





BY THE NUMBERS

EXCELLENCE, INNOVATION, LEADERSHIP: RESEARCH AT THE UNIVERSITY OF TORONTO





A POWERFUL PARTNERSHIP

The combination of U of T and the 10 partner hospitals affiliated with the university creates one of the world's largest and most innovative health research forces. More than 1,900 researchers and over 4,000 graduate students and postdoctoral fellows pursue the next vital steps in every area of health research imaginable.





^{*} Current Foreign Honorary Members only ** The National Academies consists of: Members or Foreign Asssociate Members of the Institute of Medicine, National Academy

The National Academies consists of: Members or Foreign Associate Members of the institute of Medicine, National Academy of Engineering and National Academy of Sciences
 *** As of August 2009
 **** Federal Granting Councils' Highest Awards: NSERC: Gerhard Hertzberg Canada Gold Medal for Science and Engineering; CIHR: Michael Smith Prize in Health Research; SSHRC: Gold Medal for Achievement in Research

The following honours consist of data up to 2008 only: Federal Granting Councils, National Academies and Steacie Prize

KESEARCH FUNDING

U of T's research funding has been increasing steadily over the past decade.



Research funding at U of T comes from a variety of sources, in particular the federal and provincial governments.

Research Funds Awarded by Sector (2007-08) Total: \$850M



U of T consistently leads all other Canadian universities in investment from federal granting agencies.

Federal Granting Council Funding to G13 Universities (2008-09)

FEDERAL FUNDING



Data Sources: Federal Granting Councils Excludes Networks of Centres of Excellence, Canada Research Chairs, Indirect Costs and funding for the Canadian Microelectronics Corporation Affiliates and partner hospitals counted with each university

Canada Research Chairs at G13 Universities (2008-09)



Data Source: CRC website, updated January 2009 Affiliates and partner hospitals counted with each university

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DERAL FUNDING

U of T consistently leads all other Canadian universities in investment from federal granting agencies.

Canada Foundation for Innovation Funding to G13 Universities



U of T leads all Ontario universities in funding from the Ministry of Research and Innovation.

Ontario Ministry of Research and Innovation Funding Top 10 universities

PROVINCIAL FUNDING



Limited to main competitive programs (funding since inception) Limited to universities (includes partner hospitals and affiliates)

 Data Sources:

 Research Infrastructure Award – up to November 27, 2008

 Ontario Research Fund Research Excellence Award – Rounds 1 to 3 (MRI web site September 10, 2009)

 Early Researcher Award estimated to be Styapo.oo per award; Rounds 1 to 5 (MRI web site September 3, 2009)

 Post-Doctoral Fellowship Allocations – Rounds 1 to 3, valued at \$50,000 each (MRI, September 4, 2009)

 Ontario Research Chair – Round 1 (MRI web site November 23, 2008)

 Premier Stocwery Award Round 1, 2 & 8 (MRI web site September 3, 2009)

 Premier Summit Award Round 1, 2 & 3 (MRI web site September 3, 2009)

Data Source: CFI website, June 18, 2009 (funding since inception) Affiliates and partner hospitals counted with each university

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INDUSTRY FUNDING

U of T is among Canada's leaders in industry-sponsored research.

Industry Funding to G13 Universities (2007-08)



U of T is among North America's leaders in new invention disclosures.

Invention Disclosures (2005-07)





Note: University of Toronto includes the following affiliated hospitals: Bloorview Kids Rehab, Centre for Addiction and Mental Health, Hospital for Sick Children, Sunnybrook Health Sciences Centre and University Health Network University of California, only available as a system aggregate, is not shown

Data Source: CAUBO 2007-08 Toronto data corrected for one-year lag in reporting from partner hospitals McMaster not shown due to comparability issues

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INNOVATIONS

INNOVATIONS

U of T is among North America's leaders in creating spin-off companies.

New Spin-off Companies (2005-07)

U.S. & Canadian universities



Data Source: AUTM Survey FY 2007, 2006 and 2005

Note: University of Toronto includes the following affiliated hospitals: Bloorview Kids Rehab, Centre for Addiction and Mental Health, Hospital for Sick Children, Sunnybrook Health Sciences Centre and University Health Network University of California, only available as a system aggregate, is not shown

U of T is one of the leading institutions in North America for publications and citations.

Rankings on Publications and Citations (2004-08)

	G13 (Canada)		AAU [†] Public		AAU [†] All	
	Publications	Citations	Publications	Citations	Publications	Citations
All Fields*	1		1		2	
All Sciences*	1		1		2	
Health & Life Sciences*	1		1		2	
Paediatrics	1		1		2	
Paediatrics & Pharmacy	1		1		2	
Oncology	1		1		2	
Genetics & Heredity	1		1		2	
Engineering & Materials Science**	1		6		7	12
Environmental Engineering	1		2		2	
Biomedical Engineering	1		1		2	
Physics, Atomic, Molecular & Chemical	1		3		7	
Optics	1		3		8	10
Physical Chemistry	1		4		6	11
Social Sciences**	1		3		4	
Behavioural Sciences	1		1		2	
Criminology & Penology	1		2		2	

Data Source: Thomson Reuters, University Science Indicators (U.S. and Canada), Deluxe Edition, 2008, unless otherwise indicated by "(Standard and Deluxe Editions, U of T groupings) or "(Standard Edition) 'Association of American Universities supplemented with the Canadian G13 institutions and the University of California at San Francisco. Data not available for Texas A&M College Station

World University Rankings

In the 2009 Times Higher Education-QS World University Rankings, U of T was ranked by academic peers globally as one of the leading institutions in all fields:

- $8^{\mbox{\tiny th}}$ in the world in Engineering and Information Technology
- 11th in the world in Life Sciences and Biomedicine
- 11th in the world in Arts and Humanities
- 14th in the world in Natural Sciences
- 15th in the world in Social Sciences

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IMPAC

AWARDS AND HONOURS

Selected Awards and Honours in the past three years.

Aurora Prize, Social Sciences and Humanities Research Council Anthony Glinoer, French

Bower Award for Achievement in Science, Franklin Institute W. Richard Peltier, Physics

Brockhouse Canada Prize, Natural Sciences and Engineering Research Council of Canada Javad Mostaghimi, Mechanical & Industrial

Tom Chau, Institute of Biomaterials & Biomedical

Engineering Brendan Frey, Electrical & Computer Engineering Ray Jayawardhana, Astronomy & Astrophysics Shana O. Kelley, Lesile Dan Faculty of Pharmacy Mihnea (Michael) Moldoveanu, Rotman School or nanogeneen Yverk Roo, Sugery Paul Salvini, Civil Engineering Rezz Satchu, Economics Aaron Schimmer, Medicine Michael Toylor, Sugery Peter Zandstra, Institute of Biometicals & Biomedical

Michael Smith Prize in Health Research, Canadian Institutes of Health Research Peter Singer, Medicine

Dan David Prize, Dan David Atom Egoyan, Dean's Distinguished Visitor in Theatre, Film, Music & Visual Studies

E.W.R. Steacie Fellowship, Natural Sciences and Engineering Research Council of Canada Brendan Frey, Electrical & Computer Engineering Ray Jayawardhana, Astronomy & Astrophysics Eckhard Meinrenken, Mathematics C. Barth Netterfield, Astronomy & Astrophysics,

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Locke Rowe, Ecology & Evolutionary Biology Gregory Scholes, Chemistry Aephraim Steinberg, Physics

Advancement of Science D. Grant Allen, Chemical Engineering & Applied

William Cluett, Chemical Engineering & Applied James Donaldson, Physical & Environmental Studies

Brendan Frey, Electrical & Computer Engineering Bryan W. Karney, Civil Engineering Susan McCahan, Mechanical & Industrial

Javad Mostaghimi, Mechanical & Industrial Laura Ann Petitto, Psychology, UTSC M. Jane Phillips, Chemical Engineering & Applied Chemistry Robert Reisz, Biology, UTM Kover restz, anacy, winn Keren Rice, Linguistics Edward Sargent, Electrical & Computer Engineering Donald Stuss, Medicine Christopher Yip, Chemical Engineering & Applied Peter Zandstra, Institute of Biomaterials & Biomedical

Jean Zu, Mechanical & Industrial Engineering

Engineering Barry Adams, Civil Engineering Cristina Amon, Mechanical & Industrial Engineering Will Bawden, Civil Engineering Michael Collins, Civil Engineering Levente Diosady, Chemical Engineering & Applied Chemistry Masahiro Kawaji, Chemical Engineering & Applied Chemistry Alexander McLean, Materials Science & Javad Mostaghimi, Mechanical & Industrial

Engineering Chul Park, Mechanical & Industrial Engineering Doug D. Perovic, Materials Science & Engineering Douglas Reeve, Chemical Engineering & Applied Jonathan Rose, Electrical & Computer Engineering

James Smith, Chemical Engineering & Applied Chemistry Bill Vanderburg, Civil Engineering

Sciences John R.G. Challis, Physiology Abdallah Duar, Dala Lano School of Philic Health John Evans, Medicine (Dictinguished Fellow) Geoffrey R. Fernie, Sugery Avrum I. Gottlieb, Labaratory Medicine & Pathobiology Alejandra R. Jadda, Anaestheau Wendy Levinson, Medicine David Locker, Dentistry Christopher McCulloch, Dentistry Roderick R. McInnes, Paediathics Stoban Nelson, Lawrence S. Biomberg Faculty of Nursion

Helene Polatajko, Occupational Health & Occupational Peter Singer, Medicine Arthur S. Slutsky, Medicine George Steiner, Medicine Mladen Vranic, Medicine, Physiology Paul Walfish, Medicine Kue Young, Dalla Lana School of Public Health

Fellow, Royal Society (UK) Fergus I.M. Craik, Psychology

Fellow, Royal Society of Canada Peter Backx, Physiology Ronald Beiner, Political Science, UTM Alan Bewell, English James Robert Brown, Philosophy James Kabert Brown, Printsdpny Robert Brym, Sociology Raymond G. Carlberg, Astronomy & Astrophysics J.K. Chambers, Linguistics Mark A. Cheetham, Art Jing Chen, Geography Gary Crawford, Anthropology, UTM Joseph G. Culotti, Molecular Genetics Abdallah Daar, Dalla Lana School of Public Health Eleftherios P. Diamandis, Laboratory Medicine & Pathobiology Anthony Doob, Criminology George Eleftheriades, Electrical & Comput Engineering Morley Gunderson, Economics Lisa Jeffrey, Computer & Mathematical Sciences, UTSC

Lewis E. Kay, Molecular Genetics, Biochemistry, Chemistry Eugenia Kumacheva, Chemistry Ian Lancashire, English Kenneth Leithwood, OISE/UT Hector Levesque, Computer Scien

Andres Lozano, Surgery Andreas Mandelis, Mechanical & Industrial Peter Martin, Canadian Institute for Theoretic

Astrophysics Eckhard Meinrenken, Mathematics Alberto O. Mendelzon, Computer & Mathematical John Mylopoulos, Computer Science John Mylopoulos, (compute Science Neil Nevitte, Patrical Science Pamelo S. Ohoshi, Medical Bophysics, Immunology Robert Orr, Physiss Terence W. Picton, Medicine Janet Polityy, Psychology, UTM Robert Reisz, Bology, UTM Robert Reisz, Bology, UTM Stephen Scherer, Maleculus Genetics Gregory Scholes, Chemistry Theodore Shepherd, Physics Sarra Shettleworth, Psychology Mally Shorkhet, Chemical Engineering & Applied Chemistry Peter Singer, Medicine Philip Sohm, Art Philip Sohm, Art Demetri Terzopoulos, Computer Science William Trimble, Biochemistry Mariana Valverde, Criminology Germaine Warkentin, English Barry Wellman, Sociology Jeff Wrana, Malecular Genetics R. Paul Young, Cnil Englineening Min Zhune Revolvence

Bancroft Award David J. Dunlop, Physics

Min Zhuo, Physiology

Henry Marshall Tory Medal J. Richard Bond, Canadian Institute for . Theoretical Astrophysics

Jason A. Hannah Medal J. Michael Bliss, History

John L. Synge Award Stephen A. Cook, Computer Science

Lorne Pierce Medal Rosemary Sullivan, English

McLaughlin Medal John R.G. Challis, Physiology Michael Tyers, Molecular Gene

Miroslaw Romanowski Medal W. Richard Peltier, Physics

Rutherford Memorial Medal in Chemistr Molly Shoichet, Chemical Engineering & Applied Gregory Scholes, Chemistry

Rutherford Memorial Medal in Physics C. Barth Netterfield, Astronomy & Astrophysics Aephraim Steinberg, Physics

Thomas W. Eadie Medal Alberto Leon-García, Electrical & Computer Engineering

Willet G. Miller Medal R. Paul Young, Civil Engine

Foreign Associate Member, National Academies – Institute of Medicine Peter Singer, Medicine Peter St George-Hyslop, Medicine

Foreign Associate Member, National Academies – National Academy of Innet Rossant Malerular Genetics

Foreign Honorary Member, American Academy of Arts and Sciences Spencer C.H. Barrett, Ecology & Evolutionary Biology John H. Dirks, Medicine Ernest J. Weinrib, Low

Founders Award, Society for Biomaterials Michael Sefton, Chemical Engineering & Applied Chemistry, Institute of Biomaterials & Biomedical Engineering

Francis Bacon Prize in the History and Philosophy of Science and Technology, California Institute of Technology – Francis Bacon Foundation Alexander Jones, Clessics

Gairdner Foundation Wightman Award, Gairdner Foundation Alan Bernstein, Molecular Genetics

Science and Engineering, Natural Sciences and Engineering Research J. Richard Bond, Canadian Institute for Theoretical

John Polanyi, Chemistry

Governor General's Awards in Visual and Media Arts, Canada Council for the Arts Tanya Mars, Humanities, UTSC

Guggenheim Fellowship, John Simon Guggenheim Memorial Michael Goldstein, Computer & Mathematical

ces, UT Soerices, UDC. Allan Greer, History Thomas Hurka, Philosophy Jerry Mitrovica, Physics Demetri Terzopoulos, Computer Science Peter Zandstra, Institute of Biomaterids & Biomedical

Heinz Lehmann Award, Canadian College of Neuropsychopharmacology Trevor Young, Psychiatry

Holberg International Memorial Prize, Ludvig Holberg Memorial Fund Ian M. Hacking, Philosophy

Humboldt Research Awards, Alexander von Humboldt Foundation J. Richard Bond, Canadian Institute for Theoretical

Lev Kofman, Canadian Institute for Theoretical Mark Lautens, Chemistry Robert Reisz, Biology, UTM

John Sipe, Physics International Order of Smile James Rutka, Surgery

Investigator Award, King Abdullah University of Science and Technology Edward Sargent, Electrical & Computer Engineering

John H. Chapman Award of Excellence, Canadian Space Agency Peter Hughes, University of Toronto Institute for Aerosonre Studie

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AWARDS AND HONOURS

Jonas Salk Award, Ontario March of Dimes Robert D. Inman, Medicine, Immunology Andres Lozano, Surgery

José Vasconcelos Award of Education, World Cultural Council Marlene Scardamalia. OISE/UT

Killam Prize, Canada Council for

the Arts J. Richard Bond, Canadian Institute for Theoretical Astrophysics Michael Sefton, Chemical Engineering & Applied Chemistry, Institute of Biomaterials & Biomedical Engineering Peter St George-Hyslop, Medicine Ernest J. Weinrib, Law

Killam Research Fellowship, Canada Council for the Arts

Virginia Brown, Medieval Studies Elizabeth Edwards, Chemical Engineering & Applied Chemistry Ian Lancashire, English Lynne Magnusson, English Molly Shoichet, Chemical Engineering & Applied Chemistry Douglas W. Stephan, Chemistry

Konrad Adenauer Research Award, Alexander von Humboldt Foundation Jennifer Whiting, Philosophy

Kyoto Prize, Inamori Foundation Anthony J. Pawson, Molecular Genetics

Laureate, Canadian Medical Hall of Fame Tak Mak, Medical Biophysics M. Vera Peters, Medicine Charles Tator, Surgery Endel Tulving, Psychology, Rotman Research Institute Mladen Vranic, Medicine, Physiology

L'Oreal-UNESCO Awards for Women in Science, L'Oreal-UNESCO Eugenia Kumacheva, Chemistry

Manning Award of Distinction, Ernest C. Manning Awards Foundation Stuart Foster, Medical Biophysics

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March of Dimes Prize in Developmental Biology, March of Dimes Foundation Janet Rossant, Molecular Genetics

Maud Menten New Principal Investigator Prize, CIHR Daniel Durocher, Molecular Genetics

Member, Canadian Science and Engineering Hall of Fame Louis Siminovitch, Molecular Genetics

Member, National Academies – National Academy of Engineering Cristina Amon, Mechanical & Industrial Engineering

Molson Prize, Canada Council for the Arts L. Wayne Sumner, Philosophy

Order of Canada

Michael Baker, Medicine George H. Beaton, Nutritional Science Raymond Breton, Sociology Ian D. Clark, Public Policy & Governance Bernard Dickens, Law John H. Dirks. Medicine George Elliott Clarke, English J. Barry French, University of Toronto Institute for Paul Garfinkel, Psychiatry Bernard S. Goldman, Surgery Patrick Gullane, Otolaryngology Doreen Hall, Music Norman Levine, Dentistry Jeffrey Lozon, Health Policy, Management & Evaluation Michael R. Marrus, History Roderick R. McInnes, Paediatrics Donald E. Meeks, The Factor-Inwentash Faculty of Social Work Timothy M. Murray, Medicine David Naylor, Medicine Dorothy Pringle, Lawrence S. Bloomberg Faculty of Nursing Henry A. Regier, Ecology & Evolutionary Biology Mary Seeman, Psychiatry Dennis Smith, Dentistry John S. Speakman, Ophthalmology & Vision Sciences Janice Gross Stein, Political Science Marvin Tile, Surgery

Endel Tulving, Psychology, Rotman Research Institute E. Douglas Wigle, Medicine David Young, Music George Zarb, Dentistry Stanley Zlotkin, Paediatrics

Order of Ontario Michael Baker, Medicine J. Richard Bond, Canadian Institute for Theoretical

Astrophysics Brenda L. Gallie, Ophthalmology & Vision Sciences David H. MacLennan, Banting & Best Department of Medical Research Tak Mak, Medical Biophysics Ernest A. McCulloch, Medical Biophysics Lily McGregor, First Nations House/UT Roderick R. McInnes, Poediatrics Frances A. Shepherd, Medicine, Division of Medical Oncology Janice Gross Stein, Political Science Ronald W. Taylor, Medicine James Till, Medical Biophysics Paul G. Walfish, Medicine

Peter Gruber Cosmology Prize, Gruber

Foundation J. Richard Bond, Canadian Institute for Theoretical Astrophysics

Premier's Catalyst Award, Ministry of Research and Innovation Parham Aarabi, Electrical & Computer Engineering

Premier's Discovery Award for Individual Research, Ministry of

Research and Innovation Spencer C.H. Barrett, Ecology & Evolutionary Biology Stuart Foster, Medical Biophysics Lewis E. Kay, Molecular Genetics, Biochemistry, Chemistry Andreas Mandelis, Mechanical & Industrial Engineering

Premier's Summit Award, Ministry of

Research and Innovation John E. Dick, Molecular Genetics Tak Mak, Medical Biophysics Benjamin G. Neel, Medical Biophysics Anthony J. Pawson, Molecular Genetics Stephen Scherer, Molecular Genetics Frances A. Shepherd, Medicine, Division of Medical Oncology Peter St George-Hyslop, Medicine Prix Galien Canada Research Award, Prix Galien Daniel Drucker, Medicine

Professional Prix de Rome in Architecture, Canada Council for the Arts Pierre Belanger, John H. Daniels Faculty of Architecture, Landscape & Design

Rick Gallop Award Recognizing Research Excellence, Heart and Stroke Foundation of Ontario Duminda N. Wijeysundera, Anesthesia

Ronald J. Thom Award for Early Design, Canada Council for the Arts Shane Williamson, John H. Daniels Faculty of

Senior Fellow, McLean Award James Colliander, Mathematics Baochun Li, Electrical & Computer Engineering Aephraim Steinberg, Physics Yu Sun, Mechanical & Industrial Engineering Peter Zandstra, Institute of Biomaterials & Biomedical Engineering

Sloan Research Fellowship, Alfred P. Sloan Foundation Ravin Balakrishnan, Computer Science Valentin Blomer, Mathematical & Computational Sciences, UTM Vy Maria Dong, Chemistry Aaron Hertzmann, Computer Science Arun Paramekanti, Physics Aaron Wheeler, Chemistry Stephen Wright, Ecology & Evolutionary Biology Deborah Zamble, Chemistry

SSHRC Gold Medal for Achievement in Research, Social Sciences and Humanities Research Council Ian M. Hacking, Philosophy

Steacie Prize for Natural Sciences, E.W.R. Steacie Foundation Ray Jayawardhana, Astronomy & Astrophysics Synergy Award for Innovation, Natural Sciences and Engineering Research Council of Canada Elizabeth Edwards, Chemical Engineering & Applied Chemistry Luis Seco, Mathematics

Top 35 Under 35, MIT Technology Review Milica Radisic, Chemical Engineering & Applied Chemistry

Trudeau Foundation Fellowship, Trudeau Foundation Rosemary Sullivan, English

Trudeau Mentor, Trudeau Foundation Ursula M. Franklin, Metallurgy & Materials Science

ISI Highly-Cited Researchers (As of March 2009) The following researchers are among the top 250 most highly cited in each of 21 subject categories over the last 25 years as indexed by Thomson ISI.

Biology and Biochemistry Sergio Grinstein, Biochemistry David H. MacLennan, Banting & Best Department of Medical Research

Chemistry Lewis E. Kay, Molecular Genetics, Biochemistry, Chemistry Mitchell A. Winnik, Chemistry

Computer Science Radford M. Neal, Statistics, Computer Science Subbarayan Pasupathy, Electrical & Computer Engineering Charles Rackoff, Mathematical & Computational Sciences, UTM

Kenneth C. Sevcik, Computer Science

Ecology/Environment Peter A. Abrams, Ecology & Evolutionary Biology Wan-Ying Shiu, Centre for Environment

Engineering Bruce Allen Francis, Electrical & Computer Engineering Geoffrey E. Hinton, Computer Science Geosciences W. Richard Peltier, Physics

Immunology, Molecular Biology and Genetics Tak Mak, Medical Biophysics

Materials Science Karl T. Aust, Materials Science & Engineering Neil Coombs, Chemistry (Nano Imaging Facility Supervisor) Geoffrey A. Ozin, Chemistry

Mathematics Nancy Reid, Statistics

Mathematics and Engineering W.M. Wonham, Electrical & Computer Engineering

Medical Biophysics and Immunology Pamela S. Ohashi, Medical Biophysics, Immunology

Molecular Biology and Genetics Anthony J. Pawson, Molecular Genetics Johanna M. Rommens, Molecular Genetics Janet Rossant, Molecular Genetics Jeffrey L. Wrana, Molecular Genetics

Pharmacology Werner Kalow, Pharmacology Philip Seeman, Pharmacology Edward M. Sellers, Pharmacology

Plant and Animal Science Stephen S. Tobe, Cell & Systems Biology

Psychology/Psychiatry Paul E. Garfinkel, Psychiatry Janet Polivy, Psychology, UIM Endel Tulving, Psychology, Rotman Research Institute

Social Sciences Keith E. Stanovich, Human Development & Applied Psychology, OISE/UT

Space Sciences J. Richard Bond, Canadian Institute for Theoretical Astrophysics Raymond G. Carlberg, Astronomy & Astrophysics Howard K.C. Yee, Astronomy & Astrophysics





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