Senate Research Report

November 4, 2014

News

Dr. Gilles Gerbier (Physics, Engineering Physics and Astronomy) has joined Queen's University as the Canada Excellence Research Chair in Particle Astrophysics. Dr. Gerbier will conduct some of his work at SNOLAB in Sudbury, researching the mysteries surrounding dark matter. One goal of his research is to strengthen the Canadian presence in a joint North-American/European SNOLAB project and facilitate the sharing and transfer of expertise and knowledge between European and Canadian researchers.

Four outstanding Queen's professors have been named Canada Research Chairs, and two current Queen's chairholders have had their positions renewed:

- Dr. Christopher Booth (Oncology), Tier 2 CRC in Population Cancer Care
- Dr. Mark Daymond (Mechanical and Materials Engineering), Tier 1 CRC in Mechanics of Materials.
- Dr. Jeffrey Masuda (School of Kinesiology and Health Studies), Tier 2 CRC in Environmental Health Equity
- Dr. Dylan Robinson (Indigenous Studies), Tier 2 CRC in Indigenous Arts
- Dr. Tucker Carrington (Chemistry), Tier 1 renewal, CRC in Computational Quantum Dynamics
- Dr. David Murakami Wood (Sociology), Tier 2 renewal, CRC in Surveillance Studies

Three Queen's University professors have been named to the Royal Society of Canada's College of New Scholars, Artists and Scientists program, intended to recognize an emerging generation of Canadian intellectual leadership:

- Pascale Champagne (Civil Engineering)
- Una D'Elia (Art History)
- Morten Nielsen (Economics)

Dr. Guy Narbonne (Geological Sciences and Geological Engineering) is the recipient of the Bancroft Award from the Royal Society of Canada for publication, instruction and research in the earth sciences and his contributions to the public understanding and appreciation of the subject of geology.

Dr. John McGarry (Political Studies) is the recipient of the Innis-Gérin Medal from the Royal Society of Canada for his contribution to the literature of the social sciences.

Dr. Duncan Sinclair (Physiology, Emeritus; Fellow, School of Policy Studies) has been inducted into the Canadian Medical Hall of Fame for his leadership in health care reform.

Dr. Noel James (Geological Sciences and Geological Engineering) has received the Sorby Medal – the highest award of the International Association of Sedimentologists.

Dr. Robert Dalrymple (Geological Sciences and Geological Engineering) has received the Middleton Medal from the Canadian Sedimentology Research Group, a part of the Geological Association of Canada.

Dr. Robert Dalrymple (Geological Sciences and Geological Engineering) has also received the Twenhofel Medal which is the highest award given by the Society for Sedimentary Geology, in recognition of outstanding contributions.

Drs. R. Kerry Rowe, Richard Brachman and Fady Abdelaal (all from Civil Engineering) were authors of the 2013 Best Paper from *Geosynthetics International*, as voted on by the international editorial board. This marks the second year in a row that Drs. Rowe and Brachman were authors on the journal's best paper.

The Honourable Reza Moridi, Minister of Research and Innovation, announced on October 1, 2014 that $900,000 from the Government of Ontario's Campus-Linked Accelerator (CLA) program will be allocated to support innovation at Queen's University. The funds will allow the university-based Queen's Innovation Connector and campus-based accelerator to partner with Launch Lab, Kingston's regional innovation centre, to increase regional youth entrepreneurship activity.

Queen's University and the University of Stuttgart, Germany, have agreed to work together on the development of a dual master's program in the fields of chemistry, chemical engineering and physics. The two institutions signed a memorandum of understanding (MOU).

RE$EARCH Infosource, a research and development intelligence company, recently released their 2013 figures. Queen's sponsored research income grew to nearly $190 million, up from $168 million in the previous year. This growth saw Queen's national rank for research income move up one spot to 11th. Queen's also moved up in terms of research intensity, which measures research income per full time faculty member. The university placed sixth in Canada, up from 10th in the previous year.

Principal Daniel Woolf and Vice-Principal (Research) Steven Liss toured medical research facilities at Imperial College London during their recent trip to the UK. Dr. Jeremy Nicholson, a biochemist and head of Imperial College's Department of Surgery and Cancer, forged links with several Queen's researchers following his selection as the Faculty of Health Sciences Bruce Visiting Scholar in Surgical Innovation in 2013. As a result, Queen's Faculty of Health Sciences is planning a partnership with Imperial College. Principal Woolf and Dr. Liss also joined in a delegation representing the U15 group of Canadian research universities, of which Principal Woolf is now vice-chair. The delegation met with members of the Russell Group, which represents 24 leading public research universities in the UK.

Research Funding

Researcher	Department	Project Title	Amount
Canada Excellence Research Chair			
Gerbier, Gilles	Physics, Engineering Physics and Astronomy	Particle astrophysics	$10,000,000
Canada Research Chairs			
Booth, Christopher	Oncology	Population Cancer Care, Tier 2	$500,000
Carrington, Tucker	Chemistry	Computational Quantum Dynamics, Tier 1	$1,400,000
Daymond, Mark	Mechanical and Materials Engineering	Mechanics of Materials, Tier 1	$1,400,000
Masuda, Jeffrey	School of Kinesiology and Health Studies	Marginalized Populations, Place and Health, Tier 2	$500,000
Murakami Wood, David	Sociology	Surveillance Studies, Tier 2	$500,000
Robinson, Dylan	Indigenous Studies	Indigenous Arts, Tier 2	$500,000
Canada Foundation for Innovation: JELF			
Carrington, Tucker	Chemistry	Parallel computer for the development of new algorithms in quantum dynamics	$50,000
Daymond, Mark	Mechanical and Materials Engineering	Preparation of transmission electron microscopy (TEM) foils from ion irradiated samples	$100,000
Gerbier, Gilles	Physics, Engineering Physics and Astronomy	Search for GeV Dark Matter	$800,000
Mitacs: Accelerate Graduate Research Internship Program			
Loock, Hans-Peter	Chemistry	Fiber-optic monitoring of pipes and pipelines	$6,250
NSERC: Collaborative Research and Development Grant			
McAuley, Kim	Chemical Engineering	Mathematical models for polyether production from 1,3-propanediol	$48,000
Zou, Ying	Electrical and Computer Engineering	User centric service composition in service ecosystems	$204,000
NSERC: Discovery Grant Program, Accelerator Supplement			

Eckert, Christopher	Biology	The ecology and evolution of species range limits	$120,000
NSERC: Engage Grant			
Guay, Martin	Chemical Engineering	Model free distributed optimization for building systems	$25,000
SSHRC: Connection Grant			
Smith, Gordon E.	School of Music	Kahswentha Indigenous knowledge initiative	$25,000