

# *Senate Research Report*

*January 15, 2013*

## *Awards and Honours*

Dr. James R. Cordy (School of Computing) has been appointed an international **Grand Professor at the Center for Advancing Electronics Dresden (cfAED)**, a German national centre of excellence at the Technical University of Dresden. The Center, which includes numerous industry partners, addresses the current and future challenges of electronic information processing and communications technology.

Dr. Brant Peppley (Chemical Engineering; Mechanical and Materials Engineering; FCRC) has received the **Community Leadership Award** for his ongoing research on fuel cells. The award is presented annually by SWITCH, a non-profit, member-based organization dedicated to making Kingston a hub for sustainable energy. Dr. Peppley's current work involves partnering with industry to develop clean energy solutions.

Dr. Cathleen Crudden (Chemistry) is one of only two North American experts asked to join an international team developing drought-resistant crops. The Japan-based project will receive \$150 million over the next 10 years from that country's Society for the Promotion of Science and Nagoya University. A portion of that funding will help Dr. Crudden build a chemistry laboratory in the World Premier Institute Research Center for Transformative Biomolecules in Nagoya, Japan.

Dr. Kimberly Woodhouse, Dean of the Faculty of Engineering and Applied Science and professor in the department of Chemical Engineering, was recently appointed to the Natural Sciences and Engineering Research Council of Canada (NSERC).

Dr. Stephen H. Scott (Biomedical and Molecular Sciences) received the **Barbara Turnbull Award** (\$50,000) for the project entitled, "*Influence of motor behaviour on sensory feedback to primary motor cortex.*" The award is administered through a partnership between the Barbara Turnbull Foundation for Spinal Cord Research, the Neuroscience Canada Foundation and the Canadian Institutes of Health Research (CIHR).

## Research Funding

### **Canadian Institutes of Health Research (CIHR)**

#### **Operating Grant: Programmatic Grants in Food and Health – Letter of Intent**

- Dr. Patricia Anne Collins (School of Urban and Regional Planning), Dr. Margaret Little (Political Studies), and Dr. Elaine Power (School of Kinesiology and Health Studies): \$10,000 development grant for *“The buck stops here? A critical and comprehensive pan-Canadian analysis of the prescriptions, scope, impacts, and costs of municipal-level interventions to reduce household food insecurity.”*

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

#### **Engage Grant**

- Dr. Kevin J. Deluzio (Mechanical and Materials Engineering): \$25,000 for *“Statistical models for establishing a control data set for biomechanical gait analysis.”* HAS Motion’s in-kind contribution: \$25,000.

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

#### **Idea to Innovation Grant**

- Dr. Vladimir Krstic (Mechanical and Materials Engineering): \$9,450 for *“New generation of zirconia-based guide pins for resistant welding.”*
- Dr. Andrew Pollard (Mechanical and Materials Engineering): \$125,000 for *“Phase I – development of a continuous torrefaction/densification process.”*

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

#### **Miscellaneous Grant (Workshop Support)**

- Ms. Wendy L. Powley (School of Computing): \$3,500 for *“Ontario celebration of women in computing.”*

### **Networks of Centres of Excellence – BioFuelNet**

- Dr. Warren Mabee (Geography, School of Policy Studies): \$156,250 for *“The supply and sustainability of forestry feedstocks.”*
- Dr. Warren Mabee (Geography, School of Policy Studies): \$75,000 for *“Assessing priority feedstocks for Canadian biorefining pathways.”*

### **Networks of Centres of Excellence – Carbon Management Canada**

- Dr. Warren Mabee (Geography, School of Policy Studies): \$224,760 for *“Low Carbon Fuel Demonstration Pilot Plant for the Cement Industry.”*
- Dr. Andrew Pollard (Mechanical and Materials Engineering): \$175,240 for *“Low carbon fuel demonstration pilot plant for the cement industry.”*

## Other News

On December 6, PARTEQ Innovations celebrated 25 years of helping Queen's University researchers and the business and finance communities bring the benefits of scientific discovery to the public. Since 1987, Queen's discoveries have returned over \$30 million to the university and its inventors.

November saw the opening of the new Real-time Embedded Systems Laboratory (RESL) at the University of Waterloo, established as part of the \$48-million Embedded Systems Canada (emSYSCAN) project funded by the Canada Foundation for Innovation, and with assistance from CMC Microsystems. An embedded system is a computer designed for specific control functions within a larger system, often with real-time computing constraints. As the lead institution on the emSYSCAN project, Queen's University is working with 37 other institutions in an administrative capacity for implementation of emSYSCAN facilities.