

SYNOPSIS OF RESEARCH ACTIVITIES

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

April 1, 2018 - March 31, 2019

http://medicine.utoronto.ca/research/research-resources

Based on RIS data snapshot: December 13, 2019 at 0950 hrs Version 1: December 13, 2019

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About this Report

In 2012 the Faculty of Medicine Research Office (Office of the Vice-Dean for Research, Faculty of Medicine) ceased its publication 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 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, 2018- March 31, 2019.**
- 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.
- 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.
- Under exceptional conditions, funds may be assigned to a department in which a principal investigator holds a cross appointment.
- This summary includes only research grants captured in the University's Research Information System (RIS) and starting with the 2016-17 report, CFI/ORF awards are represented as a separate source category (column).
- 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 0950hrs of December 13, 2019..
- All calculations were done using validated programs in SAS statistical Software version 9.4

^{*} 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 1 **FACULTY OF MEDICINE - UNIVERSITY OF TORONTO** Summary of Department Research Funding vs Sponsor in THOUSANDS of Dollars April 2018 - March 2019

| DEPARTMENT | Total | CIHR | NSERC | NCIC | HLTH CAN | МОН | HSFO/C | SSHRC | INDUS | OTHER | CFI/ORF 1 | # of Awards |
|------------------------------|--------------|---------|-------|-------|----------|--------|----------|-------|--------|---------|-----------|----------------|
| BASIC | 10101 | | | | | | 1101 070 | | | • | 0 | 711101100 |
| Donnelly Centre (f/c BBDMR) | 28,634 | 8,811 | 269 | 0 | 0 | 0 | 0 | 0 | 1.633 | 11.041 | 6.881 | 121 |
| Biochemistry | 27,202 | 8,924 | 1,335 | 0 | 0 | 0 | 76 | 0 | 444 | 13,637 | 2,787 | 324 |
| Biomat & Biomed Eng | 3,306 | 286 | 149 | 0 | 0 | 0 | 32 | 0 | 106 | 2,679 | 55 | 42 |
| Immunology | 15,441 | 5,823 | 226 | 246 | 0 | 0 | 0 | 0 | 1.247 | 6.905 | 994 | 250 |
| Medical Biophysics | 69,478 | 17,253 | 1,418 | 292 | 0 | 0 | 237 | 0 | 3,531 | 42,018 | 4,728 | 719 |
| Molecular Genetics | 92,778 | 23,199 | 1.931 | 267 | 0 | 0 | 98 | 0 | 4.542 | 42,055 | 20,685 | 768 |
| Nutritional Sciences | 4,845 | 1,988 | 227 | 0 | 10 | 0 | 0 | 0 | 1,025 | 1,515 | 80 | 134 |
| Pharmacology | 8,050 | 2,692 | 173 | 0 | 0 | 209 | 11 | 0 | 425 | 4.467 | 74 | 226 |
| Physiology | 28,295 | 10,273 | 762 | 0 | 0 | 0 | 437 | 0 | 81 | 14,126 | 2,616 | 348 |
| SUB-TOTAL | 278,029 | 79,249 | 6,490 | 805 | 10 | 209 | 891 | 0 | 13,034 | 138,443 | 38,900 | 2,932 |
| CLINICAL | • | · | · · | | | | | | | · | · | · |
| Anesthesia | 9,465 | 1,885 | 0 | 0 | 0 | 730 | 8 | 0 | 1,082 | 5,760 | 0 | 155 |
| Family & Community Medicine | 17,603 | 2,233 | 0 | 0 | 354 | 8,170 | 0 | 48 | 125 | 6,673 | 0 | 144 |
| Lab. Medicine & Pathobiology | 39,096 | 8,506 | 441 | 241 | 0 | 0 | 416 | 0 | 4,267 | 21,714 | 3,511 | 476 |
| Medical Imaging | 7,485 | 459 | 130 | 16 | 0 | 0 | 44 | 0 | 777 | 6,058 | 1 | 144 |
| Medicine | 229,927 | 36,915 | 329 | 1,543 | 1,176 | 3,308 | 4,844 | 0 | 52,871 | 116,965 | 11,976 | 2,599 |
| Obstetrics & Gynaecology | 7,394 | 2,626 | 30 | 134 | 0 | 0 | 0 | 0 | 521 | 4,083 | 0 | 95 |
| Occupational Therapy | 13,035 | 1,101 | 0 | 0 | 0 | 0 | 59 | 388 | 8 | 11,480 | 0 | 305 |
| Ophthalmology And Vision Sci | 6,645 | 388 | 160 | 0 | 0 | 0 | 0 | 0 | 275 | 5,822 | 0 | 95 |
| Otolaryngology | 3,056 | 206 | 0 | 0 | 0 | 0 | 0 | 0 | 573 | 2,277 | 0 | 43 |
| Paediatrics | 71,378 | 17,160 | 162 | 0 | 0 | 89 | 224 | 0 | 6,948 | 44,829 | 1,966 | 1,028 |
| Physical Therapy | 4,548 | 1,608 | 63 | 0 | 0 | 89 | 381 | 53 | 30 | 2,209 | 115 | 286 |
| Psychiatry | 57,563 | 12,698 | 127 | 0 | 0 | 47 | 96 | 167 | 2,446 | 41,274 | 708 | 487 |
| Radiation Oncology | 61,937 | 1,740 | 117 | 367 | 0 | 0 | 0 | 0 | 1,335 | 47,123 | 11,256 | 275 |
| Speech-Language Pathology | 3,873 | 179 | 81 | 0 | 0 | 5 | 0 | 55 | 324 | 3,218 | 11 | 109 |
| Surgery | 81,990 | 13,969 | 368 | 398 | 0 | 887 | 761 | 0 | 8,531 | 55,608 | 1,468 | 997 |
| SUB-TOTAL | 614,995 | 101,673 | 2,008 | 2,699 | 1,530 | 13,325 | 6,833 | 711 | 80,113 | 375,093 | 31,012 | 7,238 |
| Other | 17,276 | 778 | 268 | 0 | 0 | 521 | 0 | 0 | 2,765 | 12,626 | 318 | 599 |
| TOTAL | 910,300 | 181,700 | 8,766 | 3,504 | 1,540 | 14,055 | 7,724 | 711 | 95,912 | 526,162 | 70,230 | 10,769 |
| GRAND TOTAL ² | 910,300 (x s | \$1000) | | | | | | | | | | 10,769 |
| | | | | | | | | | | | | |

¹ Starting in 2016-17, CFI and ORF funding, previously evoluded from Departmental totals is now displayed as a separate sponsor category. 2 Excludes \$23,770,617 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 THOUSANDS of Dollars
April 2018 - March 2019

| | | | | | | | | | | | | # of |
|--|---------|---------|-------|-------|----------|--------|--------|-------|--------|---------|-----------|--------|
| HOSPITAL | Total | CIHR | NSERC | NCIC | HLTH CAN | MOH | HSFO/C | SSHRC | INDUS | OTHER | CFI/ORF 3 | Awards |
| Baycrest Centre for Geriatric Care | 4,494 | 786 | 62 | 0 | 0 | 0 | 0 | 0 | 24 | 3,622 | 0 | 33 |
| Holland Bloorview | 6,086 | 997 | 140 | 0 | 0 | 0 | 0 | 225 | 151 | 4,561 | 11 | 94 |
| Centre for Addiction and Mental Health | 47,060 | 8,104 | 102 | 0 | 274 | 8,350 | 0 | 84 | 2,286 | 27,151 | 708 | 266 |
| Hospital for Sick Children | 170,618 | 39,930 | 2,289 | 0 | 0 | 89 | 558 | 0 | 9,807 | 103,199 | 14,746 | 1,851 |
| Sinai Health System - Mt. Sinai Hospital | 65,628 | 16,974 | 431 | 0 | 0 | 0 | 100 | 0 | 5,357 | 30,034 | 12,732 | 455 |
| St. Michael's Hospital | 66,690 | 18,071 | 279 | 0 | 1,176 | 1,127 | 1,667 | 36 | 8,972 | 35,237 | 124 | 769 |
| Sunnybrook Health Sciences Centre | 91,039 | 16,447 | 800 | 0 | 0 | 395 | 2,587 | 0 | 12,943 | 47,208 | 10,659 | 860 |
| University Health Network | 319,137 | 35,533 | 959 | 3,258 | 0 | 1,425 | 1,547 | 58 | 49,208 | 207,451 | 19,698 | 2,965 |
| Women's College Hospital | 10,140 | 2,900 | 0 | 0 | 0 | 2,149 | 455 | 0 | 145 | 4,491 | 0 | 87 |
| Other Hospitals / Institutions 1 | 10,206 | 2,129 | 0 | 0 | 80 | 0 | 0 | 0 | 440 | 7,557 | 0 | 76 |
| SUB-TOTAL | 791,096 | 141,871 | 5,062 | 3,258 | 1,530 | 13,535 | 6,914 | 403 | 89,333 | 470,511 | 58,678 | 7,456 |
| Other Locations ² | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 1 |
| UofT Campus | 119,183 | 39,828 | 3,704 | 246 | 10 | 521 | 808 | 287 | 6,579 | 55,650 | 11,551 | 3,312 |
| TOTAL | 910,299 | 181,699 | 8,766 | 3,504 | 1,540 | 14,056 | 7,722 | 710 | 95,912 | 526,161 | 70,229 | 10,769 |
| GRAND TOTAL 910,299 (x \$1000) | | | | | | | | | | | 10,769 | |

Research atother affiliated institutions: For a beakdown see Table 4.1
 Research at other locations other than UofT Campus and affiliates.
 Starting in 2016-17, CFI and ORF funding, previously excluded from hospital totals is now displayed as a separate sponsor category.

Table 4.1

FACULTY OF MEDICINE - UNIVERSITY OF TORONTO

Summary of Other Hospitals / Institutes vs Sponsor (Funding Source) in THOUSANDS of Dollars

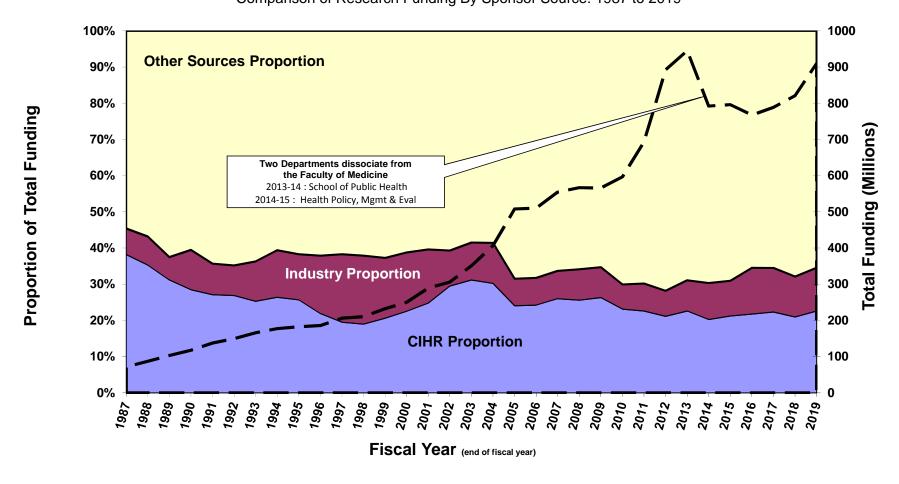
April 2018 - March 2019

| | | | | | | | | | | | | # of |
|--|-------|-------|-------|------|----------|-----|--------|-------|-------|-------|----------------------|--------|
| HOSPITAL | Total | CIHR | NSERC | NCIC | HLTH CAN | MOH | HSFO/C | SSHRC | INDUS | OTHER | CFI/ORF ³ | Awards |
| North York General Hospital | 648 | 250 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 390 | 0 | 14 |
| Ontario Agency For Health Protection And Promotion | 852 | 708 | 0 | 0 | 80 | 0 | 0 | 0 | 0 | 65 | 0 | 6 |
| Ontario Institute For Cancer Research | 7,385 | 1,096 | 0 | 0 | 0 | 0 | 0 | 0 | 160 | 6,129 | 0 | 32 |
| St. Joseph's Health Centre | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 15 | 0 | 3 |
| Trillium Health Partners | 1,279 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 246 | 958 | 0 | 21_ |
| TOTAL | 10206 | 2129 | 0 | 0 | 80 | 0 | 0 | 0 | 440 | 7557 | 0 | 76 |

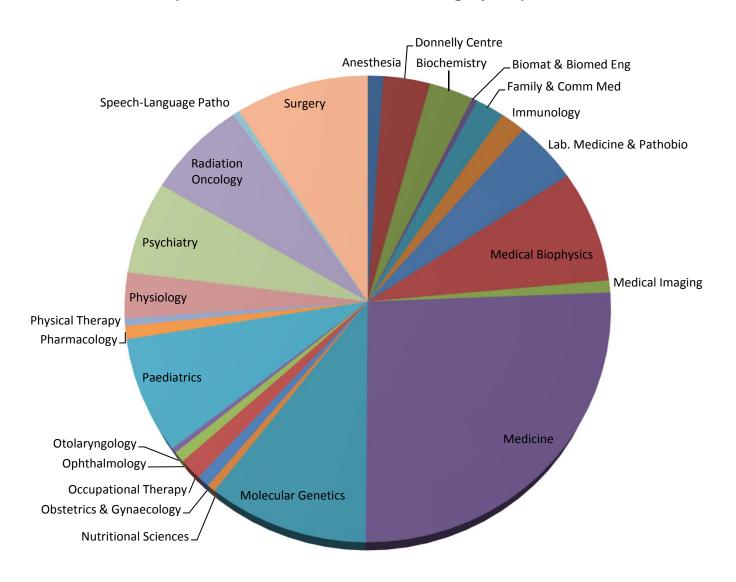
Figure 1

FACULTY OF MEDICINE - UNIVERSITY OF TORONTO

Comparison of Research Funding By Sponsor Source: 1987 to 2019

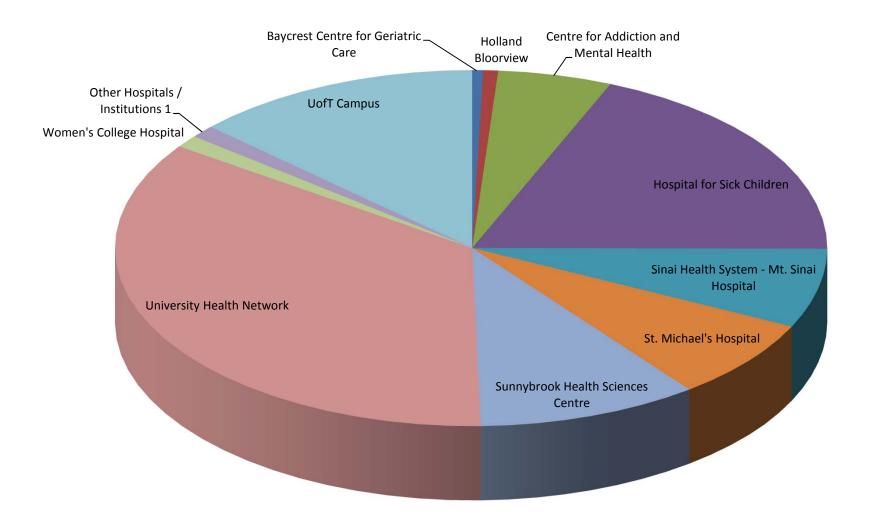


FACULTY OF MEDICINE - UNIVERSITY OF TORONTO Proportion of Total 2018-19 Funding by Department

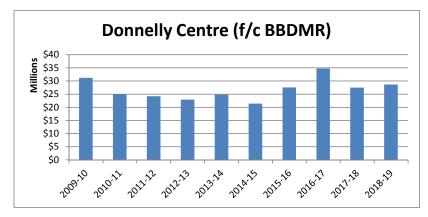


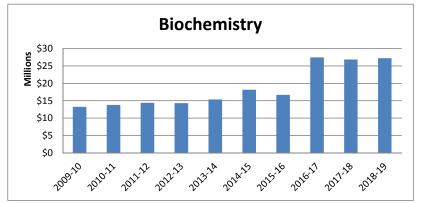
FACULTY OF MEDICINE - UNIVERSITY OF TORONTO

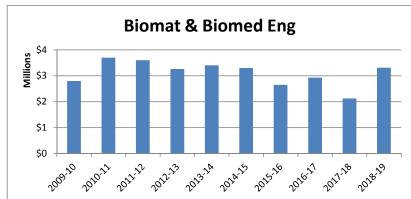
Total Research Dollar Distribution by Location of Research for 2018-19

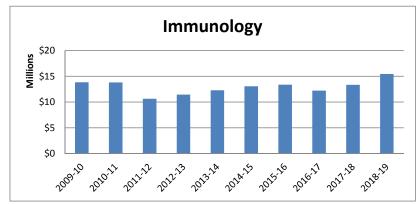


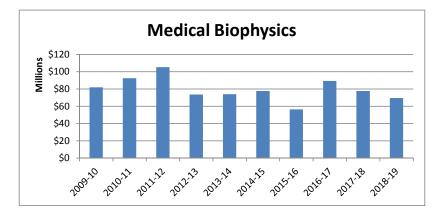
Ten-Year Trends By Department in Millions of Dollars

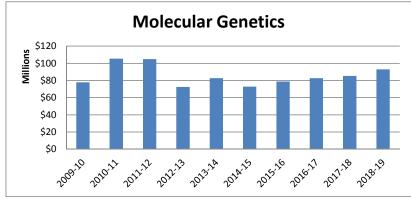


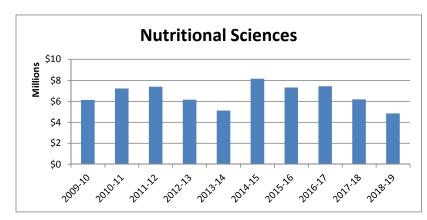




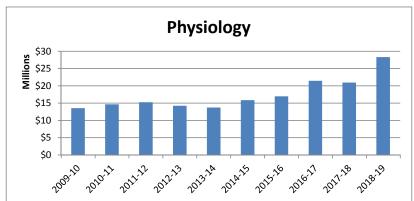


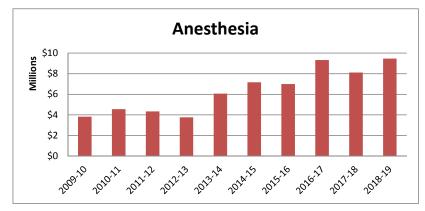


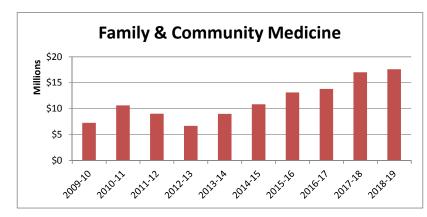


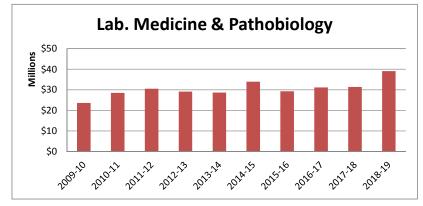


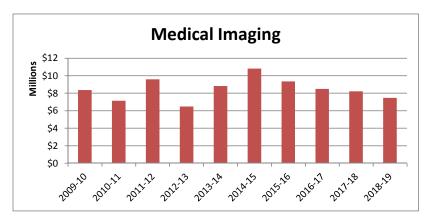


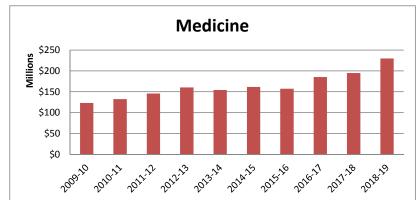


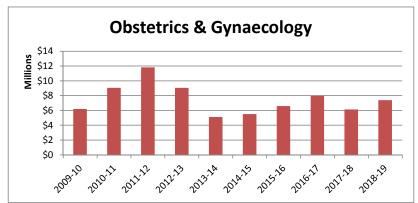


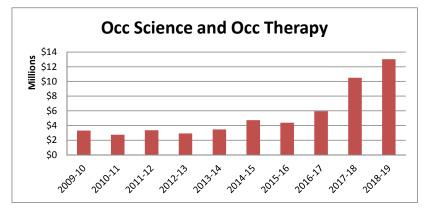


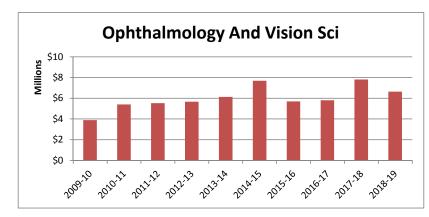


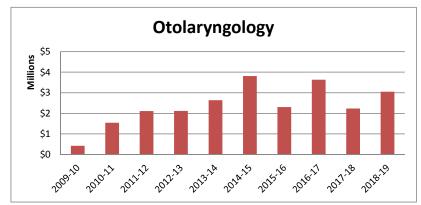


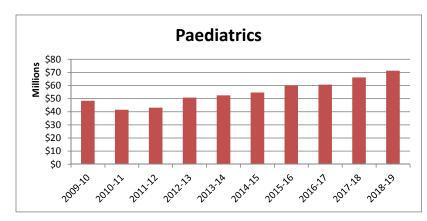


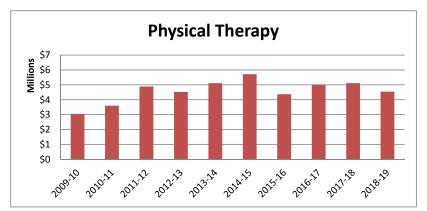


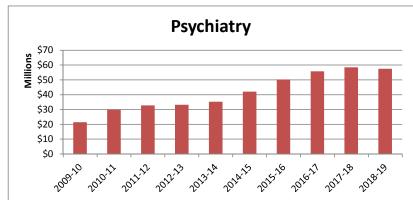


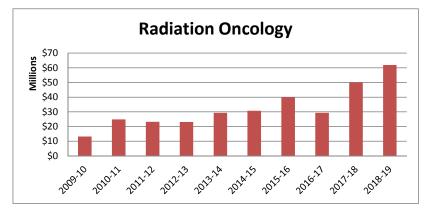


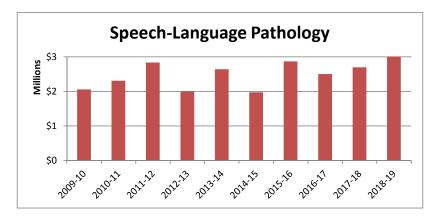


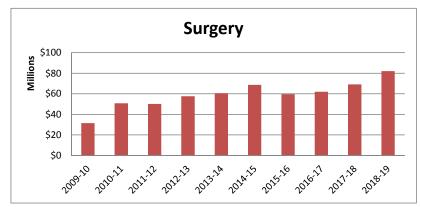




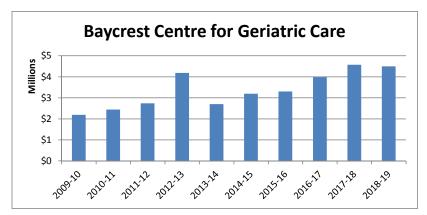


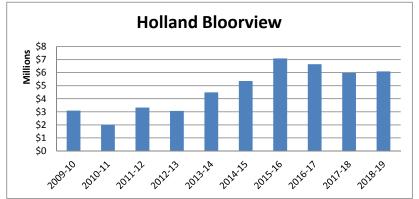


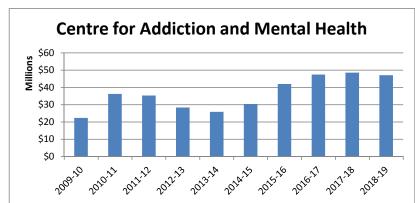


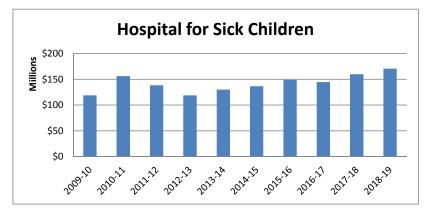


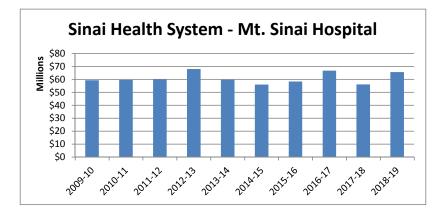
Ten-Year Trends By Location in Millions of Dollars

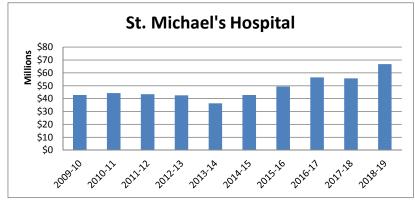


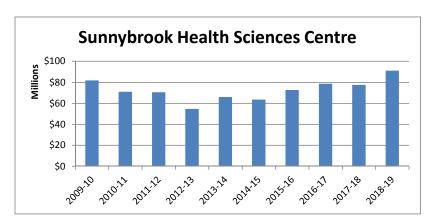


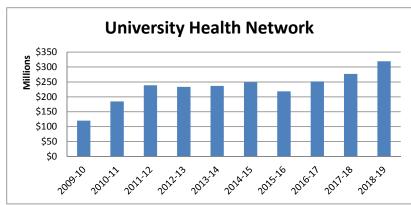


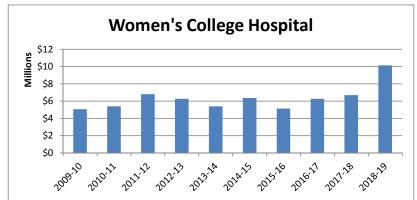


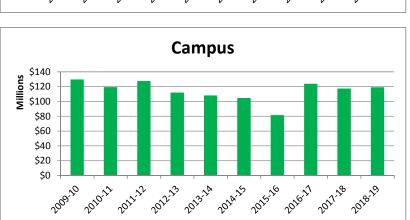


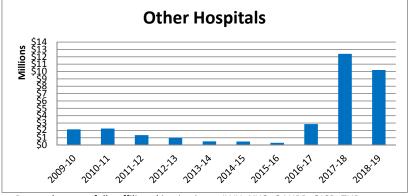












Research at non fully-affiliated institutions: IWH, NYG, OAHPP, OICR, THP 2017-18 includes data collection from NYG, OICR and THP

IWH - Institute for Work and Health

NYG - North York General

OAHPP - Ontario Agency for Health Protection and Promotion

OICR - Ontario Insittute for Cancer Research

THP - Trillium Health Partners

Note that vertical axes are scaled to each individual location.