here at UNB changes lives and changes the world. The impact of our community's research is felt in academia, where numerous publications and presentations help share knowledge; through knowledge mobilization and transfer activities, which help research reach the public and decision makers; and also in industry and community partnerships, where organizations and researchers both gain from mutually beneficial collaborations.

Among the countless moments of research translation, transformation and impact, we find:

1

CONTINUED SUCCESS AND GROWTH IN PROTECTING THE CRITICALLY-ENDANGERED NORTH ATLANTIC RIGHT WHALE

For years, a UNB team led by Dr. Kimberley Davies has collaborated with Transport Canada, the Ocean Tracking Network (OTN) and Woods Hole Oceanographic Institution on a project to reduce incidents of whales being struck by passing ships. This project has led to the development and implementation of underwater autonomous vehicles with acoustic sensors; this past year, leveraging support from the Murphy Family Foundation, the project added a third such glider to their fleet.

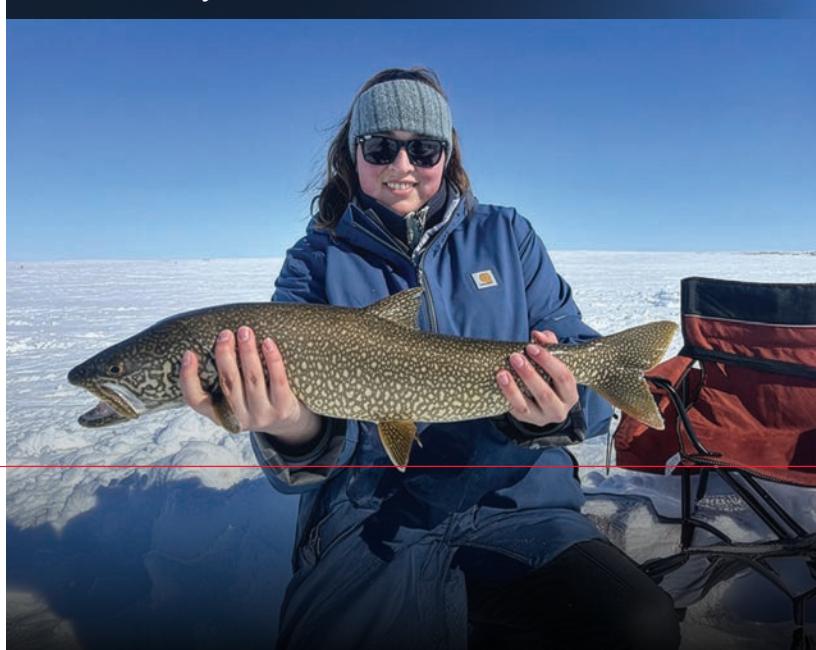
2

LEVERAGING DATA SCIENCE EXPERTISE FOR DECISION-MAKING AND CRISIS MANAGEMENT

UNB's NB Institute for Research, Data and Training continued their ongoing work in helping government better respond to health events like the COVID-19 pandemic, releasing a report on The Effects of COVID and Related Restrictions on Health Service Use in New Brunswick. Beyond the pandemic, they also released reports on the role and impact of migration in New Brunswick, among others.



PhD Student Emily Williams



3 BUILDING A NEW FUTURE FOR CONSTRUCTION

The Off-site Construction Research Centre hosted their annual Transforming Construction with Off-site Methods and Technologies conference during the summer. The conference, organized in partnership with Northumbria University (Newcastle, UK), the conference brings together scholars, students, industry leaders, innovators and others to explore how we can build better and smarter.

4 INTEGRATING MOBILIZATION AND IMPACT EARLY IN RESEARCH CAREERS

Students at UNB also engaged in sharing their knowledge with others.

Saint John-based PhD student Emily Williams takes reconciliation and impact to heart in her work on Arctic fish species, working with northern Indigenous communities both to inform her work and develop her knowledge, and to share her research findings, which focuses on food species, with communities and school groups in the North.

In Fredericton, the Faculty of Arts held their annual Arts Matters Conference, bringing students from across the Atlantic region to share their work with each other. This year, the conference highlighted learning through community.

Whale-detecting acoustic drones help reduce ship strikes





INTELLECTUAL PROPERTY

In the 2024-2025 government fiscal year, 12 disclosures were made to the Office of Research Services.

Additionally, by leveraging past disclosures and assignments, three new patents were granted to UNB inventors over the same year, and two inventions were licensed.

This licensing and assignment activity represents one of the myriad ways research conducted at UNB makes a demonstrable impact on our world. It represents the transfer of knowledge created through academic research into products, solutions and services that can be leveraged by business and community organizations.

12

DISCLOSURES
WERE MADE
TO THE OFFICE OF
RESEARCH SERVICES

3

NEW PATENTS
WERE GRANTED
TO UNB INVENTORS

2

NEW INVENTIONS
WERE LICENSED

RESEARCH
CONDUCTED AT
UNB MAKES A
DEMONSTRABLE
IMPACT ON
OUR WORLD.

PUBLICATIONS

INTERNATIONAL COLLABORATION

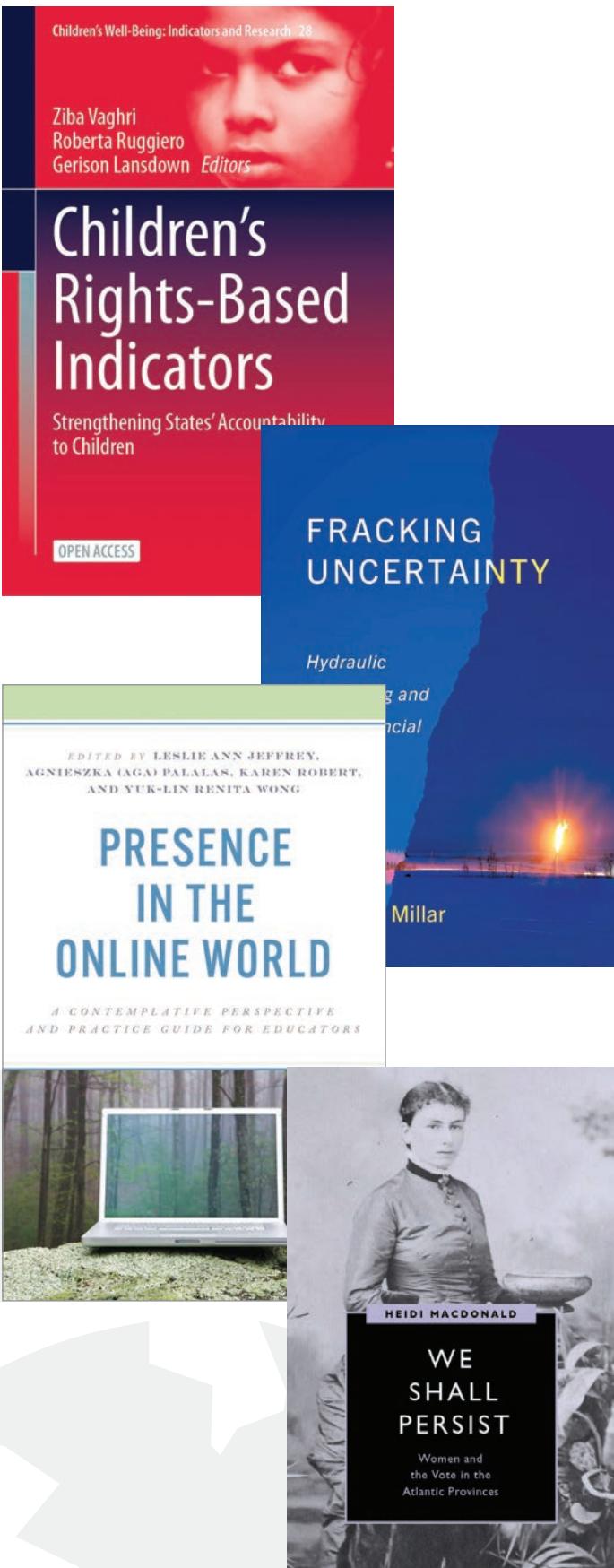
Among the many research-based publications to appear in print this past year were the following book titles:

Dr. Leslie Jeffrey, a professor of political science, co-edited *Presence in the Online World: A Contemplative Perspective and Practice Guide for Educators*. Drawing from the unanticipated and sudden transition to online teaching brought on by COVID, the book brings together the insights of contemplative pedagogy and the experiences of online teaching.

Dr. Heidi MacDonald's *We Shall Persist: Women and the Vote in Atlantic Canada* was also released by UBC Press. In the book, MacDonald found that contrary to the myths that have persisted for the last seven decades, Atlantic Canada was actually at the forefront of suffrage campaigns, even though the Prairies are usually credited as the country's leaders.

Dr. Heather Millar's *Fracking Uncertainty: Hydraulic Fracturing and the Provincial Politics of Risk* was published by University of Toronto Press in September 2024. The title, which is Millar's first sole-authored book, looks at how the regulation of fracking in different jurisdictions is shaped by narratives of uncertainties and risks.

Dr. Ziba Vaghri's *Children's Rights-Based Indicators* was published as an open-access book by Springer. The book is a reference guide for the indicators developed as part of the GlobalChild platform project. These indicators are used in monitoring, assessing and reporting on how jurisdictions around the world are respecting the promises made under the United Nations Convention on the Rights of the Child (UNCRC).



SCHOLARLY OUTPUTS AND OPEN ACCESS

Scholarly publications, including journal articles, conference papers, books and book chapters, and similar, represent some of the primary ways that research and knowledge are disseminated into the broader world.

This is particularly true with Open Access publications, which are made available either directly through the publisher, or through institutional repositories like UNB's Scholar Research Database.

This year, data has been sourced from OpenAlex, which indexes more Open Access content than the data used for last year's report. OpenAlex also captures a wider range of material, both in type of publication (OpenAlex also includes preprints and reports published in repositories) and in range of disciplines.



1,017
scholarly outputs captured in
Scopus, for UNB Fiscal 2024-2025



892
of these scholarly outputs
were **journal articles**



43%
of these articles were **published
under an Open Access license**

In the past year,
UNB-affiliated
researchers
co-authored papers
with scholars from

**84 DIFFERENT
COUNTRIES
AROUND
THE WORLD**,



demonstrating
the extensive reach,
engagement, and
exchange of ideas
by our scholars.





UNB.ca/research

