Board of Governors Report
May 28, 2015
Joy Johnson, Vice-President, Research

Research News

- **QS World University Rankings by Subject** 2015 ranks SFU within the world’s top universities in half of the diverse subject areas it covers, including in the top 100 in the world in two subject areas: Communication & Media Studies (3rd in Canada) and Geography (7th in Canada). In the 2015 **Times Higher Education 100 Under 50**, SFU’s score for research and citations rose slightly over 2014.

- SFU has two new Tier 2 Canada Research Chairs (CRCs): Jing Li (Beedie School of Business) in Global Investment Strategy and Eundeok Mun (Physics) in Materials Physics. **Paul Tupper’s** Tier 2 CRC in Applied Mathematics has been renewed.

- SFU, the First Nations Health Authority and St. Paul’s Hospital Foundation have established a **First Nations Health Authority Chair in Heart Health and Wellness**. The Chair will lead research, education, and knowledge mobilization relating to First Nations’ heart health.

- **SFU Geography** is now home to an Esri Canada Centre of Excellence (ECCE) in GIS, joining a national network of five other Canadian universities. **Suzana Dragicevic**, who is coordinating and managing the SFU ECCE, told SFU News that the collaboration will expand SFU’s research and teaching capacity in spatial information sciences.

- The Vice-President, Research Office and the Pacific Institute for Climate Solutions co-hosted the **SFU Climate and Energy Research Day** on April 14th to enable SFU scholars to share their research with the broader community. Mark Jaccard of REM delivered a plenary talk on “Integrating Research from Natural to Social Science,” followed by a series of En’lightening talks and panel sessions on the climate and energy research landscape at SFU, and concluding with a poster session featuring 29 projects.

- The Government of Canada has renewed its support for **TRIUMF** by providing an additional $45 million in operating funds, resulting in total federal support of $267 million over the next five years for its world-leading particle and nuclear physics research. TRIUMF is a joint venture by a consortium of Canadian universities, including SFU, and is physically located at UBC.

- Among the notable SFU research findings that have been recently released:
  - **Kimberly Plomp**, a postdoc in Mark Collard’s Human Evolutionary Studies Program, attracted media attention for leading the first known research study to find evidence that the occurrence of back pain in humans may have an evolutionary explanation. The international research team found that some individuals have vertebrae at the “ancestral end” of the range of shape variation, and are less well adapted for bipedalism.
  - The fossil record provides clues to modern marine extinction risk, says new research published in Science magazine and co-led by SFU postdoc **Sean**
Anderson. Their analysis estimated worldwide extinction patterns of marine life, important for guiding conservation efforts.

- Professor Kelley Lee of Health Sciences has co-authored an international research study, funded by the U.S. National Cancer Institute, examining how the tobacco industry undermines Islamic opposition to smoking in an effort to normalize tobacco use among Muslims.

- Chemistry professor David Vocadlo and his team from the Laboratory for Chemical Glycobiology have published new research in Nature Chemical Biology that brings fresh insight into how a specialized sugar regulates protein levels in cells. As protein levels influence the health of cells, a better understanding of this process could improve how we treat many diseases, including cancer and Alzheimer’s, in the future.

- Health sciences professor Tim Takaro is the lead author of new research emerging from the nationwide Canadian Healthy Infant Longitudinal Development (CHILD) Study funded by AllerGen and CIHR. Malcolm Sears from McMaster University, who is Director of CHILD, notes that this is “one of the largest studies in the world to look in depth and how genes and the environment interact to impact the development of allergies, asthma and other chronic diseases.”

Research Grant Successes

- Mechatronics professor Majid Bahrami is leading a $700,000 NSERC-funded project that brings together expertise from SFU’s Laboratory for Alternative Energy Conversion and Ontario’s Sheridan College to help three Canadian companies (Terrella Energy Systems, Alpha Technologies and Westport Innovations) advance their graphite thermal management products.

Research Awards & Honours

- Health sciences professor Bruce Lanphear has been named Academic of the Year 2015 by the Confederation of University Faculty Associations (CUFA BC) for his research on fetal and childhood exposure to environmental neurotoxins, including residential hazards.

- Lianping Ti, who completed a master’s degree in Public Health at SFU and is now a PhD candidate at UBC, has received CIHR’s Rising Star Award for her research in population and public health.

- Health Sciences undergrad Natalie Kinloch was among eight students from across Canada to receive a scholarship to present her vaccine research at the Canadian Conference on HIV/AIDS Research (CAHR 2015) in Toronto.
Innovation Updates

• Beedie School of Business student entrepreneur Ethan O’Brien’s unique solution to unsustainable food growing practices is close to being market-ready. His company, SFU Venture Connection client Garden Fresh Foods, has developed a vertical aquaponics system for growing herbs that dramatically increases herb production while requiring 90% less water and space.

• Alice Park has been named one of BC’s Top 30 Under 30 by BC Business magazine, following her 2013 Top 25 Under 25 award from the Surrey Board of Trade. As a Beedie School of Business student, Park developed her idea for a ride-sharing app through participation in Venture Connection® and RADIUS incubator programs. With support from BCIC, Futurpreneur Canada and the Business Development Bank of Canada, Park has built a social venture to help solve Vancouver’s transportation problems. Go2gether has been adopted by SFU, Vancity, and the Vancouver Airport Authority and will officially launch in September 2015.

• ArtsALLY is the latest Venture Connection® client company to have been acquired to date, following Layerboom (Joyent, 2010) and MetroLyrics (CBS Interactive, 2011). In September 2014, SFU student Michelle Martin launched the company along with her partners to connect Vancouver’s artists with the local art market. With a collection of 800 art works, ArtsALLY is being absorbed into While New Home’s online platform.

• Together, SFU and the RBC Foundation will prepare the next generation of Aboriginal leaders in entrepreneurship and innovation. With a $1.3 million gift from RBC, SFU’s Beedie School of Business is establishing the RBC First Peoples Enterprise Accelerator, facilitated by RADIUS in partnership with the EMBA in Aboriginal Business and Leadership. It will also provide $30,000 in scholarships over the next ten years through the RBC Award in Aboriginal Business and Leadership, enabling Aboriginal undergraduate and graduate students to take advantage of SFU’s many innovation and entrepreneurship programs.

• The Beedie School of Business launched its new Science & Technology Commercialization Graduate Certificate program in April. The first cohort of 15 students will commence in September 2015. It aims to provide science and engineering graduates from SFU and UBC with both the theoretical understanding and practical tools to take research discoveries out of the lab and into the marketplace, where they can have real impact.