

Message from the Vice-President (Research)

In our challenging economic times, the University continues to struggle to increase research revenue. Overall research revenue decreased for the 2015/16 year though Tri-Council funding increased 7.3% over 2014/15 levels. Most of the decrease in funding was due to completion of large Tri-Council network projects and some large industrial partner contracts. Though it appears a significant decrease in funding, the impact this has at the University is substantially less. Much of the funding for these projects do not stay at UNB but are dispersed to our partners. The Tri-Council research support fund program discounts funding flowing through the university and is calculated on the money spent at the University. As shown on page 7, this proxy for funding at the University shows little change over the last 5 years. New initiatives underway should see an increase to funding spent at UNB to help fuel our research activities.



I acknowledge the Research Support Fund (RSF) program contributes significantly to help provide the background services for research at UNB. Established in 2003, RSF, formerly the Indirect Costs Program, supports Canadian postsecondary institutions, and their affiliated research hospitals and institutes, with the indirect costs associated with federally-funded research. The program funds support the indirect costs of research in the areas of research facilities, research resources, management and administration, regulatory requirements and accreditation, and intellectual property. In 2015-16, the RSF program helped fund many activities / initiatives such as, but not limited to, library acquisitions, animal care and ethics compliance, and research services. More information on the Research Support Fund can be found at <u>http://www.unb.ca/research/vp/research-support-fund.html</u>.

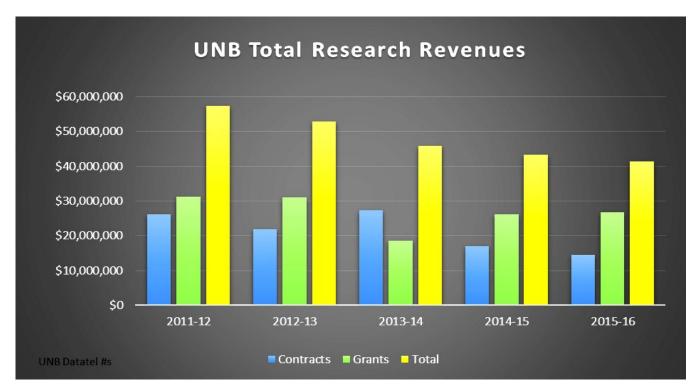
This past summer we refreshed our <u>Research website</u> as part of UNB's 2015+ web refresh. Please take a few minutes to explore our site and check out the exciting changes.

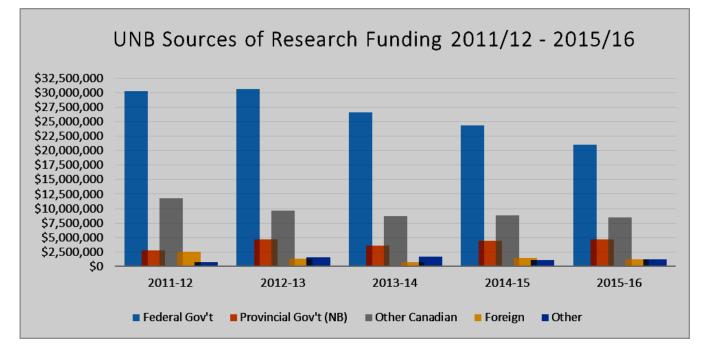
Pictured (L-R): David Burns, Derek MacFarlane (Director General of the Atlantic Forestry Centre) - 2016 National Forest Week tree planting event.

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Research Revenue

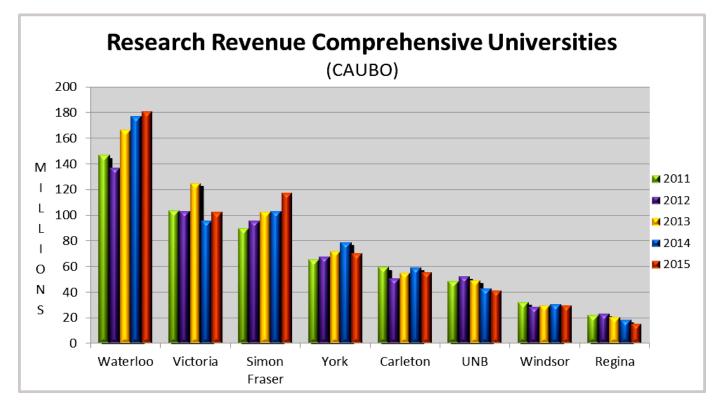
The 2015-16 fiscal year saw our research revenues decrease. After the significant upswing of 2011-12 we are now back at \$41,294,153, down 4.6% from 2014-15. Grant revenues increased slightly from 2014-15, including a 7.3% increase in Tri-Council funding. Contract revenues decreased by 32% from the previous year due to the finalization of a number of large Federal contracts in 2014-15. Royalty revenues remain relatively stable.



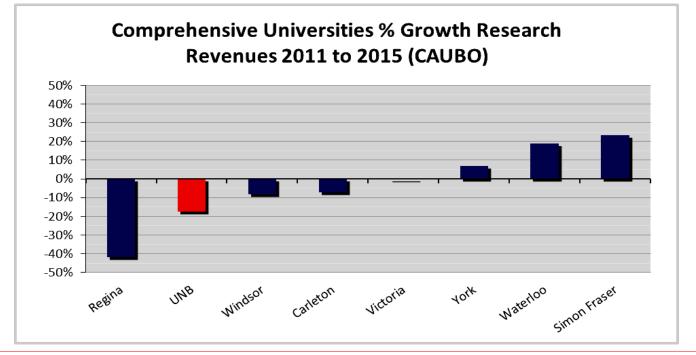


Research Revenue (continued)

The Canadian Association of University Business Officers (CAUBO) compiles research-related revenues based on mutually agreed upon definitions. It is this number that is used for inter-institutional comparisons. In the fiscal year 2014-15, UNB's CAUBO number was \$41,039 down 3.45% from the final CAUBO number for the previous year of \$42,505. The inter-institutional comparative revenues graphed below are one year in arrears due to reporting and publication delays.



We have routinely reported our percentage growth in CAUBO research revenues over a rolling five year period in comparison to our peer group of universities.



Research Revenue per Generating Unit

The following table attributes research revenues by generating unit during the last fiscal year. Grants, Contracts and Other column values are generated by audited CAUBO numbers. Funding for research scholarships such as Canadian Heritage, Canada Council, and The NB Arts Board are reported in the Additional Research Funding column, as submitted by heads of the Departments and Faculties. Note that some research revenues are generated by the university, but are not reported on this table (e.g., the Research Support Fund program).

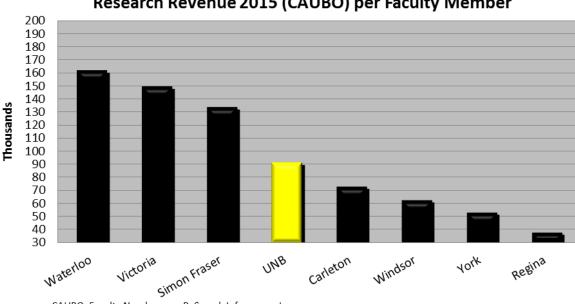
Research Revenues per Generating Unit							
UNIT	Grants (CAUBO)	Contracts (CAUBO)	Other (CAUBO)	Total (CAUBO)	Additional Research Funding		
ARTS (F)	2,497,973	36,891	103,300	2,638,164	305,506		
Arts	396,662			396,662			
Anthropology							
Classics & Ancient History	34,928		9,150	44,078			
Culture & Language Studies					3,000		
Economics	939,095	20,721		959,816			
English	34,599			34,599	144,941		
French	-1,025			-1,025			
History	378,000		65,550	443,550			
Philosophy							
Political Science			9,298	9,298	1,000		
Psychology	216,006	8,670	10,658	235,334			
Sociology	499,708	7,500	8,644	515,852	156,565		
BUSINESS ADMIN (F)	52,500	120,501		173,001	2,000		
COMPUTER SCIENCE (F)	921,585	1,104,902	42,250	2,068,737			
EDUCATION (F)	402,724	20,300	579	423,603			
ENGINEERING (F)	4,272,635	2,824,493	824,529	7,921,657			
Chemical Engineering	1,831,039	726,057	111,717	2,668,813			
Civil Engineering	448,398	320,225		768,623			
Electrical & Computer Eng.	939,100	1,137,514	12,500	2,089,114			
Geodesy & Geomatics	447,615	431,665	135,000	1,014,280			
Mechanical Engineering	566,767	209,032	30,150	805,949			
J Herbert Smith ACOA Chair	10,019		345,162	355,181			
FORESTRY (F)	609,368	1,103,827	12,960	1,726,155			
KINESIOLOGY (F)	86,103	34,757		120,860			
LAW (F)			12,440	12,440			
NURSING (F)	175,926	6,886	43,992	226,804	425,904		

Research Revenues per Generating Unit (continued)

Research Revenues per Generating Unit							
UNIT	Grants (CAUBO)	Contracts (CAUBO)	Other (CAUBO)	Total (CAUBO)	Additional Research Funding		
SCIENCE (F)	3,598,400	1,710,777	38,854	5,348,031			
Biology	730,647	320,490	9,200	1,060,337			
Chemistry	261,722	104,214	1,909	367,845			
Earth Sciences	882,840	246,042	27,745	1,156,627			
Math & Stats	215,512			215,512			
Physics	1,507,679	1,040,031		2,547,710			
SCHOOL OF GRAD STUDIES			2,629,167	2,629,167			
INSTITUTE OF BIOMEDICAL ENGI- NEERING (IBME)	953,782	1,122,856	500	2,077,138			
CHRONIC ILLNESS RESERCH INSTI- TUTE (CIRI)							
CANADIAN RESEARCH INSTITUTE FOR SOCIAL POLICY (CRISP)	220,000	26,886		246,886			
CDN. RIVERS INSTITUTE (CRI) (F & SJ)	1,743,621	1,469,723	6,361	3,219,705			
NB INSTITUTE RESEARCH DATA	210,000	87,689		297,689			
HIL							
CNER INSTITUTE*		283,954		283,954			
ARTS (SJ)		5,000	5,000	10,000	41,428		
History & Politics			5,000	5,000			
Humanities & Languages							
Psychology					41,428		
Social Science		5,000		5,000			
Criminal Justice Studies							
BUSINESS (SJ)							
SCIENCE, APPLIED SCIENCE & EN- GINEERING (SJ)	1,891,209	164,412	115,497	2,171,118	28,000		
Biology	1,431,691	54,412	114,615	1,600,718			
Computer Science and Applied Stats	22,000			22,000			
Engineering					28,000		
Mathematical Sciences	44,468			44,468			
Nursing/Health Sciences	257,650			257,650			
Science		110,000		110,000			
Physical Sciences	135,400		882	136,282			
DAL MEDICAL ED PROGRAM	161,500			161,500			

Research Revenue (continued)

A metric that is commonly cited when comparing the research intensity at universities is the research revenue generated per faculty member. In order to make such a comparison credible, independent sources are required for the two metrics. For our purposes, we use Re\$earch Info Source Inc. and CAUBO.

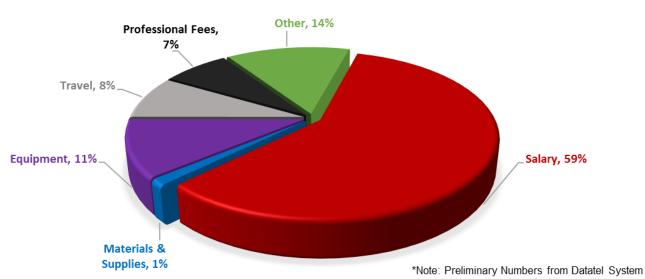


Research Revenue 2015 (CAUBO) per Faculty Member

Revenue per CAUBO -Faculty Numbers per Re\$earch Inforsource Inc

Research Expenditures

The majority of the research funding received by UNB goes back into the New Brunswick economy through salaries. In 2015-16, \$22.4 million was spent on student and non-student salaries. Equipment, materials and supplies consumed \$4.7 million and travel \$3.2 million.

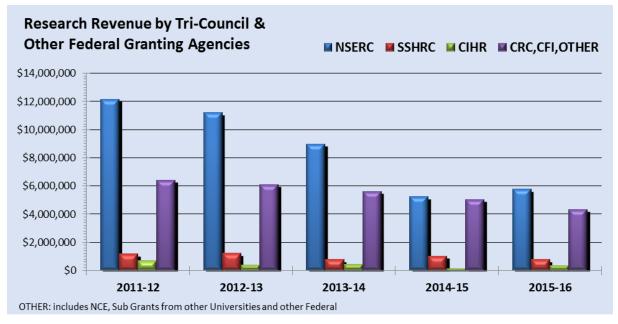


RESEARCH EXPENDITURES UNB 2015-2016

NOTE: The bulk of all research revenues eventually flow back out as expenses. Due to the timing of different accounting tasks, however, total research expenditures will not equal total research revenues for the fiscal year.

Tri-Council Funding

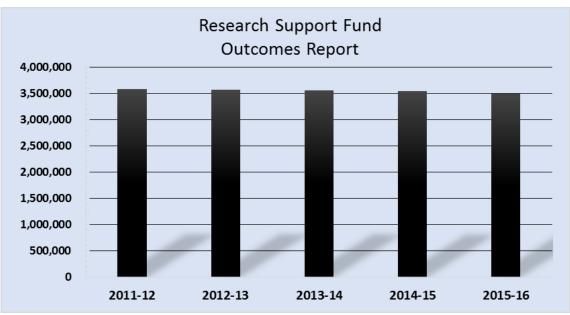
UNB's Tri-Council (NSERC, SSHRC, CIHR) grant revenues in 2015-16 increased by 7.3% overall to \$6.9M from the \$6.4M level of 2014-15.



As indicated, grants from Tri-Council are a very important component of UNB's research activities. The details of our successes or lack thereof are being continuously scrutinized. To that end, details of our submissions to & awards from NSERC, SSHRC & CIHR for the calendar year 2015 are depicted on the above table (totals will differ from those presented for fiscal year 2015-16). In order to facilitate comparisons, we have also provided last year's (2014) metrics.

Research Support Fund

The Research Support Fund program provides funding for research facilities, resources, management and administration, regulatory requirements, accreditation and intellectual property management. The amount universities receive from this program is contingent on their level of Tri-Council funding based on a three-year rolling average. The university's allocation for 2014-15 was \$3,538,546, and the allocation for the 2015-16 fiscal year is \$3,493,045.

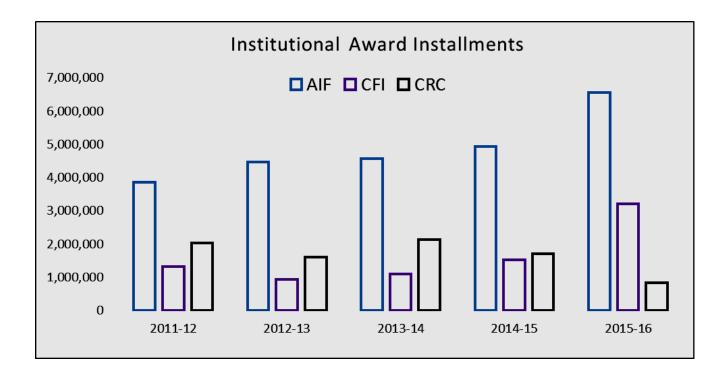


Tri-Council Success

2015 Results								
Submissions	Program	Submitted	Requested	Successful	Awarded	Success Rate	Funding Rate	
	CRD	2	1,052,000	2	1,052,000	100.0%	100.0%	
	Strategic Project	0	0	0	0	0.0%	0.0%	
	RTI	9	875,241	0	0	0.0%	0.0%	
NSERC	Discovery	48	13,733,672	30	3,907,000	62.5%	28.4%	
NOLKO	Engage & Engage Plus	16	386,900	12	287,500	75.0%	74.3%	
	Other	8	504,964	2	28,574	25.0%	5.7%	
	Total NSERC	83	16,552,777	46	5,275,074	55.4%	31.9%	
	Insight	6	1,416,233	2	442,095	33.3%	31.2%	
SSHRC	Other	21	3,568,787	1	38,616	4.8%	1.1%	
	Total SSHRC	27	4,985,020	3	480,711	11.1%	9.6%	
CIHR	Foundation Scheme	3	LOI	0	0	0.0%	0.0%	
	Transitional OG	4	2,266,597	0	0	0.0%	0.0%	
	Other	7	2,190,391	2	600,175	28.6%	27.4%	
	Total CIHR	14	4,456,988	2	600,175	14.3%	13.5%	

2014 Results								
Submissions	Program	Submitted	Requested	Successful	Awarded	Success Rate	Funding Rate	
	CRD	4	3,900,664	4	3,900,664	100.0%	100.0%	
	Strategic Project	3	1,439,600	1	306,200	33.3%	21.3%	
	RTI	8	692,775	0	0	0.0%	0.0%	
NSERC	Discovery	46	12,217,854	26	3,327,000	56.5%	27.2%	
	Engage & Engage Plus	18	424,577	14	324,077	77.8%	76.3%	
	Other	8	1,053,198	4	826,800	50.0%	78.5%	
	Total NSERC	87	19,728,668	49	8,684,741	56.3%	44.0%	
	Insight	11	1,806,775	1	135,973	9.1%	7.5%	
SSHRC	Other	19	1,419,432	7	615,728	36.8%	43.4%	
	Total SSHRC	30	3,226,207	8	751,701	26.7%	23.3%	
	Foundation Scheme	4	LOI	0	0	0.0%	0.0%	
	OOG	4	1,888,535	1	383,675	25.0%	20.3%	
CIHR	Other	5	1,992,969	1	75,000	20.0%	3.8%	
	Total CIHR	13	3,881,504	2	458,675	15.4%	11.8%	

Institutional Funding



Atlantic Innovation Fund (AIF)

The Atlantic Canada Opportunities Agency continues to support UNB research. Although there were no new awards in this fiscal year, we currently lead six active AIF projects (one from round 7, two from round 9 and three from round 10).

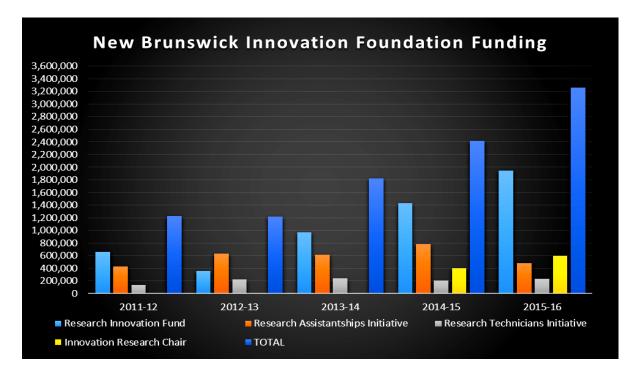
Along with leading six projects, UNB is involved in two active AIFs lead by other organizations. UNB researchers continue to play important roles in an AIF project led by Acadia University and another project led by Forest Protection Limited.

Canada Foundation for Innovation (CFI)

In 2015-16, UNB was successful in having four new CFI projects approved at a total value of \$529,620, plus an additional \$158,886 in Infrastructure Operating Funds to help maintain the equipment. UNB researchers are currently leading 11 active CFI infrastructure projects involving \$1.8 million from the CFI and \$2.3 million from matching sources.

New Brunswick Innovation Foundation

The New Brunswick Innovation Foundation continued to be a strong supporter of research at UNB. UNB saw increases in all NBIF programs with the exception of the Research Assistantships Initiatives, and received added funding via the Innovation Research Chair for the second year. Total NBIF funding to UNB increased by 34.8% over last year.



New Brunswick Health Research Foundation

The New Brunswick Health Research Foundation continued to contribute to UNB research. As the graph below indicates, since 2011-12 NBHRF contributions to our research enterprise have been in the \$200K—\$300K range. They have increased to \$1.3M in 2014-15 due in part to funding for the SPOR Network, and funding for the Jarislowsky Chair. Additionally, NBHRF has increased both the number of projects it has funded at UNB by 11 in 2014-15, as well as increasing the dollar value of the average grant awarded.

