Research in the University of Toronto’s Faculty of Medicine spans ten Toronto sites, collectively known as the Toronto Academic Health Sciences Network (TAHSN). Partners include the Downtown Toronto (St. George) campus of University of Toronto (UofT) and nine affiliated academic hospitals: Baycrest Health Sciences, the Centre for Addiction and Mental Health (CAMH), Holland Bloorview Kids Rehabilitation Hospital, The Hospital for Sick Children (SickKids), Sinai Health System, St. Michael’s Hospital, Sunnybrook Health Sciences Centre, University Health Network (UHN) and Women’s College Hospital (WCH).
A Message From the Vice Dean Research and Innovation

The University of Toronto's Faculty of Medicine is Canada's leader in medical discovery research and clinical innovation. This report outlines our impressive research impact and growth for 2014-2015, a year which further strengthened partnerships between the University of Toronto and its nine fully affiliated hospitals. In particular, this year brought new opportunities for major research impacts in cardiovascular health through the Ted Rogers Centre for Heart Research, a collaboration between the University of Toronto, the Hospital for Sick Children, and University Health Network. As we celebrate our research achievements and partnerships, we invite you to join us in the years to come as we continue to break new ground in research and put our ideas into action.

- Alison Buchan, PhD, FCAHS

Strategic Research Funding

Preparing for Success

GRANT & PROGRAM DEVELOPMENT SERVICE (EST. 2011)

April 2014 - March 2015

- 129 proposals edited for 17 agencies
- 86 researcher clients (41% of St. George Campus researchers)
- 27% CIHR success rate for operating grants (vs. 15% national success rate)
- $25,708,000 in research funding
Benchmarking

The Faculty of Medicine’s research output and impact rank the highest among medical research centers in Canada, and compete with best-in-class institutions worldwide. The faculty’s publication output is double that of other major Canadian universities, our research ranks in the top 1 percent by citations among publicly funded universities globally, and measures of our publication impact are consistently well over the global average.
Commercialization

Patent Applications by Site

Includes all patent applications (excluding renewal or updates over the past 6 years) with University of Toronto or an affiliated hospital as an applicant and FOM faculty as inventors as obtained from the PATENTSCOPE database of the World Intellectual Property Organization. For patents with multiple University of Toronto applicants, all sites and departments received credit.

Patent Applications by Department

PARTNERS IN INNOVATION

CANADA

INSTITUT DE RECHERCHES CLINICIDES DE MONTREAL
McGILL UNIVERSITY
UNIVERSITE DE MONTREAL
UNIVERSITY OF BRITISH COLUMBIA
WESTERN UNIVERSITY

USA

COLUMBIA UNIVERSITY
JOHNS HOPKINS UNIVERSITY
NEW YORK UNIVERSITY
NORTHEASTERN UNIVERSITY
UNIVERSITY OF CALIFORNIA
UNIVERSITY OF CHICAGO
UNIVERSITY OF MARYLAND, BALTIMORE
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
UNIVERSITY OF TEXAS
TUFTS UNIVERSITY

INTERNATIONAL

CHARITE UNIVERSITY HOSPITAL
KING SAUD UNIVERSITY
VILNIUS UNIVERSITY

INDUSTRY

APOTEX
BECKMAN COULTER
CELLAEAGIS DEVICES
COLIBRI TECHNOLOGIES
FORTICELLE
GSX
KRAFT
ROCHE
TECAN
TOSHIBA

Benchmarking Data

Ranking information is based on data obtained from the Association of University Technology Managers (AUTM).

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<th>INVENTION DISCLOSURES</th>
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<th>432</th>
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<td>Stanford Univ.</td>
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<td>Johns Hopkins Univ.</td>
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<td>Univ. of Pittsburgh</td>
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<td>START-UPS</td>
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<td>1</td>
<td>1</td>
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<td>Purdue Research Fdn.</td>
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University systems not included

Facility-Wide Benchmarking

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<th>TIMES HIGHER EDUCATION (CLINICAL, PRE-CLINICAL &amp; HEALTH)</th>
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<td>NATIONAL TAIWAN UNIVERSITY RANKING (MEDICINE)</td>
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</table>
Featured Awardees 2014

**Daniel J. Drucker, OC, MD, FRS, FRSC, FRCPC**
Professor, Department of Medicine  
Senior Investigator, Lunenfeld-Tanenbaum Research Institute, Sinai Health System  
Officer of the Order of Canada  
Fellow of the Royal Society

Dr. Daniel Drucker is a world leader in the translational biology of gastrointestinal hormones. His pioneering studies of gut hormone action have enabled development of three new classes of medications for the treatment of diabetes, obesity and short bowel syndrome (SBS), including teuglutide, the first glucagon-like-peptide-2 analogue approved for treatment of SBS. Dr. Drucker is the first Canadian researcher to be honoured with the Manpei Suzuki International Prize, the world’s most valuable prize for diabetes research, and was appointed to the Order of Canada “for his contributions to the development of medicines used around the world to treat diabetes and intestinal disorders.”

**Angela Colantonio, PhD, FACRM, FCAHS**
Professor, Department of Occupational Science and Occupational Therapy  
Director, Rehabilitation Sciences Institute  
Senior Scientist, UHN - Toronto Rehabilitation Institute  
Fellow of the Canadian Academy of Health Sciences

“Dr. Angela Colantonio leads a broad, internationally recognized program of research on acquired brain injury (ABI) examining ABI in the population, targeting injury prevention and post-acute care with a special focus on how ABI impacts the lives of those most vulnerable to health service inequities, such as homeless and older adults and high-risk workers. Dr. Colantonio’s research program also examines work-related TBI, long term outcomes among women with ABI, the impact of sex/gender on outcomes, and innovative approaches to intervention, such as the use of theatre as a knowledge mobilization strategy.” – University of Texas Medical Branch

**Arthur S. Slutsky, MD, MASc, FRSC, FCAHS**
Professor, Department of Medicine  
Vice President, Research, St. Michael’s Hospital  
2014 CIHR Health Researcher of the Year  
Fellow of the Royal Society of Canada

Dr. Arthur Slutsky was named Canadian Institutes of Health Research (CIHR) Health Researcher of the Year in honour of his outstanding research in critical care medicine and pulmonary care. Dr. Slutsky “has made important discoveries related to the benefits and complications of mechanical ventilation, a life-sustaining therapy in critically ill patients. He has published over 450 peer-reviewed articles and his innovative work has played a major role in improving the way that mechanical ventilation is delivered, resulting in decreased mortality in patients with respiratory failure.” – Royal Society of Canada

**Anne-Claude Gingras, PhD, FRSC**
Professor, Department of Molecular Genetics  
Senior Investigator, Lunenfeld-Tanenbaum Research Institute, Sinai Health System  
Fellow of the Royal Society of Canada

“Dr. Anne-Claude Gingras is an internationally recognized leader in the field of systems biology, having developed and applied innovative new technologies and analysis tools for understanding complex protein-protein interactions associated with human diseases. Her tools and data analysis methods are used by researchers across the globe.” – Royal Society of Canada