Appendices

Appendix A: Outreach Programs

Between July 2014 and June 2015, we offered the following pre-university outreach programs, reaching more than 7,000 students from across Ontario, Canada and the world.

Program	Date	Total # of Participants	Female	Male	Audience
DEEP Summer Academy	July 7-August 1, 2014	886	252	634	Grades 9-12
DEEP Leadership Camp	July 6-July 26, 2014	37	11	26	Grades 9-12
Girls' Jr. DEEP	July 14-18, 2014	69	69	0	Grades 3-8
Jr. DEEP	July 21-August 15, 2014	748	267	481	Grades 3-8
ENGage	July 14-18, 2014	44	19	25	Grades 3-8
Go ENG Girl	October 18, 2014	103	103	0	Grades 7-10
Girls' Jr. DEEP Saturday Fall	October 25 - November 8, 2014	66	66	0	Grades 3-8
Jr. DEEP Saturday Fall	November 15-29, 2014	72	15	57	Grades 3-8
Girls' Jr. DEEP Saturday Winter	January 17-31, 2015	73	73	0	Grades 3-8
Jr. DEEP Saturday Winter	February 7-28, 2015	71	10	61	Grades 3-8
Go CODE Girl	February 21, 2015	50	50	0	Grades 7-11
Jr. DEEP at March Break	March 16-20, 2015	73	26	47	Grades 3-8
DEEP Leadership at March Break	March 16-20, 2015	24	7	17	Grades 9-12
In-School and On-Campus Workshops	May & June 2014	4,840	2,420	2,420	Grades 3-8
Skule™ Kids	May 30 & June 20 2015	123	53	70	Grades 3-8
Total		**7,279**	**3,441**	**3,838**	

Appendix B: Engineering Student Clubs and Teams

Below is a list of Engineering student clubs and teams, which is referenced in Chapter 1: Undergraduate Studies. Beyond the groups presented here, our students also participate in clubs and teams across U of T.

Arts

- Appassionata Music Group
- Brass Ring
- Skule Arts Festival
- Skule Orchestra
- Skule Stage Band
- Tales of Harmonia
- U of T Music Clubs Initiative

Athletics

- Skule Badminton Club
- U of T Engineering Iron Dragons
- U of T Ironsports Club

Community

- Bridges to Prosperity
- Engineers Without Borders – U of T Chapter
- Eyes of Hope
- International Within Borders
- LGBTQ & Allies in Applied Science and Engineering
- Power to Change U of T
- Promise to Future Generations
- Skule Stress Release
- Suits U
- Take Action! Organization
- Tetra Society
- TrackOne Mentorship Program
- Women in Science and Engineering

Cultural

- Arabs in Engineering
- Bangladeshi Engineering Students' Association
- Chinese Engineering Students' Association
- Indian Engineering Students' Association
- Indian Students' Society
- Malaysian Student Association of University of Toronto
- Middle Eastern Students' Association
- Muslim Students Association
- Sikh Students Association
- U of T Engineering Chinese Club
- U of T Mandarin Chinese Christian Fellowship

Design & Competition

- Biomolecular Design Club
- Blue Sky Solar Racing
- Canadian National Concrete Canoe Competition 2015 Organizational Committee
- Human-Powered Vehicle Design Team
- Mechatronics Design Association
- Multidisciplinary Analytical Kinesthetic Education
- Robotics for Space Exploration
- Spark Design Club
- Supermileage Team
- U of T Aeronautics Team
- U of T Baja Team
- U of T Concrete Canoe Team
- U of T Concrete Toboggan Team
- U of T Destination Imagination
- U of T Formula SAE Racing Team
- U of T Space Design Contest

Hobby & Special Interest

- Engineering Magic Club
- Fly with Origami, Learn to Dream
- Foodie Nation
- H2O Innovate
- Hacker Academy
- LeadingGreen
- Peer Wellness Group
- Skule Dance Club
- University of Toronto Energy Fair
- Skule's Got Talent
- Skule Improv
- Skule Smash Bros.
- U of T Emergency First Responders
- U of T Engineering Toastmasters

Professional Development & Industry

- American Society of Mechanical Engineers
- ASHRAE U of T
- Bayesian Basketball
- Biomedical Engineering Students Association
- Canadian Association of Food Engineers – University of Toronto
- Canadian Electrical Contractors Association
- Canadian Society for Chemical Engineering
- Canadian Society for Mechanical Engineering
- Canadian Institute of Mining, Metallurgy and Petroleum – University of Toronto Chapter
- Club for Undergraduate Biomedical Engineering
- Galbraith Society
- Institute of Electrical and Electronics Engineers — University of Toronto Student Branch
- Institute of Transportation Engineers
- MIE Mentorship Program
- National Society of Black Engineers
- Nsight Mentorship
- Rational Capital Investment Fund
- Skule Labs
- Society of Petroleum Engineers at the University of Toronto
- Sustainable Engineers Association
- U of T Business Association
- U of T Consulting Association
- U of T Developers
- University of Toronto Engineering Finance Association
- University of Toronto Ontario Water Works Association — Student Chapter
- Water Environment Association of Ontario Student Chapter

Appendix C: Time to Completion for Graduate Students

The following figures indicate the median time to completion for graduating cohorts in each master's and doctoral degree program by academic area for the past decade. Time to graduation represents the number of years between a student's initial enrolment in a graduate program and meeting all the requirements for graduation. The data includes only terms in which a student is registered, excluding leaves, lapses and (in most cases) the term in which convocation occurs. Where a student is fast-tracked from the MASc into a PhD, the total time for both programs is counted. Distinguishing full-time and part-time MEng students provides greater clarity.

Figure C.1 University of Toronto Institute for Aerospace Studies Time to Completion for Graduate Students, 2005–2006 to 2014–2015

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
PhD	4.3	4.5	5.2	5.3	6.0	7.0	4.7	5.3	5.3	5.7
MASc	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0
MEng (FT)	1.3	1.3		1.3	1.2	1.3	1.3	1.0	1.0	1.0
MEng (PT)		1.7	1.7	1.0	1.8			1.7	1.3	2.0

Figure C.2 Institute of Biomaterials & Biomedical Engineering Time to Completion for Graduate Students, 2005–2006 to 2014–2015

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
PhD	4.7	5.2	3.3	4.3	4.3	6.0	5.7	5.0	5.0	6.0
MASc	2.0	2.3	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.3
MHSc (FT)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0

Figure C.3 Department of Chemical Engineering & Applied Chemistry Time to Completion for Graduate Students, 2005–2006 to 2014–2015

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
PhD	5.3	5.7	4.7	5.0	5.3	6.0	5.3	5.2	5.5	5.7
MASc	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
MEng (FT)	1.2	1.3	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
MEng (PT)	2.7	3.3	2.0	3.7	2.2	1.8	1.3	2.0	2.0	1.8

Figure C.4 Department of Civil Engineering Time to Completion for Graduate Students, 2005–2006 to 2014–2015

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
PhD	5.0	4.8	4.7	5.0	5.0	5.3	5.3	5.3	5.0	5.3
MASc	2.0	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
MEng (FT)	1.5	1.3	1.0	1.0	1.0	1.3	1.0	1.0	1.0	1.0
MEng (PT)	2.0	1.8	1.7	1.7	2.0	2.3	1.8	2.0	2.0	1.7
MEngCEM (FT)										1.3

Figure C.5 The Edward S. Rogers Sr. Department of Electrical & Computer Engineering Time to Completion for Graduate Students, 2005–2006 to 2014–2015

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
PhD	4.7	5.3	4.7	4.7	4.7	5.0	5.2	5.5	5.3	5.0
MASc	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3
MEng (FT)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
MEng (PT)	2.7	2.0	2.0	2.0	3.0	2.7	2.0	2.2	2.0	2.0

Figure C.6 Department of Mechanical & Industrial Engineering Time to Completion for Graduate Students, 2005–2006 to 2014–2015

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
PhD	4.3	4.5	4.7	4.7	4.0	4.7	5.0	5.7	5.0	4.8
MASc	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
MEng (FT)	1.3	1.0	1.3	1.0	1.3	1.0	1.3	1.0	1.0	1.0
MEng (PT)	2.0	2.0	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0
MEngDM (PT)	2.2	2.7	2.2	3.3	2.7	2.3	2.7	2.5	2.7	2.3

Figure C.7 Department of Materials Science & Engineering Time to Completion for Graduate Students, 2005–2006 to 2014–2015

	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
PhD	4.0	5.8	5.3	4.0	5.3	6.0	6.3	5.7	4.7	5.3
MASc	2.3	2.0	2.0	1.7	2.0	2.0	2.0	2.0	2.3	2.0
MEng (FT)	1.0			1.5	1.7		0.8	1.0	1.0	1.0
MEng (PT)	2.5	2.7		1.3	2.0	2.3	2.3	2.0	2.7	2.8

Note: Based on Ontario Council of Graduate Studies (OCGS) data from ROSI. Data reflects median values based on the total number of terms in which a student is registered. Leaves, lapses and the term in which convocation occurs are excluded. Where a student is fast-tracked from the MASc into a PhD, the total time for both programs is counted. Full- and part-time MEng students are included for greater accuracy.

Appendix D: Research Chairs

Our Faculty is home to 71 research chairs held by 63 individual chairholders. The list below reflects five types of Chairs:

- **Canada Research Chair (CRC):** The Government of Canada invests a total of $300 million per year in two types of CRCs:
  1) Tier 1 — a renewable title held for seven years; and
  2) Tier 2 — a junior chair held for five years and is eligible for renewal once.
- **Endowed Research Chair:** Created through donor support. Holders are considered to be of great distinction and are typically tenured professors. Each position is held for a fixed term.
- **Industrial Research Chair:** Jointly funded by NSERC and industry to help universities build on existing strengths or develop major research capacity in areas of interest to industry.
- **U of T Distinguished Professor:** Designed to advance and recognize faculty with highly distinguished accomplishments. This Chair is limited to no more than 3 per cent of tenured professors within a Faculty.
- **University Professor:** The highest possible rank at the University. This title is awarded to a maximum of 2 per cent of tenured faculty at U of T.

Figure D.1 Research Chairs, 2014–2015

Title	Chairholder	Sponsor	Tier	Dep't
Alumni Chair in Bioengineering	Cristina Amon	Endowed		MIE
Bahen/Tanenbaum Chair in Civil Engineering	Jeffrey Packer	Endowed		CivE
Bahen/Tanenbaum Chair in Civil Engineering	Michael Collins	Endowed		CivE
Bell Canada Chair in Multimedia	Kostas Plataniotis	Endowed		ECE
Bell University Labs Chair in Computer Engineering	Baochun Li	Endowed		ECE
Canada Research Chair in Anaerobic Biotechnology	Elizabeth Edwards	NSERC	Tier 1	ChemE
Canada Research Chair in Autonomous Space Robotics	Timothy Barfoot	NSERC	Tier 2	UTIAS
Canada Research Chair of Biotechnology	Warren Chan	NSERC	Tier 2	IBBME
Canada Research Chair in Cellular Hybrid Materials	Glenn Hibbard	NSERC	Tier 2	MSE
Canada Research Chair in Computational Aerodynamics and Environmentally Friendly Aircraft Design	David Zingg	NSERC	Tier 1	UTIAS
Canada Research Chair in Computational Modeling and Design Optimization Under Uncertainty	Prasanth Nair	NSERC	Tier 2	UTIAS
Canada Research Chair in Diffusion-Wave Sciences and Technologies	Andreas Mandelis	NSERC	Tier 1	MIE
Canada Research Chair in Fuel Cell Materials and Manufacturing	Olivera Kesler	NSERC	Tier 2	MIE
Canada Research Chair in Functional Cardiovascular Tissue Engineering	Milica Radisic	NSERC	Tier 2	IBBME, ChemE
Canada Research Chair in Information Processing and Machine Learning	Brendan Frey	NSERC	Tier 1	ECE
Canada Research Chair in Information Theory and Wireless Communications	Wei Yu	NSERC	Tier 1	ECE
Canada Research Chair in Integrated Photonic Devices	Joyce Poon	NSERC	Tier 2	ECE
Canada Research Chair in Micro and Nano Engineering Systems	Yu Sun	NSERC	Tier 2	MIE
Canada Research Chair in Microcellular Plastics	Chul Park	NSERC	Tier 1	MIE
Canada Research Chair in Modelling of Electrical Interconnects	Piero Triverio	NSERC	Tier 2	ECE
Canada Research Chair in Nano- and Micro-Structured Electromagnetic Materials and Applications	George Eleftheriades	NSERC	Tier 1	ECE
Canada Research Chair in Nanotechnology	Edward Sargent	NSERC	Tier 1	ECE
Canada Research Chair in Network Information Theory	Ashish Khisti	NSERC	Tier 2	ECE
Canada Research Chair in Novel Optimization and Analytics in Health	Timothy Chan	NSERC	Tier 2	MIE
Canada Research Chair in Organic Optoelectronics	Zheng-Hong Lu	NSERC	Tier 1	MSE
Canada Research Chair in Robots for Society	Goldie Nejat	NSERC	Tier 2	MIE

Title	Chairholder	Sponsor	Tier	Dep't
Canada Research Chair in Secure and Reliable Computer Systems	David Lie	NSERC	Tier 2	ECE
Canada Research Chair in Seismic Resilience of Infrastructure	Constantin Christopoulos	NSERC	Tier 2	CivE
Canada Research Chair in Smart and Functional Polymers	Hani Naguib	NSERC	Tier 2	MIE, MSE
Canada Research Chair in Stem Cell Bioengineering	Peter Zandstra	NSERC	Tier 1	IBBME
Canada Research Chair in Thermofluidics for Clean Energy	Aimy Bazylak	NSERC	Tier 2	MIE
Canada Research Chair in Tissue Engineering	Molly Shoichet	NSERC	Tier 1	ChemE, IBBME
Celestica Chair in Materials for Microelectronics	Doug Perovic	Endowed		MSE
Chair in Computer Networks and Enterprise Innovation (Skoll)	Elvino Sousa	Endowed		ECE
Chair in Information Engineering	Joseph Paradi	Endowed		MIE
Chair in Software Engineering (Skoll)	Jason Anderson	Endowed		ECE
Clarice Chalmers Chair of Engineering Design	Greg Jamieson	Endowed		MIE
Dusan and Anne Miklas Chair in Engineering Design	Paul Chow	Endowed		ECE
Edward S. Rogers Sr. Chair in Engineering	Brendan Frey	Endowed		ECE
Eugene V. Polistuk Chair in Electromagnetic Design	Costas Sarris	Endowed		ECE
Frank Dottori Chair in Pulp and Paper Engineering	Honghi Tran	Endowed		ChemE
Gerald R. Heffernan Chair in Materials Processing	Mansoor Barati	Endowed		MSE
J. Armand Bombardier Foundation Chair in Aerospace Flight	David Zingg	Endowed		UTIAS
L. Lau Chair in Electrical and Computer Engineering	Reza Iravani	Endowed		ECE
Michael E. Charles Chair in Chemical Engineering	Michael Sefton	Endowed		ChemE, IBBME
Nortel Institute Chair in Emerging Technology	J. Stewart Aitchison	Endowed		ECE
Nortel Institute Chair in Network Architecture and Services	Jörg Liebeherr	Endowed		ECE
NSERC Chair in Multidisciplinary Engineering Design	Kamran Behdinan	NSERC		MIE
NSERC Industrial Research Chair in Source Water Quality Monitoring and Advanced/Emerging Technologies for Drinking Water Treatment	Robert Andrews	NSERC		CivE
NSERC Industrial Research Chair in Technologies for Drinking Water Treatment	Ron Hofmann	NSERC		CivE
NSERC/Altera Industrial Research Chair in Programmable Silicon	Vaughn Betz	NSERC/Altera		ECE
NSERC/Cement Association of Canada Industrial Research Chair in Concrete Durability and Sustainability	Doug Hooton	NSERC/CAC		CivE
NSERC/P&WC Industrial Research Chair in Aviation Gas Turbine Combustion/Emissions Research and Design System Optimization	Sam Sampath	NSERC/P&WC		UTIAS
NSERC/UNENE Industrial Research Chair in Corrosion Control and Materials Performance in Nuclear Power Systems	Roger Newman	NSERC/UNENE		ChemE
Pierre Lassonde Chair in Mining Engineering	John Hadjigeorgiou	Endowed		CivE
Robert M. Smith Chair in Geotechnical Mine Design and Analysis	Murray Grabinsky	Endowed		CivE
Stanley Ho Professorship in Microelectronics	Sorin Voinigescu	Endowed		ECE
The Stanley L. Meek Chair in Advanced Nanotechnology	Harry Ruda	Endowed		MSE
U of T Distinguished Professor in Application Platforms and Smart Infrastructure	Alberto Leon-Garcia			ECE
U of T Distinguished Professor in Global Engineering	Yu-Ling Cheng			ChemE
U of T Distinguished Professor in Plasma Engineering	Javad Mostaghimi			MIE
U of T Distinguished Professor of Digital Communications	Frank Kshischang			ECE
U of T Distinguished Professor of Microcellular Engineered Plastics	Chul Park			MIE
U of T Distinguished Professor of Urban Systems Engineering	Mark Fox			MIE
University Professor	Molly Shoichet			ChemE, IBBME
University Professor	Edward Sargent			ECE
University Professor	Michael Sefton			ChemE
University Professor	Michael Collins			CivE
Velma M. Rogers Graham Chair in Engineering	George Eleftheriades	Endowed		ECE
W. M. Keck Chair in Engineering Rock Mechanics	John Harrison	Endowed		CivE
Wallace G. Chalmers Chair of Engineering Design	Axel Guenther	Endowed		MIE

Appendix E: Research Funding by Academic Area

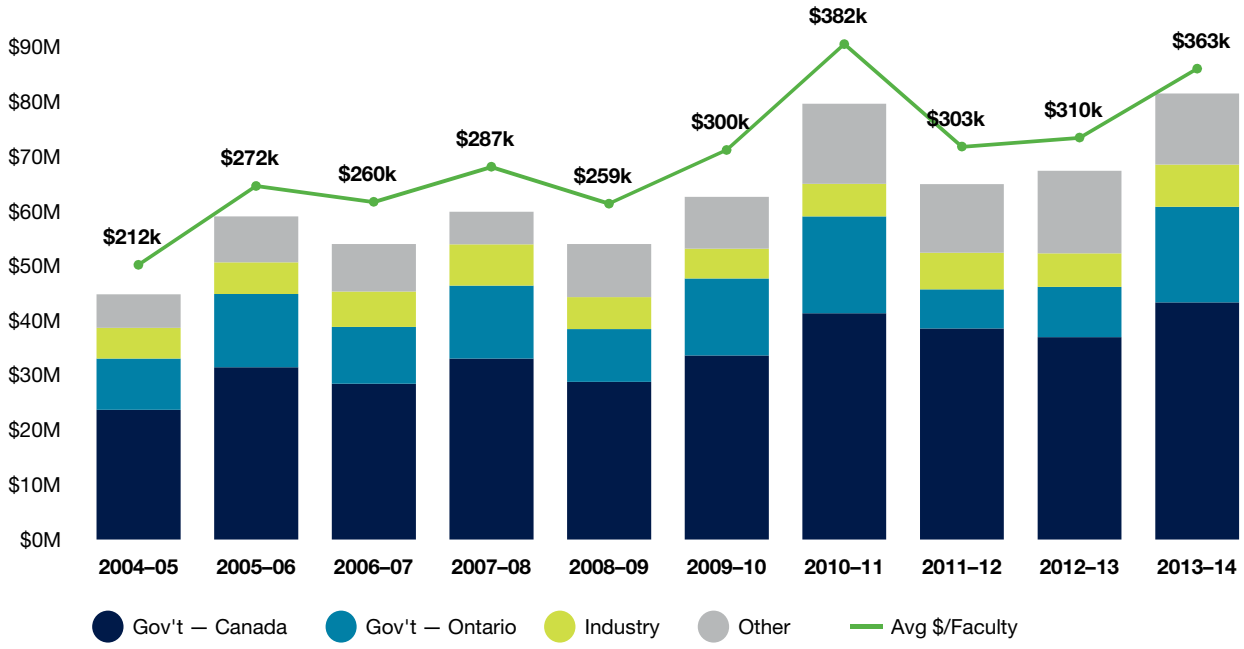
Figure E.1 shows our Faculty's total research funding, including operating and infrastructure.

Figures E.2 to E.8 in this appendix show research operating funding by department and institute over the last decade. This data excludes funding received under the following research infrastructure programs:

- Canada Foundation for Innovation (except the CFI Career Award)
- NSERC Research Tools & Instruments program for Faculty
- Ontario Innovation Trust
- Ontario Research Fund – Research Infrastructure

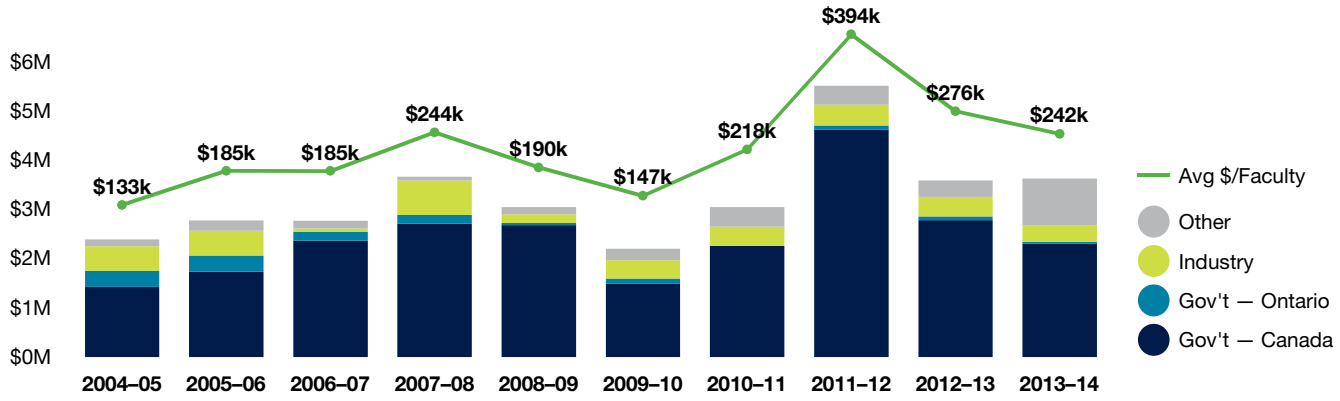
Data is based on grant years (April to March). For example, 2012–13 represents the granting cycle starting in April 2012 and ending in March 2013.

Figure E.1 University of Toronto Faculty of Applied Science & Engineering Total Research Funding by Source and Average Funding per Faculty Member, 2004–2005 to 2013–2014



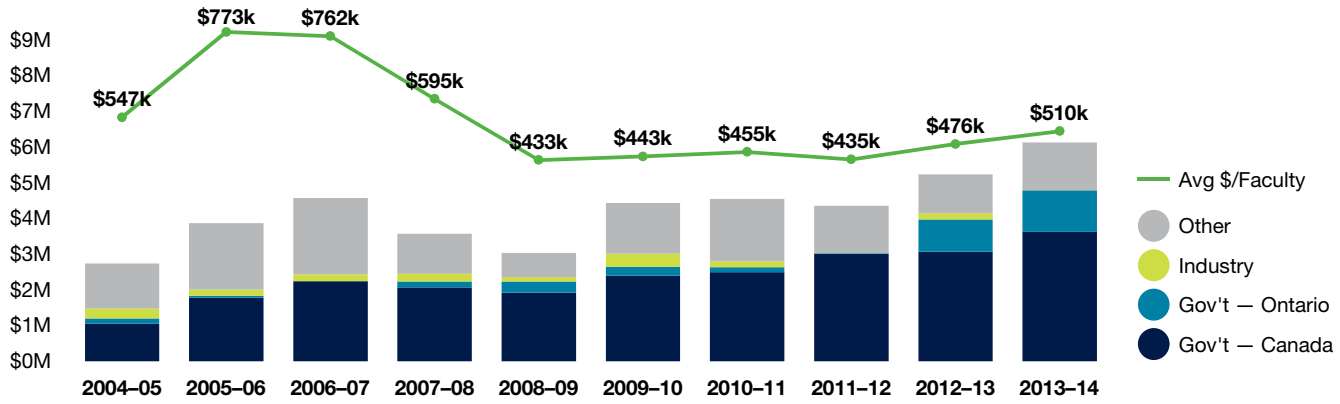
	Gov't – Canada	Gov't – Ontario	Corporate	Other	Total	Avg $/Faculty
2004–05	$23,741,663	$9,371,903	$5,605,287	$6,149,095	**$44,867,948**	**$211,641**
2005–06	$31,518,788	$13,410,788	$5,791,694	$8,382,627	**$59,103,897**	**$272,368**
2006–07	$28,547,598	$10,360,149	$6,499,117	$8,673,512	**$54,080,376**	**$260,002**
2007–08	$33,146,606	$13,319,325	$7,545,281	$5,969,510	**$59,980,722**	**$286,989**
2008–09	$28,873,417	$9,663,896	$5,801,749	$9,735,463	**$54,074,525**	**$258,730**
2009–10	$33,712,139	$14,040,826	$5,455,799	$9,491,026	**$62,699,790**	**$299,999**
2010–11	$41,407,826	$17,703,769	$6,003,781	$14,641,188	**$79,756,564**	**$381,610**
2011–12	$38,655,188	$7,125,567	$6,706,605	$12,570,435	**$65,057,795**	**$302,594**
2012–13	$37,021,243	$9,218,729	$6,120,015	$15,115,998	**$67,475,985**	**$309,523**
2013–14	$43,400,456	$17,508,774	$7,713,708	$12,989,382	**$81,612,320**	**$362,721**

Figure E.2 University of Toronto Institute for Aerospace Studies Research Operating Funding by Source and Average Funding per Faculty Member, 2004–2005 to 2013–2014



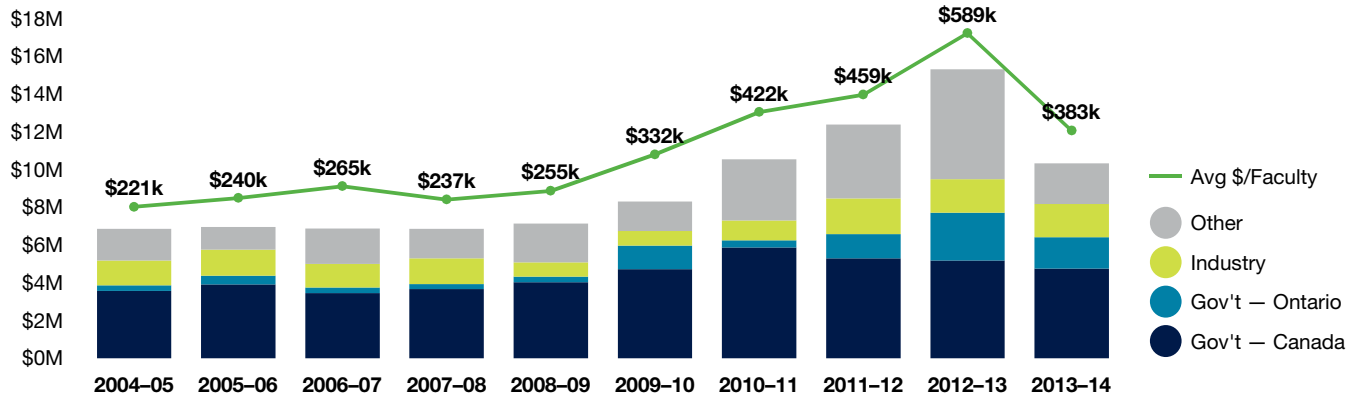
	Gov't – Canada	Gov't – Ontario	Corporate	Other	Total	Avg $/Faculty
2004–05	$1,427,214	$327,394	$498,461	$136,796	**$2,389,865**	**$132,770**
2005–06	$1,737,031	$329,500	$499,365	$210,069	**$2,775,965**	**$185,064**
2006–07	$2,365,513	$185,000	$60,000	$161,533	**$2,772,046**	**$184,803**
2007–08	$2,712,542	$175,000	$703,727	$71,667	**$3,662,936**	**$244,196**
2008–09	$2,682,272	$45,000	$172,002	$146,466	**$3,045,740**	**$190,359**
2009–10	$1,486,735	$107,333	$374,731	$233,827	**$2,202,626**	**$146,842**
2010–11	$2,261,742		$390,200	$396,936	**$3,048,878**	**$217,777**
2011–12	$4,619,917	$89,356	$420,400	$386,989	**$5,516,662**	**$394,047**
2012–13	$2,784,687	$72,605	$397,116	$337,560	**$3,591,968**	**$276,305**
2013–14	$2,302,461	$35,708	$342,400	$945,754	**$3,626,323**	**$241,755**

Figure E.3 Institute of Biomaterials & Biomedical Engineering Research Operating Funding by Source and Average Funding per Faculty Member, 2004–2005 to 2013–2014



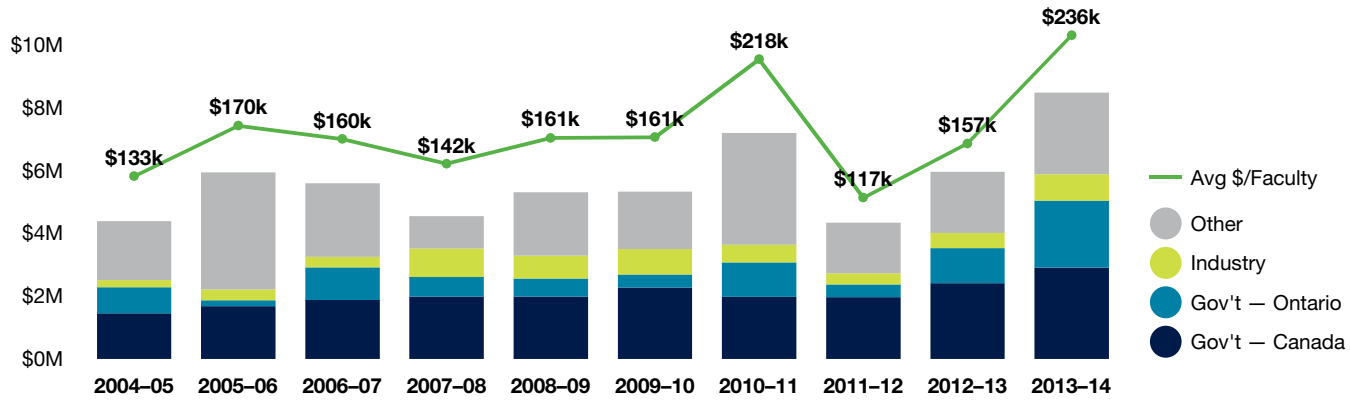
	Gov't – Canada	Gov't – Ontario	Corporate	Other	Total	Avg $/Faculty
2004–05	$1,050,550	$150,001	$275,888	$1,257,129	**$2,733,568**	**$546,714**
2005–06	$1,782,028	$48,666	$176,220	$1,857,110	**$3,864,024**	**$772,805**
2006–07	$2,243,946	$1,333	$186,904	$2,137,473	**$4,569,656**	**$761,609**
2007–08	$2,065,500	$165,515	$222,300	$1,119,211	**$3,572,526**	**$595,421**
2008–09	$1,919,671	$317,147	$117,411	$678,498	**$3,032,727**	**$433,247**
2009–10	$2,395,547	$242,228	$375,037	$1,417,800	**$4,430,612**	**$443,061**
2010–11	$2,494,234	$142,383	$160,634	$1,749,144	**$4,546,395**	**$454,640**
2011–12	$3,007,869	$13,500		$1,330,768	**$4,352,137**	**$435,214**
2012–13	$3,065,604	$908,607	$169,090	$1,088,556	**$5,231,857**	**$475,623**
2013–14	$3,626,531	$1,158,809	$4,000	$1,331,805	**$6,121,145**	**$510,095**

Figure E.4 **Department of Chemical Engineering & Applied Chemistry Research Operating Funding by Source and Average Funding per Faculty Member, 2004–2005 to 2013–2014**



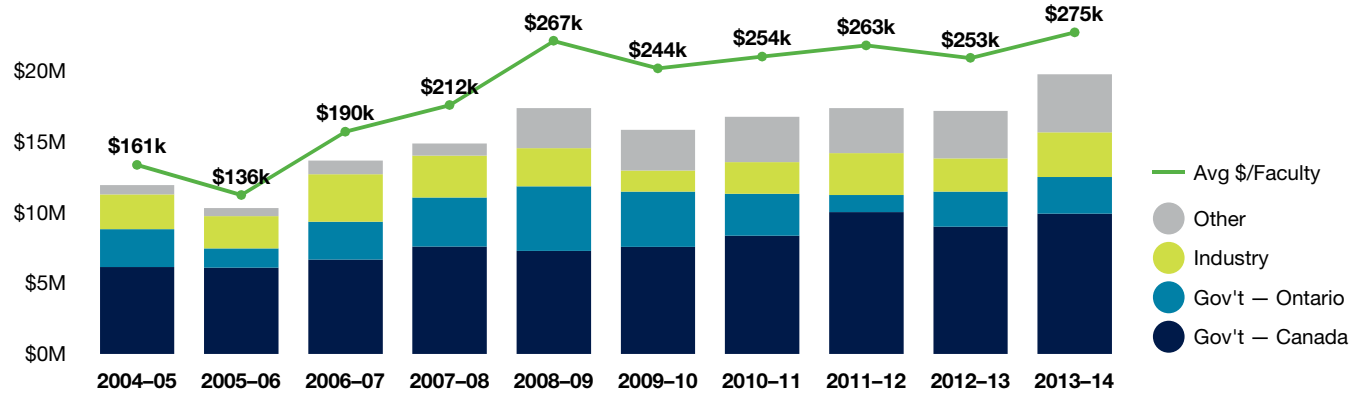
	Gov't – Canada	Gov't – Ontario	Corporate	Other	Total	Avg $/Faculty
2004–05	$3,567,347	$293,952	$1,320,139	$1,675,132	**$6,856,570**	**$221,180**
2005–06	$3,914,479	$465,999	$1,379,766	$1,195,334	**$6,955,578**	**$239,848**
2006–07	$3,460,090	$290,203	$1,261,279	$1,875,921	**$6,887,493**	**$264,904**
2007–08	$3,667,829	$261,610	$1,368,550	$1,561,293	**$6,859,282**	**$236,527**
2008–09	$4,033,714	$299,378	$757,256	$2,052,402	**$7,142,750**	**$255,098**
2009–10	$4,717,078	$1,257,813	$781,842	$1,554,321	**$8,311,054**	**$332,442**
2010–11	$5,870,910	$391,737	$1,052,026	$3,236,019	**$10,550,692**	**$422,028**
2011–12	$5,294,253	$1,283,137	$1,897,761	$3,915,646	**$12,390,797**	**$458,918**
2012–13	$5,192,831	$2,525,848	$1,783,746	$5,818,832	**$15,321,257**	**$589,279**
2013–14	$4,761,821	$1,653,303	$1,761,315	$2,152,823	**$10,329,262**	**$382,565**

Figure E.5 **Department of Civil Engineering Research Operating Funding by Source and Average Funding per Faculty Member, 2004–2005 to 2013–2014**



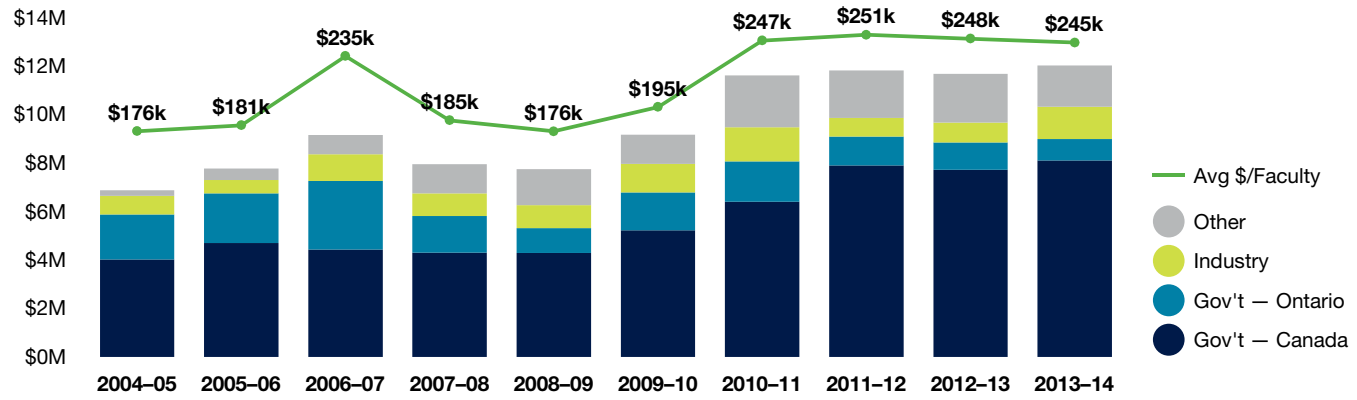
	Gov't – Canada	Gov't – Ontario	Corporate	Other	Total	Avg $/Faculty
2004–05	$1,456,773	$826,688	$225,653	$1,878,573	**$4,387,687**	**$132,960**
2005–06	$1,685,873	$182,459	$347,635	$3,725,020	**$5,940,987**	**$169,742**
2006–07	$1,879,079	$1,040,229	$337,126	$2,345,592	**$5,602,026**	**$160,058**
2007–08	$1,990,013	$622,300	$910,734	$1,023,094	**$4,546,141**	**$142,067**
2008–09	$1,990,579	$572,670	$730,076	$2,014,822	**$5,308,147**	**$160,853**
2009–10	$2,279,407	$412,542	$806,466	$1,829,277	**$5,327,692**	**$161,445**
2010–11	$1,982,184	$1,097,072	$559,231	$3,561,675	**$7,200,162**	**$218,187**
2011–12	$1,972,638	$402,645	$353,513	$1,612,893	**$4,341,689**	**$117,343**
2012–13	$2,413,881	$1,121,004	$476,088	$1,947,886	**$5,958,859**	**$156,812**
2013–14	$2,907,378	$2,136,573	$844,840	$2,595,744	**$8,484,535**	**$235,682**

Figure E.6 **The Edward S. Rogers Sr. Department of Electrical & Computer Engineering Research Operating Funding by Source and Average Funding per Faculty Member, 2004–2005 to 2013–2014**



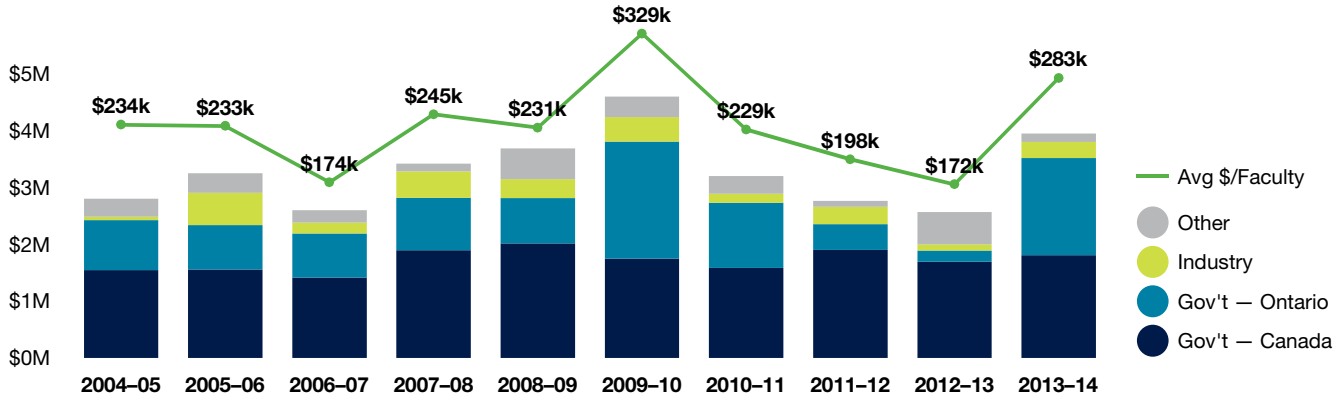
	Gov't – Canada	Gov't – Ontario	Corporate	Other	Total	Avg $/Faculty
2004–05	$6,142,164	$2,680,773	$2,455,661	$663,252	**$11,941,850**	**$161,376**
2005–06	$6,094,609	$1,378,334	$2,266,096	$575,955	**$10,314,994**	**$135,724**
2006–07	$6,679,878	$2,660,526	$3,363,559	$957,306	**$13,661,269**	**$189,740**
2007–08	$7,599,810	$3,470,568	$2,950,516	$853,281	**$14,874,175**	**$212,488**
2008–09	$7,296,269	$4,551,690	$2,709,325	$2,815,615	**$17,372,899**	**$267,275**
2009–10	$7,564,356	$3,923,866	$1,481,958	$2,878,488	**$15,848,668**	**$243,826**
2010–11	$8,355,878	$2,978,371	$2,238,062	$3,187,226	**$16,759,537**	**$253,932**
2011–12	$10,027,063	$1,205,388	$2,960,981	$3,192,836	**$17,386,268**	**$263,428**
2012–13	$8,996,927	$2,481,833	$2,355,784	$3,347,918	**$17,182,462**	**$252,683**
2013–14	$9,911,993	$2,602,801	$3,145,172	$4,110,224	**$19,770,190**	**$274,586**

Figure E.7 **Department of Mechanical & Industrial Engineering Research Operating Funding by Source and Average Funding per Faculty Member, 2004–2005 to 2013–2014**



	Gov't – Canada	Gov't – Ontario	Corporate	Other	Total	Avg $/Faculty
2004–05	$4,024,542	$1,857,684	$766,235	$224,614	**$6,873,075**	**$176,233**
2005–06	$4,703,394	$2,042,264	$555,242	$473,811	**$7,774,711**	**$180,807**
2006–07	$4,425,552	$2,833,485	$1,095,225	$804,332	**$9,158,594**	**$234,836**
2007–08	$4,297,733	$1,519,533	$924,880	$1,200,988	**$7,943,134**	**$184,724**
2008–09	$4,289,293	$1,027,566	$946,457	$1,486,804	**$7,750,120**	**$176,139**
2009–10	$5,226,172	$1,558,727	$1,173,710	$1,211,942	**$9,170,551**	**$195,118**
2010–11	$6,406,136	$1,653,762	$1,415,128	$2,129,492	**$11,604,518**	**$246,905**
2011–12	$7,900,012	$1,188,878	$771,086	$1,956,458	**$11,816,434**	**$251,413**
2012–13	$7,723,687	$1,115,661	$827,191	$2,005,639	**$11,672,178**	**$248,344**
2013–14	$8,107,037	$879,834	$1,333,542	$1,703,357	**$12,023,770**	**$245,383**

Figure E.8 **Department of Materials Science & Engineering Research Operating Funding by Source and Average Funding per Faculty Member, 2004–2005 to 2013–2014**



	Gov't – Canada	Gov't – Ontario	Corporate	Other	Total	Avg $/Faculty
2004–05	$1,551,531	$879,481	$63,250	$313,599	**$2,807,861**	**$233,988**
2005–06	$1,561,749	$783,577	$567,370	$345,328	**$3,258,024**	**$232,716**
2006–07	$1,417,224	$777,970	$195,024	$216,848	**$2,607,066**	**$173,804**
2007–08	$1,898,382	$927,585	$464,574	$138,250	**$3,428,791**	**$244,914**
2008–09	$2,020,903	$796,601	$339,222	$539,173	**$3,695,899**	**$230,994**
2009–10	$1,754,687	$2,059,894	$432,055	$364,545	**$4,611,181**	**$329,370**
2010–11	$1,588,204	$1,150,973	$158,500	$309,101	**$3,206,778**	**$229,056**
2011–12	$1,907,580	$453,820	$302,864	$104,500	**$2,768,764**	**$197,769**
2012–13	$1,698,541	$196,359	$111,000	$569,275	**$2,575,175**	**$171,678**
2013–14	$1,810,800	$1,716,977	$282,439	$149,675	**$3,959,891**	**$282,849**

Appendix F: Spinoff Companies

Est.	Company Name	Engineering Affiliation	Department
2014	Arrowonics Inc.	Hugh Liu	UTIAS
2014	Enceladeus Imaging	Steve Mann	ECE
2014	IQBiomedical	David Sinton	MIE
2014	Sonas Systems Inc.	Joyce Poon	ECE
2014	Toronto Nano Instrumentation Inc. (TNi Inc.)	Yu Sun	MIE
2013	CoursePeer	Hadi Aladdin	ECE
2013	eQOL Inc.	Binh Nguyen	ECE
2013	Kydo Engineering	John Ruggieri	ChemE
2013	Pragmatek Transport Innovations, Inc.	Baher Abdulhai	CivE
2013	QD Solar Inc.	Sjoerd Hoogland and Ted Sargent	ECE
2013	SpineSonics Medical Inc.	Richard Cobbold	IBBME
2013	XCellPure Inc.	Milica Radisic	IBBME, ChemE
2013	XTouch Inc.	Parham Aarabi	ECE
2012	MyTrak Health Systems	Sean Doherty	CivE
2012	OTI Lumionics Inc.	Zheng-Hong Lu	MSE
2012	Whirlscape Inc.	Will Walmsley	MIE
2012	XTT	Parham Aarabi	ECE
2011	Aereus Technologies Inc. (formerly Aereus Wood)	Javad Mostaghimi	MIE
2011	Filaser Inc.	Peter Herman	ECE
2011	Kinetica Dynamics Inc.	Constantin Christopoulos	CivE
2011	Luminautics Inc. (formerly Ensi Solutions)	Graham Murdoch	MSE
2011	Nymi (Formerly Bionym Inc.)	Karl Martin	ECE
2011	Ojiton Inc.	Tom Chau	IBBME
2011	PRISED Solar Inc.	Wahid Shams-Kolahi	ECE
2011	RenWave	Mohamed Kamh	ECE
2011	Xagenic Canada Inc.	Ted Sargent	ECE
2010	Arda Power Inc.	Peter Lehn	ECE
2010	FOTA Technologies	Tony Chan Carusone	ECE
2009	Chip Care Corp.	J. Stewart Aitchison	ECE
2009	Cytodiagnostics	Warren Chan	IBBME
2009	Peraso Technologies Inc.	Sorin Voinigescu	ECE
2008	Ablazeon Inc.	Javad Mostaghimi	MIE
2008	Arch Power Inc.	Mohammad (Reza) Iravani	ECE
2008	AXAL Inc.	Milos Popovic and Egor Sanin	IBBME
2008	Incise Photonics Inc.	Peter Herman	ECE
2008	Quantum Dental Technologies	Andreas Mandelis	MIE
2008	Simple Systems Inc.	Milos Popovic, Aleksandar Prodic and Armen Baronijan	ECE, IBBME
2007	002122461 Ontario Inc.	Harry Ruda	MSE
2007	Cast Connex Corp.	Jeffrey Packer and Constantin Christopoulos	CivE
2007	Elastin Specialties	Kimberly Woodhouse	ChemE
2007	Inometrix Inc.	Michael Galle	ECE
2007	Modiface Inc.	Parham Aarabi	ECE
2007	Neurochip Inc.	Berj Bardakjian	IBBME
2007	Viewgenie Inc.	Parham Aarabi	ECE
2006	Anviv Mechatronics Inc. (AMI)	Andrew Goldenberg	MIE
2006	InVisage Technologies Inc.	Ted Sargent	ECE
2006	Metabacus	Jianwen Zhu	ECE
2006	Vennsa Technologies Inc.	Andreas Veneris and Sean Safarpour	ECE
2005	Greencore Composites	Mohini Sain	Forestry, ChemE
2004	Field Metrica Inc. (FMI)	Tim DeMonte, Richard Yoon	IBBME
2004	Tissue Regeneration Therapeutics Inc. (TRT)	J.E. Davies	IBBME
2003	1484667 Ontario Inc.	Brad Saville	ChemE
2003	ArchES Computing Systems Corp.	Paul Chow	ECE
2003	Norel Optronics Inc.	Zhenghong Lu	MSE
2003	Vocalage Inc.	Mark Chignell	MIE

2002	Information Intelligence Corporation (IIC)	Burhan Turksen	MIE
2002	MatRegen Corp.	Molly Shoichet	IBBME, ChemE
2002	OMDEC Inc.	Andrew K.S. Jardine	MIE
2002	SiREM	Elizabeth Edwards	ChemE
2001	Fox-Tek	Rod Tennyson	UTIAS
2001	Insception Biosciences	Peter Zandstra	IBBME
2001	Interface Biologics	Paul Santerre	IBBME
2000	Biox Corporation	David Boocock	ChemE
2000	Photo-Thermal Diagnostics Inc.	Andreas Mandelis	MIE
2000	Simulent Inc.	Javad Mostaghimi	MIE
2000	Virtek Engineering Science Inc.	Andrew Goldenberg	MIE
1999	Accelight Networks Inc.	Alberto Leon-Garcia and Paul Chow	ECE
1999	em2 Inc.	J.E. Davies	IBBME
1999	Soma Networks	Michael Stumm and Martin Snelgrove	ECE
1999	Vivosonic Inc.	Yuri Sokolov and Hans Kunov	IBBME
1998	1208211 Ontario Ltd. (affiliate: Regen StaRR)	Robert Pilliar, Rita Kandel and Marc Grynpas	IBBME
1998	BANAK Inc.	Andrew K.S. Jardine	MIE
1998	BoneTec Corp. (now owned by subsidiary of TRT)	J.E. Davies and Molly Shoichet	IBBME
1998	Right Track CAD Corp.	Jonathan Rose	ECE
1998	SMT HyrdaSil	Rod Tennyson	UTIAS
1998	Snowbush Microelectronics	Kenneth Martin and David Johns	ECE
1997	Rimon Therapeutics	Michael Sefton	IBBME, ChemE
1996	OANDA Corp.	Michael Stumm	ECE
1996	Rocscience Inc.	John Curran	CivE
1995	Amilog Systems		MIE
1995	Electrobiologies	Paul Madsen	IBBME
1995	Hydrogenics Corp.		MIE
1995	Tribokinetics Inc.	Raymond Woodhams	ChemE
1994	Key Lime Co.	Honghi Tran	ChemE
1994	Trantek Power		ECE
1993	Electro Photonics	Raymond Measures	UTIAS
1993	Liquid Metal Sonics Ltd.		MSE
1993	SAFE Nozzle Group	Honghi Tran	ChemE
1993	SmartSpeaker Corp.	Anees Munshi	ECE
1992	Condata Technologies Ltd.		ECE
1992	Gao Research & Consulting Ltd.	Frank Gao	ECE
1992	Novator Systems Ltd.	Mark Fox	MIE
1992	Paul Madsen Medical Devices	Hans Kunov	IBBME
1992	PolyPhalt Inc.	Raymond Woodhams	ChemE
1991	Advent Process Engineering Inc.		MSE
1991	LinShin Canada Inc.		IBBME
1991	Minnovex	Glenn Dobby	MSE
1991	Redrock Solvers Inc.	Michael Carter	MIE
1990	Fibre Metrics	Dale Hogg	UTIAS
1989	Apollo Environmental Systems Corp.	John Harbinson	ChemE
1989	Integrity Testing Laboratory Inc. (ITL)		UTIAS
1989	Translucent Technologies	Paul Milgram	MIE
1989	Xiris Automation Inc.	Cameron Serles	MIE
1988	Advanced Materials Technologies	Steven Thorpe	MSE
1988	Food BioTek Corp.	Leon Rubin	ChemE
1988	HydraTek and Associates Inc.	Bryan Karney and (since 2006) Fabian Papa	CivE
1986	EHM Rehabilitation Technologies	Pomeranz Salansky	UTIAS
1986	LACEC Energy Systems Inc.	Charles Ward	MIE
1985	El-Mar Inc.		IBBME
1985	Electrocaps Inc.	J. Smith	ChemE
1985	Katosizer Industries Ltd.	W. Snelgrove	ECE
1985	Tibur-Howden		MSE

Appendix G: Descriptions of Major Awards

Chapter 5: Awards and Honours summarizes the international, national and provincial awards our faculty and alumni received. Below are descriptions of some of those awards and honours.

International

MIT Top 35 Under 35
Awarded to world's top 35 young innovators under the age of 35 by *MIT Technology Review* magazine.

U.S. National Academies
The National Academies serve (collectively) as the scientific national academy for the United States.

National

3M Teaching Fellowship
Canada's highest teaching award in recognition of educational excellence and leadership.

Alan Blizzard Award
Recognition for exemplary collaboration in university teaching as it enhances student learning.

Canadian Academy of Engineering (CAE) Fellowship
Recognition for distinguished achievements and career-long service to the engineering profession.

Engineering Institute of Canada (EIC) Fellowship
Recognition for exceptional contributions to engineering in Canada and for service to the profession and to society.

Engineering Institute of Canada (EIC) Awards
Recognition of outstanding engineers for exemplary contributions to engineering achievement in Canada and the world.

Engineers Canada Awards
Recognition of outstanding Canadian engineers, teams of engineers, engineering projects and engineering students.

Killam Prize
Awarded to distinguished Canadian scholars conducting research in one of five fields of study, including engineering, by the Canada Council for the Arts.

Killam Research Fellowship
Awarded to an established scholar who has demonstrated outstanding research ability and has published research results in substantial publications in their field by the Canada Council for the Arts.

Manning Innovation Award
Recognition of Canadian innovators who are improving the lives of Canadians and others around the world through their commercialized innovations.

Royal Society of Canada (RSC) Fellowship
Highest Canadian honour a scholar can achieve in the arts, humanities and sciences.

Royal Society of Canada (RSC) College of New Scholars, Artists and Scientists
Members are Canadian scholars who, at an early stage in their career, have demonstrated a high level of achievements and excellence.

Steacie Fellowship
Awarded to enhance the career development of outstanding and highly promising scientists and engineers by the Natural Sciences and Engineering Research Council (NSERC).

Steacie Prize
Awarded to a scientist or engineer 40 years of age of less for outstanding scientific research carried out in Canada.

Synergy Award for Innovation
Recognition for university-industry collaboration that stands as a model of effective partnership.

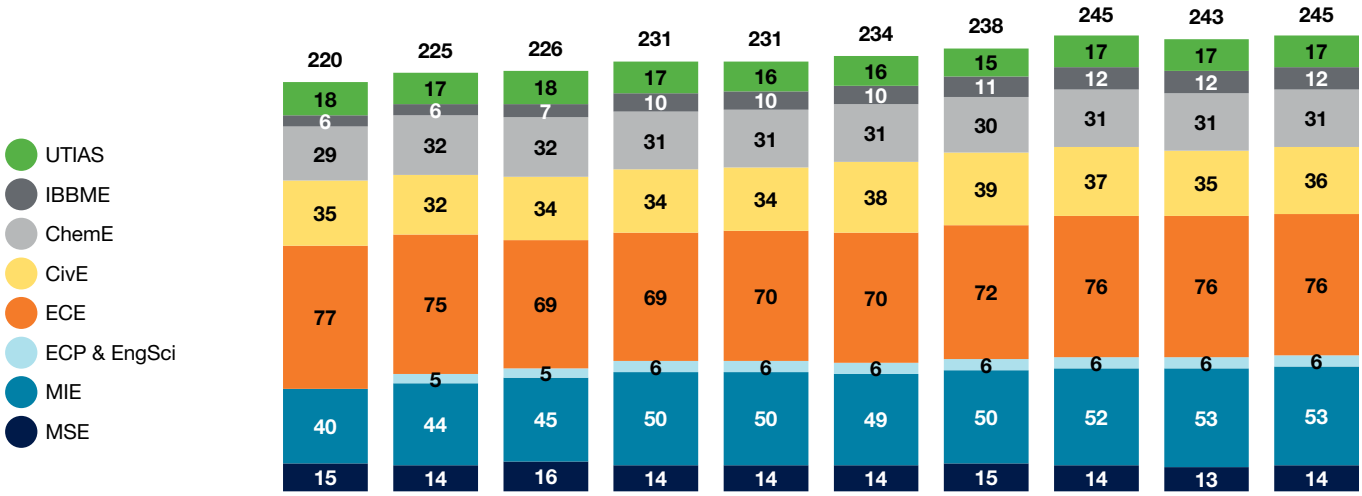
Provincial

Ontario Professional Engineers Awards
Awarded to Professional Engineers Ontario members who have contributed substantially to the advancement of the engineering profession in any of its branches.

Appendix H: Academic Staff by Academic Area

The figures in Appendix H show the composition of our academic staff from 2005–2006 to 2014–2015. Figures H.1a and H.1b provide a Faculty overview and H.2 to H.8 present a detailed analysis by academic area.

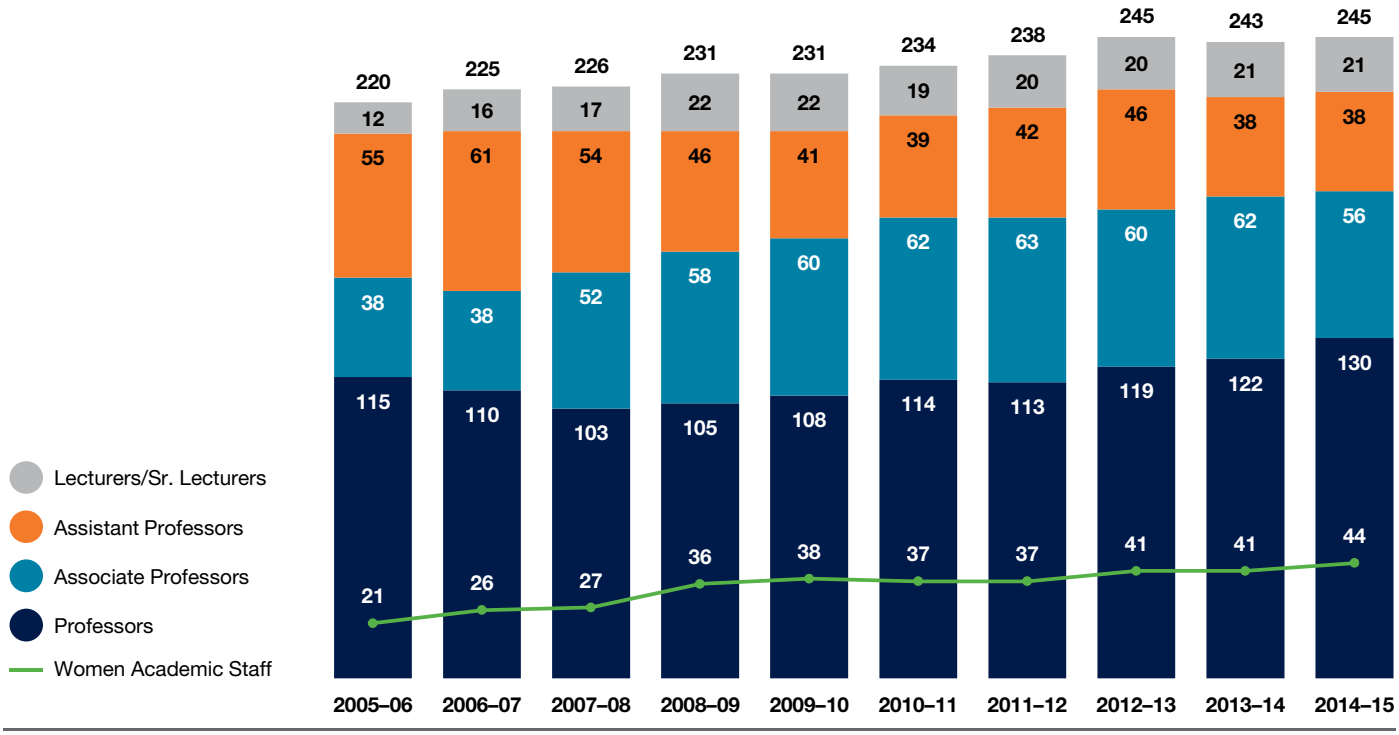
Figure H.1a **Total Academic Staff by Academic Area, 2005–2006 to 2014–2015**



		2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
UTIAS	Assistant Profs	4	4	4	4	4	4	5	6	5	5
	Associate Profs	1	1	3	5	4	3	3	4	4	4
	Professors	10	10	9	6	6	7	5	5	6	6
	Lecturers	3	2	2	2	2	2	2	2	2	2
IBBME	Assistant Profs	3	3	3	6	5	3	5	6	5	4
	Associate Profs	3	3	3	3	1	3	3	2	2	3
	Professors	0	0	1	1	4	4	3	4	4	4
	Lecturers	0	0	0	0	0	0	0	0	1	1
ChemE	Assistant Profs	2	4	5	5	6	7	5	6	4	5
	Associate Profs	2	3	3	3	2	2	3	3	5	5
	Professors	22	22	20	17	17	18	18	18	18	17
	Lecturers	3	3	4	6	6	4	4	4	4	4
CivE	Assistant Profs	7	11	8	6	6	9	9	8	7	8
	Associate Profs	9	6	10	12	12	11	10	11	11	9
	Professors	19	15	15	15	15	17	19	17	16	18
	Lecturers	0	0	1	1	1	1	1	1	1	1
ECE	Assistant Profs	28	25	18	9	8	7	9	11	9	7
	Associate Profs	14	15	22	26	26	25	25	22	20	16
	Professors	30	30	25	30	32	34	34	39	43	49
	Lecturers	5	5	4	4	4	4	4	4	4	4
ECP & EngSci	Lecturers		5	5	6	6	6	6	6	6	6
MIE	Assistant Profs	10	13	14	13	11	8	7	7	6	6
	Associate Profs	5	6	7	8	12	15	16	14	16	15
	Professors	24	24	23	26	24	24	24	28	28	29
	Lecturers	1	1	1	3	3	2	3	3	3	3
MSE	Assistant Profs	1	1	2	2	1	1	2	2	2	3
	Associate Profs	4	4	4	2	3	3	3	4	4	4
	Professors	10	9	10	10	10	10	10	8	7	7
	Lecturers	0	0	0	0	0	0	0	0	0	0
Total		**220**	**225**	**226**	**231**	**231**	**234**	**238**	**245**	**243**	**245**

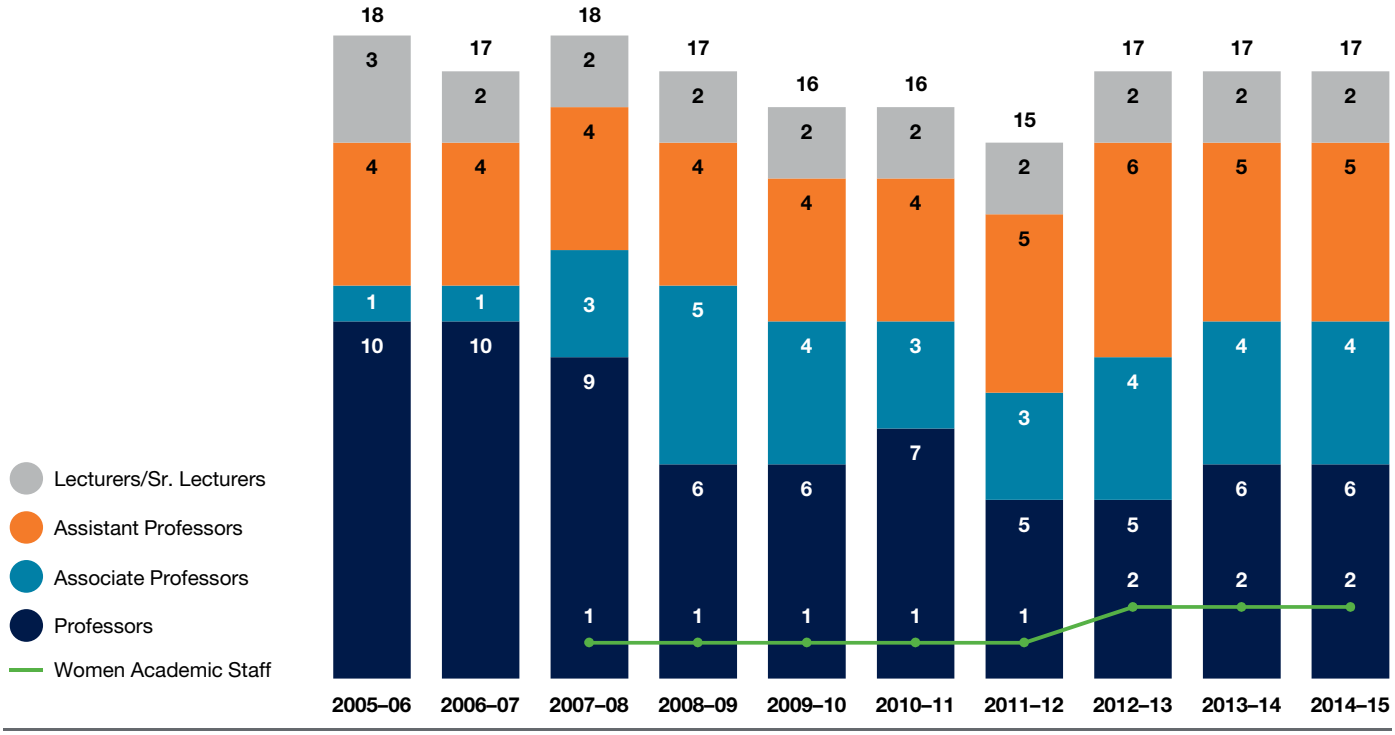
Note: Number of lecturers from Engineering Communications Program (ECP) and EngSci is unavailable prior to 2006–07.

Figure H.1b **University of Toronto Faculty of Applied Science & Engineering Total Academic Staff by Position with Percentage of Women, 2005–2006 to 2014–2015**



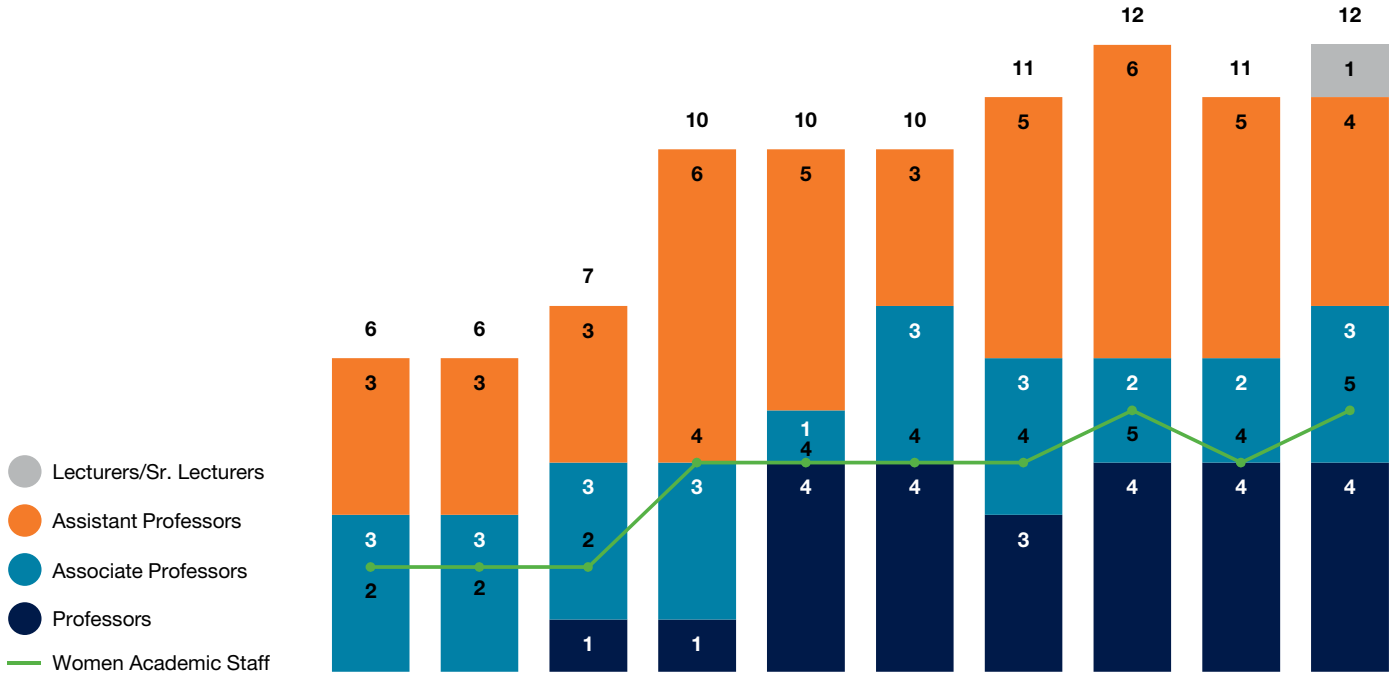
	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Assistant Professors	55	61	54	46	41	39	42	46	38	38
Women Assistant Professors	9	13	12	17	17	15	14	16	10	12
% Women Assistant Professors	**16.4%**	**21.3%**	**22.2%**	**37.0%**	**41.5%**	**38.5%**	**33.3%**	**34.8%**	**26.3%**	**31.6%**
Associate Professors	38	38	52	58	60	62	63	60	62	56
Women Associate Professors	6	5	6	8	10	13	13	13	17	14
% Women Associate Professors	**15.8%**	**13.2%**	**11.5%**	**13.8%**	**16.7%**	**21.0%**	**20.6%**	**21.7%**	**27.4%**	**25.0%**
Professors	115	110	103	105	108	114	113	119	122	130
Women Professors	4	5	6	5	5	5	6	8	9	13
% Women Professors	**3.5%**	**4.5%**	**5.8%**	**4.8%**	**4.6%**	**4.4%**	**5.3%**	**6.7%**	**7.4%**	**10.0%**
Lecturers/ Sr. Lecturers	12	16	17	22	22	19	20	20	21	21
Women Lecturers/ Sr. Lecturers	2	3	3	6	6	4	4	4	5	5
% Women Lecturers/ Sr. Lecturers	**16.7%**	**18.8%**	**17.6%**	**27.3%**	**27.3%**	**21.1%**	**20.0%**	**20.0%**	**23.8%**	**23.8%**
Total Tenured and Tenure Stream	208	209	209	209	209	215	218	225	222	224
Women Tenured and Tenure Stream	19	23	24	30	32	33	33	37	36	39
% Women Tenured and Tenure Stream	**9.1%**	**11.0%**	**11.5%**	**14.4%**	**15.3%**	**15.3%**	**15.1%**	**16.4%**	**16.2%**	**17.4%**
Total Academic Staff	220	225	226	231	231	234	238	245	243	245
Women Academic Staff	21	26	27	36	38	37	37	41	41	44
% Women Academic Staff	**9.5%**	**11.6%**	**11.9%**	**15.6%**	**16.5%**	**15.8%**	**15.5%**	**16.7%**	**16.9%**	**18.0%**

Figure H.2 **University of Toronto Institute for Aerospace Studies: Academic Staff by Position with Percentage of Women, 2005–2006 to 2014–2015**



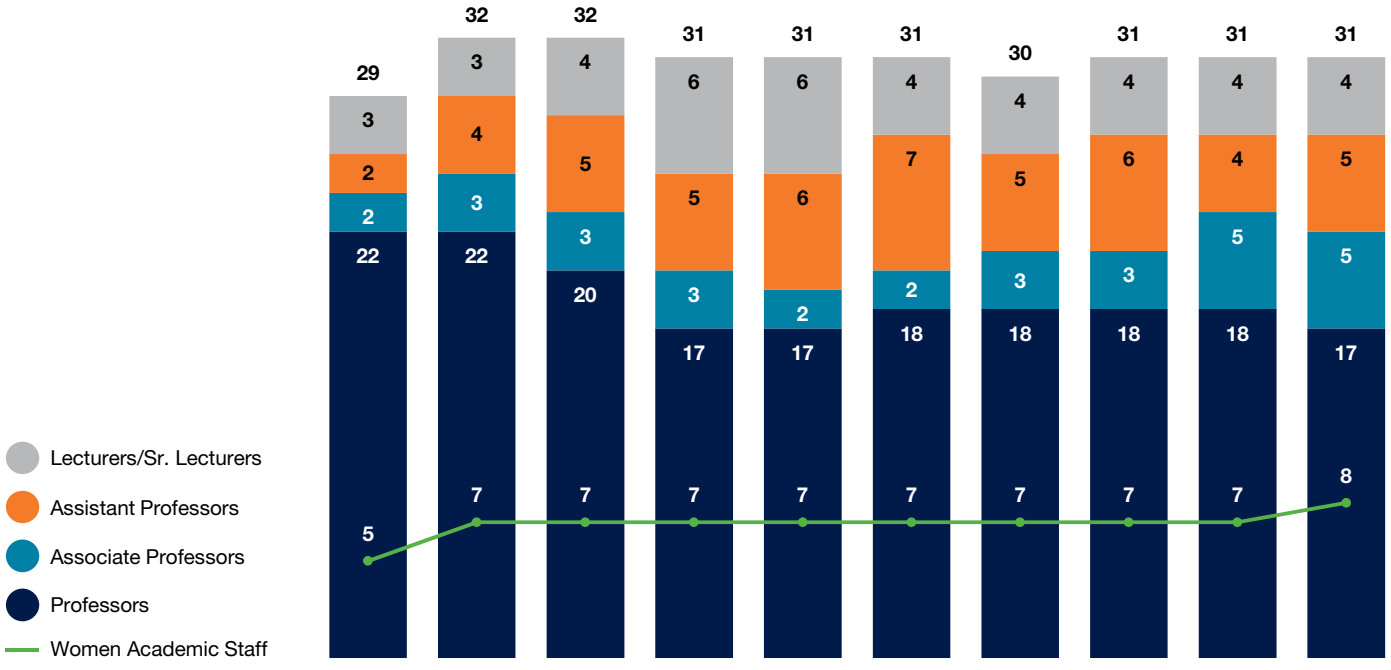
	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Assistant Professors	4	4	4	4	4	4	5	6	5	5
Women Assistant Professors	0	0	1	1	1	1	1	2	2	2
% Women Assistant Professors	**0.0%**	**0.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**20.0%**	**33.3%**	**40.0%**	**40.0%**
Associate Professors	1	1	3	5	4	3	3	4	4	4
Women Associate Professors	0	0	0	0	0	0	0	0	0	0
% Women Associate Professors	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Professors	10	10	9	6	6	7	5	5	6	6
Women Professors	0	0	0	0	0	0	0	0	0	0
% Women Professors	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Lecturers/ Sr. Lecturers	3	2	2	2	2	2	2	2	2	2
Women Lecturers/ Sr. Lecturers	0	0	0	0	0	0	0	0	0	0
% Women Lecturers/ Sr. Lecturers	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Total Tenured and Tenure Stream	15	15	16	15	14	14	13	15	15	15
Women Tenured and Tenure Stream	0	0	1	1	1	1	1	2	2	2
% Women Tenured and Tenure Stream	**0.0%**	**0.0%**	**6.3%**	**6.7%**	**7.1%**	**7.1%**	**7.7%**	**13.3%**	**13.3%**	**13.3%**
Total Academic Staff	18	17	18	17	16	16	15	17	17	17
Women Academic Staff	0	0	1	1	1	1	1	2	2	2
% Women Academic Staff	**0.0%**	**0.0%**	**5.6%**	**5.9%**	**6.3%**	**6.3%**	**6.7%**	**11.8%**	**11.8%**	**11.8%**

Figure H.3 **Institute of Biomaterials & Biomedical Engineering: Academic Staff by Position with Percentage of Women, 2005–2006 to 2014–2015**



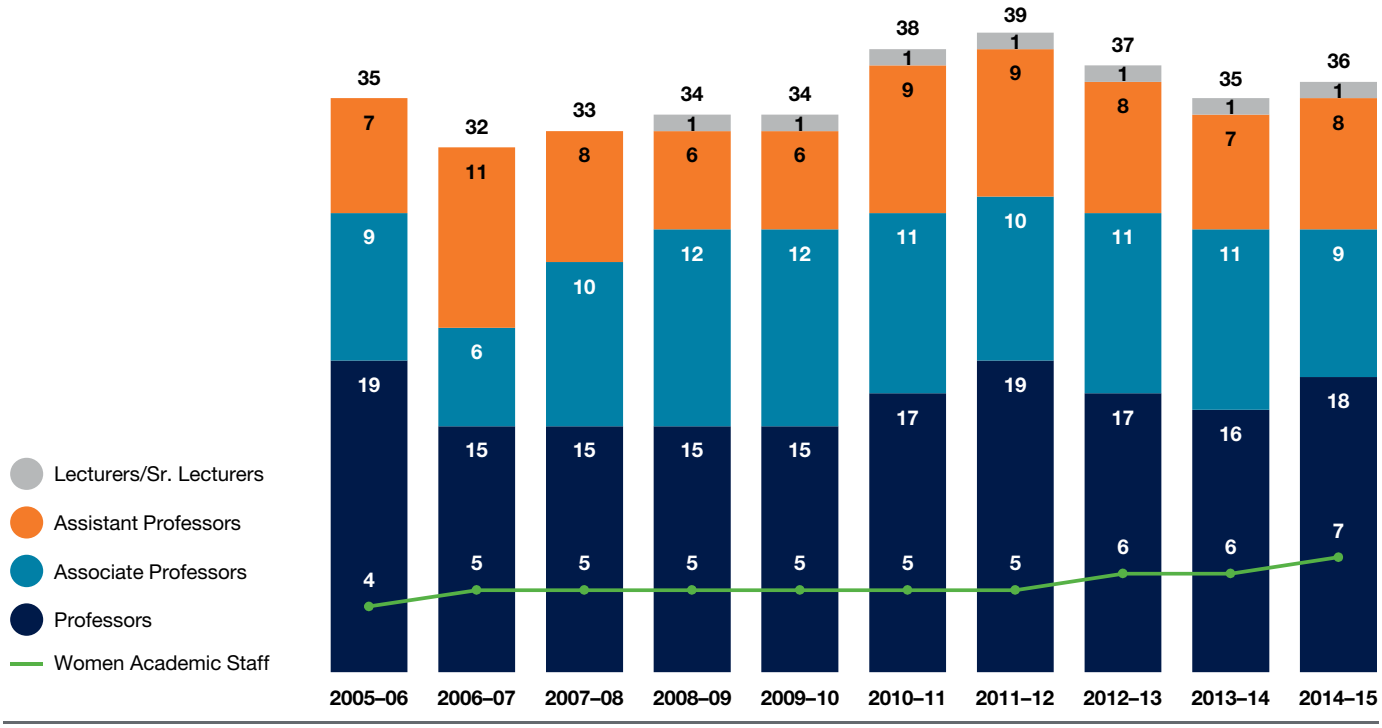
	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Assistant Professors	3	3	3	6	5	3	5	6	5	4
Women Assistant Professors	2	2	2	4	4	2	2	3	1	2
% Women Assistant Professors	**66.7%**	**66.7%**	**66.7%**	**66.7%**	**80.0%**	**66.7%**	**40.0%**	**50.0%**	**20.0%**	**50.0%**
Associate Professors	3	3	3	3	1	3	3	2	2	3
Women Associate Professors	0	0	0	0	0	2	2	2	2	1
% Women Associate Professors	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**66.7%**	**66.7%**	**100.0%**	**100.0%**	**33.3%**
Professors	0	0	1	1	4	4	3	4	4	4
Women Professors	0	0	0	0	0	0	0	0	0	1
% Women Professors	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**25.0%**
Lecturers/ Sr. Lecturers	0	0	0	0	0	0	0	0	1	1
Women Lecturers/ Sr. Lecturers	0	0	0	0	0	0	0	0	1	1
% Women Lecturers/ Sr. Lecturers	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**100.0%**	**100.0%**
Total Tenured and Tenure Stream	6	6	7	10	10	10	11	12	11	11
Women Tenured and Tenure Stream	2	2	2	4	4	4	4	5	3	4
% Women Tenured and Tenure Stream	**33.3%**	**33.3%**	**28.6%**	**40.0%**	**40.0%**	**40.0%**	**36.4%**	**41.7%**	**27.3%**	**36.4%**
Total Academic Staff	6	6	7	10	10	10	11	12	12	12
Women Academic Staff	2	2	2	4	4	4	4	5	4	5
% Women Academic Staff	**33.3%**	**33.3%**	**28.6%**	**40.0%**	**40.0%**	**40.0%**	**36.4%**	**41.7%**	**33.3%**	**41.7%**

Figure H.4 **Department of Chemical Engineering & Applied Chemistry: Academic Staff by Position with Percentage of Women, 2005–2006 to 2014–2015**



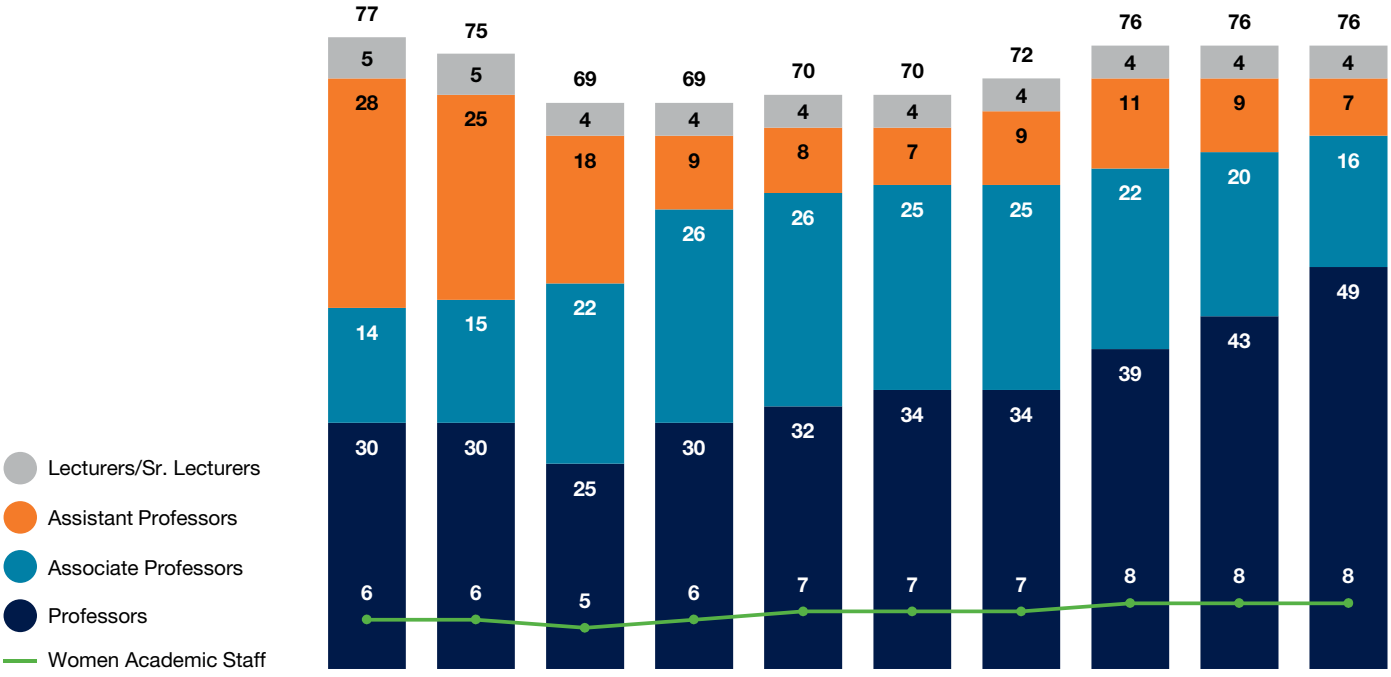
	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Assistant Professors	2	4	5	5	6	7	5	6	4	5
Women Assistant Professors	0	2	2	2	2	3	2	2	2	3
% Women Assistant Professors	**0.0%**	**50.0%**	**40.0%**	**40.0%**	**33.3%**	**42.9%**	**40.0%**	**33.3%**	**50.0%**	**60.0%**
Associate Professors	2	3	3	3	2	2	3	3	5	5
Women Associate Professors	1	1	0	0	0	0	1	1	1	1
% Women Associate Professors	**50.0%**	**33.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**33.3%**	**33.3%**	**20.0%**	**20.0%**
Professors	22	22	20	17	17	18	18	18	18	17
Women Professors	3	3	4	3	3	3	3	3	3	3
% Women Professors	**13.6%**	**13.6%**	**20.0%**	**17.6%**	**17.6%**	**16.7%**	**16.7%**	**16.7%**	**16.7%**	**17.6%**
Lecturers/ Sr. Lecturers	3	3	4	6	6	4	4	4	4	4
Women Lecturers/ Sr. Lecturers	1	1	1	2	2	1	1	1	1	1
% Women Lecturers/ Sr. Lecturers	**33.3%**	**33.3%**	**25.0%**	**33.3%**	**33.3%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**
Total Tenured and Tenure Stream	26	29	28	25	25	27	26	27	27	27
Women Tenured and Tenure Stream	4	6	6	5	5	6	6	6	6	7
% Women Tenured and Tenure Stream	**15.4%**	**20.7%**	**21.4%**	**20.0%**	**20.0%**	**22.2%**	**23.1%**	**22.2%**	**22.2%**	**25.9%**
Total Academic Staff	29	32	32	31	31	31	30	31	31	31
Women Academic Staff	5	7	7	7	7	7	7	7	7	8
% Women Academic Staff	**17.2%**	**21.9%**	**21.9%**	**22.6%**	**22.6%**	**22.6%**	**23.3%**	**22.6%**	**22.6%**	**25.8%**

Figure H.5 **Department of Civil Engineering: Academic Staff by Position with Percentage of Women, 2005–2006 to 2014–2015**



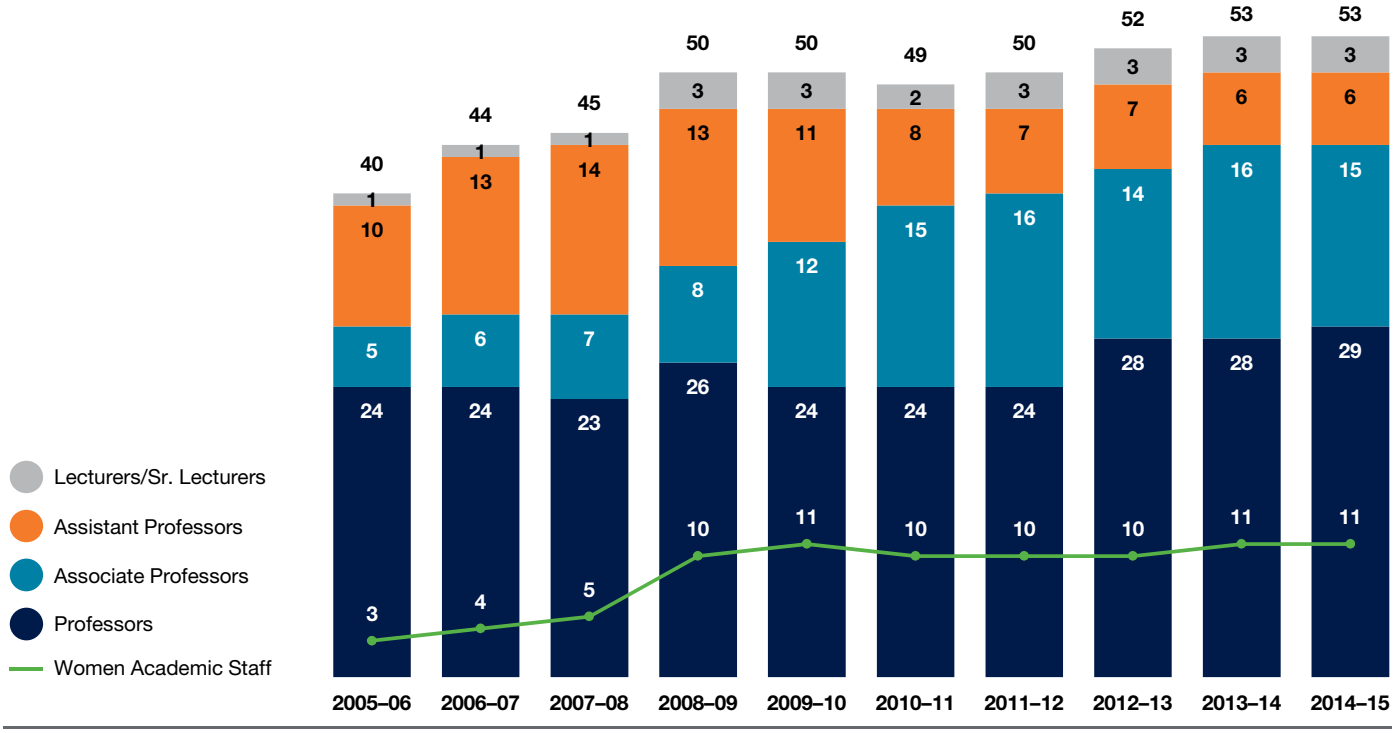
	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Assistant Professors	7	11	8	6	6	9	9	8	7	8
Women Assistant Professors	3	4	3	2	2	2	2	3	2	3
% Women Assistant Professors	**42.9%**	**36.4%**	**37.5%**	**33.3%**	**33.3%**	**22.2%**	**22.2%**	**37.5%**	**28.6%**	**37.5%**
Associate Professors	9	6	10	12	12	11	10	11	11	9
Women Associate Professors	1	1	2	3	3	3	2	2	3	2
% Women Associate Professors	**11.1%**	**16.7%**	**20.0%**	**25.0%**	**25.0%**	**27.3%**	**20.0%**	**18.2%**	**27.3%**	**22.2%**
Professors	19	15	15	15	15	17	19	17	16	18
Women Professors	0	0	0	0	0	0	1	1	1	2
% Women Professors	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**5.3%**	**5.9%**	**6.3%**	**11.1%**
Lecturers/ Sr. Lecturers	0	0	1	1	1	1	1	1	1	1
Women Lecturers/ Sr. Lecturers	0	0	0	0	0	0	0	0	0	0
% Women Lecturers/ Sr. Lecturers	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Total Tenured and Tenure Stream	35	32	33	33	33	37	38	36	34	35
Women Tenured and Tenure Stream	4	5	5	5	5	5	5	6	6	7
% Women Tenured and Tenure Stream	**11.4%**	**15.6%**	**15.2%**	**15.2%**	**15.2%**	**13.5%**	**13.2%**	**16.7%**	**17.6%**	**20.0%**
Total Academic Staff	35	32	34	34	34	38	39	37	35	36
Women Academic Staff	4	5	5	5	5	5	5	6	6	7
% Women Academic Staff	**11.4%**	**15.6%**	**14.7%**	**14.7%**	**14.7%**	**13.2%**	**12.8%**	**16.2%**	**17.1%**	**19.4%**

Figure H.6 **The Edward S. Rogers Sr. Department of Electrical & Computer Engineering: Academic Staff by Position with Percentage of Women, 2005–2006 to 2014–2015**



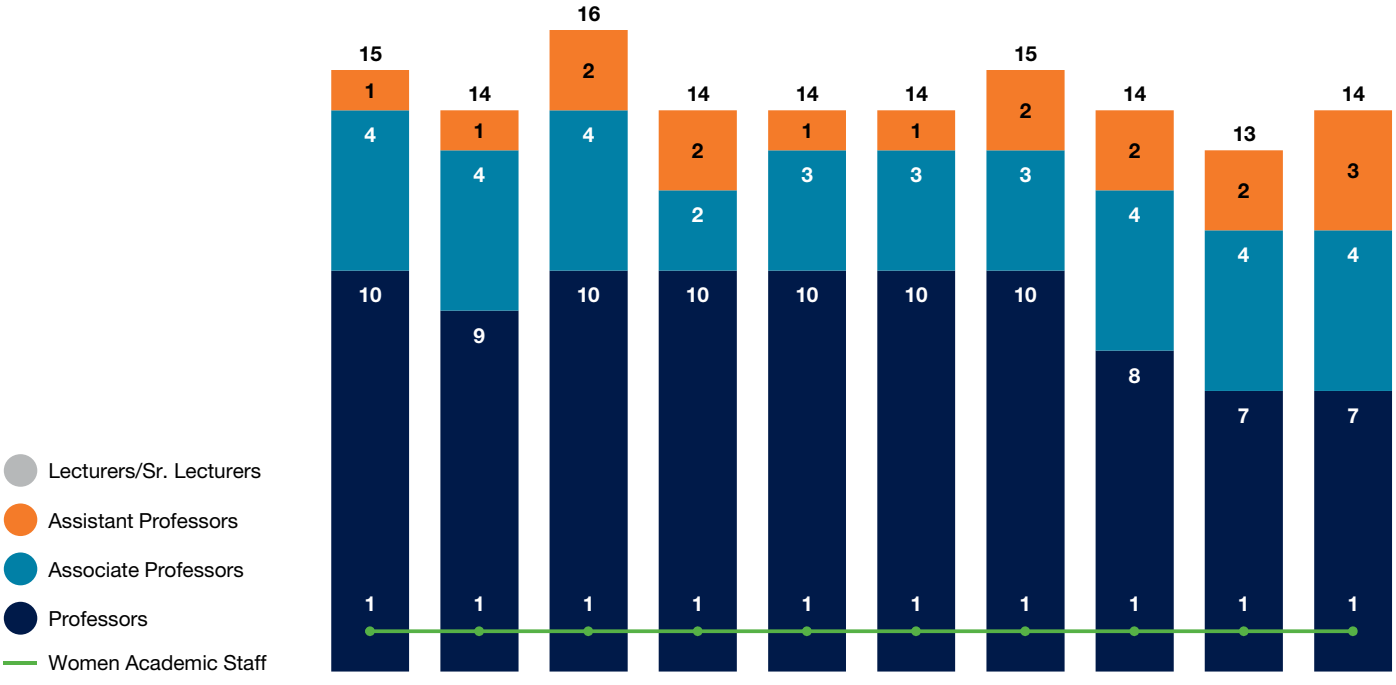
	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Assistant Professors	28	25	18	9	8	7	9	11	9	7
Women Assistant Professors	4	5	3	2	2	2	2	2	1	0
% Women Assistant Professors	**14.3%**	**20.0%**	**16.7%**	**22.2%**	**25.0%**	**28.6%**	**22.2%**	**18.2%**	**11.1%**	**0.0%**
Associate Professors	14	15	22	26	26	25	25	22	20	16
Women Associate Professors	1	0	1	3	4	4	4	4	4	4
% Women Associate Professors	**7.1%**	**0.0%**	**4.5%**	**11.5%**	**15.4%**	**16.0%**	**16.0%**	**18.2%**	**20.0%**	**25.0%**
Professors	30	30	25	30	32	34	34	39	43	49
Women Professors	0	0	0	0	0	0	0	1	2	3
% Women Professors	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**2.6%**	**4.7%**	**6.1%**
Lecturers/ Sr. Lecturers	5	5	4	4	4	4	4	4	4	4
Women Lecturers/ Sr. Lecturers	1	1	1	1	1	1	1	1	1	1
% Women Lecturers/ Sr. Lecturers	**20.0%**	**20.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**	**25.0%**
Total Tenured and Tenure Stream	72	70	65	65	66	66	68	72	72	72
Women Tenured and Tenure Stream	5	5	4	5	6	6	6	7	7	7
% Women Tenured and Tenure Stream	**6.9%**	**7.1%**	**6.2%**	**7.7%**	**9.1%**	**9.1%**	**8.8%**	**9.7%**	**9.7%**	**9.7%**
Total Academic Staff	77	75	69	69	70	70	72	76	76	76
Women Academic Staff	6	6	5	6	7	7	7	8	8	8
% Women Academic Staff	**7.8%**	**8.0%**	**7.2%**	**8.7%**	**10.0%**	**10.0%**	**9.7%**	**10.5%**	**10.5%**	**10.5%**

Figure H.7 **Department of Mechanical & Industrial Engineering: Academic Staff by Position with Percentage of Women, 2005–2006 to 2014–2015**



	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Assistant Professors	10	13	14	13	11	8	7	7	6	6
Women Assistant Professors	0	0	1	5	6	5	5	4	2	2
% Women Assistant Professors	**0.0%**	**0.0%**	**7.1%**	**38.5%**	**54.5%**	**62.5%**	**71.4%**	**57.1%**	**33.3%**	**33.3%**
Associate Professors	5	6	7	8	12	15	16	14	16	15
Women Associate Professors	2	2	2	2	2	3	3	3	6	5
% Women Associate Professors	**40.0%**	**33.3%**	**28.6%**	**25.0%**	**16.7%**	**20.0%**	**18.8%**	**21.4%**	**37.5%**	**33.3%**
Professors	24	24	23	26	24	24	24	28	28	29
Women Professors	1	2	2	2	2	2	2	3	3	4
% Women Professors	**4.2%**	**8.3%**	**8.7%**	**7.7%**	**8.3%**	**8.3%**	**8.3%**	**10.7%**	**10.7%**	**13.8%**
Lecturers/ Sr. Lecturers	1	1	1	3	3	2	3	3	3	3
Women Lecturers/ Sr. Lecturers	0	0	0	1	1	0	0	0	0	0
% Women Lecturers/ Sr. Lecturers	**0.0%**	**0.0%**	**0.0%**	**33.3%**	**33.3%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Total Tenured and Tenure Stream	39	43	44	47	47	47	47	49	50	50
Women Tenured and Tenure Stream	3	4	5	9	10	10	10	10	11	11
% Women Tenured and Tenure Stream	**7.7%**	**9.3%**	**11.4%**	**19.1%**	**21.3%**	**21.3%**	**21.3%**	**20.4%**	**22.0%**	**22.0%**
Total Academic Staff	40	44	45	50	50	49	50	52	53	53
Women Academic Staff	3	4	5	10	11	10	10	10	11	11
% Women Academic Staff	**7.5%**	**9.1%**	**11.1%**	**20.0%**	**22.0%**	**20.4%**	**20.0%**	**19.2%**	**20.8%**	**20.8%**

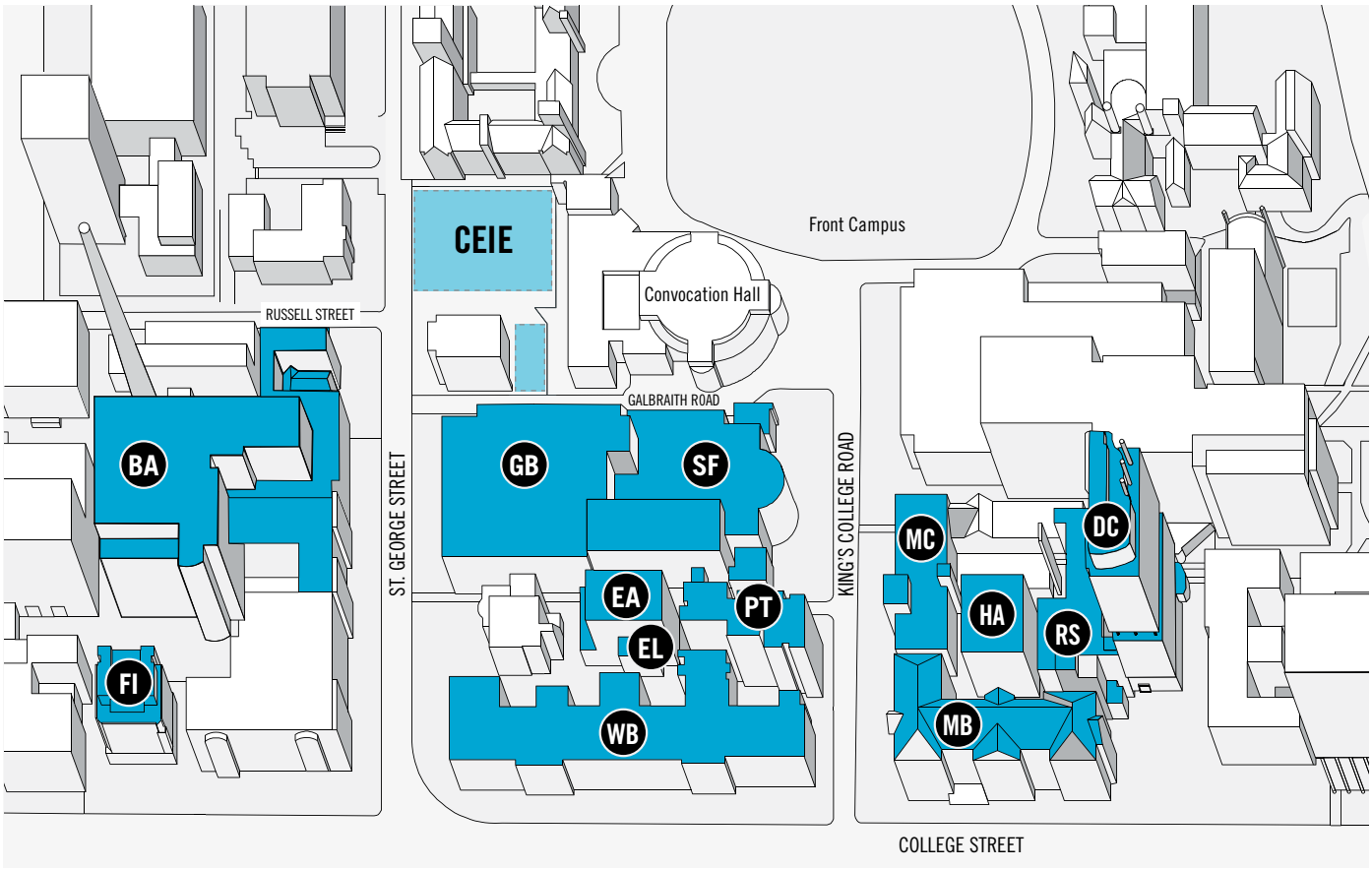
Figure H.8 **Department of Materials Science & Engineering: Academic Staff by Position with Percentage of Women, 2005–2006 to 2014–2015**



	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14	2014–15
Assistant Professors	1	1	2	2	1	1	2	2	2	3
Women Assistant Professors	0	0	0	0	0	0	0	0	0	0
% Women Assistant Professors	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Associate Professors	4	4	4	2	3	3	3	4	4	4
Women Associate Professors	1	1	1	1	1	1	1	1	1	1
% Women Associate Professors	**25.0%**	**25.0%**	**25.0%**	**50.0%**	**33.3%**	**33.3%**	**33.3%**	**25.0%**	**25.0%**	**25.0%**
Professors	10	9	10	10	10	10	10	8	7	7
Women Professors	0	0	0	0	0	0	0	0	0	0
% Women Professors	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Lecturers/ Sr. Lecturers	0	0	0	0	0	0	0	0	0	0
Women Lecturers/ Sr. Lecturers	0	0	0	0	0	0	0	0	0	0
% Women Lecturers/ Sr. Lecturers	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
Total Tenured and Tenure Stream	15	14	16	14	14	14	15	14	13	14
Women Tenured and Tenure Stream	1	1	1	1	1	1	1	1	1	1
% Women Tenured and Tenure Stream	**6.7%**	**7.1%**	**6.3%**	**7.1%**	**7.1%**	**7.1%**	**6.7%**	**7.1%**	**7.7%**	**7.1%**
Total Academic Staff	15	14	16	14	14	14	15	14	13	14
Women Academic Staff	1	1	1	1	1	1	1	1	1	1
% Women Academic Staff	**6.7%**	**7.1%**	**6.3%**	**7.1%**	**7.1%**	**7.1%**	**6.7%**	**7.1%**	**7.7%**	**7.1%**

Appendix I: The Engineering Precinct

The map below highlights buildings on the St. George campus that form the Engineering Precinct. Most of our buildings reside on the southern-most part of campus. Along with UTIAS in Downsview, our offices at 256 McCaul Street and 704 Spadina Avenue, and the site of the forthcoming CEIE, these 17 buildings house our students, faculty, staff, research and teaching spaces. For details on the buildings we occupy, please see Chapter 11: Financial and Physical Resources.



BA	Bahen Centre for Information Technology
DC	Donnelly Centre for Cellular and Biomolecular Research (CCBR)
EA	Engineering Annex / Electro-Metallurgy Lab Building (South Side)
EL	Electrometallurgy Lab
FI	Fields Institute
GB	Galbraith Building
HA	Haultain Building
MB	Lassonde Mining Building
MC	Mechanical Engineering Building
PT	D.L. Pratt Building
RS	Rosebrugh Building
SF	Sandford Fleming Building
WB	Wallberg Building
–	256 McCaul Street [not pictured]
–	704 Spadina Avenue [not pictured]
–	UTIAS (Downsview) [not pictured]
CEIE	Centre for Engineering Innovation & Entrepreneurship (coming in 2017)