

# Cape Breton University Annual Research Report 2021

#### Introduction

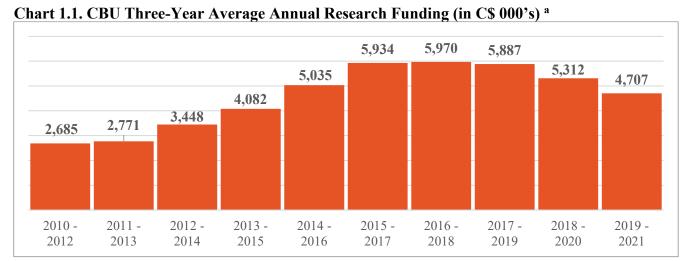
The Annual Research Funding Report presents a snapshot of the state of research funding at Cape Breton University. CBU researchers continually apply themselves to the pursuit of funding to support both fundamental and applied research and to ensure that we are training the next generation of researchers to the highest standard. 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 covers the period from April 1, 2020 to March 31, 2021.** Data in the report is shown in year-by-year graphics and tabular breakdowns, and some of the data is also reported in three-year rolling totals. These figures better indicate trends in CBU's research climate and take account of large grants that can have an inordinate effect on a single year's total.

Last year CBU developed its 2020-2025 Strategic Research Plan. This document connects with the Strategic Plan and the Academic Plan in important ways and underscores an institution-wide commitment to both fundamental and applied research, as well as to the ongoing community connections that are the hallmark of so much of CBU's research. It is with real enthusiasm that we move towards implementing the SRP and seeing how our research can continue to grow, and how we can continue to connect that research to community, industry, and the world.

Since 2019 the Verschuren Centre for Sustainable Energy and Environment has become its own entity and is no longer reported alongside CBU's research numbers. We look forward to working in tandem with our VCSEE to develop Cape Breton's research strengths. Financial data for this report were taken from the CAUBO website (Financial Information of Universities and Colleges Reports 2009-2020) and procured from the CBU Finance Office in preparation of the 2020-2021 CAUBO report. Faculty numbers were obtained from the Statistics Canada University College Academic Staff Survey.

#### 1. External Research Funding

Examining the three-year average research funding (Chart 1.1), CBU has maintained a steady position provincially in the last 10 years. 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.



<sup>a</sup> Average over the three-year period indicated.

Table 1.2. Research Amount: Total Annual of Research Funding (in C\$ 000's)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CBU	2,447	1,990	3,619	2,704	4,021	5,522	5,562	6,719	5,629	5,312	4,996
NS a	13,972	14,388	15,146	16,250	14,511	15,759	15,146	16,504	15,785	17,033	18,239

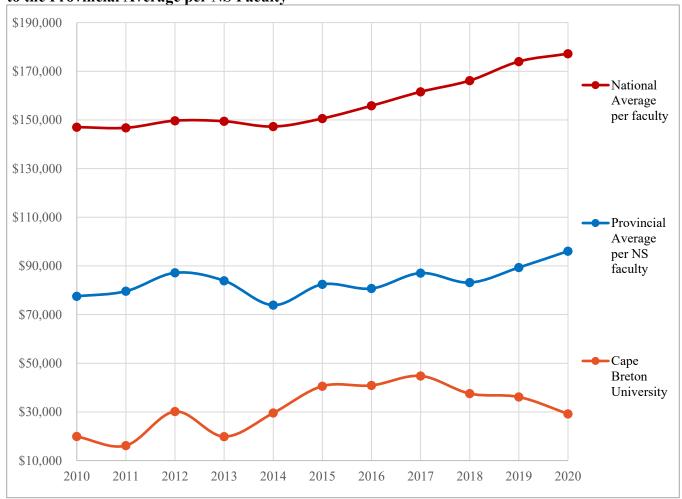
<sup>&</sup>lt;sup>a</sup> Provincial average calculated as total provincial research funding per total number of universities in NS. (12 between 2010-2012; 11 from 2013 after NS Agricultural College became the Faculty of Dalhousie University.)

Table 1.3. Research Intensity: Annual Research Funding per Faculty Member (in C\$) [1]

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CBU	19,576	16,179	30,158	19,882	29,566	40,603	40,897	44,793	37,527	36,136	29,216
NS a	77,515	79,602	87,170	83,919	73,900	82,429	80,718	87,070	83,159	89,347	96,089

<sup>&</sup>lt;sup>a</sup> Provincial average calculated as total provincial research funding per total university faculty in NS. (Faculty data from Statistics Canada Table 37-10-0108-01 (formerly: CANSIM 477-0123).)

Chart 1.2. Research Intensity – Annual Research Funding per CBU Faculty Member Compared to the Provincial Average per NS Faculty



<sup>[1]</sup> 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, including CBU, only data for 2011-2012 were updated in the Statistics Canada Tables. For those, average of 2010-2011, 2011-2012 and 2016-2017, 2017-2018 numbers were used to estimate the data for missing years data of 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.

Chart 1.3. CBU % share of total research funding received by all CAUBO universities.

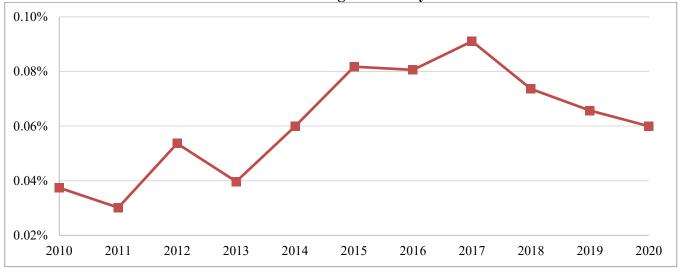


Chart 1.4. NS Universities' % share of total research funding received by all CAUBO universities.

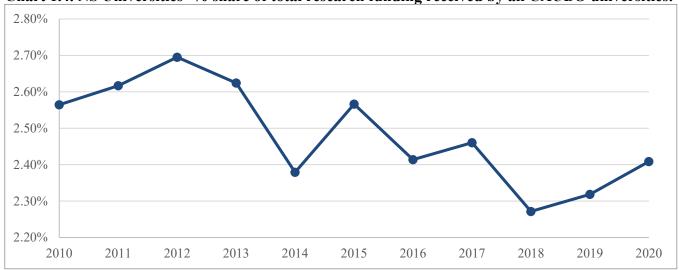
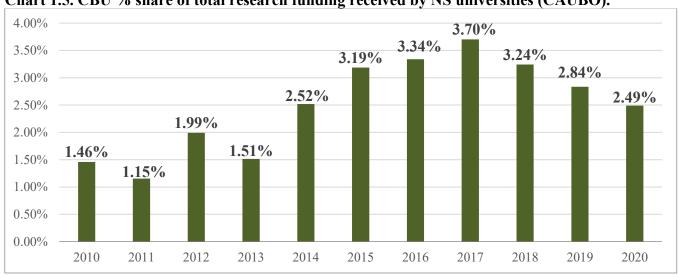


Chart 1.5. CBU % share of total research funding received by NS universities (CAUBO).

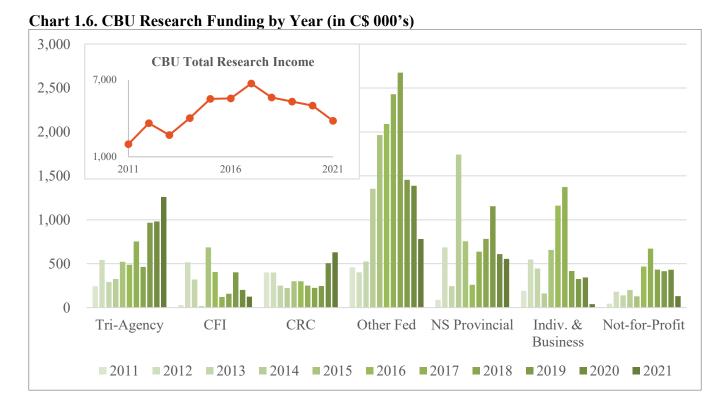


#### **Research Funding by Source:**

It is also informative to analyze the distribution of CBU research funding. Table 1.4 shows the breakdown of funding by source; we note that CBU continues successfully attracting and increasing Tri-Agency funding. Our CRC allocation is currently full, we are well-positioned to make the most of this Tri-Agency funding, especially through the implementation of our Strategic Research Plan, which aims to build on existing strengths by facilitating the ignition of six CBU Collaborative Research Networks. Decreases in non-Tri-Agency funding can be attributed, in large part, to the difference in non-Tri-Agency funding since the branching of Verschuren Centre to become incorporated into a not-for-profit, stand-alone research and technology centre.

Table 1.4. CBU Annual Research Funding by Source (in C\$ 000's)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
SSHRC	53	384	81	187	320	230	371	238	526	421	650
NSERC	186	153	179	138	202	257	233	225	440	418	422
CIHR	4	6	33	0	0	0	150	0	0	143	189
CFI	31	517	320	16	686	405	121	157	402	201	125
CRC	400	400	250	223	300	300	250	225	245	505	630
Other Federal	459	402	525	1,353	1,965	2,091	2,429	2,675	1,455	1,388	781
Provincial	89	686	245	1,743	756	259	637	783	1,155	609	556
Not-for-Profit	44	181	140	199	129	467	671	432	415	431	131
<b>Business Contracts</b>	190	548	446	162	656	1,162	1,373	417	326	344	39
Total Tri-Agency	249	243	543	293	325	522	487	754	463	966	982
Total Federal	1,310	1,133	1,862	1,388	1,917	3,473	3,283	3,554	3,520	3,068	3,076
Total Research	2,447	1,990	3,619	2,704	4,021	5,522	5,562	6,719	5,629	5,312	4,996



### 2. Student Research Contracts (from the employment contract numbers – CBU Finance Office)

2016-2017: 198 Total Student Research Contracts (employed as research assistants)

11 Graduate Research Contracts (7 unique students)

2017-2018: no data available for 2017-2018

2018-2019: 186 Total Student Research Contracts (employed as research assistants)

16 Graduate Research Contracts (7 unique students)

2019-2020: 120 Total Student Research Contracts (employed as research assistants)

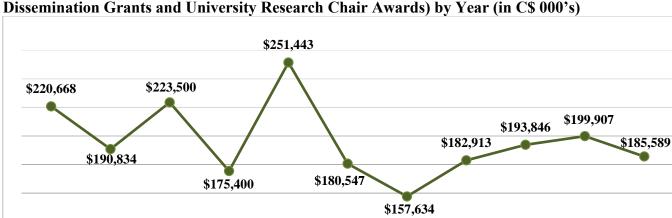
23 Graduate Research Contracts (18 unique students)

2020-2021: 92 Total Student Research Contracts (employed as research assistants)

66 Graduate Research Contracts 51 unique students)

# 3. Internal Research 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 Research Grants and Research, Innovation, Scholarship, and Exploration (RISE) Grants. Start-up grants, aimed at new tenure-track faculty, provide up to \$10,000. 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 23 RISE projects, 4 Research Dissemination Grants and 3 University Research Chair Awards were funded through in 2020-21.



2015-2016

2016-2017 2017-2018

2018-2019

2019-2020

2020-2021

2014-2015

Chart 3.1. CBU Internal Research Funding (RISE Grants, formally RP Grants, CBU Research Dissemination Grants and University Research Chair Awards) by Year (in C\$ 000's)

## 4. Concluding Remarks

2011-2012

2012-2013

2013-2014

2010-2011

CBU continues to demonstrate its consistency as a research active, primarily undergraduate university. CBU researchers have continued success with Tri-Agency funding. Over the next year we will continue to implement our Strategic Research Plan, and by next year's reporting time we will have a clearer picture of the way the Plan is helping CBU research to extend farther, make more meaningful links internally, apply for more ambitious funding from a more diverse range of sources, and communicate its research success and ambition regionally and well beyond.

#### 5. List of Abbreviations

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

NSERC Natural Sciences and Engineering Research Council

NSGEU Nova Scotia Government Employees Union

ORGS Office of Research & Graduate Studies

RISE Research, Innovation, Scholarship and Exploration

RNS Research Nova Scotia

RP Research Policy

SSHRC Social Sciences and Humanities Research Council

VCSEE Verschuren Centre for Sustainability in Energy and the Environment