

Senate Research Report

March 21, 2017

News

Two Queen's faculty members – Dr. Vicki Friesen (Biology) and Dr. Philip Jessop (Chemistry) – have received three-year grants from the Natural Sciences and Engineering Research Council (NSERC) [Strategic Partnership Grants](#) for Programs. Dr. Friesen's project will study the effects of climate change on seabirds in the Arctic, and Dr. Jessop's project will develop a new water purification system.

Queen's students Yuliya Nesterova and Sterling Mitchell have been shortlisted in [NSERC's "Science, Action" contest](#). Contestants had to create one-minute online videos discussing their research.

The [Canadian Frailty Network](#) has received renewal funding of \$23.9M from the Networks of Centres of Excellence. An echo announcement was hosted at Queen's by MP Mark Gerretsen on March 3, 2017.

A gift of \$5M from entrepreneur and geologist Ross J. Beaty will support the newly-named [Beaty Water Research Centre](#) in maintaining permanent facilities in the Queen's Innovation and Wellness Centre and other research and education initiatives.

On March 1, the School of Graduate Studies hosted the Big Data PechaKucha Research Showcase at the University Club as part of the Big Data 175 series being run by the Surveillance Studies Centre.

Research Funding

Researcher	Department	Project Title	Amount
Canada Foundation for Innovation – John R. Evans Leaders Fund			
Braun, Alexander	Geological Sciences & Geological Engineering	Reservoir monitoring using superconducting gravimetry	\$180,000
Davies, Theresa	Mechanical and Materials Engineering	Building and designing assistive technology	\$125,000

Gallivan, Jason	Biomedical and Molecular Sciences	Neural mechanisms underlying cognitive transformations for human goal-directed action	\$150,000
Johri, Amer, with P. Mousavi	Medicine	The Precision Imaging Program: Advanced computational methods for quantification of cardiovascular disease	\$120,000
Martin, Ryan	Physics, Engineering Physics and Astronomy	Germanium detectors to understand neutrinos and dark matter	\$250,000
Monaghan, Jacqueline	Biology	State-of-the-art signal transduction and molecular biology laboratory	\$125,641
Natural Sciences and Engineering Research Council of Canada – Collaborative Research and Development Grant			
Liu, Yan-Fei	Electrical and Computer Engineering	Technology development for 48V input voltage regulator for next generation data center power systems	\$144,000
Rowe, Kerry	Civil Engineering	Tailing migration through geomembrane holes	\$39,490
Retina Foundation of Canada – Junior Clinical Research Grant			
Rullo, Jacob	Ophthalmology	Tachyphylaxis in Neovascular Diseases of the Eye: Intraocular immune activation to intravitreal anti-VEGF	\$5,000