

# Research Stimulus Fund Report 2014/15

June 2015

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Office of the Vice-President, Research and Innovation

# **Executive Summary**

The University of Windsor's Strategic Plan, "Thinking Forward... Taking Action", promotes taking action to "create a more research-intensive university with graduate programs that build on academic and professional strengths". With this in mind, the Research Stimulus Funds (RSF) was established in 2013/14 under the purview of the Vice-President, Research and Innovation (VPRI) with annual funding of \$500,000 to be allocated among the Faculties. Now in its second year, the funds are to be utilized to build upon research strengths, enhance future research funding, and enhance graduate training and experiential learning. The aggregate RSF funding for each of the individual Faculties is based on the three-year average of Tri-Council (NSERC, SSHRC and CIHR) funding dollars as calculated and reported by the Indirect Costs Secretariat.

The RSF funding allocated to each of the Faculties was distributed to individuals or groups of researchers whose projects or activities were approved by the Dean in consultation with the VPRI. The RSF funds supported a diverse variety of research projects and activities, and enabled the purchase of research infrastructure within the Faculties. The Faculty of Education provided a portion of the funds as a contribution towards a successful SSHRC Partnership Development Grant, with the balance of the funds being used for its guest speaker and lunch and learn programs. The Faculty of Engineering supported the renovation and upgrade of a research lab and the purchase of needed research equipment. The Faculty of Human Kinetics used the funds to create a Golden Jubilee Research Excellence Award, which has the mandate to support and extend the research culture within the Faculty. The Internal Research Grants Program within the Faculty of Nursing was augmented by the RSF funds, which provides seed funding to strengthen external research applications. The Faculty of Science utilized the funds for the second and final year of three Golden Jubilee Research Excellence Awards to expand and strengthen the research programs of the recipients, and to augment funding from other sources for the purchase of infrastructure needed in the Faculty's research labs. The Faculty of Arts, Humanities and Social Sciences (FAHSS) funded New Faculty Research Establishment Grants to aid new faculty members in developing and establishing their research programs. The Odette School of Business used the RSF funds toward the second and final year of an awarded Golden Jubilee Professorship. Descriptions of each of the individual awards and funded activities/purchases are detailed in this report.

### **Background**

Funding from the Research Stimulus Fund (RSF), under the purview of the Vice-President, Research and Innovation (VPRI), is allocated to each of the individual Faculties based on their respective three-year average of Tri-Council (NSERC, SSHRC and CIHR) research revenue within each Faculty (as provided by the Indirect Costs Secretariat). The RSF funding is intended to be used to support the research enterprise, to invest in research infrastructure, and to provide strategic research grants or awards to faculty members in the individual Faculties that have the potential to attract additional external funding to the University.

# **RSF-Funded Projects and Activities**

#### Education

The Faculty of Education has continued its investment in strengthening the research culture in the Faculty with a contribution to research funding, as well as promoting research through presentation of research projects and findings by guest speakers, faulty members and graduate students.

#### **Dr. Yvette Daniel**

Dr. Daniel was provided with funding of \$1,500 from the RSF as part of an institutional contribution to her successful 2014-2017 SSHRC Partnership Development Grant, "Pedagogies of Repair and Reconciliation: The Embodied Praxis of Youth Civic Engagement", with a total awarded amount of \$197,810.

#### **Faculty of Education**

The Faculty of Education received \$1,500 for its Lunch & Learn Series which involved guest speakers, faculty members and graduate students presenting research projects or findings that have had a practical application or influenced educational practices.

#### **Faculty of Education**

The Faculty of Education was provided with \$3,500 for its Speakers' Series. This program saw invited guest speakers make presentations on the impact of education research on educational practice, and for small groups/individuals to receive consultations with guest speakers on specific research plans or programs.

# Engineering

The Faculty of Engineering has focussed on investments in research infrastructure through the use of the RSF funds to purchase research equipment and to complete research lab renovations, thereby providing more advanced capabilities for researchers.

#### Dr. Narayan Kar

Dr. Kar received \$25,000 from the RSF funds to complete renovations and upgrades in the Centre for Hybrid Automotive Research and Green Energy (CHARGE) resulting in enhanced research capabilities. These renovations will support the further engagement of the CHARGE lab with a wide range of industry partners.

#### **Dr. Sazzadur Chowdhury**

Dr. Chowdhury and his colleagues in Electrical and Computer Engineering received funding in the amount of \$130,506, consisting of \$101,650 from the RSF and \$28,856 from the Dean of Engineering, to purchase the Verasonics Vantage system to use for biometric identification, security/surveillance application development and biomedical imaging therapy. This system will enhance the ultrasound research capability of the University, develop HQP in this area, and support the ongoing development of commercializable technology within the MEMs laboratories.

#### **Human Kinetics**

The goal of supporting a strong research culture and events such as the annual Kinesiology Research Day involving undergraduate students is envisioned by the Dean of the Faculty of Human Kinetics. With this in mind, the RSF funding was used to create a Golden Jubilee Research Excellence Award with funding in the amount of \$40,000 per year for a period of two years, funded by the Faculty of Human Kinetics (\$30,000) and the RSF (\$10,000).

#### **Dr. David Andrews**

Dr. Andrews was awarded the Golden Jubilee Research Excellence Award in recognition of his research and his continued commitment to the success of his colleagues. This award will be used to extend his efforts in advancing Kinesiology research.

### Nursing

The Faculty of Nursing promotes research within the Faculty through its Internal Research Grants Program with the goal of engaging a larger number of faculty members in research activity and increasing the overall research portfolio within the Faculty, as well as enhancing the grant writing experiences of junior faculty members.

#### **Faculty of Nursing**

The Faculty of Nursing received \$1,300 in RSF funds towards its Internal Research Grants Program for the purpose of providing seed funds for faculty members who plan to obtain pilot data for external grant applications, to open venues for research collaboration between faculty members and clinical and/or college nursing partners, and to provide opportunities for mentorship of junior faculty members.

#### Science

Last year the Faculty of Science awarded three Golden Jubilee Awards in three thematic areas with the goal of increasing external research funding and research capacity by growing existing research programs through the fostering of new partnerships and research directions. The second and final year of the awards were funded at \$40,000 each.

#### **Golden Jubilee Research Excellence Awards**

#### Dr. Robert Schurko

Dr. Schurko's award is in the area of *Materials Science*. His research program, "*Multinuclear SSNMR for High-Throughput Screening of Pharmaceuticals*" aims to provide Dr. Schurko with the opportunity to increase his program capacity, open new doors to private/industrial research collaborations, and enhance the reputation of the University.

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#### **Dr. Daniel Mennill**

Dr. Mennill received an award in the area of *Environment & Ecosystems* for his research program, "*Ecosystem level studies of animal responses to anthropogenic disturbance: animal communication in polluted and pristine Canadian environments."* This award provides the means for Dr. Mennill to explore new research directions, strengthen existing and foster new collaborations, and to attract new research funding.

#### **Dr. Panayiotis Vacratsis**

Dr. Vacratsis was the recipient of an award in the area of *Health Research* for his research program, "*Integration of Next Generation Biological Mass Spectrometry Techniques: Health Research and Beyond."* This award aids in the expansion of Dr. Vacratsis' research by using the mass spectrometry system for numerous biological and health applications leading to new opportunities for research funding.

The Faculty of Science also invested in research enterprise through contributions to research infrastructure.

#### **Dr. Philip Karpowicz**

Dr. Karpowicz was provided the sum of \$75,000, with \$25,000 coming from the RSF and \$50,000 from the Dean of Science, to purchase equipment and to establish his lab as one of the newest faculty members in the Department of Biological Sciences.

# Drs. Stephen Loeb, Jeremy Rawson, Charles Macdonald, Samuel Johnson, and Holger Eichhorn

Drs. Loeb, Rawson, Macdonald, Johnson, and Eichhorn in the Department of Chemistry and Biochemistry received \$100,000 in RSF funding, which, together with a \$150,000 Research Tools and Instruments grant funded by NSERC, allowed for the purchase of a new mass spectrometer required for proper identification and characterization of new chemical compounds and materials.

# Faculty of Arts, Humanities and Social Sciences (FAHSS)

The Faculty of Arts, Humanities and Social Sciences has provided funding to its new faculty to develop and establish their research programs for the purpose of producing quality publications and applying for external funding, as well as laying the foundation for their research track record. These grants have a term of 20 months.

# **New Faculty Research Establishment Grants (FAHSS)**

#### Dr. Kyle Asquith

Dr. Asquith was awarded funding in the amount of \$10,000 to develop his program on "Advertising, controversial practices, and promises of 'responsibility'" which falls under the grand challenge of Viable, Healthy, and Safe Communities. The anticipated results will include conference presentations, journal publications, and networking with potential collaborators, leading towards a larger, potentially collaborative SSHRC-funded research project.

#### **Dr. Brian Brown**

Dr. Brown received a grant of \$10,000 to build his program, "The Work of 'Street Art' in the Age of Digital Reproducibility," which fits within the grand challenge of Viable, Healthy, and Safe Communities. This work will lead to peer-reviewed articles in targeted journals and the submission of an application under the SSHRC Insight Development Grant Program.

#### Dr. Laszlo Erdodi

Dr. Erdodi was the recipient of a grant in the amount of \$10,000 to develop his research program, "Performance validity testing in neuropsychological assessment: Developing measurement models that increase diagnostic accuracy and clinical utility while reducing time and cost of administration," which falls under the grand challenges of Viable, Healthy, and Safe Communities and Sustainable Industry. His work is expected to result in publications in peer-reviewed scientific journals, with a view to building a research track record.

#### **Dr. Emmanuelle Richez**

Dr. Richez was awarded the sum of \$10,000 in support of her research program on "The Impact of Bills of Rights on Aboriginal Peoples: A Comparative Study of Australia, Canada, New Zealand and the United States," which fits within the grand challenge of Viable Health, and Safe Communities. The goal of this work is to enhance public discourse on the issue of Aboriginal rights and to establish the research publication record of the researcher.

#### **Business**

During the last fiscal year, the Odette School of Business awarded one Golden Jubilee Professorship, funded by the Faculty and the VPRI, which was based the awardee's research plan detailing the strategic priorities, aims, and projected outcomes which would be supported by the award. Now in its second year, funding of \$50,000 was provided, comprised of \$8,000 from the RSF, \$12,000 from the VPRI and \$30,000 from the Odette School of Business.

#### **Dr. Francine Schlosser**

Dr. Schlosser's Golden Jubilee Professorship outlines various research activities, including: (i) to prepare and disseminate topical and impactful research to both practical and academic audiences; (ii) to research, develop, and experiment with innovative and collaborative student learning experiences; (iii) to pursue academic and practical service leadership opportunities; and (iv) to develop a forum for entrepreneurial activities.