



VICE-PRINCIPAL (RESEARCH)

Senate Research Report

March 22, 2016

News

Professor Emeritus Art McDonald, winner of the 2015 Nobel Prize in Physics, was recognized in the House of Commons of Canada on March 8 for his Nobel Prize-winning research on neutrino oscillations. A delegation from Queen's, including Principal Daniel Woolf and fellow members of the Department of Physics, Engineering Physics and Astronomy and SNOLAB, as well as family members, travelled with him.

Two Queen's University researchers have been awarded Strategic Partnership Grants from the Natural Sciences and Engineering Research Council of Canada (NSERC) for their work in improving optical fibre networks and road safety:

- Dr. Hossam Hassanein (School of Computing) received \$522,500 over three years for his iDriveSense project – a system that integrates sensors already available in vehicles and drivers' smartphones to provide information about the vehicle's location and dynamics;
- Dr. John Cartledge (Electrical and Computer Engineering) accepted \$433,560 over three years for his research in improving optical networks.

The Undergraduate Student Summer Research Fellowship (USSRF) program was established in 2011 for continuing undergraduate students pursuing research in the fields of social science, humanities and creative arts. The program is intended to provide students with meaningful opportunities to engage in discovery-based learning and to develop research and presentation skills. The deadline for the next round of applications was March 11. Up to 19 fellowships of \$6,000 each will be offered to students whose projects take place on Queen's campus. Another five fellowships of \$5,000 will be offered to students whose projects take place at the Bader International Study Centre (BISC) at Herstmonceux Castle.

Professor Kerry Rowe (Civil Engineering) has been elected to the US National Academy of Engineering (NAE). Dr. Rowe is one of only two civil engineers listed as foreign members.

Research Funding

Name	Department	Project Title	Amount
Canada Foundation for Innovation – JELF			
Colautti, Robert	Biology	Ecological Genomics of Plant Adaptations in Novel Environments	\$150,000
Ormiston, Mark	Biomedical and Molecular Sciences (DBMS)	Regenerative Cardiovascular Medicine Laboratory	\$175,000
Canada Research Chairs (CRC) – new and renewed			
Castleden, Heather	Geography and Planning, and Public Health Sciences	Canada Research Chair in Healthy Indigenous-Settler Environments	\$500,000
Colautti, Robert	Biology	CRC in Rapid Evolution	\$500,000
Janssen, Ian	School of Kinesiology and Health Studies	Canada Research Chair in Physical Activity and Obesity	\$500,000
Lillicrap, David	Pathology and Molecular Medicine	Canada Research Chair in Molecular Hemostasis	\$1,400,000
McGarry, John	Political Studies	Canada Research Chair in Nationalism and Democracy	\$1,400,000
Ormiston, Mark	DBMS	Canada Research Chair in Regenerative Cardiovascular Medicine	\$500,000
Canadian Institutes for Health Research (CIHR) – MD/PhD Program Grants			
Bennett, Brian	DBMS	CIHR MD/PhD Program Grant	\$132,000
Canadian Institutes for Health Research (CIHR) – Planning and Dissemination			
Rudan, John	Surgery	Characterizing prosthetic joint infections using high resolution mass spectrometry	\$8,050

Mitacs -- Accelerate Graduate Research Internship			
Vlachopoulos, Nicholas	Geological Sciences & Geological Engineering	Development of Distributed Optical Sensing Technique for Ground Monitoring and Support	\$30,000
Natural Sciences and Engineering Research Council (NSERC) – Collaborative Research and Development			
Mumford, Kevin	Civil Engineering	Enhanced performance monitoring of in situ thermal treatment Industrial Partner: McMillan-McGee Corp. - \$32,000	\$64,000
Natural Sciences and Engineering Research Council (NSERC) – Engage			
Mousavi, Parvin	School of Computing	A biofabrication and validation platform for 3D bioprinting of physiologically complex tissue phantoms for ultrasound imaging	\$25,000
Rowe, Kerry	Civil Engineering	Initial insights into the effect of geomembrane welding parameters on cold-climate welding	\$25,000
Physicians' Services Inc. Foundation – Research Grant			
Bardana, Davide	Surgery	Development of human engineered cartilage suitable for joint resurfacing	\$169,000
Boyd, J. Gordon	Medicine	The CONFOCAL Study: Cerebral oxygenation and neurological outcomes following critical illness	\$231,000
Royal College of Physicians and Surgeons of Canada – Research Grant			
Smith, Karen	Physical Medicine & Rehabilitation	Self-directed learning in continuing professional development: A scoping review to explore the representation of CanMEDS competencies in the Canadian context	\$24,710
Social Sciences and Humanities Research Council (SSHRC) – Impact Award			
Lyon, David	Sociology		\$50,000

