

Senate Research Report

May 22, 2012

Awards and Honours

The Engineering Institute of Canada: Sir John Kennedy Medal

Dr. R. Kerry Rowe (Civil Engineering) won the Sir John Kennedy Medal. The institute's highest honour is awarded on a biennial basis in recognition of outstanding service to the profession or for noteworthy contributions to the science of engineering or to the benefit of the Institute. The medal will be presented on June 7th in Edmonton.

Research Funding

External Awards:

AUTO21 Research Award

Dr. Gabriel Ciccarelli (Mechanical & Materials Engineering) received \$26,000 for the project, *Performance and Emissions Gains in Diesel Engines with Low Concentrations of Added Hydrogen*.

Canadian Institutes of Health Research (CIHR)

Operating Grant

Dr. Lucie Lévesque (School of Kinesiology & Health Studies) received \$1,012,095 over four years for the project, *Youth Driven Development in Aboriginal Communities: Impact evaluation of the Active Circle Initiative*.

Canadian Institutes of Health Research (CIHR)

Operating Grant: Industry-partnered Collaborative Research

Dr. David Lillicrap (Pathology & Molecular Medicine) received \$720,000 over three years for the project, *Evaluation of innovative therapeutic strategies for hemophilia A in a unique hemophilia dog colony*.

Canadian Institutes of Health Research (CIHR)

Proof of Principle Program

Dr. Martin Petkovich (Biomedical & Molecular Sciences) received \$135,557 for the project, *Blocking RA Metabolism: A safer approach to retinoid therapy in skin disease*.

Higher Education Quality Council of Ontario (HEQCO)

Dr. Brian Frank (Electrical & Computer Engineering) received \$9,807 for the project, *Piloting the CLA in Engineering at Queen's University: Curricular, Accreditation and Advising Applications*.

Ministry of Economic Development and Innovation:

Ontario Research Fund – Research Infrastructure

- Dr. Joshua Marshall (Robert M. Buchan Department of Mining) received \$150,000 for the project, *Cooperative Mining Machines Research Test-Bed*.
- Drs. Susan Cole (Pathology & Molecular Medicine), Thomas Massey (Biomedical & Molecular Sciences) and Richard Oleschuk (Chemistry), received \$400,000 for the project, *Molecular Characterization of Proteins Critical to Xenobiotic Disposition and Cancer: Enhanced Detection and Quantitation*.
- Dr. Anne Croy (Biomedical & Molecular Sciences) was awarded \$50,000 for the project, *Immune Cell Contributions to the Genesis of Human Hypertension*.
- Dr. Neil Hoult (Civil Engineering) was awarded \$130,000 for the project, *Early Detection of Deterioration Mechanisms for Civil Infrastructure*.
- Dr. Zhongwen Yao (Mechanical & Materials Engineering), was awarded \$125,000 for the project, *Advanced Microstructure Characterization Lab*.

Publicly announced March 12, 2012

Ministry of Economic Development and Innovation:

Early Researcher Awards

- Dr. Yves Filion (Civil Engineering) received \$140,000 for the project, *Sustainable Drinking Water Main Asset Rehabilitation and Renewal Planning in Ontario*.
- Dr. Lauren Flynn (Chemical Engineering) received \$140,000 for the project, *Enhancing wound healing and regeneration with adipose-derived stem cells*.
- Dr. Chandrakant Tayade (Biomedical and Molecular Sciences) received \$140,000 for the project, *Blocking the growth of blood vessels as a new treatment for endometriosis*.

Announced April 30, 2012

Natural Sciences and Engineering Research Council of Canada (NSERC)

Engage Grants

Dr. Vladimir Krstic (Mechanical & Materials Engineering) received \$25,000 for the project, *Advanced Orthopedic Coating*. Funding partner: Octane Orthobiologics Inc.

Natural Sciences and Engineering Research Council of Canada (NSERC)

Collaborative Research and Development Grant

Dr. Ugo Piomelli (Mechanical & Materials Engineering) received \$184,239 over 4 years for the project, *Numerical simulations of turbulence in hydro-electric applications*. Funding partner: Hydro Quebec.

Ontario Ministry of Government Services

Dr. Robert Hickey (School of Policy Studies) received \$49,000 for the project, *Development of a General Collective Bargaining Costing Toolkit for Broader Public Sector Agencies*.

Other News

President of SSHRC visits Queen's

On April 17, 2012, Dr. Chad Gaffield, President of the Social Sciences and Humanities Research Council of Canada (SSHRC), visited Queen's University. After spending the day with researchers and students, he engaged in a Public Dialogue at the Ban Righ Fireside Room to a full crowd. Dr. Gaffield discussed the increasing public recognition of the value of the social sciences and humanities.

HPCVL Participates in Creating an Extensive Brain Research Database

The High Performance Computing Virtual Laboratory (HPCVL) at Queen's is helping to develop the world's largest brain database by managing data for the Ontario Brain Institute's "Brain-CODE" (Centre for Ontario Data Exploration). HPCVL is consolidating Brain-CODE data from many neurological databases into one platform to help neuroscientists, both in Ontario and worldwide, develop strategies for prevention, early diagnosis and treatment of brain diseases and disorders.

Announced April 5, 2012

Southern Ontario Smart Computing and Innovation Platform (SOSCIP)

Queen's is partnering with IBM Canada and six other universities to form the IBM Canada Research and Development Centre, bringing researchers from across Ontario together to collaborate in areas including healthcare, urban challenges, water conservation and energy monitoring. The new centre uses cloud computing for storing data on remote servers. The project is being led by the University of Toronto and Western University and includes partners McMaster University, University of Ottawa, the University of Ontario Institute of Technology and the University of Waterloo.

Announced April 10, 2012