SFU: Engaging the world

Since 2008, SFU has placed within the 201-300 group of the world’s top 500 universities in the Shanghai Jiao Tong Academic Ranking of World Universities, which attempts to evaluate the overall (research and educational) performance of institutions. Indicators include Nobel Prize winners, highly cited researchers, papers published in Nature and Science, and per capita academic performance. Twenty-three Canadian universities made the list (Concordia was added this year); the other Canadian universities in the 201-300 group are Dalhousie, Laval, Queen’s, Calgary, Western Ontario, Guelph, Ottawa, and Saskatchewan.

By field, SFU ranks within the world’s top 100 universities in the field of Social Sciences, and within the top 200 in Engineering/Technology and Computer Sciences. In the more detailed subject rankings, SFU appears among the top 150 in Mathematics, Computing Science, and Economics/Business.

The 2013 Times Higher Education 100 Under 50 ranking lists SFU as #26 in overall performance among the world's youngest institutions (up from #30 last year). SFU's rankings in both the research and citations categories are higher than in 2012.

SFU to CREATE new opportunities for graduate research

Leading SFU’s first grant under NSERC’s Collaborative Research and Training Experience (CREATE) program, Cenk Sahinalp of Computing Science will help advance SFU and Canada’s research capacity in big data, genomics, and DNA sequencing. The $1.65 million project will train young academics via a proposed joint graduate program with Germany’s Bielefeld University in the development of methods for the practical analysis of genome diversity and dynamics. It capitalizes on SFU’s partnerships with the BC Cancer Agency and the Vancouver Prostate Centre.

Chemists Robert Young, Mario Pinto, and David Vocadlo are involved in another CREATE grant, led by the University of Toronto, focusing on epigenetics and universal access to free or low-cost medicines. The Collaborative Medicinal Chemistry Network in Epigenetics Training (ChemNET) will train Canadian chemists with internships in pharmaceutical labs as well as practical training on biochemical and biophysical techniques.
MSFHR Post-Doctoral Fellowship Awards

Out of 250 applicants and 59 awards, seven exceptional SFU researchers have been selected to receive funding. Since 2001, SFU has received 117 Trainee awards. This year’s recipients include:

• Razieh Eskandari, New molecular probes to evaluate the role of O-glycosylation in Alzheimer Disease
• Cindy Holmes, Safety, belonging and mental health
• Bryn Lander, recipient of one of three Knowledge Translation Science Awards for his research on the translation between research and clinical practice
• Ryan McNeil, Exploring the natural history of nonmedical prescription opioid use among street-involved youth and adult injection drug users
• Philip Mwimanzi, Role of HIV Nef in establishment and maintenance of HIV latency
• Dave Pasalich, A preventive parenting program for family reunification
• Jeremy Duncan Wong, Investigating the mechanisms that reduce the metabolic cost of gait in persons with stroke using a novel bipedal exoskeleton

New CIHR Operating Grants

SFU researchers were funded in the latest CIHR Open Operating Grants competition:

• Angela Brooks-Wilson of BPK is heading a 5-year $800,000 program with the BC Cancer Agency using next-generation sequencing methods to reveal genetic variants responsible for lymphoid cancers in families. It aims to facilitate better risk prediction and more effective treatment and prevention measures.

• Robert Hogg of the Faculty of Health Sciences leads a $250,000 study to achieve a better understanding of the relationship between healthcare service utilization, costs and the uptake of highly active antiretroviral therapy (HAART) in BC. This research will help the Canadian public understand the impact of HIV on BC’s healthcare system, and lead to evidence-informed policy decisions.

• Ryan Morin of MBB will run a $613,000 project using new sequencing approaches to learn more about the mutations that produce lymphomas. These findings should lead to better diagnosis and treatment.

Health Sciences researchers leading collaborative projects

Kelley Lee Gilmore is leading a $2 million, five-year project funded by the National Institutes of Health to conduct new multi-disciplinary research for meeting public health challenges against tobacco-related diseases. Scott Venners has received a $505,000 grant from MSFHR to study the impact of exposures to environmental pollutants, such as secondhand smoke, and their link to health inequalities between socioeconomic groups.
SFU: Engaging with industry

Robert Britton of Chemistry has received almost $200,000 from NSERC and industry partner Synergy Semiochemicals Corp. to help Synergy and the USDA Forest Service develop novel semiochemical tools for managing forest pests such as the bark beetle.

Research-related Awards

Two SFU professors will be inducted into the Royal Society of Canada in an official ceremony on November 16th:

Owen Underhill of Contemporary Arts is a respected Canadian composer/conductor, an inspirational music educator/mentor, and an influential cultural animator. He has composed over 70 works and conducted 175 premiere performances. He has been a leading force in shaping contemporary music culture on the West Coast as artistic director/programmer with Vancouver New Music and the Turning Point Ensemble.

Patricia Mooney of Physics is a leader in the fields of materials physics and semiconductor characterization. Through the innovative use of experimental methods, her studies of semiconductor defects have provided new insight into their fundamental properties, and led to advances that have aided in the perfection and commercialization of important new information technologies. She has been a highly visible role model in international conference organization, and in professional society governance.

Peter Anderson of Communications has been awarded the Order of British Columbia, the province's highest recognition of excellence and lifetime achievement. One of Canada's top communications experts, Anderson's advice has been instrumental in numerous provincial, regional and national public safety and disaster reduction initiatives. He is also an accessible advisor to local organizations and communities.

John O'Neill, Dean of the Faculty of Health Sciences, was inducted into the Canadian Academy of Health Sciences on September 19th. His Fellowship was awarded in recognition of his many contributions to tireless commitment to advancing the health sciences through both his research and his academic leadership.

IPinCH, the Intellectual Property Issues in Cultural Heritage project led by SFU archaeology professor George Nicholas, has been selected as one of three finalists for the new SSHRC Partnership Award. IPinCH was established in 2002 as an international collective representing nine Canadian and 19 international universities, as well as 11 other organizations. The partnership takes a uniquely holistic, multidisciplinary, and community-based approach to intellectual property issues and their implications for theory, policy and practice. IPinCH has developed mutually respectful relationships with indigenous and other groups worldwide, which have deepened into 25 active partnerships.

IPinCH and SFU will be promoted by SSHRC and the winner will be announced during the World Science Forum in Montreal on October 15th. The award carries a $50,000 fund for extending the research and knowledge mobilization activities of the winning project.
SFU’s young entrepreneurs are attracting attention
Serial entrepreneur and SFU Venture Connection client Michael Cheng has been invited to speak at Canada’s first Thiel Fellowship Event, named after PayPal cofounder Peter Thiel. Cheng, founder of WittyCookie and the Next 36-based startup NeedleHR, was named as one of Macleans’ “Canada’s future leaders under 25.”

Buyatab.com has been recognized with a national industry award for its partnership with Cineplex Inc’s eGift Card and marketing program. Buyatab, founded by SFU Venture Connection client Matias Marquez, is a leading international provider of eGift cards.

Venture Connection incubator client MetaOptima Technology Inc., founded by Maryam Sadeghi, has been selected as one of ten finalists in the 2013 BCIC New Ventures competition. The company’s newest product is called Molescope, a smartphone app that acts as a self-screening imaging device for the early detection of skin cancer.

SFU student engages in international archaeology research
SFU undergraduate student Matthew Go is engaging his passion for archaeology as part of an international team working in Peru. Their recent discovery of the 1,200 year-old tomb of a Moche priestess attracted media attention. Now back in Vancouver, Go will use this experience to work on his undergraduate thesis on this female-led society and whether societal class impacted the spinal diseases of its people.

SFU Fulbright Visiting Research Chair
Tony Penikett, an associate with the SFU Centre for Dialogue, has been named an SFU recipient of a 2013-14 Fulbright Visiting Research Chair in Arctic Studies at the University of Washington. His subject of enquiry is “Comparative Study of Canadian and U.S. Approaches to Issues of Arctic Governance in the 21st Century.”