## AWARDS & HONOURS May 17, 2014 – June 13, 2014

## Faculty of Applied Science & Engineering

**Professor Heather MacLean**, Civil Engineering, has been awarded a 2013 Excellence in Education Award for the Promotion of Sustainable Practices by the Canada Mortgage and Housing Corporation (CMHC). CMHC established the Excellence in Education Award in 2003 to honour outstanding educational contributions to sustainable practices. Recipients are selected based on their efforts to integrate sustainable concepts in housing and community development into the academic curriculum.

**Professor Molly Shoichet** (Chemical Engineering, IBBME) is leading a multidisciplinary team of researchers who are developing new ways to administer drugs that target only cancerous tissues, leaving the healthy ones intact. Shoichet has now received one of the University of Toronto's most prestigious titles: University Professor. The distinguished rank is given to just two per cent of tenured faculty, serving to highlight her outstanding contributions to research and teaching.

**University Professor Michael Sefton**, Chemical Engineering & Applied Chemistry and Institute of Biomaterials & Biomedical Engineering, has won the Engineers Canada's Gold Medal, which recognizes exceptional achievement and distinction in engineering. An international leader in the areas of biomedical engineering, biomaterials and regenerative medicine, Sefton led the way in recognizing the importance of combining living cells with synthetic polymers to create artificial organs and tissues — a field now known as tissue engineering. He was also among the first to demonstrate the significant synergy between chemical engineering principles and biomedical engineering.

**Professor Frank Vecchio**, Civil Engineering, has received the Horst Leipholz Medal from the Canadian Society for Civil Engineering (CSCE). This award recognizes a CSCE member who has made "truly outstanding contributions to engineering mechanics research and/or practice in Canada". Vecchio co-developed the Modified Compression Field Theory, a groundbreaking conceptual model for describing the behaviour of reinforced concrete under general load conditions.

## **Faculty of Medicine**

**Professor Eleftherios Diamandis**, Laboratory Medicine and Pathobiology, has won the University of Toronto's JJ Berry Smith Doctoral Supervision Award. The accolade honours active faculty members who, over a minimum of 15 years, have demonstrated excellence in supervision at U of T. Diamandis's research focuses on the discovery and validation of cancer biomarkers, proteomics, mass spectrometry and translational research.

**Professor John Dick**, Molecular Genetics, has been named a fellow of the Royal Society of London for his research on hematopoiesis and cancer stem cells. Professor Dick is a Canada Research Chair in Stem Cell Biology, and a senior scientist at the Princess Margaret Cancer Centre and was the first scientist to identify cancer stem cells in some types of leukemia.

**Dr. Michael Fehlings**, Surgery, has won the Rick Hansen Foundation's 2014 Difference Maker Award. This Award recognizes individuals who have made a significant impact on accessibility, or those who have made advanced discoveries in spinal cord injury research or put "service above self" to make an extraordinary difference in the lives of others. Fehlings is a neurosurgeon at University Health Network and director, Spine Program at Toronto Western Hospital.

The Canadian Association of Occupational Therapists (CAOT) honoured **Professor Bonnie Kirsh** with the Muriel Driver Memorial Lectureship Award. CAOT established the lectureship as a memorial to Muriel Driver in honour of her many significant contributions to occupational therapy. Kirsh's research interests focus on integrating persons with mental illness into the community and workplace.

The University of Toronto has named **Andres Lozano** a University Professor, the institution's highest honour for academic excellence. The promotion recognizes Lozano's contributions to neurosurgery research and treatments for brain disorders, as

well as his commitment to education. Only about two per cent of tenured U of T faculty members become University Professors, and Lozano, a professor in Faculty of Medicine's Department of Surgery who holds the Dan Family Chair in Neurosurgery at U of T is the first neurosurgeon to receive the distinction.

**Professor Tak Mak**, Immunology, is the inaugural recipient of the University of British Columbia Faculty of Medicine's Dr. Chew Wei Memorial Prize in Cancer Research. The prize is awarded annually to a Canadian physician or scientist who has made transformational and internationally recognized contributions to the fight against cancer. Mak is director of the Campbell Family Institute for Breast Cancer Research at the Princess Margaret Cancer Centre. His legacy includes a series of critical discoveries in immunology, signal transduction and cancer biology.

**Professor Malcolm Moore**, Department of Medicine, has been awarded an Honorary Doctorate of Science by the University of Waterloo. Moore is director of the Wallace McCain Centre for Pancreatic Cancer clinic at Princess Margaret Hospital and a professor of Pharmacology and Toxicology.

CIHR honoured **Professor Chris Perumalla**, Physiology, with a Synapse Mentorship Award, which recognizes leaders who are dedicated to promoting health research among Canadian secondary school students. Perumalla is renowned for his dedication to students at the Faculty of Medicine and beyond. He is director, Division of Teaching Laboratories, incorporating new research technologies to enhance the experience of undergraduate students.

**Professor Ivan Silver**, Psychiatry, was honoured by the Canadian Association for Medical Education with the Ian Hart Award. Silver was recognized for his exceptional contributions to medical education throughout his academic career. Silver is vicepresident, education at the Centre for Addiction and Mental Health.

**Professor Samir Sinha**, Medicine, received an Honorary Diploma in Health Sciences from The Michener Institute for Applied Health Sciences. The Michener Institute awards the honorary diplomas to individuals who demonstrate leadership and commitment to

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health care and who are dedicated to the advancement of applied health sciences education. Sinha is director, Geriatrics at Mount Sinai Hospital and expert lead for Ontario's Seniors Strategy.

**Professor Igor Stagljar**, Donnelly Centre for Cellular & Biomolecular Research, has been named a corresponding member of the Croatian Academy of Sciences and Arts. He uses a combination of molecular, cellular, chemical genomic and proteomic approaches to study the function of yeast and human membrane proteins, as well as bacterial proteins involved in pathogenicity.

**Deputy Dean Sarita Verma** has been named a Grant's Desi Achiever by Desi News Magazine. Verma is associate vice-provost health professions education, and a professor in the Department of Family and Community Medicine. She is currently a colead for the Canadian Interprofessional Health Leadership Collaborative, and was one of the lead consultants for the Future of Medical Education in Canada Postgraduate project.

## **Multi-Faculty Awards:**

On May 21, four inventions took top honours at the University of Toronto Celebrates Innovation event. The annual event, which has previously honoured the university's top inventors of the year, has widened its scope. This year, in addition to naming the top inventors of the past year, U of T honoured people and companies working on everything from apps to help the disabled to a printer that prints human skin for wound dressing. It also recognized the financial support of the Connaught Fund for several programs that support innovation.

The 2014 inventors of the year are:

**Baher Abdulhai** and **Samah El-Tantawy** of the Department of Civil Engineering, who invented MARLIN Smart Traffic lights Control Software. The technology uses machine learning to help traffic lights self-optimize. Based on artificial intelligence and game

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theory, MARLIN improves the flow of traffic and reduces maintenance and infrastructure operating costs. Abdulhai is a professor and El- Tantawy completed her PhD at U of T under Abdulhai's supervision. They co-founded Pragmatek Transport Innovations in 2013.

**Will Walmsley**, a recent graduate of the Department of Mechanical and Industrial Engineering, who was cited for his development of the Minuum keyboard. Dubbed "the small keyboard for big fingers," it provides a full keyboard for mobile devices using very little space, allowing users to type quickly and use gesture shortcuts.

**Cynthia Goh**, a professor in the Department of Chemistry, who is the inventor of a novel, inexpensive and eco-friendly platform approach to making a wide variety of nanoparticles, which are tiny particles about 1000 times smaller than the width of a human hair. The applications for nanoparticles are almost endless, and include drug delivery, coatings to protect materials against UV rays and more efficient solar energy collection. In addition to being an entrepreneur herself—her inventions have led to six start-up companies—Goh is also known for being a tireless advocate for student entrepreneurs.

**Geoffrey Hinton, Ilya Sutskever** and **Alex Krizhevsky**, who invented Supervision, a deep neural network that works much better than previous systems. Neural networks are models that are capable of learning and recognizing patterns. Hinton is a professor in the Department of Computer Science and Sutskever and Krizhevsky are former computer science students who are now research scientists at Google.

**Don Boyes**, senior lecturer in the Department of Geography and Program in Planning, and **Professor Shafique Virani**, Chair of the Department of Historical Studies and Distinguished Professor of Islamic Studies, are the two recipients of President's Teaching Awards this year. The awards recognize sustained excellence in teaching, research on teaching and the integration of teaching and research. Winners join the University's Teaching Academy for a five-year period and receive an annual professional development allowance of \$10,000 for five years. U of T's Chancellor, The Honourable **Michael Wilson**, received a lifetime achievement award from the Canadian Association of Former Parliamentarians, on May 21, 2014. His long-time friend and business partner, U of T honorary graduate **Tony Fell**, presented the award, saying the Association's decision was "a home run".