

Research Profile: Local & Global Impact

R G I S

Message from the Vice-Principal (Research & Graduate Studies)

In the fall of 2008, I completed a three-year term as Vice-Principal (Research & Graduate Studies) at the University of Toronto Scarborough. Over that time, it has been a privilege to watch the research enterprise at this campus undergo a truly transformative phase. Many colleagues have worked diligently with me to ensure that scholarship and discovery become integral to the academic life at UTSC, and for their efforts I am grateful.



Research at UTSC has experienced a real maturation, coinciding with a dramatic growth in faculty and students. Yet, it is not head-count numbers but careful planning that has led to our position of strength today.

A research agenda is not built overnight. It takes time. Over many years, UTSC has made tough decisions, hired faculty strategically to allow research clusters to emerge, and has carefully directed resources to build infrastructure and employ graduate students in areas of distinction.

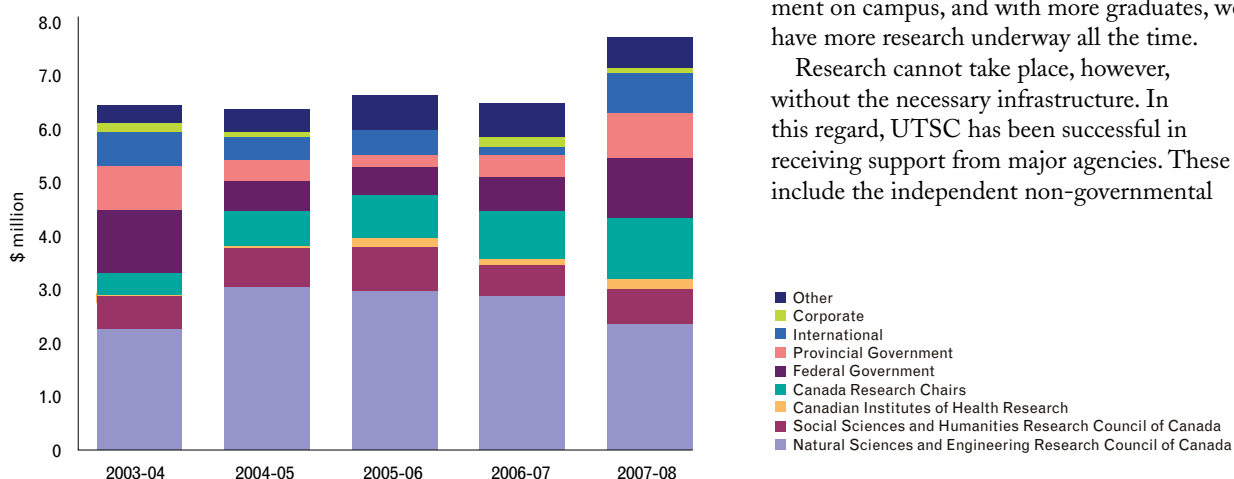
UTSC is now a full research partner in the University of Toronto tri-campus system. We boast eight Canada Research Chairs (CRC) –

the hallmark federal government program that funds research programs of the most accomplished international minds at Canadian universities. Our success at creating eight Chairs at UTSC is relatively high for a campus of this size.

Over the past five years, the total amount of annual funding for research projects underway at UTSC has grown to almost \$8 million – an increase of 19 percent. Across all academic departments, a true research culture has emerged, with collaborations and mentoring among faculty leading to greater success in grant proposals. Our faculty continue to submit grant proposals in increasing numbers, and grants are being awarded in increasing numbers, too. For the past three years, we have more than doubled our annual graduate enrolment on campus, and with more graduates, we have more research underway all the time.

Research cannot take place, however, without the necessary infrastructure. In this regard, UTSC has been successful in receiving support from major agencies. These include the independent non-governmental

Total research funding by source, 2003-04 to 2007-08



48

Canada Foundation for Innovation (CFI), which supports top research initiatives that strengthen Canada's capacity for innovation. In recent years, such funding has allowed, for example, our Psychology Department to expand its neuroscience imaging facility into a state-of-the-art lab, our Biological Sciences Department to install highly specialized, climate-controlled plant growth rooms, and our environmental geochemists to acquire and upgrade nuclear magnetic resonance spectrometers.

The opening of the new Science Research Building in October 2008 was a watershed for new infrastructure on this campus. I cannot overemphasize its significance to faculty and the community at large, as it will make possible research of global relevance. This state-of-the-art 6,080-square-metre facility provides lab space for 16 Principal Investigators and their research staff, all of them focused on responding to issues that matter to the whole planet. This new facility will be an important home for students at all stages of their academic careers, from the undergraduates working on lab projects to graduate and post-doctorate students, as well as research associates.

I have had the pleasure and privilege to be involved from the earliest stages of planning for the Science Research Building to the final construction. We have achieved our goal to create a new paradigm for dynamic research space. The open-concept layout will foster dynamic interdisciplinary interaction between researchers and students. Organized into research clusters, the labs will facilitate the types of collaborations that will lead to important discoveries.

UTSC now has a strong platform on which to reinforce existing programs and build new clusters of strength. As we continue our success in attracting exceptional faculty who build international reputations for research excellence, the University of Toronto Scarborough will, undoubtedly, soon take its place as a leading centre for research on the world stage.

Dr. John R. Coleman
Vice-Principal (Research & Graduate Studies)
Professor of Cell & Systems Biology



Summary of research grants & contracts, 2007-08

	\$ Value	Number
■ Biological Sciences	2,669,091	54
■ Computer & Mathematical Sciences	760,827	22
■ Humanities	359,766	34
■ Management	275,731	21
■ Physical & Environmental Sciences	1,785,500	38
■ Psychology	1,047,747	23
■ Social Sciences	687,223	26
Total	\$7,585,885	218

Summary of research publications, 2007-08

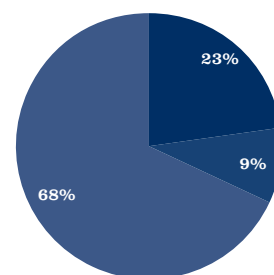
	Number of papers in refereed journals	Number of books	Number of book chapters
■ Biological Sciences	44	1	5
■ Computer & Mathematical Sciences	45	0	1
■ Humanities	92	2	25
■ Management	39	3	18
■ Physical & Environmental Sciences	91	3	5
■ Psychology	56	0	17
■ Social Sciences	40	7	49
Total	407	16	120

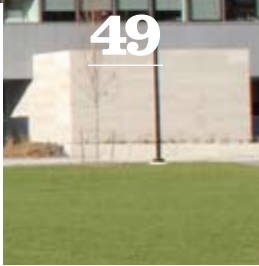
Summary of graduate-student supervision, 2007-08

	Number of graduate students supervised	Number of post-doctoral fellows
■ Biological Sciences	59	17
■ Computer & Mathematical Sciences	52	12
■ Humanities	63	1
■ Management	16	2
■ Physical & Environmental Sciences	51	6
■ Psychology	42	3
■ Social Sciences	50	2
Total	333	43

Graduate students supervised by UTSC faculty

Master of Art
Master of Science
Doctor of Philosophy





Designed for discovery

Our new Science Research Building (SRB) is dedicated exclusively to fostering collaborative research at UTSC. Scientists in the fields of brain science, plant biology and environmental science work in 16 open-concept labs in the three-storey SRB, which is situated next to the Highland Creek Ravine. Designed by Toronto's Moriyama + Tesbima Architects, the state-of-the-art facilities are making a vital contribution to the intellectual life of the campus and enriching the undergraduate and graduate experience.

Conferences & Presentations

NORTH & CENTRAL AMERICA

- Albuquerque, New Mexico, USA
- Amherst, Massachusetts, USA
- Ann Arbor, Michigan, USA
- Arlington, Virginia, USA
- Asilomar, California, USA
- Athens, Ohio, USA
- Atlanta, Georgia, USA
- Baltimore, Maryland, USA
- Banff, Alberta, Canada
- Barrie, Ontario, Canada
- Bellingham, Washington, USA
- Berkeley, California, USA
- Boston, Massachusetts, USA
- Boyer Falls, Michigan, USA
- Brockville, Ontario, Canada
- Cambridge, Massachusetts, USA
- Cancún, México
- Cape Breton, Nova Scotia, Canada
- Chapel Hill, North Carolina, USA
- Chattanooga, Tennessee, USA
- Chicago, Illinois, USA
- Cold Spring Harbor, New York, USA
- Columbus, Ohio, USA
- Corvallis, Oregon, USA
- Cuernavaca, México
- Denver, Colorado, USA
- Durham, Ontario, Canada
- Edmonton, Alberta, Canada
- Ellis Island, New York, USA
- Etobicoke, Ontario, Canada
- Ewing, New Jersey, USA
- Fairfax, Virginia, USA
- Fargo, North Dakota, USA
- Fredericton, New Brunswick, Canada
- Fredonia, New York, USA
- Gatineau, Quebec, Canada
- Georgetown, Washington, D.C., USA
- Guelph, Ontario, Canada
- Halifax, Nova Scotia, Canada
- Hamilton, Ontario, Canada
- Honolulu, Hawaii, USA
- Ithaca, New York, USA
- Kentucky, USA
- Kingston, Ontario, Canada
- Lafayette, Indiana, USA
- Laurentians, Quebec, Canada
- Lincoln, Nebraska, USA
- Long Beach, California, USA
- Los Angeles, California, USA
- Louisville, Kentucky, USA
- Lubbock, Texas, USA
- Madison, Wisconsin, USA
- Markham, Ontario, Canada
- Marquette, Michigan, USA
- Memphis, Tennessee, USA
- Miami, Florida, USA
- Middlebury, Vermont, USA
- Milwaukee, Wisconsin, USA
- Minneapolis, Minnesota, USA
- Mississauga, Ontario, Canada
- Montreal, Quebec, Canada
- Mountain View, California, USA
- Nashville, Tennessee, USA
- New Orleans, Louisiana, USA
- New York, New York, USA
- North York, Ontario, Canada

- Oakville, Ontario, Canada
- Orlando, Florida, USA
- Ottawa, Ontario, Canada
- Pacific Grove, California, USA
- Palo Alto, California, USA
- Park City, Utah, USA
- Peterborough, Ontario, Canada
- Philadelphia, Pennsylvania, USA
- Pittsburgh, Pennsylvania, USA
- Portland, Oregon, USA
- Princeton, New Jersey, USA
- Providence, Rhode Island, USA
- Puebla, México
- Puerto Vallarta, México
- Quebec City, Quebec, Canada
- Richmond, British Columbia, Canada
- Riverside, California, USA
- Rochester, New York, USA
- San Antonio, Texas, USA
- San Diego, California, USA
- San Francisco, California, USA
- San Jose, California, USA
- Sarasota, Florida, USA
- Saskatoon, Saskatchewan, Canada
- Savannah, Georgia, USA
- Scarborough, Ontario, Canada
- Seattle, Washington, USA
- Smithfield, Rhode Island, USA
- Snowbird, Utah, USA
- St. Louis, Missouri, USA
- Stanford, California, USA
- Stratford, Ontario, Canada
- Syracuse, New York, USA
- Toronto, Ontario, Canada
- Trois-Rivières, Quebec, Canada
- Tucson, Arizona, USA
- Urbana, Illinois, USA
- Vancouver, British Columbia, Canada
- Victoria, British Columbia, Canada
- Waikoloa, Hawaii, USA
- Washington D.C., USA
- Waterloo, Ontario, Canada
- Williamstown, Massachusetts, USA
- Windsor, Ontario, Canada
- Winnipeg, Manitoba, Canada
- Yellowknife, Northwest Territories, Canada
- Zatatecas, México

EUROPE

- Amsterdam, The Netherlands
- Arrábida, Portugal
- Bairrigg, Lancaster, UK
- Barcelona, Spain
- Barga, Italy
- Berlin, Germany
- Birmingham, UK
- Borovets, Bulgaria
- Braga, Portugal
- Brussels, Belgium
- Cambridge, England
- Constance, Germany
- Copenhagen, Denmark
- Puerto Vallarta, México
- Coventry, England
- Crieff, Scotland
- Davos, Switzerland
- Dubrovnik, Croatia
- Durham, UK
- Edinburgh, Scotland
- Florence, Italy
- Frankfurt (Oder), Germany
- Geneva, Switzerland
- Halle, Germany
- Hamburg, Germany
- Heidelberg, Germany
- Helsinki, Finland
- Innsbruck, Austria
- Kalmar, Sweden
- Krakow, Poland
- Leeds, England
- Leiden, The Netherlands
- Leuven, Belgium
- Lisbon, Portugal
- Liverpool, England
- Ljubljana, Slovenia
- London, England
- Madrid, Spain
- Malmö, Sweden
- Manchester, UK
- Marburg, Germany
- Moldova
- Mont Verité, Switzerland
- Murcia, Spain
- Newcastle, United Kingdom
- Oberwolfach, Germany
- Paris, France
- Perugia, Italy
- Pisa, Italy
- Poznan, Poland
- Prague, Czech Republic
- Rotterdam, Netherlands
- Sheffield, UK
- St. Andrews, Scotland
- St. Malo, France
- Torquay, England
- Torun, Poland
- Trieste, Italy
- Turku, Finland
- Vienna, Austria
- Zürich, Switzerland

ASIA

- Almaty, Kazakhstan
- Ankara, Turkey
- Beijing, China
- Beirut, Lebanon
- Emek Hefer, Israel
- Hong Kong, China
- Jerusalem, Israel
- Jurong, Singapore
- Kent Ridge, Singapore
- Kuala Lumpur, Malaysia
- Osaka, Japan
- Seoul, South Korea
- Shanghai, China
- Suzhou, China
- Tokyo, Japan

SOUTH AMERICA

- Atibaia, São Paulo, Brazil
- Buenos Aires, Argentina
- Catamarca, Argentina
- Ciudad Colón, Costa Rica
- Comayagua, Honduras
- Montevideo, Uruguay
- Panama City, Panama
- Rio de Janeiro, Brazil

AFRICA

- Cape Town, South Africa
- Durban, South Africa
- Gaborone, Botswana
- Johannesburg, South Africa
- KwaZulu-Natal, South Africa

AUSTRALIA

- Canberra, Australia
- Kiolo, Australia
- Perth, Australia
- Sydney, Australia
- Wellington, New Zealand

