



VICE-PRINCIPAL (RESEARCH)

Senate Research Report

April 18, 2017

Strategic Research Plan Renewal

The Queen's Strategic Research Plan (SRP) is a foundational governing document that supports and guides the institutional research mission. Over the past five years it has supported the research landscape at Queen's in a variety of ways – allowing us to enhance our research prominence through targeted areas of focus, successes in external funding, development of internal funding programs, engagement of trainees, and innovation and partnership activities.

The current iteration of the SRP will conclude at the end of 2017. Over the past several months, we have started the process of communication and consultation to review and refresh the SRP. The Senate Advisory Research Committee (SARC) has been informed of the renewal process and a small writing team will be established to support the drafting of the revised SRP. Engagement with the community through a variety of online and in-person engagements are being planned. The three phases of the renewal are comprised of: 1) Planning, consultation and feedback, 2) Drafting the SRP and soliciting feedback, and 3) Revision of the SRP draft followed by a consultation phase culminating in Senate approval.

A foundational principle underlying the strategic research plan is a commitment to equity, diversity and inclusion, as addressed by the Principal's Implementation Committee on Racism, Diversity, and Inclusion, coupled with the recommendations of the Queen's University Truth and Reconciliation Commission Task Force. These principles are important for the enhancement of our research prominence through faculty renewal and emerging or established strategic themes of focus.

An initial communication has been posted on the [Office of the Vice-Principal \(Research\) website](#), which will be updated regularly to provide information on process and timelines. Updates will also be provided through the Senate Research report.

News

The Honorable Reza Moridi, Minister of Research, Innovation and Science, visited Queen's on March 14 to announce [\\$4.5M in funding](#) for four Queen's researchers from the Ontario Research Fund – Research Excellence and Research Infrastructure programs. See table below.

On April 3, the 2016 winners of the [Prizes for Excellence in Research](#) presented public lectures to members of the Queen’s and Kingston community. The presenters were:

- Gauvin Bailey (Art History & Art Conservation)
- James Cordy (School of Computing)
- Janet Hiebert (Political Studies)
- Myra Hird (School of Environmental Studies, 2015 recipient)
- Stephen Vanner (Medicine)
- Virginia Walker (Biology)

On April 20, the Office of the Vice-Principal (Research) will host a day-long [Faculty Writing Retreat](#) at the Donald Gordon Centre focused on research funding applications.

Dr. Stephen Lougheed (Biology) was named the recipient of the 2016 [Partners in Research Science Ambassador Award](#).

Dr. Guy Narbonne (Geological Sciences and Geological Engineering) was awarded the [2017 E.R. Ward Neale Medal](#) from the Geological Association of Canada for his “exceptional scientific discovery and commitment to public outreach.”

Research Funding

Researcher	Department	Project Title	Amount
Bickell Foundation – Medical Research			
Wells, Laura	Chemical Engineering	Designing better intraocular lenses for cataract patients - determining the role of neutrophils and materials in posterior capsule opacification	\$58,800
Canada Foundation for Innovation – Major Science Initiatives Fund			
Smith, Nigel	SNOLAB	SNOLAB Facility Operations	\$28,809,614
Canadian Cancer Society Research Institute			
Dancey, Janet	Canadian Cancer Trials Group	Canadian Cancer Trials Group – CCSRI Program	\$23,500,000
Natural Sciences and Engineering Research Council of Canada – Collaborative Research and Development Grant			
Kim, Il Yong	Mechanical and Materials Engineering	Automotive weight reduction through nonlinear finite element modeling, fatigue	\$48,000

		analysis, and optimization of hot stamped ultra-high strength steels	
NSERC – Engage Grant			
Loock, Hans-Peter	Chemistry	Optical sensor for improved copper production	\$24,400
Networks of Centres of Excellence – BioFuelNet			
Mabee, Warren	Geography and Planning	Knowledge Translation - Policy options for advanced biofuel sustainability	\$50,000
		Knowledge Translation - A visual scenario for an oilsands biorefinery	\$10,000
Networks of Centres of Excellence – Canadian Arrhythmia Network			
Glover, Benedict	Medicine	Patient-Centred AF Management Program (PCAF) – Motivations of patients with known atrial fibrillation in various emergency departments: A mixed methods survey	\$171,903
Ministry of Research, Innovation and Science: Ontario Research Fund – Research Excellence Program			
Jain, Praveen	Electrical and Computer Engineering	Eco-friendly Nano PV Energy System	\$4,000,000
MRIS: Ontario Research Fund – Research Infrastructure Program			
Braun, Alexander	Geological Sciences and Geological Engineering	Reservoir monitoring using superconducting gravimetry	\$180,000
Gallivan, Jason	Biomedical and Molecular Sciences	Neural mechanisms underlying cognitive transformations for human goal-directed action	\$150,000
Martin, Ryan	Physics, Engineering Physics and Astronomy	Germanium detectors to understand neutrinos and dark matter	\$250,000

Mitacs – Accelerate			
Munoz, Doug	Biomedical and Molecular Sciences	KINARM Standard Tests' Task Scores: towards a validated and effective tool for communicating to clinical communities KINARM measures of brain function	\$15,000
Mitacs – Globalink Research Grant			
Bryant, Tim	Mechanical and Materials Engineering	Controlled passive energy management in prosthetic foot components: cosmetic cover design and performance during simulated gait	\$5,000
Ontario Institute for Cancer Research – Ontario Molecular Pathology Research Network (OMPRN) Cancer Pathology Translational Research Grants			
Rauh, Michael	Pathology and Molecular Medicine	Path2MyDx: Personalized molecular pathology for Myeloid Cancer Diagnosis	\$207,842
Varma, Sonal	Pathology and Molecular Medicine	Ezrin as a novel biomarker for response to chemotherapy in breast cancer	\$207,838