

Office of Research Services Annual Report 2013



Director's Message

Research is an integral part of UWindsor and a continuous commitment to research and development has been - and still is - the core of UWindsor. We have continued a long tradition of taking our valuable research and applying it directly to our mission of improving the lives of Canadians through activities in research, education, and community service. In pursuing creative avenues to further these activities UWindsor and its staff make valuable contributions to the larger scientific community and provide a unique resource for the local community and region. UWindsor research promotes academic autonomy and empowerment, risk-taking, and maintains a commitment to exploratory research across disciplines among our faculty and students. UWindsor encourages aspiring researchers and scholars to pursue their research ambitions, aligned to the vision and the mission of the University and to emerging trends in the global market.

This year was a time both to look forward and envision the coming years and to examine—and celebrate—our past, as UWindsor commemorates its 50th anniversary. UWindsor has a long tradition of excellence that spans a history of almost half a century and we want to continue and strengthen this tradition with the adoption of new expertise, research methods, cutting-edge technologies, and interdisciplinary collaborations.

UWindsor has a rich tradition of teaching and training highly qualified personnel ranging from undergraduates, graduate students, and post-doctoral fellows. Our aim is to aid our students by providing experiential learning opportunities and to enable them to become accomplished individuals that will make a valuable contribution to the workforce. As Director of Research and Development, I feel inspired by the commitment to excellence of our faculty, trainees, students, and staff. I am most thankful for having the opportunity to learn from my interaction with our multidisciplinary team and our many talented collaborators on campus and worldwide. We are strongly committed to community outreach and engagement and to moving research from the lab to the community at-large through various technology transfer models. I believe this is being accomplished through training the next generation of researchers, entrepreneurs and the workforce who are conducting innovative and exciting work, advancing their fields, and having a powerful and positive impact on the lives of Canadians. An important aspect of these research activities is the highly collaborative research environment at UWindsor, which fosters multi-disciplinary research and experiential learning opportunities involving researchers and industry partners.

Challenging times are upon us as we are critically affected by the budget cuts that have dramatically reduced federal and provincial support for many key institutions on which we rely for funding. This has forced us to make difficult choices and what sets UWindsor research apart is how we have chosen to respond to these challenges. We believe that smart, selective and strategic decision-making positions us for maximum success. In the face of these challenges, we are adapting to a new, more dedicated approach to research that will enable us to thrive in these times. UWindsor has the expertise, infrastructure, and willingness to work with partners in the public and private sectors to solve problems in energy and the environment, automotive, health and medicine, water, food, transportation, housing, and many other areas that are important to advancing relevant and timely research initiatives.

The diverse nature of research at UWindsor illustrates that our portfolio is diverse and that the range of funding sources supporting research at our institution and the engagement of academic units across the University in research and development activities is valuable to our community. UWindsor has been very active on a number of multi-year research projects as well as engaging in community outreach activities. Fulfilling UWindsor's research mandate would not be possible without the broad expertise of its researchers and assistants. Their efforts are essential to UWindsor's involvement and success in its research projects and community endeavours. UWindsor Research remains very supportive of students' learning and networking opportunities and we seek to engage our students in many of these events. With such talent, both among our most senior researchers and the new investigators who have recently joined us, I look forward to 2013/14 and to the discoveries that await us.



Research Revenue

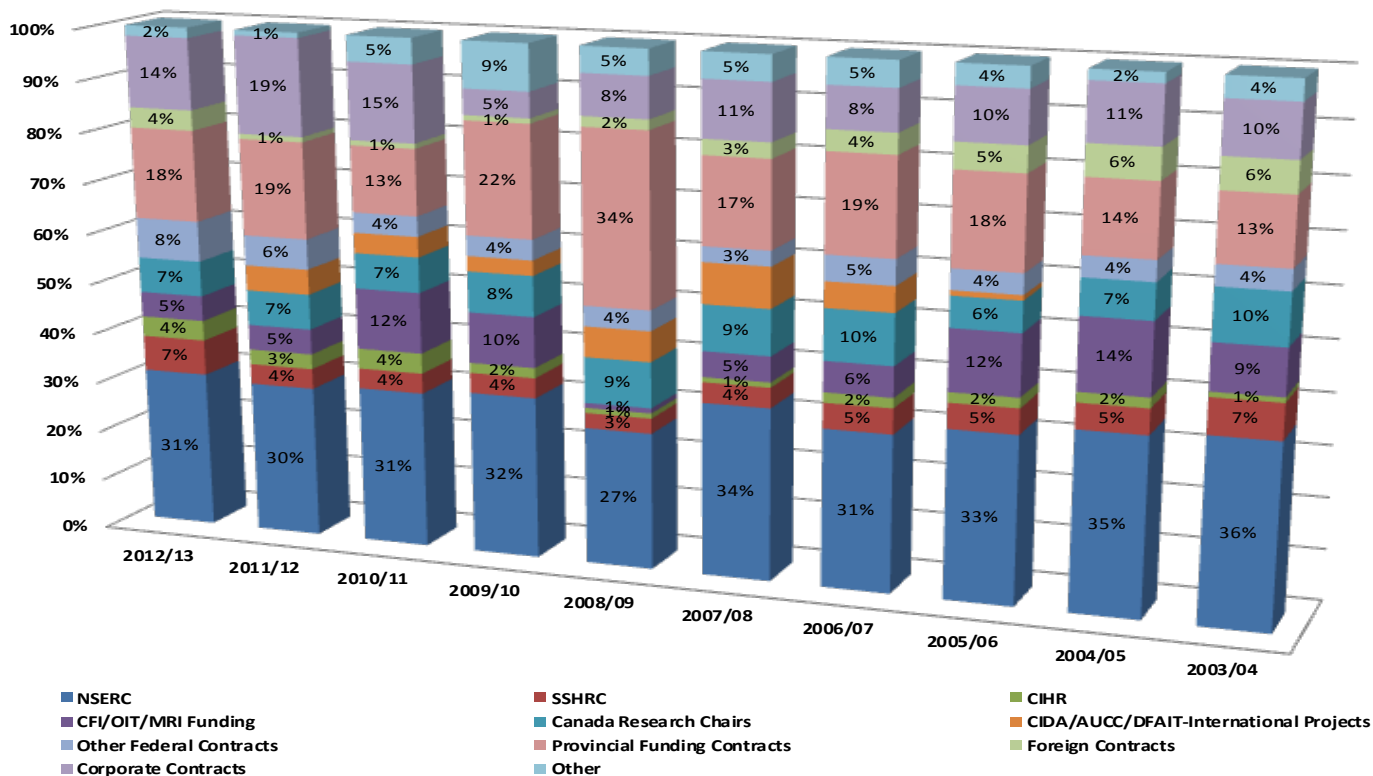


Research Revenue 10 Year Summary

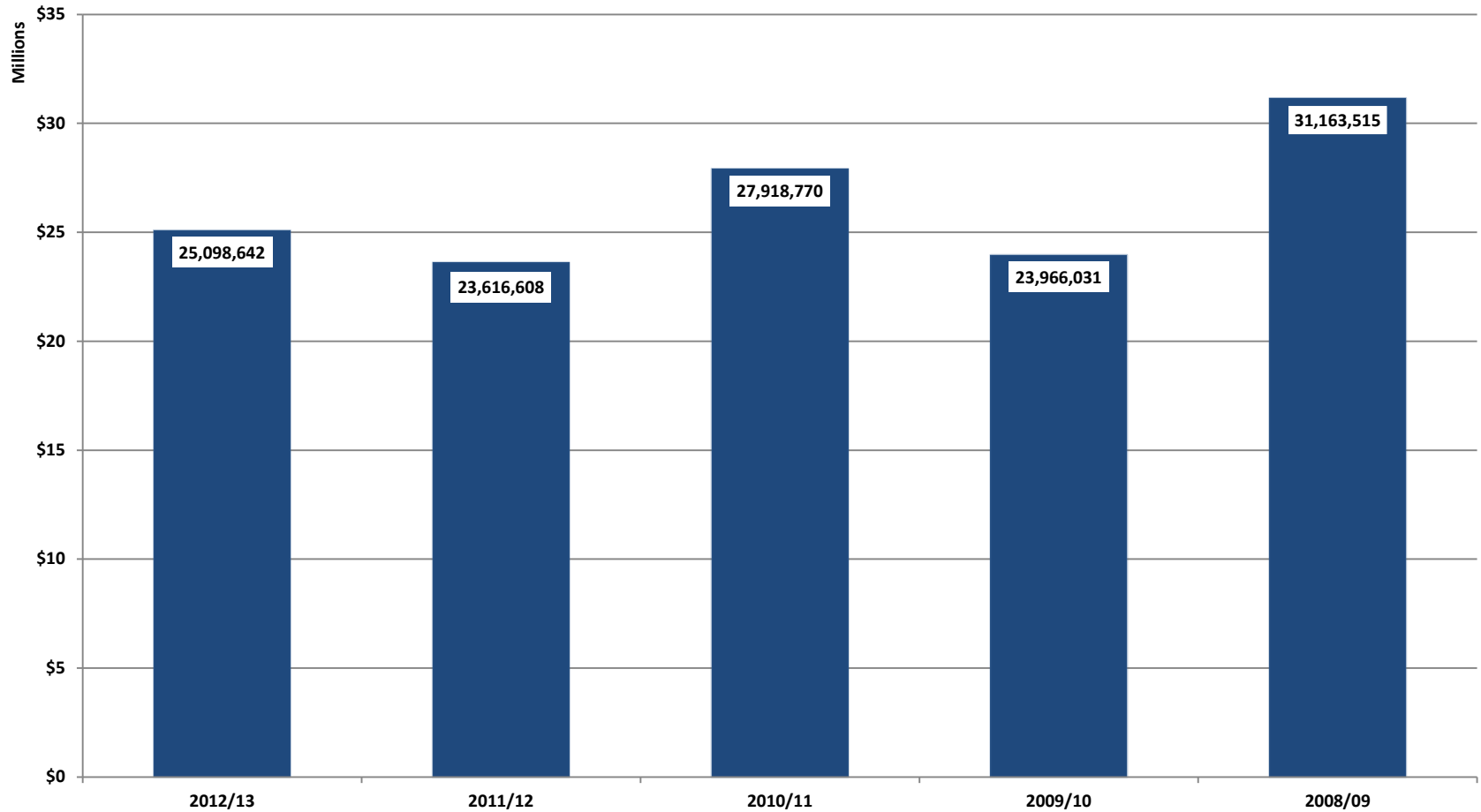
	2012/13	2011/12	2010/11	2009/10	2008/09	2007/08	2006/07	2005/06	2004/05	2003/04
External Research Grant Revenue-Gross Per FS	25,098,642	23,616,608	27,918,770	23,966,031	31,163,515	23,450,347	21,982,487	22,131,360	21,063,715	16,952,674
Tri-Council Funding										
NSERC	7,709,715	7,210,039	8,692,980	7,930,728	8,319,639	7,764,690	7,084,194	7,329,768	7,794,340	6,098,047
SSHRC	1,700,279	909,903	1,139,100	966,603	869,135	933,639	1,058,515	1,146,357	1,042,553	1,186,052
CIHR	935,704	800,017	1,239,106	518,289	418,683	192,175	353,602	422,010	325,289	214,215
Total Tri-Council Funding	10,345,698	8,919,959	11,071,186	9,415,620	9,607,457	8,890,504	8,496,311	8,898,135	9,162,182	7,498,314
Other External Funding Sources										
CFI/OIT/MRI Funding	1,198,924	1,183,125	3,417,676	2,277,828	347,469	1,276,069	1,234,230	2,590,351	2,858,082	1,532,258
Canada Research Chairs	1,712,500	1,637,500	2,012,500	1,945,833	2,676,559	2,025,000	2,190,666	1,424,788	1,395,781	1,750,000
CIDA/AUCC/DFAIT-International Projects	74,801	1,162,585	1,068,806	737,603	1,758,866	1,894,454	1,179,235	311,072	90,000	0
Other Federal Contracts	2,119,947	1,339,944	1,178,723	887,333	1,373,086	723,236	1,142,625	919,543	760,607	708,709
Provincial Funding Contracts	4,517,974	4,416,634	3,559,744	5,174,544	10,736,896	4,055,486	4,079,959	3,884,647	2,989,351	2,137,915
Foreign Contracts	1,063,698	123,529	250,386	319,393	738,985	739,726	960,161	1,128,678	1,169,731	1,024,779
Corporate Contracts	3,515,119	4,523,151	4,090,886	1,164,055	2,339,873	2,592,162	1,686,207	2,103,685	2,300,037	1,706,071
Other	549,981	309,990	1,268,863	2,043,822	1,584,324	1,253,710	1,013,093	870,461	337,944	594,628
Total Other External Funding Sources	15,353,805	15,653,363	17,416,299	15,097,622	22,309,880	15,404,361	14,008,263	14,307,605	12,636,826	10,215,002
Total External Research Grant Revenue	25,098,642	23,616,607	27,918,770	23,966,031	31,163,515	23,450,347	21,982,487	22,131,360	21,063,715	16,952,674



Total Research Revenue by Agency 10 Year Summary

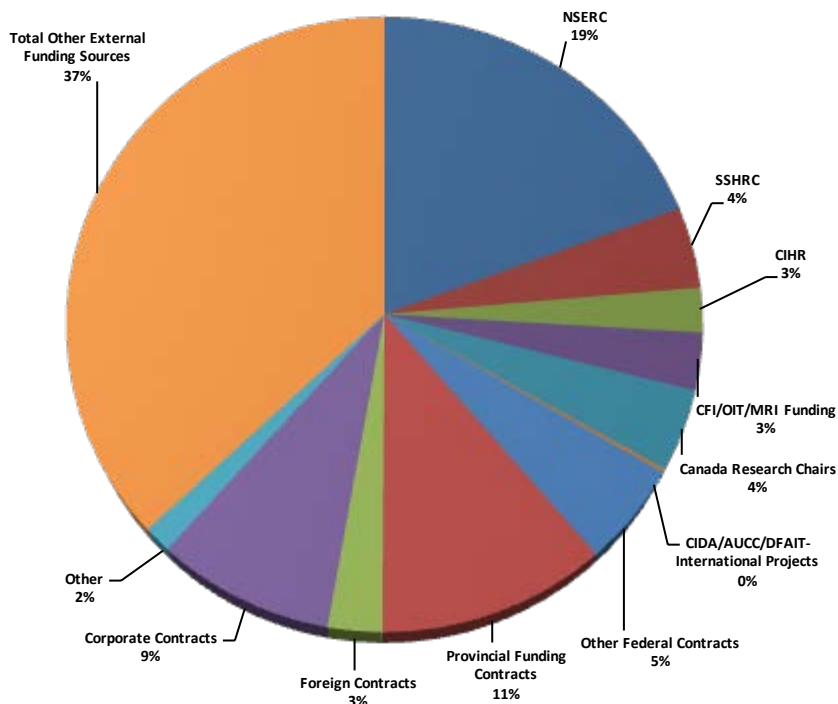


Total Grant Revenue 5 Year Summary

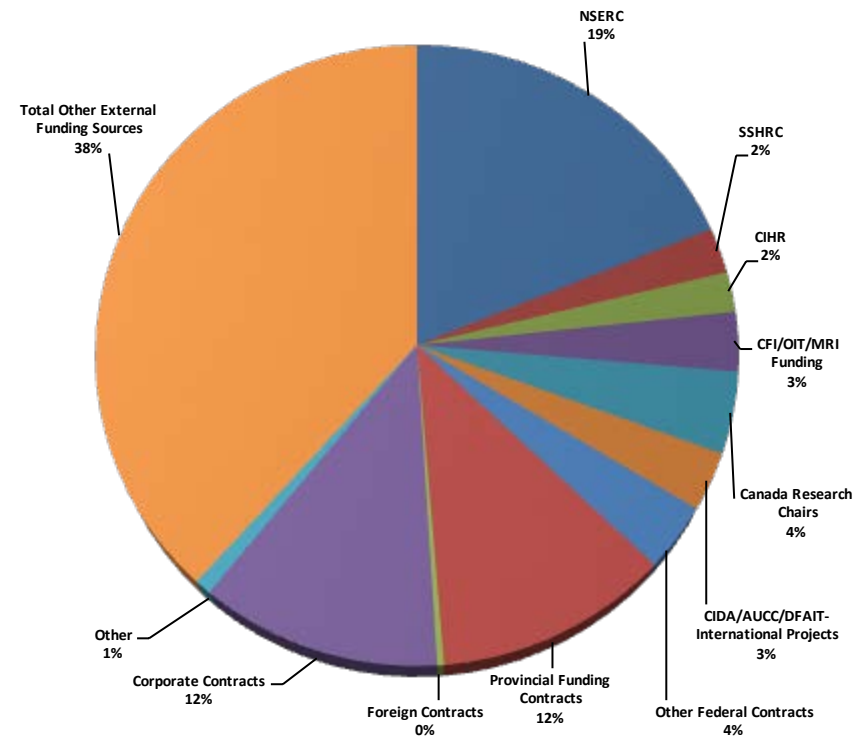


Total Sources of Funding for Research Grant Revenue

2012/2013



2011/2012

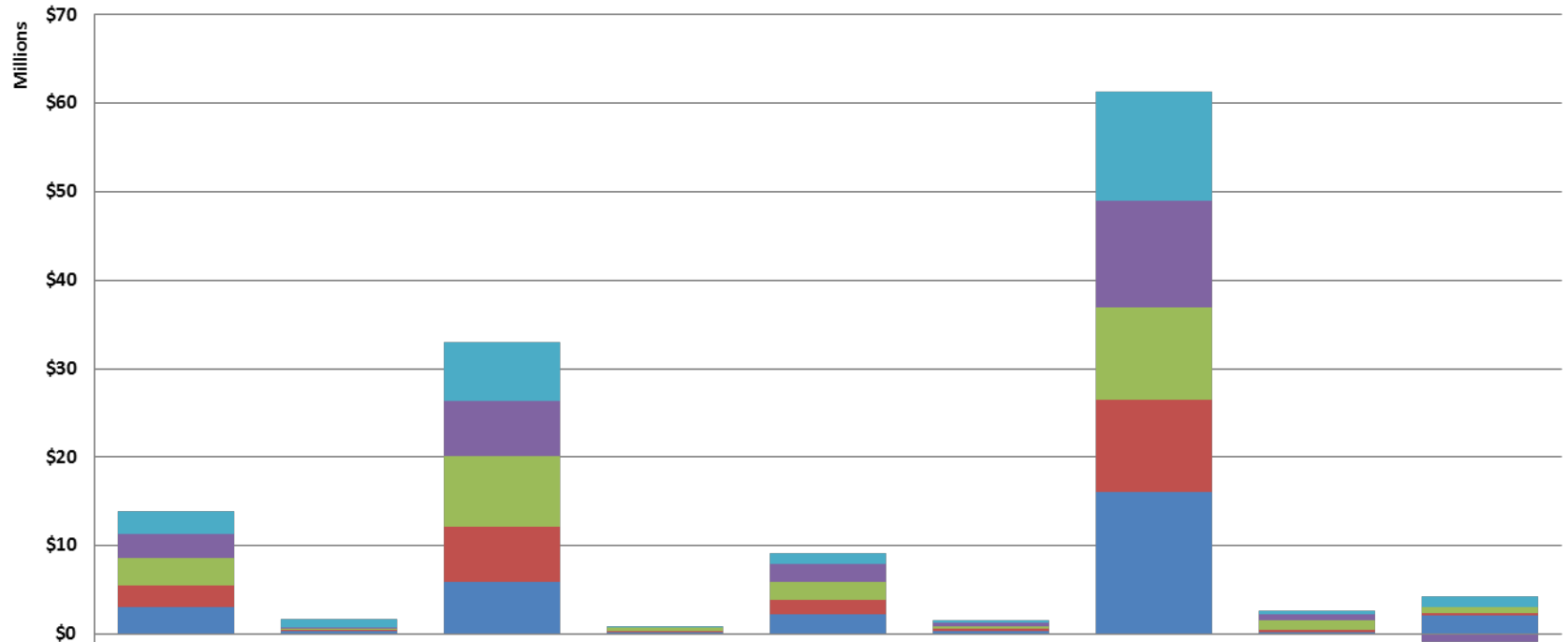


Research Revenue by Faculty



Total Research Revenue by Faculty

5 year summary



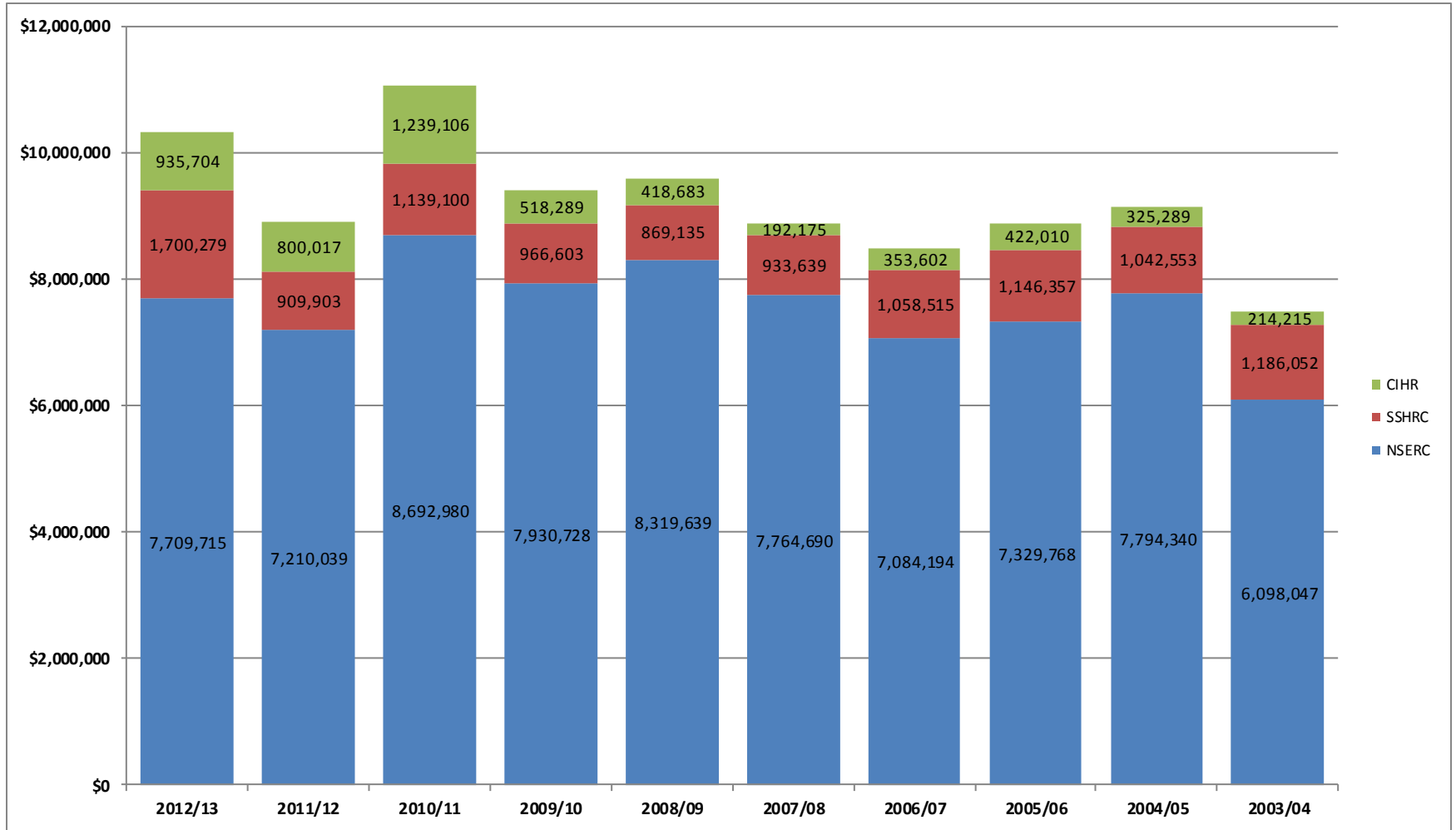
	Faculty of Arts, Humanities & Social Sciences	Faculty of Education	Faculty of Engineering	Faculty of Human Kinetics	Faculty of Law	Faculty of Nursing	Faculty of Science	Odette School of Business	Other
2012/13	2,568,020	871,293	6,725,172	155,181	1,315,372	333,255	12,316,420	417,590	1,175,706
2011/12	2,709,185	165,518	6,115,327	31,644	1,967,352	378,920	12,117,967	677,755	-874,572
2010/11	3,195,501	68,773	8,009,587	327,196	1,996,602	293,450	10,411,409	1,000,797	769,717
2009/10	2,395,142	130,305	6,292,541	221,436	1,660,835	275,147	10,378,964	321,116	234,692
2008/09	3,041,540	386,733	5,876,790	168,513	2,254,722	300,710	16,096,915	215,530	2,085,507



Tri-Council Funding



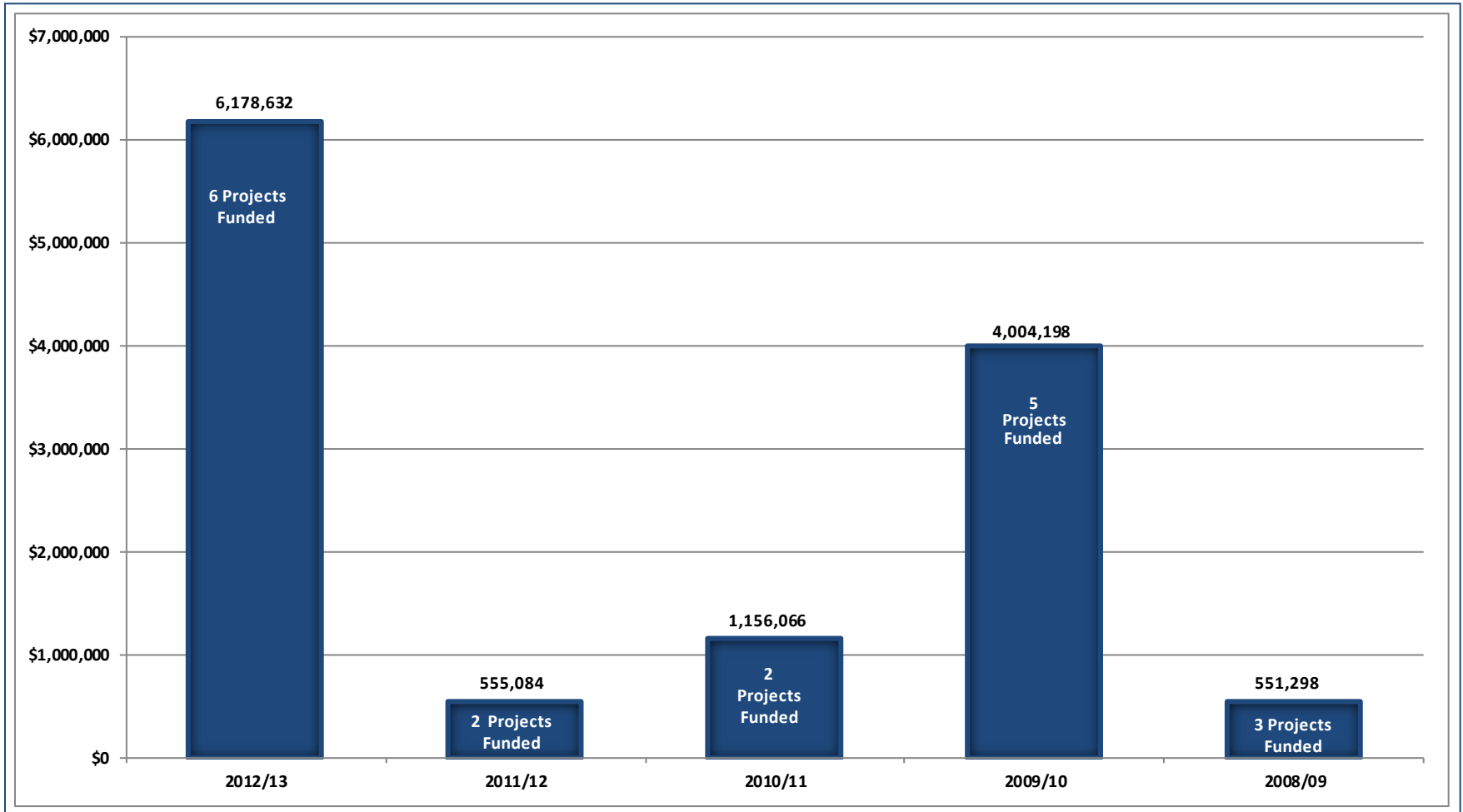
Tri-Council Funding 10 year summary



Canadian Foundation for Innovation (CFI) and Ministry of Research and Innovation (MRI) Funding Program



Canadian Foundation for Innovation (CFI) and Ministry of Research and Innovation (MRI) Funding 5 year summary



Canada Research Chairs (CRC)



Canada Research Chairs (CRC) 2012/13 summary

The University of Windsor received approximately \$1.712M for 13 of its active Canada Research Chairs in 2012-13. Two of the 15 Chairs listed below have been phased out through a re-allocation process, but have received continued support from the University of Windsor to the end of their terms. During the 2012-13 fiscal year, Dr. Jonathan Wu (Electrical and Computer Engineering) was successful in the renewal of his Tier 1 Chair for a second seven-year term and Dr. Oliver Love (Biological Sciences) was awarded a new five-year term Tier 2 Chair.

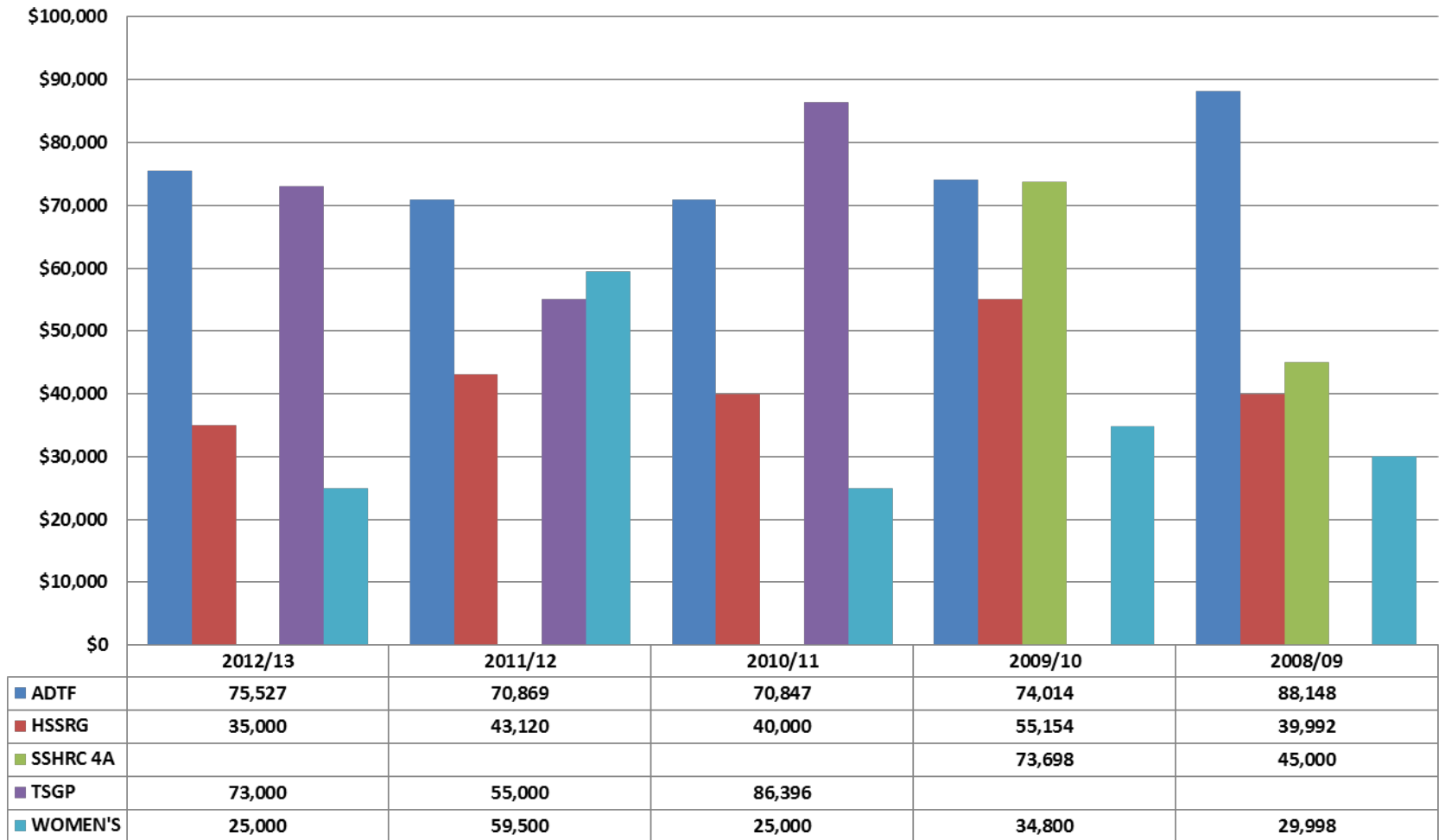
	Department/ Faculty	Canada Research Chair in...	Tier
Lori Buchanan	Psychology	Psycholinguistics	2
Hoda ElMaraghy	Industrial & Manufacturing Engineering	Manufacturing Systems	1
Aaron Fisk	GLIER	Trophic Ecology	2
Robin Gras	Computer Science	Heuristics for Bioinformatics	2
Daniel Green	Mechanical Automotive & Materials Eng.	Development & Optimization of Metal Forming Processes	2
G. Douglas Haffner	GLIER	Great Lakes Environmental Health	1
Narayan Kar	Electrical & Computer Eng.	Hybrid Drivetrain Systems	2
Jerald Lalman	Civil & Environmental Eng.	Environmental Biotechnology	2
Stephen Loeb	Chemistry & Biochemistry	Supramolecular Chemistry & Functional Materials	1
Oliver Love	Biological Sciences	Integrative Ecology	2
Eleanor Maticka-Tyndale	Sociology, Anthropology, Criminology	Social Justice & Sexual Health	1
Steven Palmer	History	The History of International Health	2
Jeremy Rawson	Chemistry & Biochemistry	Molecular Materials	1
Johnathan Wu	Electrical & Computer Eng.	Automotive Sensors and Information Systems	1
Ming Zheng	Mechanical Automotive & Materials Eng.	Clean Diesel Engine Technologies	2



Internal Grant Funding Program



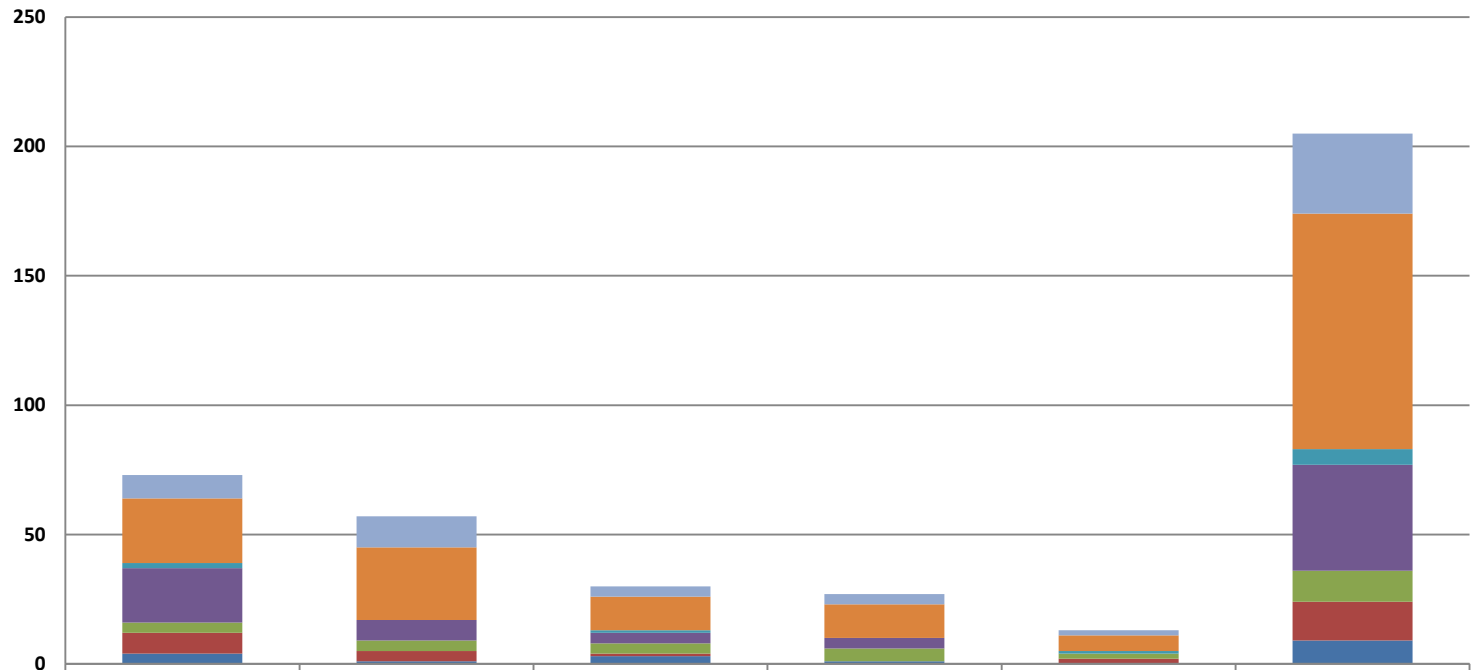
Internal Grants Program 5 year summary – awarded cash



Intellectual Property Management, Technology and Knowledge Transfer



Total Patents Pending 5 year summary



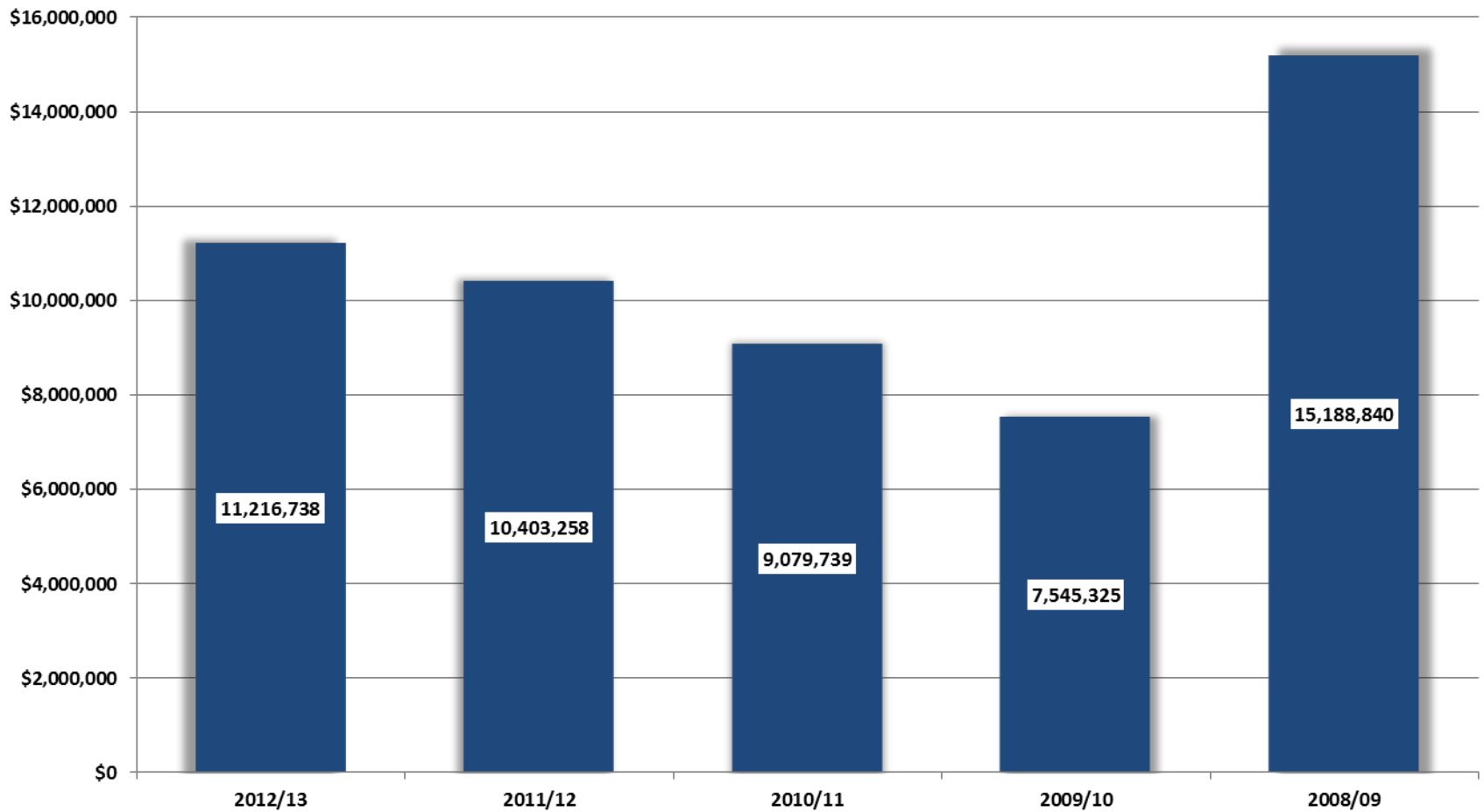
	2012/13	2011/12	2010/11	2009/10	2008/09	Total
Disclosures	9	12	4	4	2	31
Total Patents Pending	25	28	13	13	6	91
Patents Issued	2		1		1	6
Patents Filed	21	8	4	4		41
PCTs Filed	4	4	4	5	2	12
Provisional Patents Filed	8	4	1		2	15
Patents/IP Abandoned	4	1	3	1		9



Research Contract Statistics



Total Contract Revenue 5 year summary



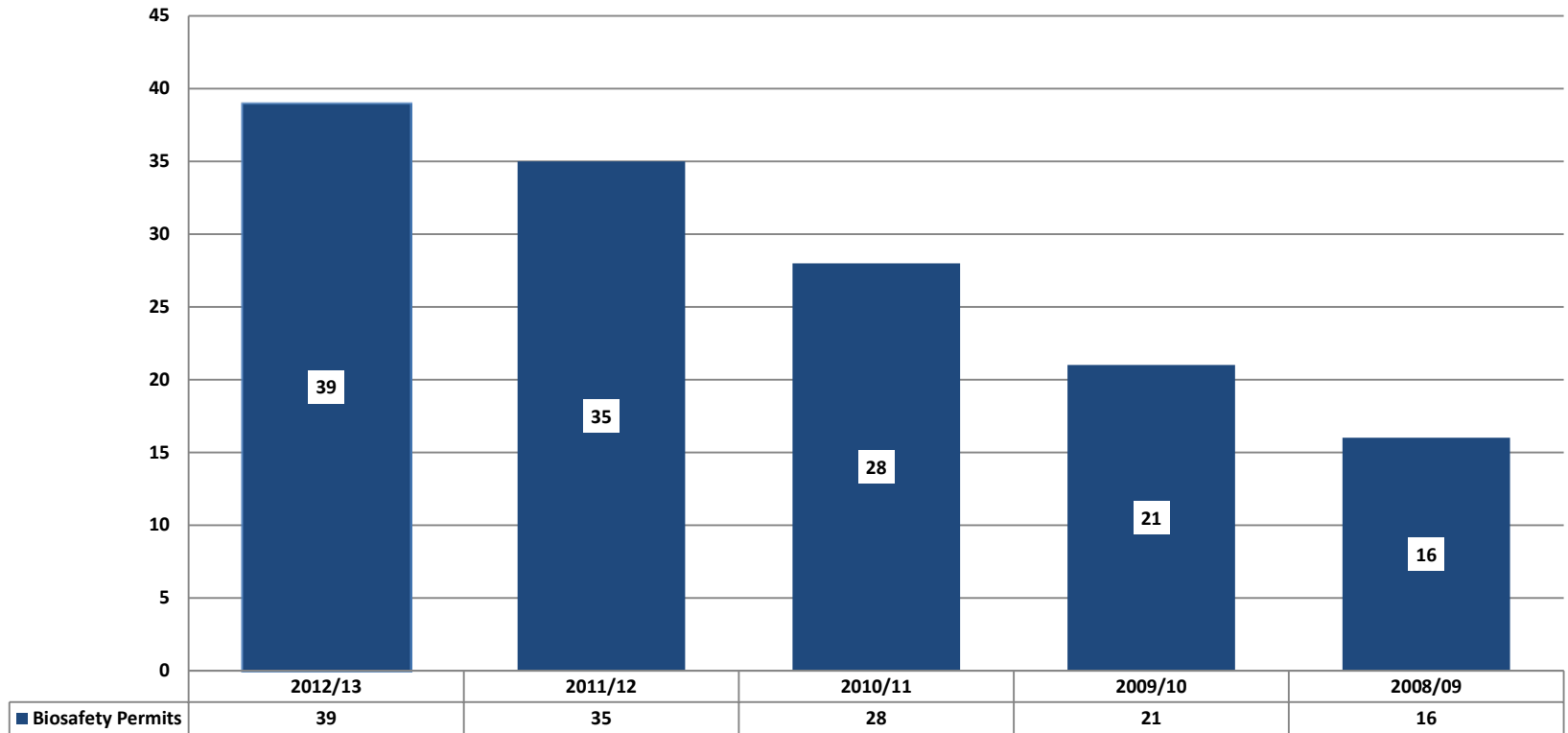
Research Biosafety



Biosafety Active Permits 5 year summary

The Research Safety Committee (RSC) oversees all matters pertaining to biosafety at U Windsor.

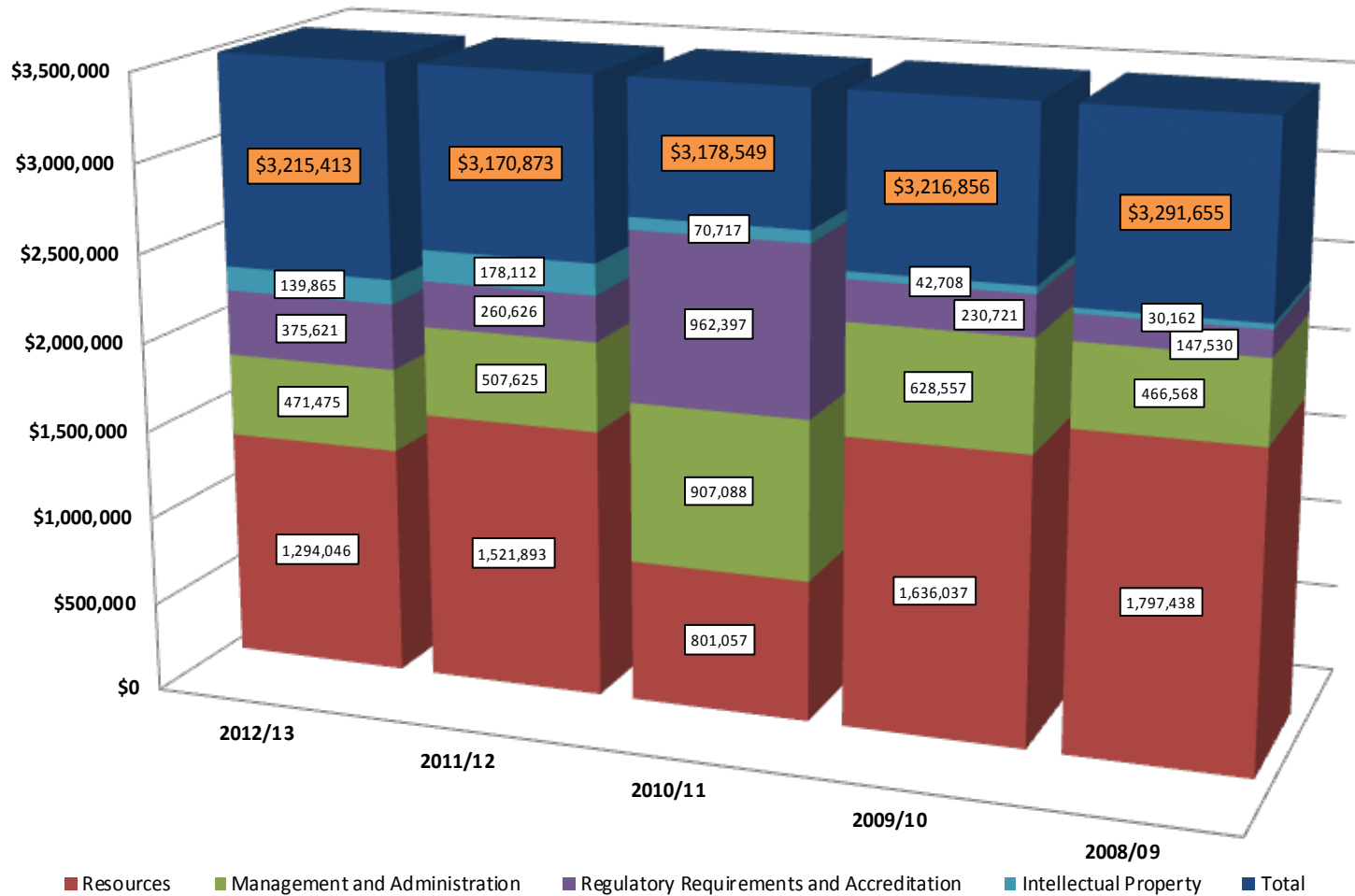
The Chemical Control Centre is responsible for administering the Biosafety program on a day-to-day basis, for providing technical advice on safety procedures and equipment and relevant regulations. Biosafety Permit metrics for the calendar year 2008/09 – 2012/13 metrics are shown in the following table.



Federal Indirect Costs Program



Federal Indirect Costs of Research 5 year summary



Federal Indirect Costs of Research 2012/13

Indirect Costs of Research

The Indirect Costs of Research program provides funding for research facilities, resources, management and administration, regulatory requirements and accreditation and intellectual property management. The amount U Windsor receives from this program is contingent on our level of Tri- Council funding based on a three-year rolling average. The university's allocation for the 2012/13 fiscal year is **\$3,215,413**.

