

Royal Society of Canada honours 19 U of T faculty members

McNeil Medal to chemistry's Dwayne Miller

The **University of Toronto**'s research community has had one of its most successful years in earning honours from the prestigious Royal Society of Canada (RSC), with 18 faculty members named Fellows and one winning a major medal.

Founded in 1882, the RSC is the senior national body of distinguished Canadian scholars, artists and scientists. The society's three academies collectively consist of nearly 2,000 fellows, men and women who are selected by their peers for outstanding contributions to the natural and social sciences, in the arts and in the humanities.

“Congratulations to all the faculty members who are being honoured by the Royal Society of Canada this year,” said Professor **Paul Young**, vice-president (research) and himself a Royal Society Fellow and medallist. “Being recognized for excellence by the RSC is one of the great achievements in a researcher's career. All of the professors honoured this year have contributed to their fields – and to global society – significantly and are most deserving of this high honour. U of T is proud of them and Canada is fortunate to have them.”

U of T's medal win goes to Professor Dwayne Miller of the Department of Chemistry. Miller won the McNeil Medal, which recognizes outstanding ability to promote and communicate science to students and the public within Canada. Miller is being honoured specifically “for his dedication to the promotion of science throughout his career and as a founder of Science Rendezvous. This event provides a single voice behind which all the sciences have rallied across the nation to teach the public about the importance of science to society and to make the joys of science accessible.”

The 18 new Fellows join 309 U of T faculty members who have been named Fellows by the RSC since 1980, giving U of T the largest contingent in the country. Miller and the new Fellows will be honoured at a ceremony in Ottawa on Nov. 26.

Faculty members elected as Fellows to the RSC are:

AMON, Cristina – Faculty of Applied Science and Engineering

For pioneering contributions to CFD algorithms, concurrent thermal designs, innovations in electronics cooling and nano-scale transport in semi-conductors and biological systems.

BRUDNER, Alan – Faculty of Law and Department of Political Science

Brudner is a distinguished philosopher. His aim of elaborating a Hegelian account of private and public law has materialized in three acclaimed books and in numerous influential articles.

COLLINS, Michael P. – Department of Civil Engineering

Collins is a structural engineer whose research concerns the basic shear transfer mechanisms of reinforced concrete under extreme loads. His research has improved the safety of buildings, bridges, nuclear containment structures and offshore oil platforms.

GERSON, Lloyd P. – Department of Philosophy

Gerson is one of Canada's most prolific and respected historians of philosophy. In his numerous monographs, articles and translations, he has sought especially to illuminate philosophy done in late antiquity.

KEYMER, Thomas – Department of English

Keymer is an internationally renowned scholar of British literature and culture between 1600 and 1830. His publications have made ground-breaking contributions to eighteenth-century studies, the history and theory of narrative, and basic history.

KUDLA, Stephen S. – Department of Mathematics

Kudla is an international leader in the field of automorphic forms and arithmetic geometry. His research continues the development of the arithmetic theory of quadratic forms and theta functions, a subject that has deep historical roots. His work has had a wide impact on the study of special values of L-functions and their derivatives, a topic of central importance in modern number theory.

LANG, Anthony E. – Movement Disorders Unit, Toronto Western Hospital and U of T

Lang is internationally renowned for his clinical and research work in the fields of Parkinson's disease and other movement disorders. Between 2001 and 2010 he was the most cited author in the world in Parkinson's disease.

MABURY, Scott – Department of Chemistry

Mabury and his students have discovered five new classes of fluorinated chemical pollutants. Laboratory and field experiments, measuring their physical, chemical and biological properties, lead to widely cited theories about contamination, particularly of mammals in the remote Arctic environment and in humans, primarily in the industrial economies.

MILLER, Renée J. – Department of Computer Science

Miller is world-renowned as a pioneer in the field of database systems. Her work has focused on the long-standing open problem of data integration. Her profile is unique in that it combines gracefully theoretical elegance with industrial impact, reflected by successful industrial products.

NOVAK, David – Department for the Study of Religion

Novak is a leading Jewish philosopher today. His internationally recognized expertise is in natural law theory, Jewish-Christian relations and biomedical ethics.

PENSLAR, Derek Jonathan – Department of History

Penslar has achieved high international recognition for treating sensitive and controversial subjects — Zionism, the Arab-Israeli conflict, Jewish economic and political power, antisemitism — in rigorous, erudite, original and prolific scholarship.

PAULY, Louis W. – Department of Political Science and Munk School of Global Affairs

Pauly is a distinguished leader in the field of international political economy. His influential and original research focuses on the increasingly complex interaction between globally integrating capital markets and local systems of legitimate and effective governance.

PARK, Chul B. – Department of Mechanical & Industrial Engineering

Park, a world leader in plastic foaming, identified fundamental mechanisms of cell nucleation and growth of polymer foams and developed foaming technologies that significantly improve plastic products, reduce manufacturing costs and replace ozone-depleting blowing agents with inert gases.

RETALLACK, James – Department of History

Retallack is his generation's foremost historian of Germany's imperial era (1871-1918). With his prolific scholarship on the German Right and his pioneering research on Saxony, no one has done more to illuminate Germany's early struggles with democracy.

RUTKA, James T.- Division of Neurosurgery, The Hospital for Sick Children and U of T

Rutka is a neurosurgeon and scientist with keen interests in the molecular biology of human brain tumors. He has published over 300 peer reviewed articles and received more than \$10 million in research funding.

SICHERI, Frank – Samuel Lunenfeld Research Institute, Mount Sinai Hospital and U of T

Sicheri uses x-ray crystallography to understand how signalling proteins compose communication pathways in the cell and how the dysregulation of signalling proteins contributes to human disease.

STANGEBY, Peter C. – Institute for Aerospace Studies

Stangeby is internationally recognized as the leading authority on most aspects of the boundary physics of magnetic fusion energy research devices. His standing is due to his seminal scientific findings and his graduated students, who occupy key positions in the major international fusion research projects.

THOMSON, James D. – Department of Ecology and Evolutionary Biology

Thomson has investigated pollination biology and pollinator behavior from novel perspectives. Notably, his models and measurements of the fates of pollen grains explain phenomena that are not treated in other bodies of theory.