

Senate Research Report September 24, 2009

Awards and Honours

Killam Prize

Dr. John Smol (Biology) was awarded a 2009 Killam Prize, worth \$100,000. These awards are administered by the Canada Council for the Arts, and provide support to scholars of exceptional ability who are engaged in research projects of broad significance and widespread interest.

Publicly announced May 11, 2009

Premier's Discovery Awards

The Premier's Discovery Awards are administered by the Ministry of Research and Innovation, and are intended to celebrate the research excellence of Ontario's most accomplished researchers. By showcasing individual achievements, the program aims to enhance Ontario's attractiveness as a global research centre.

- Dr. John Smol (Biology) was selected as the recipient of the 2009 Premier's Discovery Award in Life Sciences and Medicine, valued at \$500,000
- Dr. Will Kymlicka (Philosophy) was selected as the recipient of the 2009 Premier's Discovery Award in Social Sciences, valued at \$250,000

Publicly announced May 12, 2009

Early Researcher Awards (ERA)

The ERA program, administered by the Ministry of Research and Innovation, helps promising, recently-appointed Ontario researchers build their research teams of undergraduates, graduate students, post-doctoral fellows, research assistants, associates, and technicians. These awards were approved for \$100,000 each (plus an additional \$40,000 each for indirect costs to Queen's)

- Dr. Joyce Davidson (Geography) for *Autism Online: The Social and Cultural Implications of the Internet for Individuals on the Spectrum*
- Dr. J. Andrew Grant (Political Studies) for *Improving Governance and Competitiveness in Ontario's Mineral Resource Sector*
- Dr. Nicholas J. Mosey (Chemistry) for *Rational Design of Lubricants through Chemical Simulation*
- Dr. Parvin Mousavi (School of Computing) for *Towards Integrative Data Analysis for Reliable Predictive Modeling in Biomedical Computing*
- Dr. W.A. (Andy) Take (Civil Engineering) for *Investigating the Impact of Climate Change on Slope Stability*

Publicly announced August 17, 2009

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Royal Society of Canada: New Fellows

The Royal Society of Canada recognizes merit and achievement by electing to its membership distinguished individuals from all branches of learning who have achieved distinction, both nationally and internationally, by publishing learned works or original research in the arts, humanities and sciences.

- Dr. Raleigh J. Robertson (Biology)
- Dr. R. Stan Brown (Chemistry)
- Dr. David A. Dodge, Chancellor of Queen's University

Royal Society of Canada: Jason A. Hannah Medal

- Dr. Jacalyn Duffin (History) has been awarded the 2009 Jason A. Hannah Medal by the Royal Society of Canada for an important publication in the history of medicine. Her book is entitled *Medical Miracles: Doctors, Saints, and Healing in the Modern World*. New York, NY: Oxford University Press, 2009.

Professor Arthur B. McDonald (Physics) was elected to the Fellowship of the Royal Society, the national academy of science of the UK and the Commonwealth.

Publicly announced May 15, 2009

Dr. Michael C. Baird (Chemistry) has won the 2009 Canadian Catalysis Lectureship Award by the Canadian Catalysis Foundation and the Chemical Institute of Canada. This award is given annually to a researcher in chemistry or chemical engineering who is recognized as a leader in catalysis in Canada.

Announced May 2009

Dr. Ian McKay (History) has won the Canadian Historical Association's Sir John A. Macdonald prize for best Canadian history book of the year. The book is entitled *Reasoning Otherwise: Leftists and the People's Enlightenment in Canada, 1890-1920*. Toronto: Between the Lines, 2008.

Publicly announced June 1, 2009

Dr. Caroline F. Pukall (Psychology) is a recipient of a 2008 Pfizer Canada Neuropathic Pain Research Award for *Vulvodinia: a neuropathic pain condition?*

Publicly announced June 2, 2009

Dr. Rosa Bruno-Jofré (Dean of Education) has been named a Distinguished Professor at the Universidad Complutense de Madrid for three months, and awarded €10,000.

Dr. Ryan Bicknell (Orthopaedic Surgery) has been named the North American Travelling Fellow of the year by the Canadian Orthopaedic Association. The prestigious fellowship is awarded to only one young surgeon in Canada each year. Dr. Bicknell specializes in elbow and shoulder reconstruction, arthroplasty, arthroscopy and sports injuries.

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Research Funding

Natural Sciences and Engineering Research Council of Canada (NSERC)

NSERC Collaborative Research and Training Experience (CREATE) Program

The Human Mobility Research Centre (HMRC), a collaboration between Kingston General Hospital (KGH) and Queen's University, has received \$1.65 million over 6 years to give graduates in the bone and joint health technologies program a head start in their careers. Dr. Tim Bryant, professor of Mechanical and Materials Engineering and co-director of HMRC, heads the new initiative, and works with other Queen's collaborators: Drs. Randy Ellis and Purang Abolmaesumi (School of Computing); Dr. Kevin Deluzio (Mechanical and Materials Engineering); Drs. Brian Amsden, Stephen Waldman, and Aris Docoslis (Chemical Engineering); Dr. Kim Woodhouse (Dean of Applied Science, Chemical Engineering); Dr. David Pichora (Orthopaedic Surgery); Dr. Tassos Anastassiades (Rheumatology, Biochemistry); Dr. Elsie Culham (School of Rehabilitation Therapy).

NSERC Discovery Accelerator Supplements (DAS) Program

The DAS program aims to provide substantial and timely additional resources to accelerate progress and maximize the impact of outstanding research programs. These supplements are valued at \$120,000 over three years.

- Dr. Geoffrey Lockwood (Physics), *A hybrid piezoelectric/silicon array for ultrasound intravascular/intracardiac imaging*
- Dr. Ian Moore (Civil Engineering), *Soil-pipe interaction and the behaviour and design of urban pipe infrastructure*
- Dr. Kevin Munhall (Psychology), *Audiovisual speech perception*
- Dr. Martin Paré (Physiology), *Parietal cortex persistent activity and working memory capacity*
- Dr. Hagit Shatkay (School of Computing), *Translating data into knowledge: From biomedical sequences and text to disease prediction and prevention*

Publicly announced July 23, 2009

Social Sciences and Humanities Research Council of Canada (SSHRC)

SSHRC Standard Research Grants

- Dr. Kathleen Lahey (Law), *Women, Equality, and Fiscal Equality: Gender Analysis of Taxes, Benefits, and Budgets*, \$101,537

SSHRC Community-University Research Alliances (CURA)

- Dr. M.A. McColl (Centre for Health Services and Policy Research), *Disability policy alliance: learning collaborative and equity coalition*, \$1,000,000

SSHRC Research Development Initiative

- Dr. M. Hand (Sociology), *The social informatics of mobile learning*, \$31,995

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Canadian Institutes of Health Research (CIHR) – Operating Grants

Based on the received Authorizations for Funding, the following awards have been received:

- Dr. John Allingham (Biochemistry), *Structural and functional analyses of novel heterodimeric kinesin motors*, \$621,710 over 5 years
- Dr. Christopher Booth (Oncology), *Adoption of adjuvant chemotherapy for non-small cell lung cancer in Ontario: A population-based outcomes study*, \$286,790 over 3 years
- Dr. Roger Deeley (Cancer Research Institute), *MRP mediated multidrug resistance*, \$980,680 over 5 years
- Dr. Alastair Ferguson (Physiology), *Circumventricular organs – New CNS sites for the regulation of energy homeostasis*, \$784,562 over 5 years
- Dr. Peter Greer (Cancer Research Institute), *A molecular and genetic analysis of the fer proto-oncogene: A potential novel therapeutic target in cancer*, \$100,000 from the Institute of Cancer Research
- Dr. Patti Groome (Community Health and Epidemiology), *Diagnostic delay in oral cavity cancer*, \$92,645 over 2 years
- Dr. Zongchao Jia (Biochemistry), received \$848,640 over 5 years for his project entitled “Emerging structural insights into prokaryotic phosphorylation systems”
- Dr. Michael Kawaja (Anatomy and Cell Biology), *Mechanisms underlying sympathetic sprouting in sensory ganglia after nerve injury*, \$718,324 over 5 years
- David Lillicrap (Pathology and Molecular Medicine), *Molecular studies of von Willebrand factor pathobiology*, \$883,023 over 5 years
- Dr. Linda McLean (School of Rehabilitation Therapy), *Biomechanical assessment of the female continence mechanism in women with and without stress urinary incontinence*, \$213,995 over two years
- Dr. Doug Munoz (Centre for Neuroscience Studies), *Using eye movements to probe brain function and dysfunction in humans*, \$953,386 over 5 years
- Dr. Michael Nesheim (Biochemistry), *Functional properties of prothrombinase*, \$569,484 over 5 years
- Dr. William Pickett, (Community Health and Epidemiology) and Ian Jansen (School of Kinesiology and Health Studies), *Built environments as determinants of health in young Canadians, and the role of social environments as intermediary factors*, \$546,640 over 5 years
- Dr. Victor Tron (Pathology and Molecular Medicine), *The role of microRNAs in malignant melanoma*, \$397,897 over 3 years

Publicly announced July 6, 2009

Dr. Glenville Jones (Biochemistry) received \$243,077 for one year under the CIHR/SME Research Program with Cytochroma. CIHR contributed \$89,359 and Cytochroma contributed \$153,718 cash and \$25,000 in-kind.

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Dr. Lois Mulligan (Pathology and Molecular Medicine), director of the Queen's University Terry Fox Foundation Training Program in Transdisciplinary Cancer Research at CIHR, is the principal investigator of a new grant for \$1.95 million. The program provides opportunities for students, clinicians and fellows to work with scientists in a variety of disciplines researching the molecular, clinical, social and economic implications of cancer, allowing them to target the disease from cause to clinic. This program is funded by CIHR and the Terry Fox Foundation.

Canada Foundation for Innovation

CFI – Leading Edge Fund

- Dr. Jeanette Holden (Psychiatry), *A Comprehensive Approach to Identifying Genes for Complex Genetic Disorders: Autism Spectrum Disorders & Beyond*, \$1,709,465
- Dr. David Pichora (Surgery), *Integrated Technologies for Bone and Joint Health: Multi-centre Infrastructure Development Programme Phase 4*, \$696,481
- Dr. Kurt Kyser (Geological Sciences), *Effects of the Geosphere-Biosphere Interface on Element Migration in the Near-Surface Environment*, \$1,996,087
- Dr. Ian McWalter (CMC), *emSYSCAN - Embedded Systems Canada*, \$19,303,622

Publicly announced June 18, 2009

CFI – New Initiatives Fund

- Dr. Richard Holt (Mechanical and Materials Engineering), *Testing of Nuclear Materials in a Simulated Reactor Environment*, \$6,997,920
- Drs. Mark Boulay and Mark Chen (Physics), *Particle Astrophysics Experiments at SNOLAB - SNO+ and DEAP/CLEAN*, \$10,561,628
- Dr. Kevin Robbie (Physics), *Thin Film Coating Initiative: Advancing Technology Development and Industrial Applications*, \$1,452,360

Publicly announced June 18, 2009

National Centres of Excellence

Dr. Keith Pilkey (Mechanical and Materials Engineering) will receive \$404,000 over the next two years towards his automotive research, *Advanced High-Strength Steel Microstructures for Low and High-Rate Applications*. The funding comes from AUTO21, a national Network of Centres of Excellence (NCE) program – and Canada's national automotive research network – and from industry and public-sector partners.

Publicly announced May 21, 2009

France Canada Research Fund

- Dr. Nicholas Graham (School of Computing), *Supporting the development of collaborative augmented reality applications*, \$10,000
- Dr. Derek Pratt (Chemistry), *Etude RMN et théorique de la réaction de glycosidation*, \$10,000

May 5, 2009