

### SYNOPSIS OF RESEARCH ACTIVITIES

IN THE FACULTY OF MEDICINE UNIVERSITY OF TORONTO AND ITS AFFILIATED TEACHING HOSPITALS

April 2013 - March 2014

http://www.medresearch.utoronto.ca/

Based on RIS data snapshot : October 28, 2014, 1034hrs Version 1: Jan 22, 2015

#### PRODUCED BY:

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#### **About THIS Report**

As of 2012 the Faculty of Medicine Research Office (Office of the Vice-Dean for Research, Faculty of Medicine) ceases to publish the hardcopy version of the Synopsis of Research Activities of the Faculty of Medicine and Affiliated Hospitals. In its place, is this abbreviated report – available online – consisting of only the most requested Tables and Graphs.

This report's introductory pages have been reformatted to be screen-friendly (landscape orientation) but the tables and graphs have been retained in pdf format for ease of printing for those who desire a paper copy.

As always we would like to acknowledge the support of Departmental Chairs, Research Directors and UofT/Hospital Research Administrators for providing information on research activities.

We would like to thank collectively the numerous individuals who have contributed in one way or another to the tedious task of producing this report. We look forward to your continued support for next year's report.

#### TERMS OF REFERENCE

Research funding is summarized in the Synopsis by department and by research location of the principal investigator.\*

The following guidelines are used to collect research funding information and assign funds in the research database:

- Research funding information is collected from administration offices located on the University of Toronto campus and at the affiliated teaching hospitals for grants and awards received during the period **April 1, 2013- March 31, 2014.**
- Information is collected on investigators who hold a Faculty of Medicine appointment.
- These data are assigned to a principal investigator as identified by the grant application or through consultation with the departmental Chair.
- An investigator's research funding information is linked to their primary departmental affiliation and to a primary research location as identified on the grant application.
- Funds may be assigned to a department in which a principal investigator holds a cross appointment. The assignment is conditional upon the agreement of the Chairs.
- This summary includes direct research grants only and does not include funding to implement or maintain research infrastructure, e.g. CFI awards.
- Research funding that remains unexpended during a given report period is not carried forward to subsequent reports.
- The data used to generate this report (unless otherwise indicated) was based on an RIS 'by-Location' Report download (data snapshot) initiated at 1034 hrs of October 28, 2014.
- All calculations were done using validated programs in SAS statistical Software version 9.3

<sup>\*</sup> In practice, research funds are administered through the departments of all investigators, both principal and co-investigator, involved in a research project. The resource allocation contained in this summary may differ from departmental reports.

Table 1a FACULTY OF MEDICINE - UNIVERSITY OF TORONTO Summary of Department Research Funding vs Sponsor in MILLIONS of Dollars April 2013 - March 2014

DEPARTMENT	Total	TriCouncil	TriCouncil SUB	Federal Gov	Federal Gov SUB	Provincial GOV	Provincial Gov SUB	Charities	Charities SUB	NIH & US Gov	NIH & US Gov SUB	Industry	Industry SUB	International	Other	Other SUB	Local	# of Awards
BASIC																		
BBDMR	25.168	6.821	0.028	2.347	0.283	7.579	0.395	3.211	0.136	0.258	1.981	0.814	4 0.026	0	0.698	0	0.592	204
Biochemistry	17.845	6.436	0.088	4.494	0	0.014	0.176	2.871	0	0	0.000	0.186	0.108	0	0.732	0	2.740	252
Biomat & Biomed Eng	3.404	0.771	0	0.134	0	0.981	0	0.803	0	0	0.025	0.006	6 0	0.010	0.531	0	0.145	48
Immunology	13.378	3.358	0.016	2.438	0	0.350	0	2.953	0.025	0.712	0.191	1.093	3 0.177	0	0.628	0	1.436	175
Medical Biophysics	77.224	14.070	0.088	14.000	0	5.450	0	8.744	0.173	3.870	0.699	1.496	0.454	0.134	2.285	0	25.760	577
Molecular Genetics	85.597	18.767	0.392	9.844	0.011	10.135	0.241	24.063	0	0.524	0.505	13.842	2 0.305	0.007	2.090	0.064	4.807	604
Nutritional Sciences	5.119	2.877	0.018	0.700	0	0	0	0.717	0	0	0	0.106	6 0	0	0.701	0	0	150
Pharmacology	4.888	1.752	0.023	0.215	0	0.316	0	0.346	0.065	0.350	0.450	0.336	6 0	0.010	1.024	0	0	109
Physiology	15.084	6.399	0.171	1.402	0	0.502	0	2.972	0	0.372	0	0.419	0.006	0.003	1.440	0	1.396	268
SUB-TOTAL	247.707	61.251	0.824	35.574	0.294	25.327	0.812	46.680	0.399	6.086	3.851	18.298	1.076	0.164	10.129	0.064	36.876	2,387
COMMUNITY HEALTH																		
Health Policy, Mgmt & Eval	8.889	2.347	0.353	0.218	0	2.041	0	1.515	0.051	0	0	0.339	9 0	0	1.404	0	0.620	218
SUB-TOTAL	8.889	2.347	0.353	0.218	0.000	2.041	0.000	1.515	0.051	0.000	0.000	0.339	0.000	0.000	1.404	0.000	0.620	218
CLINICAL																•		
Anesthesia	6.124	1.736	0.005	0.339	0	0.381	0	0.875	0	0	0	1.112	2 0.047	0	0.112	0	1.517	108
Family & Community Medicine	8.994	1.290	0.031	0.102	0	4.839	0.149	0.862	0	0.228	0.001	0.198	3 0.151	0	0.190	0	0.952	87
Lab. Medicine & Pathobiology	30.149	8.330	0.190	0.770	0	1.973	0	8.141	1.290	0.958	0.327	3.260	0.034	0	1.628	0	3.248	462
Medical Imaging	9.413	0.719	0	0.197	0	1.076	0	1.860	0	0.386	0.032	1.299	9 0	0.007	0.695	0	3.142	122
Medicine	155.299	26.986	1.941	3.332	0.142	10.805	0.180	29.788	0.477	3.829	1.318	39.929	0.915	0.146	3.811	0.010	31.690	1,937
Obstetrics & Gynaecology	5.128	2.164	0.023	0.280	0	0.011	0	0.447	0	0	0.203	0.790	0.010	0.002	0.362	0	0.836	86
Occupational Therapy	3.482	1.250	0.014	0	0	0.150	0	0.632	0	0	0	0.012	2 0.001	0	1.303	0	0.119	333
Ophthalmology And Vision Sci	6.139	0.896	0.086	0.358	0	0.744	0	1.510	0	0	0.006	0.418	3 0	0	0.685	0	1.435	83
Otolaryngology	2.921	0.501	0	0	0	0	0	0.490	0	0	0	0.571	0.019	0	0.249	0	1.090	44
Paediatrics	56.843	14.941	0.757	1.029	0	2.587	0	20.337	0.212	1.124	1.539	3.530	1.345	0.260	2.106	0	7.077	1,020
Physical Therapy	5.117	1.375	0.020	0.100	0	0.781	0	1.082	0	0	0	0.001	0.052	0	1.604	0	0.102	327
Psychiatry	39.236	10.055	0.180	3.806	0	4.854	0.007	7.635	0.003	3.319	0.138	1.415	0.340	0	4.358	0	3.125	488
Radiation Oncology	29.408	1.470	0.138	0.035	0	9.164	0	6.996	0.102	0	0	1.365	0.243	0	0.610	0	9.285	310
Speech-Language Pathology	2.640	0.198	0.050	0.175	0	0.100	0.013	0.181	0	0.359	0.257	0.462	2 0.078	0	0.749	0	0.020	223
Surgery	61.868	9.539	0.306	1.540	0	4.727	0	13.608	0.689	0.883	0.652	4.686	0.313	0.243	3.439	0	21.243	840
SUB-TOTAL	422.761	81.450	3.741	12.063	0.142	42.192	0.349	94.444	2.773	11.086	4.473	59.048	3.548	0.658	21.901	0.010	84.881	6,470
Other	22.735	3.254	0.185	0.359	0	3.480	0	4.964	0.492	0.352	0.770	7.983	3 0.074	0	0.822	0	0	158
TOTAL	702.092	148.302	5.103	48.214	0.436	73.040	1.161	147.603	3.715	17.524	9.094	85.668	4.698	0.822	34.256	0.074	122.377	9,233
CFI/OIT 1	116.065									0						0	0	103
GRAND TOTAL <sup>2</sup>	818 157	(x \$1,000,000)														-	_	9,336

<sup>&</sup>lt;sup>1</sup> CFI and OIT funding represents physical infrastructure grants to the Hospital for Sick Children, Mt. Sinai Hospital, St. Michael's Hospital, the Sunnybrook Health Sciences Centre, University of Toronto and the University Health Network.

<sup>2</sup> Excludes a total of \$18,354,903 from the Federal Indirect Costs Program awarded to affiliate hospitals.

Table 1b

FACULTY OF MEDICINE - UNIVERSITY OF TORONTO

Summary of Department Research Funding vs Sponsor in MILLIONS of Dollars INCLUDING SUB-GRANTS

April 2013 - March 2014

DEPARTMENT	Total	TriCouncil*	Federal Gov*	Provincial GOV*	Charities*	NIH & US Gov*	Industry*	Other	Local	# of Awards	
										Awarus	
BASIC										004	
CCBR (formerly BBDMR)	25.168	6.848	2.630	7.974	3.347	2.238	0.840	0.698	0.592	204	
Biochemistry	17.845	6.524	4.494	0.190	2.871	0.000	0.294	0.732	2.740	252	
Biomat & Biomed Eng	3.404	0.771	0.134	0.981	0.803	0.025	0.006	0.541	0.145	_	
Immunology	13.378	3.375	2.438	0.350	2.978	0.903	1.270	0.628	1.436	175 577	
Medical Biophysics Molecular Genetics	77.224	14.158	14.000	5.450	8.917	4.569	1.950	2.420	25.760	604	
	85.597	19.159	9.856	10.376	24.063	1.029	14.147	2.160	4.807		
Nutritional Sciences	5.119	2.894	0.700	0	0.717	0	0.106	0.701	0	150	
Pharmacology	4.888	1.775	0.215	0.316	0.411	0.800	0.336	1.034	0	109	
Physiology	15.084	6.571	1.402	0.502	2.972	0.372	0.425	1.443	1.396	268	
SUB-TOTAL	247.707	62.075	35.869	26.139	47.079	9.936	19.374	10.357	36.876	2,387	
COMMUNITY HEALTH										0.40	
Health Policy, Mgmt & Eval	8.889	2.700	0.218	2.041	1.567	0	0.339	1.404	0.620	218	
SUB-TOTAL	8.889	2.700	0.218	2.041	1.567	0.000	0.339	1.404	0.620	218	
CLINICAL											
Anesthesia	6.124	1.741	0.339	0.381	0.875	0	1.159	0.112	1.517	108	
Family & Community Medicine	8.994	1.321	0.102	4.988	0.862	0.229	0.349	0.190	0.952	87	
Lab. Medicine & Pathobiology	30.149	8.520	0.770	1.973	9.431	1.285	3.295	1.628	3.248	462	
Medical Imaging	9.413	0.719	0.197	1.076	1.860	0.418	1.299	0.702	3.142		
Medicine	155.299	28.926	3.474	10.985	30.265	5.147	40.844	3.966	31.690	1,937	
Obstetrics & Gynaecology	5.128	2.186	0.280	0.011	0.447	0.203	0.800	0.365	0.836		
Occupational Therapy	3.482	1.264	0	0.150	0.632	0	0.013	1.303	0.119	333	
Ophthalmology And Vision Sci	6.139	0.983	0.358	0.744	1.510	0.006	0.418	0.685	1.435	83	
Otolaryngology	2.921	0.501	0	0	0.490	0	0.590	0.249	1.090	44	
Paediatrics	56.843	15.698	1.029	2.587	20.549	2.662	4.875	2.366	7.077	1,020	
Physical Therapy	5.117	1.395	0.100	0.781	1.082	0	0.054	1.604	0.102	327	
Psychiatry	39.236	10.236	3.806	4.861	7.638	3.457	1.755	4.358	3.125	488	
Radiation Oncology	29.408	1.609	0.035	9.164	7.098	0	1.607	0.610	9.285	310	
Speech-Language Pathology	2.640	0.248	0.175	0.113	0.181	0.616	0.539	0.749	0.020	223	
Surgery	61.868	9.845	1.540	4.727	14.297	1.535	4.999	3.682	21.243	840	
SUB-TOTAL	422.761	85.192	12.205	42.541	97.217	15.558	62.596	22.569	84.881	6,470	
Other	22.735	3.439	0.359	3.480	5.456	1.122	8.056	0.822	0	158	
TOTAL	702.092	153.406	48.651	74.201	151.319	26.616	90.365	35.152	122.377	9,233	
CFI/OIT 1	116.065	0	46.902	21.765	47.399	0	0	0	0	103	
Indirect Costs	0	0	0	0	0	0	0	0	0	0	
GRAND TOTAL <sup>2</sup>	818.157	(x \$1,000,000)								9,336	

<sup>\*</sup> Dollar values represent direct funding as well as subgrants / subcontracts where primary funding source is documented. For a breakdown of direct vs subgrant funding see Table 1a.

<sup>&</sup>lt;sup>1</sup> CFI and OIT funding represents physical infrastructure grants to the Hospital for Sick Children, Mt. Sinai Hospital, St. Michael's Hospital, the Sunnybrook Health Sciences Centre, University of Toronto and the University Health Network.

<sup>&</sup>lt;sup>2</sup> Excludes a total of \$18,354,903 from the Federal Indirect Costs Program awarded to affiliate hospitals.

Table 4 FACULTY OF MEDICINE - UNIVERSITY OF TORONTO Summary of Location Research vs Sponsor (Funding Source) in MILLIONS of Dollars
April2013 - March 2014

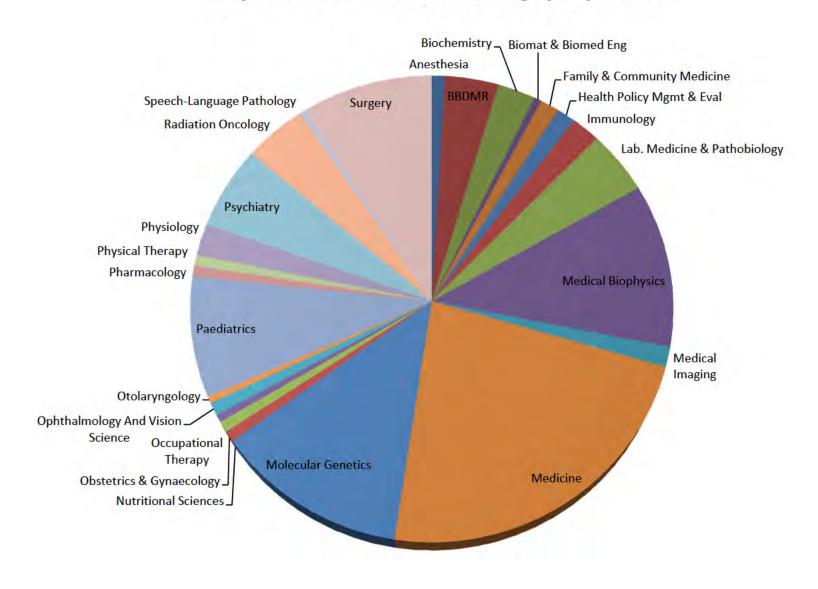
HOSPITAL	Total	TriCouncil	TriCouncil SUB	Federal Gov	Federal Gov SUB	Provincial GOV	Provincial Gov SUB	Charities	Charities SUB	NIH & US Gov	NIH & US Gov SUB	Industry	Industry SUB	International	Other	Other SUB	Local	# of Awards
Baycrest Centre for Geriatric Care	2.696	1.189	0.020	0.300	0	0.021	0	0.773	0.003	0.009	0	0.292	0.054	. 0	0.036	0	0	43
Bloorview Kid's Rehab (Holland)	4.479	0.786	0.121	1 0	0	1.371	0	0.699	0	0.083	0	0.058	0.279	0	1.082	0	0	70
Centre for Addiction and Mental Health	29.718	6.137	0.074	3.596	0	7.115	0	4.574	0	2.648	0.136	0.491	0.140	0	4.670	0	0.137	281
Hospital for Sick Children	146.417	30.841	0.939	8.227	0	6.097	0.072	46.230	2.037	2.947	2.487	18.534	1.220	0.263	3.948	0.064	22.512	1,868
Mount Sinai Hospital	59.587	16.306	0.347	3.563	0	7.443	0.211	15.167	0.021	0.680	0.815	7.338	0.175	0.047	2.679	0	4.795	521
St. Michael's Hospital	36.338	10.105	0.324	1.952	0	1.601	0	6.536	0.544	1.033	0.139	6.634	0.185	0.002	1.517	0	5.767	574
Sunnybrook Health Sciences Center	70.678	10.773	0.770	14.337	0	7.383	0	16.843	0.167	0.848	0.257	6.280	0.473	0.060	1.213	0	11.275	580
University Health Network	236.288	32.158	1.306	5.295	0.098	25.759	0.013	41.920	0.332	8.067	1.106	37.068	1.749	0.433	4.000	0	76.984	2,341
Women's College Hospital	5.396	1.535	0.018	3 0	0	2.244	0	0.462	0	0	0	0.097	0.157	0	0.053	0	0.830	69
Other Hospitals <sup>1</sup>	0.481	0.175	0.201	0.100	0	0	0	0	0	0	0	0	0	0	0.005	0	0	6
SUB-TOTAL	592.077	110.005	4.121	37.369	0.098	59.033	0.295	133.204	3.105	16.315	4.939	76.791	4.431	0.805	19.203	0.064	122.300	6,353
Other Locations <sup>2</sup>	1.270	1.016	(	0	0	0.050	0	0.000	0	0	0.203	0	0	0	0	0	0	13
UofT Campus	108.138	37.282	0.981	10.843	0.339	13.959	0.866	13.796	0.611	1.208	3.951	8.877	0.265	0.017	15.057	0.010	0.077	2,868
TOTAL	701.485	148.303	5.103	48.212	0.437	73.042	1.161	147.001	3.716	17.523	9.093	85.668	4.696	0.822	34.260	0.074	122.377	9,234
CFI/OIT <sup>3</sup>	116.065																	103
GRAND TOTAL	817.550	(x \$1,000,000																9,337

<sup>&</sup>lt;sup>1</sup> Research at non-affilitaed hospitals.

<sup>&</sup>lt;sup>2</sup> Research at other locations other than UofT Campus and other hospitals.

<sup>&</sup>lt;sup>3</sup> CFI and OIT funding represents physical infrastructure grants to the Hospitals University of Toronto and the University Health Network.

# FACULTY OF MEDICINE - UNIVERSITY OF TORONTO Proportion of Total 2013-14 Funding by Department



## FACULTY OF MEDICINE - UNIVERSITY OF TORONTO Total Research Dollar (Thousands) Distribution by Location of Research for 2013-14

