Board of Governors Report  
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B. Mario Pinto, Vice-President, Research

Research News

Budget 2014

Canada’s Economic Action Plan 2014 will invest more than $1.6 billion over the next five years in research and innovation. This includes $46 million per year to augment the Tri-Council’s base budgets: NSERC and CIHR will each get an additional $15 million and SSHRC an additional $7 million, and support for the Indirect Costs of Research Program will increase by $9 million per year.

This funding also includes $1.5 billion to be allocated over ten years to build on existing and emerging areas of research strength. The Canada First Research Excellence Fund will be administered by SSHRC and made available to all post-secondary institutions across Canada on a competitive, peer-reviewed basis. The program launched in the east and the west (at SFU’s Surrey campus) on Feb. 19, 2014.

Other research-related funding that has been committed over the next two years includes an additional $500 million to the Automotive Innovation Fund for new strategic R&D projects. Research training will receive a boost with $40 million targeted from the youth employment program to support up to 3000 internships for grad students (mostly through NRC-IRAP) and $8 million to MITACS for its Elevate postdoctoral industrial R&D fellowships program. TRIUMF, Canada’s particle physics laboratory at UBC of which SFU is a partner, will receive $126 million, which combined with existing funds from NRC will total $222 million over five years.

An additional $40 million has been allocated for incubation and acceleration initiatives.

SFU-India Research Partnerships

SFU and India’s largest company, Indian Oil, have signaled their intent to collaborate on hydrogen and fuel cell research to the benefit of students and researchers in both countries as well as the global clean energy sector. The relationship will facilitate the sharing of personnel and infrastructure, and could lead to a joint research centre in future.

An agreement was signed to establish the Bombay Stock Exchange – Ryerson – SFU Accelerator Program India, an international technology business incubator and accelerator program to be based in Mumbai. The program aims to accelerate R&D in both countries and train and develop entrepreneurs and startups for local and international market penetration. During the week of Feb. 24, 2014, the VP Research will participate in a formal signing ceremony with the President of Ryerson University as part of the Governor General’s mission to India.

Building on relationships formed during previous India missions, SFU has also signed a memorandum of understanding with the Indian Institute of Technology Bombay to facilitate student exchanges and research collaborations in solar energy and fuel cell technology.
SFU Community Trust Endowment Fund Program Successes

The CTEF program has been a successful strategy to push SFU’s research excellence higher and increase our competitive profile globally. The seven CTEF projects have fostered interdisciplinary collaborations, trained students, leveraged internal investment to gain external funds and showcased SFU’s research leadership. As of April 2013, CTEF has supported a total of 229 SFU students including 39 undergraduates, 79 Masters, 80 PhDs, and 31 postdoctoral fellows, accounting for over 52% of the total investment. The CTEF teams have collectively produced 521 publications (peer-reviewed articles, book chapters, books) and leveraged SFU’s $7 million investment to obtain over $40 million in external grant funding.

QS Top 50 Under 50 and Subject Rankings

In the 2014 QS’ rankings of world universities under 50 years of age, SFU is ranked #2 in Canada after the University of Calgary, #3 in North America and #17 in the world, up from #30 last year.

The QS World University Rankings by Subject are based on indicators of academic and employer reputation as well as Scopus citation data. SFU ranks in the top 200 universities in the world in 13 subject areas. Its highest-ranked subject is Geography; SFU is listed among the 51-100 top institutions in the world in this subject.

Research Grant Successes

- **Elliot Goldner** of Health Sciences has received a $250,000 Grand Challenges seed grant to “prepare a trial of low-cost, enhanced primary healthcare services in Vietnam for depression.” The goal is a scalable program to train primary healthcare providers in mental healthcare delivery.

- Health Sciences PhD student **Mark Labrecque** has received a $40,000 Robert C. Watson award from Prostate Cancer Canada. His work with Dr. Timothy Beischlag and the Vancouver Prostate Centre has identified the pathways that tumour cells use to grow blood vessels. They are now targeting those pathways to see if they can stop benign tumours from becoming malignant.

Research Awards & Honours

- **Michael Hayden** of Physics is part of the ALPHA-Canada team that received the NSERC John C. Polanyi Award for its work in creating, capturing, and characterizing the antihydrogen atom.

- **David Vocadlo** of Chemistry is the winner of the 2014 Canadian Society of Chemistry (CSC) – Teva Canada Ltd. Biological and Medicinal Chemistry Lectureship Award for distinguished contributions to the field of biological or medicinal chemistry.

- English professor emeritus **David Stouck** has been shortlisted for the 2014 RBC Taylor Prize for excellence in non-fiction for *Arthur Erickson: An Architect’s Life*. The winner will be announced Mar. 10, 2014.
• The 2014 winner of the Montreal Medal from the Chemical Institute of Canada is VP Research Mario Pinto, for his “outstanding contribution to the profession of chemistry or chemical engineering in Canada.”

• Jian Pei of Computing Science has been named an IEEE Fellow, recognized for his contributions to data mining and knowledge discovery.

Innovation Updates

• SFU, Ryerson University and the University of Ontario Institute of Technology submitted a joint Zones of Innovation and Incubation (ZI2) proposal to the new federal Canadian Accelerator and Incubator Fund (CAIP) program in October 2013. The proposal is one of 20 shortlisted by the NRC selection committee panel and funding decisions are expected soon. If successful, SFU would receive $6.76 million in CAIP matching funding over 51 months. This funding would be utilized, along with other sources of funding, to support student and spinout company incubation and acceleration and related facilities and program activity. It would also support innovation zone development that leverages multi-institutional program strengths.

• VentureLabs® client company Semios, a leader in the development of sustainable pest management technology, has received $285,000 in the sustainability category of Verizon’s Powerful Answers Award for bold ideas that leverage Verizon’s networks “to deliver great solutions and social good.”

• VentureLabs® company Lungpacer Medical Inc. has completed an oversubscribed US $4.25-million equity financing round for the completion of pre-commercial prototypes of its transvascular diaphragm stimulation device for mechanically ventilated patients. This funding also supports first-in-human clinical trials through Fraser Health.

• VentureLabs® company PHEMI Health Systems has completed a $2.25 million private equity financing round. It has also executed agreements with Providence Health Care, St. Paul’s Hospital, BC Centre for Excellence in HIV/AIDS, SAP and five other organizations for PHEMI’s clinical workflow management software for tablet devices.

• Four student startups and Venture Connection clients were recognized for excellence in business development at the annual Venture Connection Coast Capital Savings Venture Prize competition. First place went to Maryam Sadeghi’s Molescope for mobile skin cancer screening, while Enhanced Scientific (Ehsan Daneshi and Majid Shokoufi) was the runner-up for its UV-Visible spectrophotometers for academic and industrial applications. New this year, the Idea prize for teams showing great promise in their business plan was awarded to Str8A Tutors, an online tutoring service for high-school students. Transcription Ninjas received the second place prize.