

## ***Senate Research Report***

*February 28, 2012*

### **Awards and Honours**

#### **Association for Psychological Sciences: Fellowship**

Dr. Lola Cuddy (Psychology) has been named a Fellow of the Association for Psychological Sciences (APS). APS is non-profit international organization whose mission is to promote, protect, and advance the interests of scientifically oriented psychology in research, application, teaching, and the improvement of human welfare. Fellow status is awarded to APS Members who have made sustained outstanding contributions to the science of psychology in the areas of research, teaching, service, and/or application.

#### **Association for the Sciences of Limnology and Oceanography: Ramon Margalef Award**

Dr. John Smol (Biology) recently received the Ramon Margalef Award for Excellence in Education from the Association for the Sciences of Limnology and Oceanography (ASLO). ASLO is the main international scientific society for limnologists and oceanographers.

#### **Institute of Public Administration of Canada: Vanier Medal**

Queen's Chancellor, Dr. David Dodge, is the recipient of the 2011 Vanier Medal, one of the highest forms of recognition for Canadian public administrators. The Vanier Medal is awarded by the Institute of Public Administration of Canada. Named in honour of Canada's second Canadian-born Governor General, the Rt. Hon. Georges P. Vanier, the medal is given annually to a person who has shown distinctive leadership and has made significant contributions to the fields of public administration and public service in Canada.

#### **The Order of Ontario**

Dr. Arthur McDonald (Physics) has been named to the Order of Ontario. The Order is the Province's highest official honour. It recognizes current or former long-time residents of Ontario who have demonstrated a high level of individual excellence and achievement in any field benefiting the people of Ontario or anywhere in the world.

## Research Funding

### Internal Awards:

#### **Queen's University: Special Purpose Grant Funding**

- Dr. Ramiro Arellano (Anesthesiology) received \$10,000 for the project entitled, *Development and Evaluation of a Novel iPad Based Application for Teaching Hemodynamic Ultrasound in Unstable Patients*.

### External Awards:

#### **Access Consulting Group**

- Dr. Heather Jamieson (Geological Sciences and Engineering) received \$34,150 for the project entitled, *Mechanisms of Zn Sequestration in No Cash Creek, Yukon, Canada*.

#### **Bell Canada: The Bell Mental Health and Anti-Stigma Research Chair**

Bell Canada and Queen's University have announced a world-first with the establishment of a new \$1-million research initiative to help fight stigma associated with mental illness. Dr. Heather Stuart (Community Health and Epidemiology) is the inaugural Bell Mental Health and Anti-Stigma Research Chair. The Chair will enable Queen's Faculty of Health Sciences to advance its anti-stigma research, scholarship, and outreach programs.

#### **Canada Foundation for Innovation (CFI): Leaders Opportunity Fund (LOF)**

- Dr. Kevin Mumford (Civil Engineering) received \$116,586 for the project entitled, *Laboratory for Multiphase Flow and Mass Transfer in Porous Media*.

#### **Canadian Institutes of Health Research (CIHR): Knowledge Translation Supplement**

- Dr. Sanjay Sharma (Ophthalmology) received \$39,950 for the project entitled, *Properly Managing Concussion*.
- Dr. Sanjay Sharma (Ophthalmology) received \$39,950 for the project entitled, *Preventing Playground Injuries in Children*.

### **Canadian International Development Agency (CIDA)**

- Ms. Djenana Jalovcic (International Centre for the Advancement of Community Based Rehabilitation) received \$1,318,325 for the project entitled, *Inter-professional Project on Disability, Maternal and Child Health in Bangladesh*.

### **Foreign Affairs and International Trade Canada: Canada-Brazil Awards - Joint Research Projects**

- Dr. Barbara Anne Croy (Biomedical and Molecular Sciences) received \$174,000 for the project entitled, *Prosperity through Wellness Promotion prior to Conception and during Fetal Life*.

### **Natural Sciences and Engineering Research Council of Canada (NSERC): Collaborative Research and Development Grant**

- Dr. Martin Guay (Chemical Engineering) received \$45,800 over 2 years for the project entitled, *Process Monitoring and Estimation in Complex Flow Systems*.

### **Natural Sciences and Engineering Research Council of Canada (NSERC): Discovery Grants**

- Dr. Bram Adams (School of Computing) received \$5,000 for the project entitled, *Empirically Studying and Improving the Co-Evolution of Source Code and Build System*.
- Dr. Bingshu Chen (Community Health and Epidemiology) received \$5,000 for the project entitled, *Statistical Methods in Clinical Trials and Epidemiology Studies*.
- Dr. Mark Chen (Physics, Engineering Physics and Astronomy) received \$5,000 for the project entitled, *SNO+*.
- Dr. Ryan Danby (Geography) received \$5,000 for the project entitled, *Multiscale Ecology and Dynamics of the Forest-tundra Ecotone*.
- Dr. Brendon Gurd (School of Kinesiology and Health Studies) received \$5,000 for the project entitled, *Post-translational Regulation of SIRT1: the Impact of Activation and Subcellular Locale on Mitochondrial Biogenesis in Skeletal Muscle*.
- Dr. Neil Hoult (Civil Engineering) received \$5,000 for the project entitled, *Infrastructure Performance Monitoring and Assessment*.

- Dr. Manuela Kunz (School of Computing) received \$5,000 for the project entitled, *Algorithms and Interfaces for Improved Image-guided Surgery*.
- Dr. Qingguo Li (Mechanical and Materials Engineering) received \$5,000 for the project entitled, *Energy Efficient Lower-limb Wearable Robotic Devices*.
- Dr. Chunfang Devon Lin (Mathematics and Statistics) received \$5,000 for the project entitled, *The Design and Analysis of Large-scale Computer Experiments/Variance Estimations in Complex Surveys*.
- Dr. Warren Mabee (Geography) received \$5,000 for the project entitled, *Evaluating the Sustainability of Bioenergy Systems in Eastern Ontario*.
- Dr. Kevin Mumford (Civil Engineering) received \$5,000 for the project entitled, *Remediation of Non-aqueous Phase Liquid Wastes in Groundwater Systems Containing Trapped Gas*.
- Dr. Kyra Pyke (School of Kinesiology and Health Studies) received \$5,000 for the project entitled, *The Role of Shear Stress and Sympathetic Nervous Activity in the Regulation of Human Arterial Function and Structure*.
- Dr. Abd-Elhamid Taha (School of Computing) received \$5,000 for the project entitled, *Opportunistic Frameworks for Radio Resource Management*.
- Dr. Chandrakant Tayade (Biomedical and Molecular Sciences) received \$5,000 for the project entitled, *Regulation of Angiogenesis at the Maternal-fetal Interface*.
- Dr. Zhongwen Yao (Mechanical and Materials Engineering) received \$5,000 for the project entitled, *Investigation of Irradiation Induced Creep and Growth by Using Stressed in-situ Irradiation Correlated to Computer Simulation*.

#### **Natural Sciences and Engineering Research Council of Canada (NSERC): Engage Grants Program**

- Dr. Steven Blostein (Electrical and Computer Engineering) received \$24,640 for the project entitled, *Improving 802.11 (WiFi) Wireless Local Area Network Access Performance using Recent Channel Monitoring Techniques*.
- Dr. Wing Yiu Chan (Electrical and Computer Engineering) received \$25,000 for the project entitled, *Speech Dereverberation Algorithms for Hearing Aids*.

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This research report is meant to be an illustration of research activity at Queen's University and is based on information provided to the Office of the Vice-Principal (Research) by the Faculties.

- Dr. Vladimir Krstic (Mechanical and Materials Engineering) received \$25,000 for the project entitled, *Substitution of Polymer-based Material by Alumina in Microwave Heating Devices*.

**Natural Sciences and Engineering Research Council of Canada (NSERC):  
Interaction Grants**

- Dr. Christopher Mechefske (Mechanical and Materials Engineering) received \$2,100 for the project entitled, *Initial Meetings with Wabi Iron and Steel Inc. to discuss Research Projects*.

**Ontario Centres of Excellence (OCE): Connection Program**

- Dr. Kent Novakowski (Civil Engineering) received \$20,000 for the *CIVL 460 Connections Program*.

**Ontario Agency for Health Protection and Promotion**

- Dr. Anna Majury (Biomedical and Molecular Sciences) received \$10,000 for the project entitled, *Groundwater Contamination in Eastern Ontario*.

**Ontario Institute for Cancer Research**

- Dr. Jeremy Squire (Pathology and Molecular Medicine) received \$19,452 for the project entitled, *High Impact Clinical Trials Network, Circulating Tumour Cell HICT-CTC-Queen's*.

**Research Conferences and Projects**

**Queen's 2011 Excellence in Research Public Lectures:**

The Queen's 2011 Excellence in Research Public Lectures will take place on Tuesday, March 20<sup>th</sup> from 7:00-8:00p.m. in Chernoff Auditorium. Dr. Zongchao Jia (Biomedical and Molecular Science) will present a lecture entitled, *A Tale of the First Prokaryotic Protein Phosphorylation System*, and Dr. Victor Snieckus (Chemistry) will present the lecture, *iSynthesize. Life of an Organic Chemist*.