



Cape Breton University Annual Research Report 2019

Introduction

Cape Breton University's (CBU) Office of Research and Graduate Studies (ORGS) supports a vibrant research culture, contributing to the university's vision of being 'rooted in Cape Breton, connected to the world'. With a research profile that spans academic disciplines, engages students, industry, business, community and government, CBU is contributing to global knowledge and development through local research initiatives. Our research culture is captured by CBU's Strategic Plan 2019-2024.

The five pillars of the Strategic Plan are: Invest in our students; Champion the Island's prosperity; Indigenize the *L'nu* way; Globalize with a difference; and Empower faculty and staff. As the University community is working to make progress toward these strategic goals, ORGS continues to support research that touches these five directions, and that empowers our researchers.

This document is the seventh Annual Research Report for CBU. The Annual Research Report uses the fiscal year as the reporting period, using the Canadian Association of University Business Officers' (CAUBO) annual financial reports to analyze CBU's research indicators. The report is written in winter 2019-20 but covers the period from **April 1, 2018 to March 31, 2019**.

Data in the report is shown in year-by-year graphics and tabular breakdowns, and much of the data is also reported in three-year rolling totals. These figures better indicate trends in CBU's research climate and tend to take account of large grants that can have an inordinate effect on a single year's total.

CBU's research activities are wide-ranging and are therefore difficult to measure using one set of numbers or measurable in isolation. In order to provide as clear a picture as possible, the Annual Research Report uses statistics and data from a number of sources. The data examines reports on a variety of activities including success in obtaining research funding, dissemination of research findings along with commercialization and industry engagement.

This report also highlights some of the research successes at the Verschuren Centre for Sustainability in Energy and the Environment (VSCEE). VCSEE is reported here as a separate entity, in order to highlight the research activities of the VCSEE and its vital contribution to CBU's overall research profile.

The Annual Research Report intends to provide an overview of some of the exemplary research work at CBU, which continues to demonstrate a research environment of innovation, collaboration and commercial pursuits. The research highlights, as well as the data presented, provide a clear indication of the excellent research taking place at CBU.

Financial data were taken from the CAUBO website (Financial Information of Universities and Colleges Reports 2009-2018) and procured from the CBU Finance Office in preparation of the 2018-2019 CAUBO report. Industry engagement metrics were taken from the annual Springboard Atlantic reports. Faculty numbers were obtained from the Statistics Canada University College Academic Staff Survey.

1. Research Highlights

The past year has brought many new research accomplishments. The following profiles offer a few examples of these outstanding achievements.

Dr. David McCorquodale, Professor of Biology, School of Science and Technology

With a focus on community collaboration, CBU Biology Professor Dr. David McCorquodale is working with the Unama'ki Institute of Natural Resources (UINR), the Bras d'Or Lakes Collaborative Environmental Planning Initiative (CEPI), local governments, citizens and industry partners to study species at risk in the Bras d'Or Lakes watershed. Designated as a Biosphere Reserve in 2011, the Bras d'Or Lakes biosphere is an area of high biodiversity value with important habitats supporting multiple species at risk. The five-year project, entitled "Collaborative approach to managing diverse ecosystems for the benefit of Species at Risk in the Bras d'Or Lakes Biosphere Reserve" is funded by the Department of Environment and Natural Resources through the Canada Nature Fund. The impact of this research on species-at-risk will inform scientists across Canada, and will inform best practices for land use planning and management and around the world. The research team is comprised of biologists, researchers and traditional knowledge holders, and falls under the expert leadership of UINR. Dr. McCorquodale will lead a study on bumble bees and contribute to citizen engagement through platforms such as iNaturalist, eBird and Bumble Bee Watch. As Co-Chair of Arthropods for the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), he has helped develop recovery strategies for 9-spotted and Transverse Lady Beetles in Ontario. Dr. McCorquodale is no stranger to public education—he is co-host of a popular CBC radio feature "The Bird Hour" which has been on the air for 28 years. He has been with CBU for 29 years, including seven years as Dean of the School Science and Technology, where he continues to make teaching and research contributions.

Dr. Margaret Dechman, Associate Professor of Sociology, School of Arts and Social Sciences

Dr. Margaret Dechman applies compassion and expertise to her work on understanding substance abuse in Cape Breton communities. She has dedicated her career to trying to understand and improve the situation for community members and drug-users who have been written off as the "masters of their own fate and/or beyond help." "Drug-related deaths have become so prevalent in Cape Breton," she recalls, "that one healthcare professional we interviewed referred to a local community as *God's waiting room*". Since joining CBU, Dr. Dechman has focused on exclusionary practices associated with addiction. Most recently, during her sabbatical, her work with the Cape Breton Correctional Facility and a local youth crime prevention program examined the intergenerational consequences of criminalizing substance use. Dr. Dechman's research findings were compiled in her paper entitled "Living in a war zone: casualties of the war on drugs". Based on research with individuals who use drugs outside the sanctions of our medical system and/or who have experienced incarceration, Dr. Dechman explores the consequences of stigmatizing and criminalizing drug use. Her research and teaching are enriched through her collaboration with local organizations, including: Public Health, the Ally Centre of Cape Breton, the Cape Breton Correction Facility, Mental Health and Addiction Services and the Cape Breton Police Service. Dr. Dechman holds a PhD in sociology, specializing in intergenerational processes of social exclusion. Her research is positioned within the fields of neuro-sociology and life-course analysis. Dr. Dechman's research is providing transferrable knowledge that applies to communities nationwide working to understand and improve the life circumstances of marginalized populations.

Dr. Sahand Ashtab, Associate Professor of Supply Chain Management, Shannon School of Business

Dr. Ashtab wasn't surprised by the June 2019 announcement of a pending ban on single use plastics in Canada. He was already moving forward with a timely research project looking at waste diversion. Dr. Ashtab is an Assistant Professor of Supply Chain Management at CBU. He received funding from Divert NS in May 2018 to carry out his research project, "Quantifying the Circular Economy in Nova Scotia". The project was supported for its potential to contribute to local,

provincial and national environmental mandates, as well as inform best practices for environmental sustainability and stewardship programs. Dr. Ashtab is investigating whether the loop is closing in Nova Scotia. His research is examining plastic film used as packaging, for example. He's learned that processed plastics have the potential to become re-introduced into the supply chain. Through his research, he will measure the impact of repurposing materials in Nova Scotia, including plastics, examining business practices across the province. "There are different applications for used plastics; examples are composite structures, fence posts, building panels, park benches," he says. He highlights that the technology used to pelletize plastic is already available but adds that machines for processing used materials require initial investments. With the volume of plastic entering the waste stream, Dr. Ashtab says we could have access to a large quantity of input resources. Dr. Ashtab is contributing to CBU's strategic priority of globalizing with a difference, informing governments, industry and consumers of best practices in supply chain management. This research could significantly impact business and ecological health.

Aishwarya Mohan, Research Manager, Verschuren Centre for Sustainability in Energy and the Environment

As the Research Manager for Bio-Products and Agri-Marine at the Verschuren Centre for Sustainability in Energy and the Environment, Aishwarya Mohan can tell you the scope of work at VCSEE extends beyond the lab and into the community. One example of the community impact of research at VCSEE started in CBU's own backyard. A greenhouse, situated to the northeast of CBU campus, was donated to the Verschuren Centre under an agreement with New Dawn Enterprises, which describes itself as a private, volunteer directed business dedicated to community building. The partnership was formed to allow testing of an innovative cold climate heating system in a greenhouse setting. The greenhouse became operational in late 2018. As a result, the Verschuren Centre is growing leafy greens that are provided to New Dawn's A Better Bite community kitchen for its Meals on Wheels program for seniors. As well, an isolated section of the greenhouse is being used to test new natural products derived from the Verschuren Centre's marine biorefinery. Aishwarya is managing five projects related to marine by-products that are ongoing at VCSEE, aiming to examine materials as low-value inputs and opportunities to create high-value outputs. The projects at the VCSEE rely on industry partners and external research funding. Aishwarya enjoys the excitement of seeing ideas and the seeds of partnerships bloom into full-fledged project. The work of the VCSEE directly relates to CBU's strategic pillar of being a champion of the local economy.

2. Research Funding

A direct comparison of research funding between universities is not always possible because the situation at every university is unique. However, despite the challenges of comparing universities, this practice is still meaningful as it allows us to get a sense of CBU's standing in relation to similar institutions both regionally and nationally.

As a comparison group, we chose universities with mainly undergraduate programs on the basis that they may be 'peers' of CBU because they provide a similar range of programs or are of a similar size in terms of overall student numbers. We have selected six Atlantic institutions as well as three from farther afield. These are: Acadia University (NS), Bishop's University (QC), Brandon University (MB), Mount Allison University (NB), Mount Saint Vincent University (NS), Nipissing University (ON), Saint Francis Xavier University (NS), Saint Mary's University (NS) and Université de Moncton (NB). The ready access to major research hubs, clusters, availability of graduate

studies, access to research infrastructure, support and research assistants varies from province to province and across the primarily undergraduate universities in our comparison group, and in many ways, it shapes the research programs and progress that is possible at CBU and elsewhere.

The data for these individual universities is presented in non-identifiable form in the following tables and charts. The total research funding presented below was taken from Table 3.1 of the annual CAUBO reports. The number of faculty at each university was taken from the Statistics Canada University College Academic Staff Survey¹ in the absence of any current consistent sources of such information. Enrolment information was obtained from the Universities Canada website, sourced from the Association of Atlantic Universities, Council of Ontario Universities, and individual institutions.

Examining the three-year average research funding across the comparison group (Table 2.1), CBU has gained a slight increase in ranking since 2010. The more important consideration is that CBU is demonstrating a consistency in its ability to secure research funding. This momentum is built on efficiency in processes, as well, driven by continued success in meeting or exceeding the anticipated research outcomes/outputs.

Table 2.1 Total Research Funding: Three-Year Average Annual Research Funding per University (in 000's) ^a

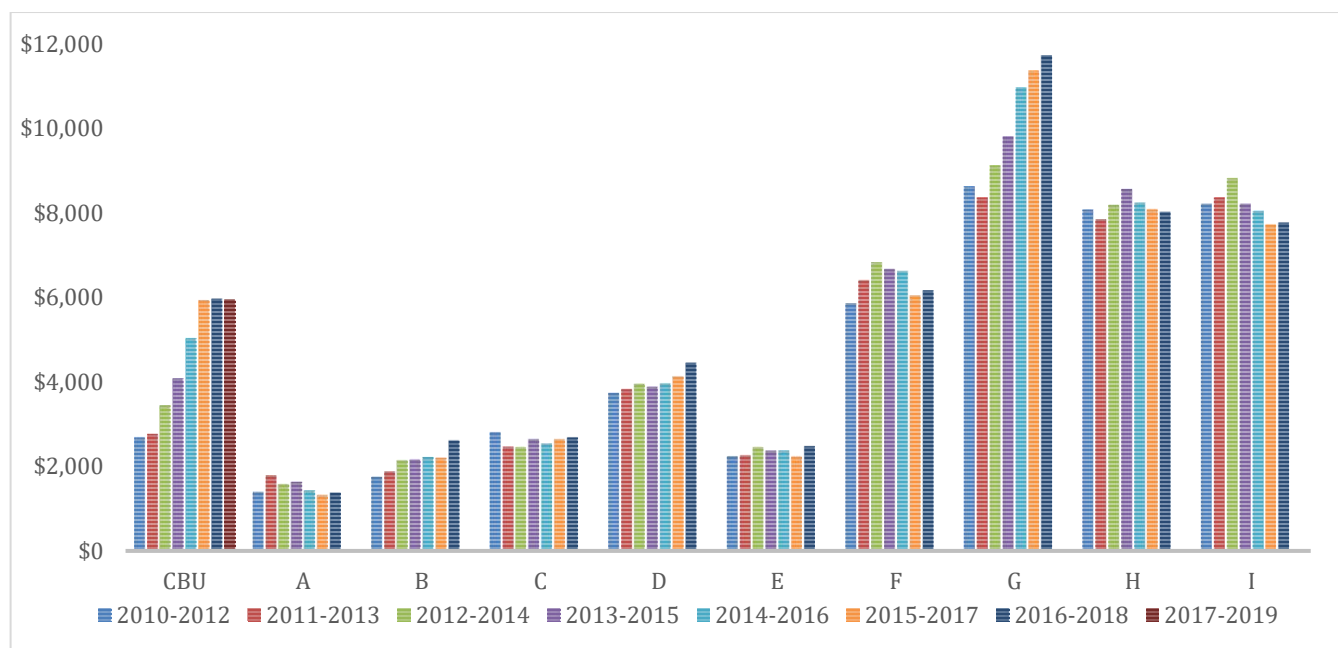
	2010 - 2012	2011 - 2013	2012 - 2014	2013 - 2015	2014 - 2016	2015 - 2017	2016 - 2018
CBU	\$2,685	\$2,771	\$3,448	\$4,082	\$5,035	\$5,934	\$5,970
A	\$1,398	\$1,792	\$1,582	\$1,635	\$1,432	\$1,324	\$1,379
B	\$1,756	\$1,884	\$2,147	\$2,164	\$2,222	\$2,204	\$2,614
C	\$2,814	\$2,467	\$2,458	\$2,646	\$2,547	\$2,644	\$2,685
D	\$3,737	\$3,827	\$3,960	\$3,888	\$3,962	\$4,131	\$4,455
E	\$2,242	\$2,264	\$2,459	\$2,371	\$2,377	\$2,234	\$2,477
F	\$5,862	\$6,406	\$6,832	\$6,668	\$6,620	\$6,048	\$6,167
G	\$8,633	\$8,366	\$9,126	\$9,813	\$10,966	\$11,363	\$11,731
H	\$8,079	\$7,846	\$8,190	\$8,567	\$8,240	\$8,082	\$8,029
I	\$8,215	\$8,366	\$8,823	\$8,215	\$8,044	\$7,718	\$7,775
CBU Rank	7	6	6	5	5	5	5
Average	\$4,542	\$4,599	\$4,903	\$5,005	\$5,145	\$5,168	\$5,328
NS Average ^b	\$14,502	\$15,261	\$15,302	\$15,507	\$15,139	\$15,803	\$15,811

^a Average over the three-year period indicated.

^b Provincial Nova Scotia average per University (12 institutions in 2011, 2012; 11 institutions since 2013)

Chart 2.1 Total Research Funding: Three-Year Average Annual Research Funding per University (Comparison Group) (in 000's) ^a

¹ The survey was discontinued after 2010-2011 and released again in 2016-2017. Some institutions updated their faculty numbers for all years considered in this report. For others, only data for 2011-2012 were updated. For those universities, average of 2011-2012 and 2016-2017 numbers were used to estimate the data for missing the years between 2012-2013 to 2015-2016. This leads to slight inaccuracies in the comparisons. The number of university academic staff members for Cape Breton University's reporting includes both CBUFA and NSGEU faculty.



^a Only CBU data available for 2017-2019 average; 2018-2019 data for other universities will be available in June 2020. CBU annual funding averaged over 2017-2019 was \$5,941,000.

CBU continues to demonstrate a noteworthy level of success when considering annual research funding per faculty member (Table 2.2). The trend over the last four years has seen CBU's research funding increase above the peer group average.

Table 2.2 Research Intensity: Annual ^a Research Funding per Faculty Member

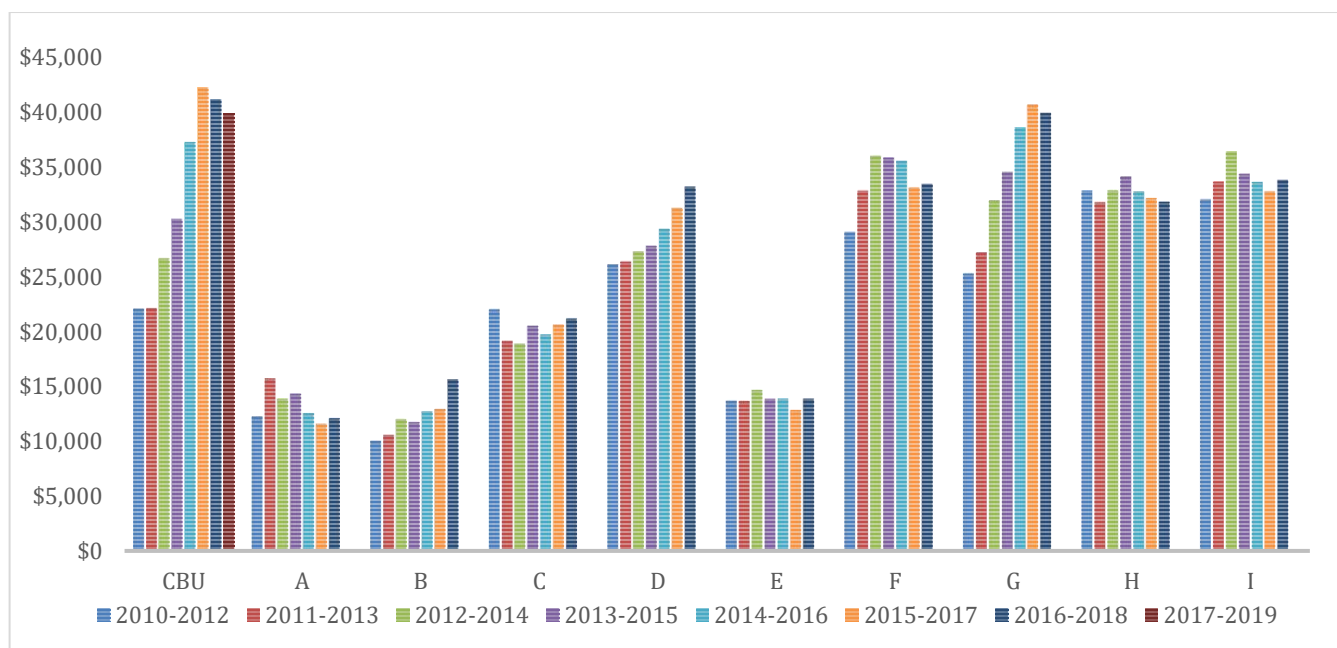
	2010 - 2012	2011 - 2013	2012 - 2014	2013 - 2015	2014 - 2016	2015 - 2017	2016 - 2018
CBU	\$22,077	\$22,122	\$26,658	\$30,240	\$37,296	\$42,299	\$41,176
A	\$12,263	\$15,719	\$13,877	\$14,339	\$12,561	\$11,617	\$12,094
B	\$10,026	\$10,576	\$12,011	\$11,740	\$12,734	\$12,957	\$15,639
C	\$22,014	\$19,117	\$18,900	\$20,514	\$19,747	\$20,657	\$21,185
D	\$26,114	\$26,365	\$27,310	\$27,807	\$29,401	\$31,293	\$33,221
E	\$13,689	\$13,668	\$14,672	\$13,867	\$13,899	\$12,862	\$13,876
F	\$29,059	\$32,828	\$36,022	\$35,851	\$35,593	\$33,169	\$33,455
G	\$25,271	\$27,189	\$31,978	\$34,512	\$38,647	\$40,754	\$39,935
H	\$32,840	\$31,757	\$32,874	\$34,130	\$32,815	\$32,187	\$31,844
I	\$32,029	\$33,646	\$36,415	\$34,371	\$33,658	\$32,810	\$33,830
Average ^b	\$22,538	\$23,299	\$25,072	\$25,737	\$26,635	\$27,060	\$27,625
Provincial ^c	\$81,429	\$83,564	\$81,663	\$80,083	\$79,016	\$83,406	\$83,649

^a Average over the three-year period indicated.

^b The comparison group average is calculated as a sum of the total research funding for the comparison group over total faculty members in the comparison group.

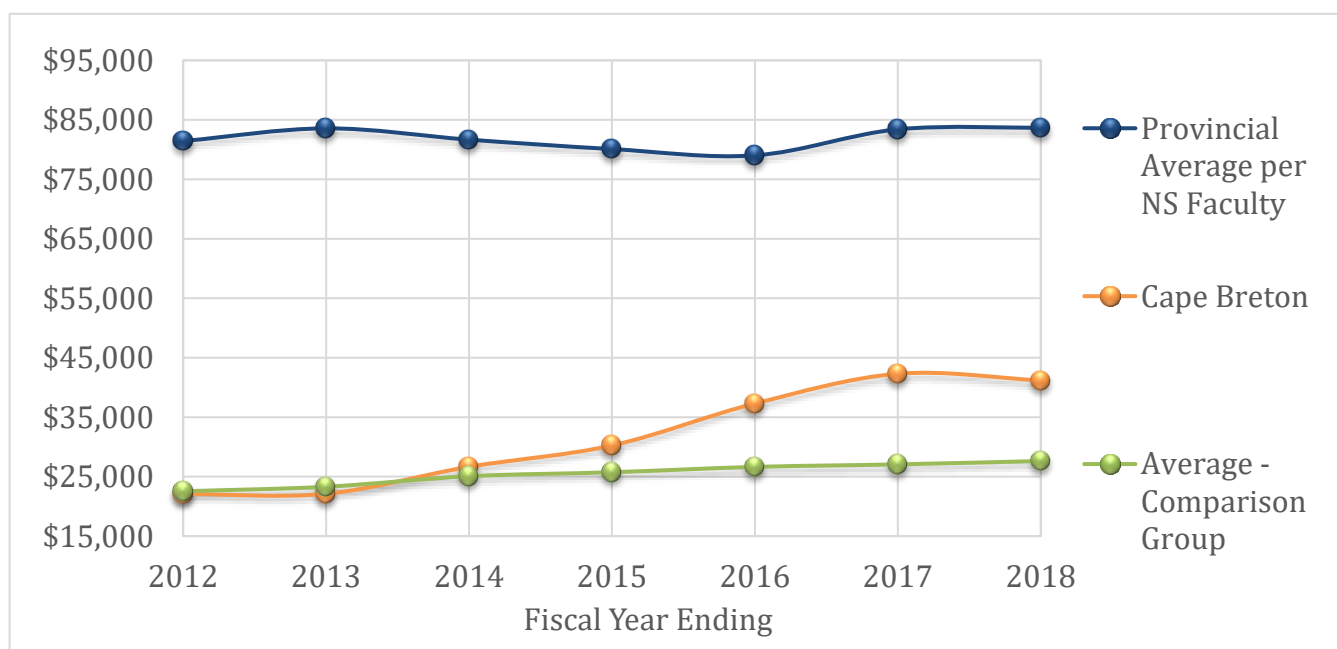
^c Provincial average calculated as total provincial research funding per total Nova Scotia university faculty.

Chart 2.2A Research Intensity – Annual Research Funding per Faculty Member



^a Only CBU data available for 2017-2019 average; 2018-2019 data for other universities will be available in June 2020. CBU annual funding per faculty member averaged over 2017-2019 decreased to \$39,854.

Chart 2.2B Research Intensity – Annual Research Funding per CBU Faculty Member compared to the Comparison Group Average and Provincial Average per NS Faculty



In addition to considering the total research funding, it is also informative to analyze the distribution of CBU research funding. Table 2.3 shows the breakdown of funding by source. A noted increase of 121% in SSHRC funding, and 96% more funding from NSERC during 2018-2019 suggests CBU's expertise in research continues to produce valid research projects related to the mandates of our funding partners. This reporting period represents the highest investment of SSHRC and NSERC funding ever awarded for CBU research. This contributes to CBU's overall increase of \$1.1 million in Tri-Agency (NSERC, SSHRC, and CIHR) funding in 2019.

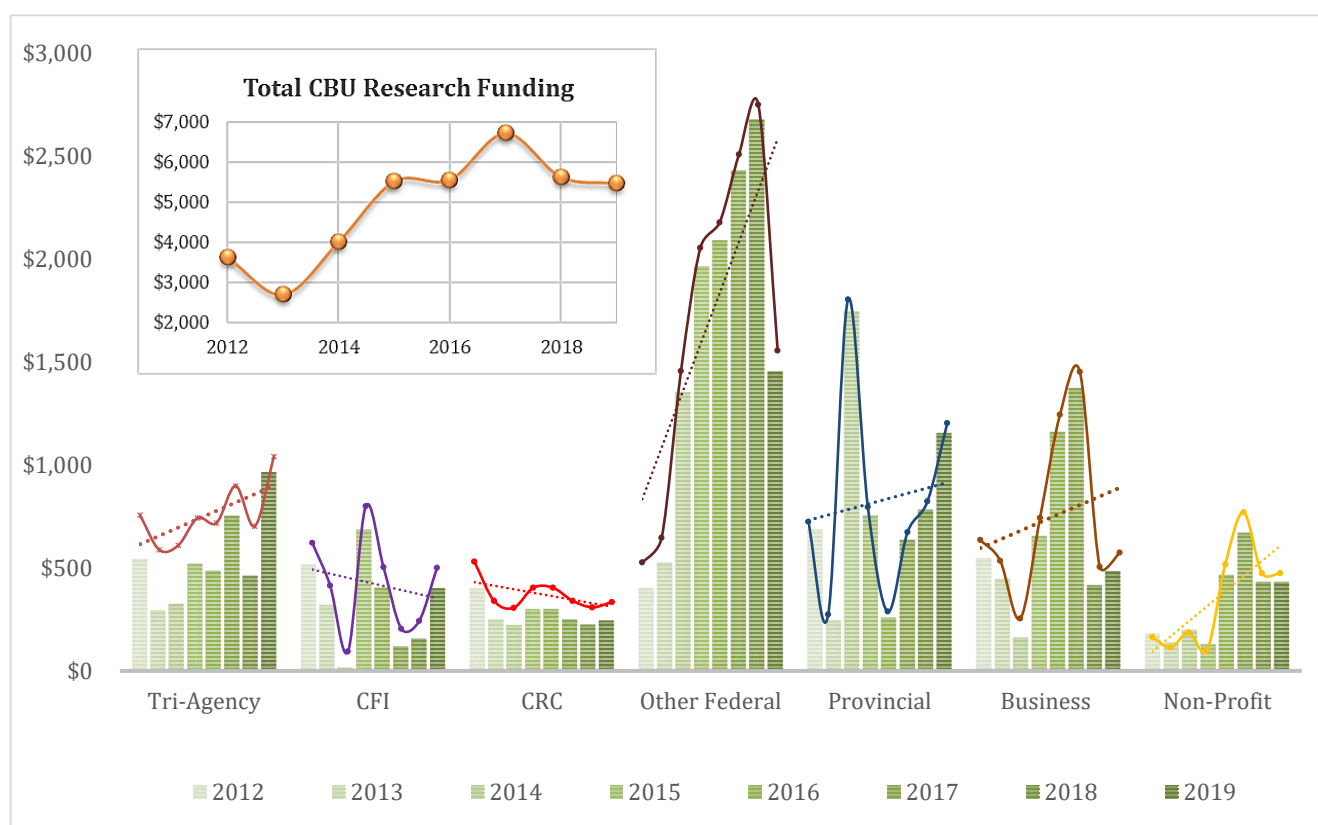
The research culture at CBU continues to thrive. This is evidenced in the overall increase in funding received by CBU researchers since 2012. It demonstrates a momentum with respect to presenting quality research projects, driven by experts, who address timely and promising research needs.

Table 2.3 CBU Annual Research Funding by Source (in 000's)

Funding Source	2012	2013	2014	2015	2016	2017	2018	2019
SSHRC	\$384	\$ 81	\$187	\$320	\$230	\$371	\$238	\$526
NSERC	\$153	\$179	\$138	\$202	\$257	\$233	\$225	\$440
CIHR	\$6	\$33	\$0	\$0	\$0	\$150	\$0	\$0
CFI	\$517	\$320	\$16	\$686	\$405	\$121	\$157	\$402
CRC	\$400	\$250	\$223	\$300	\$300	\$250	\$225	\$245
Other Federal	\$402	\$525	\$1,353	\$1,965	\$2,091	\$2,429	\$2,676	\$1,455
Provincial	\$686	\$245	\$1,743	\$756	\$259	\$637	\$783	\$1155
Not-for-Profit Grants	\$181	\$140	\$199	\$129	\$467	\$671	\$432	\$432
Business Contracts	\$548	\$446	\$162	\$656	\$1,162	\$1,373	\$416	\$486
Donations	\$0	\$0	\$0	\$0	\$100	\$0	\$1	\$1
Miscellaneous	\$342	\$485	\$0	\$508	\$291	\$484	\$477	\$349
Total Tri-Agency	\$543	\$293	\$325	\$522	\$487	\$754	\$463	\$966
Total Federal	\$1,862	\$1,388	\$1,917	\$3,473	\$3,283	\$3,554	\$3,520	\$3,068
Total	\$3,619	\$2,704	\$4,021	\$5,522	\$5,562	\$6,719	\$5,629	\$5,474

NOTE: Averages and percentage figures may not add to totals due to rounding.

Chart 2.3 CBU Research Funding by Year (in 000's)



The research environment at CBU includes the work of the Verschuren Centre for Sustainability in Energy and the Environment (VCSEE). VCSCC's total research funding by source is detailed in Table 2.4.

Table 2.4 CBU and VCSEE Research Funding by source in 2017-2018 and 2018-2019 Fiscal Years (in 000's)

Funding Source	2017-2018 VCSEE ^a	2017-2018 VCSEE %	2018-2019 VCSEE ^a	2018-2019 VCSEE %
SSHRC	\$0	0	\$0	0
NSERC	\$72	32	\$74	17
CIHR	\$0	0	\$0	0
CFI	\$0	0	\$0	0
CRC	\$0	0	\$0	0
Other Federal	\$1,494	56	\$624	43
Provincial	\$499	80	\$713	62
Not-for-Profit Grants	\$257	59	\$231	56
Business Contracts	\$322	77	\$422	87
Donations	\$0	0	\$0	0
Miscellaneous	\$590 ^b	124	\$81	23
Total Tri-Agency	\$72	16	\$74	8
Total Federal	\$1,565	44	\$698	23
Total	\$3,233	59	\$2,145	39

^a Funds brought from the Verschuren Centre for Sustainability in Energy and the Environment.

^b The VCSEE amount is included in the total CBU amount; the CBU total is less than the VCSEE amount due to a high level of internal transfer within this category.

NOTE: Averages and percentage figures may not add to totals due to rounding.

3. Partnership Projects and Workshops

During the last year, CBU faculty and researchers engaged in meaningful research and development projects. Partnerships have been forged with small and medium sized enterprises, community groups and the public sector within Nova Scotia, throughout Atlantic Canada and beyond. These partnerships help answer questions and challenges in emerging projects, providing industry with access to CBU's high caliber faculty and exceptional laboratory resources. Students are often part of the research teams, providing them with the opportunity to apply classroom learning to applied projects, gain career experience, and earn money to support educational costs.

Faculty from across the institution are sought after to lead applied projects due to the diverse nature of the research and development portfolio. Researchers in all disciplines at CBU extend their knowledge to help partners solve pressing problems, enhance operations or move towards new and exciting milestones.

In addition to building on existing partnerships, CBU supports business startups. CBU faculty and researchers provide their expertise to new ventures, allowing startups to navigate research and development challenges and opportunities.

The Verschuren Centre for Sustainability in Energy and the Environment (VCSEE) continues to be an important resource when it comes to industry engagement at CBU. The VCSEE leverages knowledge, expertise, and equipment in order to drive applied research that is beneficial to the

region. With world class lab facilities, the VCSEE is able to provide a resource that is fundamental to many research and development processes.

Table 3.1. Industry Engagement and Other Non-Industry External Partners Activities

Activity	2014-15	2015-16	2016-17	2017-18	2018-19
NRC-IRAP Projects	13	22	21	16	12
Tri-Agency Partnership Grants	6	6	12	8	9
Provincial Funded Industry Projects	5	6	7	8	15
R&D Contracts (no sponsored funding)	10	9	17	17	13
ACOA AIF Projects /subcontract	1	1	1	1	2
Industry Workshops	9	12	14	9	8

4. Knowledge Dissemination and Mobilization

CBU researchers use a broad range of initiatives to share their research work, engage local communities, and collaborate with other academic researchers and industry partners. During this reporting period, ORGS conducted a survey to determine how researchers are sharing their work. The survey results in Table 4.1 show that conference presentations, guest lectures and workshops, and academic article publications are the top three means of sharing research outcomes.

As CBU aims to achieve its strategic direction in support of local economic development, ORGS recognizes an opportunity to support place-based research and professional practice with Island communities, as detailed in the CBU's 2019-24 Strategic Plan. ORGS will provide forums through its internal and external communications efforts, increasing research mobilization and providing networking opportunities with industry, special interest, and governments. With respect to collaborative projects, CBU researchers most often work with other academic institutions/societies or internal (CBU) partners. Community organizations are also an important research component, with CBU researchers demonstrating an interest in 'place-based' resources, supporting local community health and development.

Student experience is enhanced through the work of CBU researchers. The diverse research projects happening across disciplines allows many students to grow their academic and research portfolios while completing their studies.

As indicated in the recent survey, researchers most often engage undergraduate students, offering research experience that is notably limited to graduate studies students at larger institutions. The majority of funding for these training opportunities is obtained through CBU's internal funding; specifically, RISE grants.

Table 4.1. Survey Results – Knowledge Mobilization – Research Dissemination. (Average per faculty is based on 62 participants in the ORGS 2018-19 Annual Research Report Survey.)

Activity	Average per Faculty	
Research Dissemination		
Academic Article Publication	113	1.8
Book (Book Chapter)/Book Review	39	0.6
Newspaper Article/Blog/Social Media	65	1.0
Conference Presentation	123	2.0
Community Event (Guest Lecture/Workshop)	109	1.8
Website Design/Radio/Tv Appearance	42	0.7

Report/Policy/Expert Advice	38	0.6
Research Collaborations		
Internal (CBU)	77	1.2
Other Academic Institutions/Societies	92	1.5
Community Organizations	55	0.9
Industry partnerships	38	0.6
Governmental Agencies	33	0.5
Training Activities		
CBU Undergraduate Students	70	1.1
CBU Graduate Students	38	0.6
Other Undergraduate Students	13	0.2
Other Graduate Students	40	0.6
Post-Doctoral Fellows	12	0.2
Research Assistants and Visiting Scientists	38	0.6
Funding Source for Training		Contribution Percent
Internal CBU Funding (RISE)	22	31%
Tri-Agency Funding (NSERC, SSHRC, CIHR)	16	23%
IRAP Funding	4	6%
MITACS	3	4%
Industry Sponsored	9	13%
Other Funding Agency/Work-Study Program	16	23%

5. Research Environment

There is significant research momentum at CBU that crosses disciplines, institutes, and academic schools. Much research at CBU is, in fact, marked by collaborations across fields and involves partnerships among researchers at CBU, colleagues at other institutions, and partners from businesses, industries, non-profit organizations, community groups and others. Our small size invites unique cross-disciplinary collaborations. Students, including undergraduate research assistants, are a central part of the university's research engine. CBU students have great opportunities to work on research projects of the applied or fundamental variety; sometimes as preparation for graduate studies, and other times to expose them to methodologies or topics that will be useful in careers.

In addition, some faculty, including those in the Verschuren Centre, are training Master and Doctoral students or Post-Doctoral Students through collaborative projects and adjunct positions at other institutions. These productive relationships lead to publications in high-ranking journals.

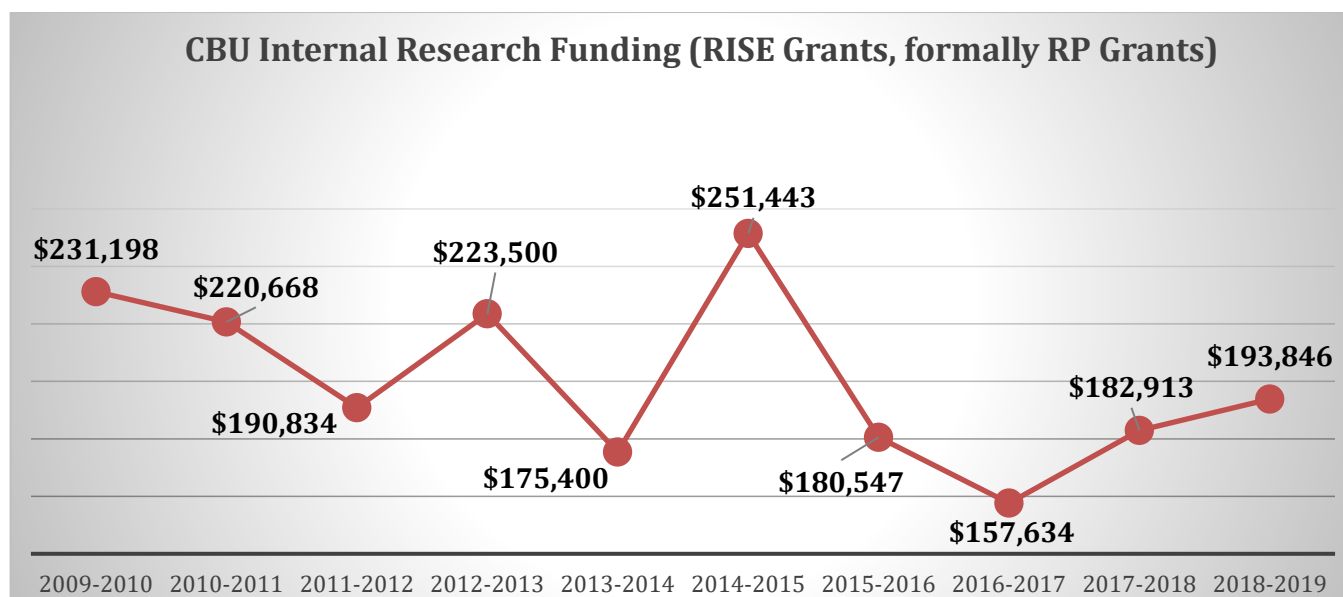
Professional development opportunities for CBU student researchers have been enhanced during this reporting period. This includes opportunities for employment as research assistants, with part time work during the study period and full-time work during the summer. In 2018-19, a total of 213 students were employed in research at CBU, with the majority employed as research assistants. This figure includes 25 graduate students (12%). This compares to student employment totaling 128 just two years ago, when seven (5%) graduate students were employed through research projects.

Communication and presentation skills of student researchers were also honed during CBU's Summer Student Lecture Series, a public forum to showcase student projects and studies. Students play a key role in CBU's annual Research Month, when they deliver Thesis 'snapshot' presentations designed to pitch their research concepts and gain feedback from faculty and classmates. Research Month also includes focus on students' posters and opportunities to participate in panel presentations of their research.

ORGS supports research communications initiatives, both internally and externally. Fostering an environment of collaboration, ORGS hosts Sabbatical Talks, allowing researchers to present their findings to a gathering of their peers. Along with the information sharing, ORGS also promotes celebration, through special recognition of faculty during Inaugural Lectures. These lectures are delivered by newly appointed full professors so they may share their academic and personal experiences leading up to their appointments. ORGS is also partnered with CBU's Centre for Teaching and Learning to extend the reach of scholarly discourse through an Island Wide Lecture series, bringing the expertise of its researchers into local community settings and forums.

Internal Funding

The CBU research environment provides support to researchers via its internal grant process which is vetted by the Research Assistance Committee of Senate, and which provides funding for both Start-up and Research, Innovation, Scholarship, and Exploration (RISE) Grants. Start-up grants, aimed at new tenure-track faculty, provide up to \$2,000 (during this reporting period). During 2018-2019 three projects were granted start-up support. RISE grants are managed in a calendar year, with up to two rounds of funding awards (spring and fall terms) to a maximum of \$8,000 per applicant per calendar year. A total of 28 projects (including the four University Research Chair Awards funded for three-year projects) were funded through RISE in 2018-19. Through these internal funding programs, \$199,846 of internal research funding was awarded to CBU researchers.



6. Concluding Remarks

CBU is continuing to demonstrate that it is a Research Active University, one that aligns its research environment with its institution's strategic direction. CBU's research capitalizes on the unique features, cultures and networks of a small, close-knit locale. This is not to dismiss the global reach of the research collaborations and findings, or their contributions to internationally significant issues, opportunities and queries.

With respect to Tri-Agency funding, CBU continues to work to grow its research profile across disciplines. The research culture at CBU is one that embraces not only six-figure technical and industry projects, but celebrates the micro research initiative that engages in one-on-one conversations with target communities. We aim to be an accurate and supportive source of information for researchers, assisting them to navigate application and reporting processes in a timely and efficient manner. To maintain the momentum, we strive to celebrate and disseminate research findings and methodologies, ensuring CBU shares its research stories with a broad range of academic and community stakeholder interests.

List of Abbreviations

ACOA AIF	Atlantic Canada Opportunities Agency – Atlantic Innovation Fund
CAUBO	Canadian Association of University Business Officers
CBUFA	Cape Breton University Faculty Association
CFI	Canada Foundation for Innovation
CIHR	Canadian Institutes of Health Research
CRC	Canada Research Chair
NRC-IRAP	National Research Council – Industrial Research Assistance Program
NSERC	Natural Sciences and Engineering Research Council
NSGEU	Nova Scotia Government Employees Union
NSRIT	Nova Scotia Research and Innovation Trust
ORGS	Office of Research & Graduate Studies
RP	Research Policy
SSHRC	Social Sciences and Humanities Research Council
VCSEE	Verschuren Centre for Sustainability in Energy and the Environment