

Senate Research Report

Sept 27, 2011

Awards and Honours

American Alliance for Theatre and Education: Lifetime Achievement Award
Queen's University Education Professor Larry O'Farrell has been awarded a lifetime achievement award by the American Alliance for Theatre and Education for his international leadership in promoting drama and theatre . The award recognizes his achievements in teaching, research and leadership at the national and international levels.

The Order of Canada

Dr. Alvaro Morales, Professor Emeritus of Urology, and Dr. John Bradford, Professor in the Department of Psychiatry were recently appointed members of the Order of Canada. Dr. Morales's research career, spanning more than 40 years, has advanced the field of urology and resulted in improved treatments for cancer and sexual dysfunction . Dr. Bradford is renowned for his work in the field of forensic psychiatry, in particular the treatment of mentally ill offenders. He has been associated with Queen's for the last 10 years including as a lecturer and external theses reviewer.

The Royal College of Surgeons (Edinburgh) : Fellowship

Dr. Richard Reznick, Dean of the Faculty of Health Sciences, recently joined a small group of Canadians who have received an honorary fellowship from the Royal College of Surgeons in Edinburgh.

The Royal Society of Canada: Fellowship

Dr. Audrey Kobayashi (Geography) has been elected as a fellow of the Royal Society of Canada. The Royal Society of Canada recognizes excellence in learning and research, advises governments and organizations, and promotes Canadian culture. Election to the Academies of the RSC is the highest honour a scholar can achieve in the arts, humanities and sciences.

The Royal Society of Canada: The Henry Marshall Tory Medal

Dr. Art McDonald (SNOLAB) has won the Royal Society of Canada's Tory Medal. The medal is awarded for outstanding research in a branch of astronomy, chemistry, mathematics, physics, or an allied science, carried out mainly in the eight years preceding the date of the award, but all the research of the candidate is taken into account.

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. John L. Schreiner (Medical Physics) received \$339,058 for his project entitled, Advancing Gel Dosimetry for Clinical Radiation Therapy.
- Dr. Michael John Beyak (Medicine) received \$705,256 for his project entitled, Diet Induced Obesity Down Regulates Gastrointestinal Vagal Afferent Satiety Signalling.
- Dr. Donald Hector Maurice (Biomedical and Molecular Sciences) received \$600,254 for his project entitled, Compartment Specific Cyclic Nucleotide Signalling and Control of Mural Cell Vascular Functions.

Canadian Institutes of Health Research (CIHR): Operating Grant – Population Health Intervention Research

Dr. Lucie Levesque (School of Kinesiology and Health Studies) received \$199,615 for her project entitled, National Guidelines for the Prevention of Obesity in the Mexican School System: An Investigation of Policy Implementation and Impact.

Canadian Institutes of Health Research (CIHR): Partnerships for Health System Improvement

Dr. Daren Heyland (Medicine) received \$433,418 for his project entitled, Advance Care Planning Evaluation in Hospitalized Elderly Patients: A Multicenter, Prospective Study. ACCEPT Study.

Canadian Institutes of Health Research (CIHR): Meetings, Planning and Dissemination Grant – Knowledge Translation Supplement

Dr. Sanjay Sharma (Medicine) received \$44,450 for his project entitled, Preventing Falls in the Elderly – Online Video KT

Dr. Sanjay Sharma (Medicine) received \$44,450 for his project entitled, An Emerging Treatment for Chronic Pain – Online Video KT

Dr. Sanjay Sharma (Medicine) received \$41,838 for his project entitled, Video Online KT-neng

Dr. Kevin Mumford (Civil Engineering) received \$90,000 for his project entitled, Remediation of Non-aqueous Phase Liquid Wastes in Groundwater Systems Containing Trapped Gas.

Dr. Kent Novakowski (Civil Engineering) received \$205,000 for his project entitled, The Role of the Drift-bedrock Contact and Upper Bedrock Properties in the Recharge and Contamination of Shallow Bedrock Aquifers.

Dr. Dongsheng Tu (Community Health and Epidemiology) received \$80,000 for his project entitled, Statistical Theory and Methods for Cancer Clinical Trials.

Dr. Gabor Fichtinger (School of Computing) received \$366,450 for his project entitled, Needle Guidance in Soft Tissue.

Dr. Audrey Girouard (School of Computing) received \$100,000 for her project entitled, Design and Evaluation of New Input and Interaction Techniques for Flexible Display Surfaces.

Dr. Janice Glasgow (School of Computing) received \$120,000 for her project entitled, Intelligent Systems for the Assessment, Diagnosis and Treatment of Stroke Patients.

Dr. Manuela Kunz (School of Computing) received \$70,000 for her project entitled, Algorithms and Interfaces for Improved Image-guided Surgery.

Dr. T. Patrick Martin (School of Computing) received \$145,000 for his project entitled, Self Managing Cloud Data Services (SMCDS).

Dr. David Skillicorn (School of Computing) received \$145,000 for his project entitled, Adversarial Knowledge Discovery.

Dr. Abd-Elhamid Taha (School of Computing) received \$100,000 for his project entitled, Opportunistic Frameworks for Radio Resource Management.

Dr. Ahmad Afsahi (Electrical and Computer Engineering) received \$110,000 for his project entitled, High-performance and Scalable Communication Subsystems for Exascale Computing.

Dr. Alireza Bakhshai (Electrical and Computer Engineering) received \$110,000 for his project entitled, Modeling, Design, and Control of Plug-and-Play Power Converters for Hybrid Renewable Distributed Energy.

Dr. Wai Yip Geoffrey Chan (Electrical and Computer Engineering) received \$140,000 for his project entitled, Anthropomorphic and Efficient Multimedia Communication.

Dr. Michael Greenspan (Electrical and Computer Engineering) received \$160,000 for his project entitled, Object Class Recognition in 3D Image Data.

Dr. Mohamed Ibnkahla (Electrical and Computer Engineering) received \$160,000 for his project entitled, Enabling Multiband Cognitive Relay Networks.

Dr. Carlos Saavedra (Electrical and Computer Engineering) received \$160,000 for his project entitled, Advanced Frequency Converters for the Radio Front-end of Wireless Communications Transceivers.

Dr. Paresh Sen (Electrical and Computer Engineering) received \$200,000 for his project entitled, Performance Enhancement in Power Electronics, Converters, Inverters, and Wind Generator Systems.

Dr. Robert Dalrymple (Geological Sciences and Geological Engineering) received \$28,000 for his project entitled, Tidal Deposits in Time and Space.

Dr. Heather Jamieson (Geological Sciences and Geological Engineering) received \$140,000 for her project entitled, Characterization of Mineral Nanoparticles in Dust and Colloids.

Dr. James Lee (Geological Sciences and Geological Engineering) received \$140,000 for his project entitled, New Advances in Ar/Ar Geochronology and Novel Applications to Global Tectonics.

Dr. Brendan Gurd (School of Kinesiology and Health Studies) received \$155,000 for his project entitled, Posttranslational Regulation of SIRT1: the Impact of Activation and Subcellular Location on Mitochondrial Biogenesis in Skeletal Muscle.

Dr. Joan Stevenson (School of Kinesiology and Health Studies) received \$155,000 for her project entitled, Evaluation of Strategies to Improve Measurement, Evaluation, and Force Requirements of the Spine During Manual Materials Handling Tasks.

Dr. Michael Tschakovsky (School of Kinesiology and Health Studies) received \$200,000 for his project entitled, Integrated Cardiovascular Control Responses to Physical Activity in Humans

Dr. Agnes Herzberg (Mathematics and Statistics) received \$60,000 for her project entitled, The Statistical Design and Analysis of Experiments and Combinatorial Design.

Dr. Abdol -Reza Mansouri (Mathematics and Statistics) received \$65,000 for his project entitled, Geometric and Topological Approaches in Nonlinear Control Theory.

Dr. Roland Speicher (Mathematics and Statistics) received \$265,000 for his project entitled, New Directions in Free Probability.

Dr. Peter D. Taylor (Mathematics and Statistics) received \$220,000 for his project entitled, General Theory of Inclusive Fitness in Structured Populations; Large Non-additive Effects; Microbial Interactions.

Dr. Stephen J Harrison (Mechanical and Materials Engineering) received \$115,000 for

