

# 2014 | 2015 FACULTY OF ENVIRONMENT ANNUAL REPORT

sfu.ca/environment



# CONTENT

- Vision and Guiding
- Message from the
- Faculty Overview
- Notable Awards ar
- New Programs Bachelor of Envi Master of Science Masters in Herita
- Faculty Wide Centr Centre for Coasta Hakai Institute a Pacific Water Res
- Programs and Dep Archaeology ... Geography ..... Resource and Environmental Second Development an Sustainable Com
- Professional Devel Cert in Commun Working with the
- FENV Events Breaking the Ice Canadian Water
- Meet a FENV Alum Alumnus Wesley Undergraduate T
- Donor Recognition
- In Memoriam (Wol
- Staff .....

y Values	4
Dean	. 5
	6
nd Distinctions	
ronment e in Ecological Restoration age Resource Management	9
res al Science and Management it SFU	11
artments	17
ivironmental Management Science	14 16 18 19
opment ity Economic Development e University of Toronto	
Summit / SFU Blue	21 21
nus and Student Regan Tesicca Truong	.22 23
	24
fgang Haider)	25
	26

# FACULTY OF ENVIRONMENT CONTRIBUTION TO SHAPING A JUST AND SUSTAINABLE WORLD

## **OUR VISION**

Engaging a Sustainable World

To be the leading Faculty of Environment defined by its engaged and innovative contributions to shaping a just and sustainable world.

## OUR GUIDING VALUES

The Faculty of Environment's core values support:

- An understanding of "environment" as consisting of both natural and built landscapes and constituted by the intersection of social and biophysical processes:
- A positive, hopeful vision of a just and sustainable world;
- Care and respect for plural communities as well as broader ecosystem needs;
- Creative, impactful, academically rigorous, collaborative, discipline-based as well as interdisciplinary approaches to teaching, learning and research;
- Community engagement as integral, rather than supplementary to, all environmental research:
- A teaching and learning environment that is rewarding and inspiring to students, staff, faculty, alumni, sponsors and all community members;
- Activities at all levels, from hiring practices to research engagement, that promote social and environmental justice, equity and well-being.

# MESSAGE FROM THE DEAN



In the coming pages, you will read updates about our student achievements, as well as our ongoing community-engaged, cuttingedge research, our innovative teaching and learning initiatives, our international awards and accomplishments and much more.

Throughout, you will see that the Faculty of Environment's passion is about a unique attitude – one that is focused on discovering innovative, restorative solutions to environmental problems, productive bridge-building and respectful collaborations - all dedicated to constructing a better, more livable and healthier world in a spirit of hope, confidence and affirmation.

It is certainly true that there is growing awareness of the environmental challenges that face our planet. Daily, we hear about the problems of climate change, water and food security and a range of challenges that we face in building a sustainable world. The extent and severity of the environmental problems that face us can leave us feeling helpless, apprehensive and pessimistic.

But we believe that we have the tools to make a genuine difference. Now is the time to take our interdisciplinary understanding and collectively implement solutions to these complex problems. The new Faculty of Environment replaces despair with determination; despondency with dedication; dejection with hope; isolation with engagement.

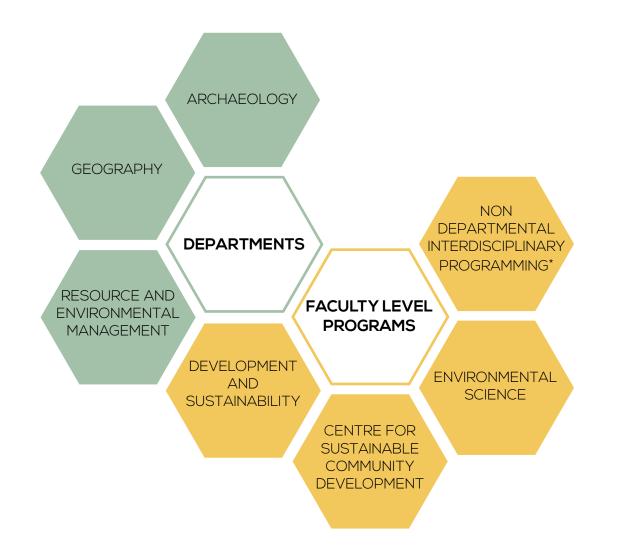
SFU's Faculty of Environment supports some of the world's leading environmental researchers and scientists, the most insightful students, and community leaders who are partners in a mission of building new success stories when it comes to the environmental challenges that we face.

We invite you to peruse some of our highlight moments from last year, and to join us in shaping a more just and sustainable world in future.

Ingrid Leman Stefanovic Professor and Dean Faculty of Environment

t is my distinct pleasure to welcome you to the inaugural Annual Report of SFU's Faculty of Environment. We are proud that the new Faculty is the only one of its kind in Western Canada and one of a handful of environmental Faculties in Canada as a whole.

# FACULTY OF ENVIRONMENT **OVFRVIFW**



The Faculty of Environment is a hybrid Faculty housing three academic departments and several academic programs including the new Bachelor of Environment and the recently approved Master of Science in Ecological Restoration.

\* Bachelor of Environment/ Master of Science in Ecological Restoration

# NOTABLE AWARDS AND DISTINCTIONS

Nicholas Blomley, an SFU geography professor, and Brian Owen, SFU Library's associate university librarian, are key players in a 7-year, \$2.5-million SSHRC Partnership Grant, for a project entitled "Landscapes of Injustice", a multi-sector interdisciplinary project that explores and chronicles the dispossession of Japanese- Canadians and shares this history with audiences across Canada and beyond.

Archaeology professor, Mark Collard, was elected Fellow of the Society of Antiquaries of London (FSA), a highly prestigious honour.

Valorie Crooks, an associate professor in Geography and a Michael Smith Foundation for Health Research Scholar, is a health geographer who specializes in health services research. She was recently awarded a Tier 2 Canada Research Chair in Health Geographies.

Tom Gunton (Principle investigator) and Murray Rutherford (Co-investigator) received a MITACS Accelerate Cluster project totaling \$413,334, in collaboration with the Metlakatla First Nation called "Strategic Planning for Cumulative Impact Assessment in Metlakatla Territory," with much of the funding going towards the Graduate Research Internship Program.

REM professor, Wolfgang Haider, received a 4 year SSHRC grant valued at \$480,000 to develop coupled social – ecological models for monarch butterflies that migrate between Mexico the US and Eastern Canada, and for the Rainbow trout recreational fishery in BC.

Nick Hedley, Geography professor and Director of SFU's Spatial Interface Research Lab, won the People's Choice Award in the Communicating Coastal Risk and Resilience category of the Massachusetts Institute of Technology's (MIT's) for his CLIVE (Coastal Impact Visualization Environment) project.

Ross Jamieson, associate Archaeology professor, was awarded a 3 year SSHRC grant valued at \$197,000 as a co-applicant with Universidad San Francisco de Ouito on the University of Victoria-led project entitled "Historical ecology of the Galapagos Islands".

Archaeology professor Dana Lepofsky and collaborators received the 2014 Theodore C. Blegen Award from the Forest History Society for the best scholarship in forest and conservation history published in a journal other than Environmental History.

Ken Lertzman, REM professor, has been awarded an Honorary Membership – the top honour of the Association of B.C. Forest Professionals (ABCFP).

Archaeology professor George Nicholas and his IPINCH team participated in the SFU President's Dream Colloquium for spring 2015 to address the theme "Protection of Indigenous Cultural Heritage". George's SSHRC Major Research Initiative consortium (IPINCH) was also recognized nationally by the 2014 inaugeral SSHRC Impact Award (\$50,000).

Anne Salomon, assistant professor in REM, received the International Recognition of Professional Excellence Prize (IRPE) for young scientists under the age of 40, awarded by the International Ecology Institute (ECI) in Germany.

# NEW PROGRAMS IN FENV

#### BACHELOR OF ENVIRONMENT

The first degree introduced at SFU since 1992, the Bachelor of Environment recognizes that finding solutions to contemporary environmental challenges requires an interdisciplinary approach. The BEnv is founded on a broad vision of the environment, including the biophysical, social and built environments. BEnv majors build toward a balanced understanding of human-nature relationships, sustainability, and decision-making.

Each BEnv major begins with a core in the social and natural sciences, and requires advanced courses in methodology, practice and communication: students learn research methods and tools, apply them to environmental problems, and communicate their results and experience to academic and wider audiences. BEnv majors emphasize the complexity and integration of environmental systems, and culminate in a capstone course that uses all those skills in collaborative team projects.

The BEnv in Environmental Resource Management prepares students to work in BC's vital and growing resource sector. Students learn the biophysical properties of resources such as fisheries, forests, fossil fuels and mines; they evaluate legislation, policy and regulations governing resource use and management; and they develop skills in community consultation and conflict resolution.

In the Global Environmental Systems major, students seek careers in the understanding of climate change and the mitigation of its consequences. They learn about major human-environmental systems at the global scale, including atmosphere and ocean dynamics; energy sources, technologies and transitions; and land use and the carbon cycle.

The Joint Major in Sustainable Business prepares students for careers in green entrepreneurship and innovation, supply chain management, environmental impact assessment and mitigation, and accounting for sustainability and the triple bottom line. The Joint Major is a collaboration between the Faculty of Environment and the Beedie School of Business, combining the core business curriculum in economics, finance, marketing and management with the core environmental curriculum in earth systems, ecology, and environmental ethics, stewardship and sustainability.



## MASTER OF SCIENCE IN ECOLOGICAL RESTORATION

M any ecosystem services and natural habitats have been severely impacted due to the cumulative impacts of previous and ongoing anthropogenic influences, for example: urban sprawl, industrial expansion, invasive species, and contamination of soils and water resources. These factors, and the need to improve habitat for threatened and endangered species, have led to the requirement for ecosystem restoration work across the province, Canada, and internationally.

The MSc in Ecological Restoration combines the applied technical (experiential) emphases at the British Columbia Institute of Technology (BCIT) with the fundamental (contextual) basic science and community engagement expertise at Simon Fraser University (SFU) to provide a unique joint-degree program that will fundamentally advance both the practice and science of ecological restoration.

The four-term program will produce graduates who will be capable of using critical thinking, adaptive management, and research within an applied problem-solving framework. This combination of skills will be applied to the identification of factors responsible for degraded ecosystems and to the restoration of ecosystems functions, while advancing the scientific knowledge of this rapidly emerging discipline.

Graduates will have the critical and theoretical skills needed to set priorities, develop a structured approach to restoring degraded ecosystems, and critically assess their success in highly complex and unpredictable environments with significant uncertainties.

Inherent in the program are the development of essential skills for program management, communication, and respectful community consultation. The program will leverage expertise at both institutions, and the setting of the region, to understand how to approach ecological restoration in diverse sociocultural and biophysical settings. PROFESSIONAL ONLINE MASTERS PROGRAM IN HERITAGE RESOURCE MANAGEMENT

The profession of archaeology is no longer centred in universities and museums across the globe. Rather, heritage conservation programs, heritage legislation and government regulatory bodies have led to a two plus billion dollar industry for private sector archaeological consultants.

The vast majority of Archaeology undergraduate students accordingly are hired directly after degree into this industry. Recognizing the difficulties of gaining graduate training in support of their careers, the Archaeology Department successfully proposed to Graduate Studies the development of a Professional Masters Degree in Heritage Resource Management beginning September 2016.

This program targets existing archaeological practitioners with experience in the Heritage Resource Management field. It is planned as a two-year degree with on-line course work in Heritage Law and Policy, Professional Practice and Ethics, Archaeology Practice and Research Design as well as Business Management for Heritage Professionals.

Students are to additionally prepare and defend a written MA thesis meeting SFU and Department standards. The thesis is compulsory for admission to the North American Register of Professional Archaeologists and for acquisition of archaeological permits in several provincial jurisdictions in Canada.

A grant to assist course preparation in collaboration with the Centre for Online Distance Education was received from the Faculty of Graduate Studies through POST (Professional Online Scholarship and Training Initiative.

# FACULTY WIDE CENTRES

### CENTRE FOR COASTAL SCIENCE AND MANAGEMENT

ntering its 15th year, the Centre fosters partnerships that seek solutions to complex environmental problems. It promotes interdisciplinary research, education and dialogue on Canada's coastal freshwater and marine ecosystems. It also addresses issues related to global ecosystems.

Since 2011, the Centre has hosted a highly popular public lecture and discussion series, A Planet Under Pressure: Citizens and Scientists Taking Action on Global Warming and Other *Threats* that uses a variety of lenses to clarify and discuss the unprecedented global change that we are facing. Featuring international and local experts on a variety of topics, it has addressed population growth, paleoecology and much more.

In the spring of 2015, five talks focused on global security with the tag line, *Climate Change: How Safe Are YOU*? The talks explored disease, food security, environmental health, human security and values. SFU Dean of Environment, Ingrid Leman Stefanovic, tackled this last issue with a provocative presentation, Safety and *Risk: Why Values Matter.* 

In the Fall and in response to suggestions from attendees, the discussion turns to Solutions and YOU: Combatting Climate Change. Invited speakers will present complex but underappreciated issues such as how to have informed public discussion about complex scientific ideas in the face of political opposition, and the economic costs and implications of climate change and extreme weather events. Respondents will be invited to suggest concrete actions that individuals can take based on information shared through each presentation.

Presentations are recorded and posted on SFU's YouTube channel to further engage the public. The 4,500 participants who attended this series, represent an eclectic mix of backgrounds including municipal, provincial and federal government employees, industry, ngo's, resource managers, community groups, First Nations, students and faculty and many curious citizens.

#### Participant Testimonial

As a relatively recent 'convert' to science, I think these kinds of free public lectures are a great idea. My background is in the fine arts and as a writer of fiction, it is a shame that art and science are often presented as either/or disciplines. Making science less impenetrable for those of us who haven't gone down traditional paths of science education can only have a positive influence. The series is the best one we have ever attended - wish more in this vein were available.

with 202,080 kms, followed by Indonesia (54,716 kms), Greenland (44,087) and Russia (37,653). By comparison our US neighbour has 19,924 kms of

#### HAKAI INSTITUTE AT SEU

he Hakai Institute at SFU (formerly the Hakai Network for Coastal People, Ecosystems and Management) examines marine, fresh water and terrestrial ecology, resource policy, archaeology, planning and statistics along the Central Coast of BC in partnership with the Hakai Institute, an ecological research organization that is part of the Tula Foundation. It also works with coastal First Nations on resilience, sustainability and conservation.

As Kelly Brown, the director of the Heiltsuk Integrated Resource Management Department noted, "We [the Heiltsuk] take our responsibility to look after this area seriously. We want to walk beside people like those of SFU ... and to work with them." By connecting local knowledge with science, the research entails a holistic approach that is relevant, addresses community needs, and aids decision-making.

#### Kelp Forest Ecosystems Project

Anne Salomon (REM) focuses on the ecological effects of predator depletion and the role of spatial planning in restoring kelp forest ecosystem resilience.

# Clam Gardens Project Dana Lepofsky (Archaeology) and

#### PACIFIC WATER RESEARCH CENTRE

he Pacific Water Research Centre was launched in June 2015, attracting accolades from both media as well as an international audience in attendance at the 6th Annual Canadian Water Summit in Vancouver.

Drawing together faculty and students from across the Faculty as well as a diverse and vibrant group of community partners, the Centre provides a base for stronger coordination and collaboration along a broad spectrum of water research.

A number of features distinguish the current activities of the Centre. First and foremost, our community engagement defines and drives our mandate. Community partners are invited to help to identify priorities and to actively contribute to the work of our research teams. Those partnerships include close collaboration with Aboriginal and First Nations who often face unique water challenges within their own communities. Our local, coastal focus helps to inform both regional, as well as national and international priorities.

As the only Faculty of Environment in Canada that houses a Department of Archaeology, our forensic science leads the way in understanding past relations between human societies and water challenges.

The interdisciplinary mandate of the Centre also means that our work ranges from water science – geomorphology to hydrology to sedimentation patterns – to human factors, including stakeholder management, as well as ethics, culture and understanding the broader lived experience of water. Given that issues of biodiversity, conservation and resource management are key to informing water policy and environmental decision making, a central part of our mission includes addressing these complex challenges as well.

We welcome collaborations with other universities, water boards, municipalities, industry and private partnerships and invite you to join us in building this important initiative.

For more information, please contact:

Dr. Murray Rutherford, Director (murray rutherford@sfu.ca), Steve Conrad, Associate Director (steve conrad@sfu.ca), Wanda Dekleva, Director of Advancement (wdekleva@sfu.ca)

Anne Salomon (REM) explore how, for thousands of years, local First Nations have cultivated the marine ecosystem to enhance the productivity of clams by building rock terraces on beaches.

#### Kwakshua Watershed Program

Ken Lertzman's (REM) project seeks to understand and model the flux of terrestrial materials from land to sea – the origins, pathways, processes and food web consequences – in the context of long-term environmental change.

# DEPARTMENT OF ARCHAEOLOGY

http://www.sfu.ca/archaeology

The Department of Archaeology was created in 1971 in the Faculty of Arts and Social Sciences, joining the Faculty of Environment in 2011. It is one of only a small number of independent Archaeology departments across North America with course delivery and graduate programs in both Archaeology and Biological Anthropology. The Department has a full time equivalent faculty complement of 11.5 individuals whose expertise largely is focused in three areas – archaeological and environmental science, First Nations heritage/resource management, and biological anthropology including Forensic sciences. Housed within the Department are the SFU Museum of Archaeology and Ethnology, SFU Archaeology Press, the Human Evolutionary Studies Program, the Centre for Forensic Research (with Criminology), the joint SFU/Jilin University Centre for Bioarchaeology, and the SSHRC Major Collaborative Research Initiative on Intellectual Property Issues in Cultural Heritage (IPinCH).

## ARCHAEOLOGY PROGRAMS AND STUDENT BODY

The Archaeology Department offers undergraduate BA honours, major, minor and joint major (Anthropology, First Nations Studies) programs as well as a Certificate in Cultural Resource Management. In 2014/2015 there were 250 majors/minors, 60 students registered in the CRM certificate and overall course enrolments that have been steadily increasing. A traditional strength of the Department has been its PhD and MA programs with a present complement of 50 students equally split between the two.

Over the past couple of years, our students, both undergraduate and graduate, have done well. Mathew Go, as a third year undergraduate, received international press acclaim for his role in the discovery and excavation of the tomb of a Moche Princess in Peru. Marina Elliott (PhD 2014) and Mana Dembo (PhD in progress) were selected by National Geographic to join the Rising Star Expedition in the excavation and analysis of fossil hominid remains in South Africa. MA graduate Sarah Oas was awarded the 2014 John Evans Masters Dissertation Prize in Environmental Archaeology while PhD student Chelsea Armstrong was given the 2015 Canadian Polar Commission's Robert McGhee Award. MA student Aviva Finklestein crushed all competition winning the 2014 SFU three-minute thesis competition.

Our alumni equally excelled. RCMP Sergeant Diane Cockell (PhD 2006) received a 2014 SFU Alumni Award as one of Canada's leading "forensic archaeologists". Current UBC faculty member Professor Michael Richards (BA, MA 1994) was elected Fellow of the Royal Society of Canada. And Dr. James Delgado (FRGS) (PhD 2006), Director of the US Department of Maritime Heritage, was given the National Oceanic and Atmospheric Administration's Bronze Medal in 2014 and made an Officer of the Order of Civil Merit, Knights Cross, by King Juan Carlos of Spain.

## FACULTY RESEARCH AND AWARDS

aculty research in the department is well funded, interdisciplinary and truly international in scope. Cumulative research funds over the past five years have been in the \$1.2 million range per annum with programs and collaborations in China, Japan, Indonesia, Australia, Tahiti, Tonga, Fiji, Portugal, France, Greece, Turkey, Ethiopia, South Africa, Israel, Jamaica, Ecuador, the Galapagos and the United States. The Department also maintains core research strength in the Pacific Northwest through coastal and interior plateau studies. Student mobility and participation across these programs is high.

There have been several national and international recognitions for archaeology faculty in the past year. Professor Mark Collard was elected Fellow of the Society of Antiguaries of London (FSA), a highly prestigious association established in 1707. Professor Birute Galdicaz delivered the 2014 keynote address to the Wildlife Conservation Film Festival held at the Steinhardt School, NYU, New York. Professor Dana Lepofsky and collaborators were given the 2014 Theodore C. Blegen Award by the Forest History Society for the best scholarship in forest and conservation history published in a journal other than Environmental History. Professor George Nicholas and his IPinCH team were given the SFU President's Dream Colloquium for spring 2015 to address the theme "Protection of Indigenous Cultural Heritage". They also were awarded the inaugeral SSHRC Impact Award for accomplishments through their IPINCH consortium. And finally, newly appointed faculty member Assistant Professor Francesco Berna received strong praise in a letter to President Petter from the Israeli Ambassador to Canada for his work on human origins of fire use in Manot Cave, Israel.

## IN THE MEDIA

Assistant Professor Rudolph Reimer (joint with First Nations Studies) was appointed co-host of "Wild Archaeology", a 13 episode TV series produced by the Aboriginal Peoples Television Network for airing in 2016. Rudy is a member of the Squamish First Nation and, through a cross Canada survey of archaeological sites, bridges the respective roles of science and indigenous histories for interpretation of the ancient past.

#### IN THE MEDIA (con't)

Post doctoral student Kimberly Plomp and Professor Mark Collard published a paper in BMC Evolutionary Biology on vertebral shape, back pain and the latter's evolutionary roots in human bipedality. Under the banner "Link to Chimpanzees sheds light on Human Back Pain", the story received widespread international media coverage.

Post Doctoral Student Ian McKechnie, Professor Dana Lepofsky and other members of their "Herring School" research group similarly received widespread media coverage for their paper on Pacific Northwest herring fisheries in antiquity published in the US Proceedings of the National Academy of Science. This work suggests that current Department of Fisheries officials are massively overestimating the health of the fishery and they will need to set a new ecological baseline for herring populations in future planning.

The desecration and potential destruction of an ancient burial ground on Grace Islet off the coast of Salt Spring Island in BC led Professor George Nicholas and his IPinCH group to pen a "Declaration on the Safeguarding of Indigenous Ancestral Burial Grounds as Sacred Sites and Cultural Landscapes". Signed by a range of academics and others, it received widespread attention through stories in the National Post and other media outlets. The declarations calls upon federal, provincial and local governments to act immediately in protecting First Nation ancestral burial grounds from destruction, damage, and alteration and to develop effective consultation mechanisms with First Nations communities to address these problems in the future.

And finally, the Museum of Archaeology and Ethnology spent much time in 2014 revamping its exhibits as well as hosting Tla'amin carver, Jackie Timothy, as Artist in Residence. The Museum is now planning a set of exhibits for the SFU 50th anniversary in the coming year.



# DEPARTMENT OF GEOGRAPHY

http://www.sfu.ca/geography

he Department of Geography was a founding member of the University back in 1965 and has since become one of the strongest Geography departments in North America. We rank 7th of all Geography departments in Canada (5th in terms of citations per paper), and 2nd amongst Canadian comprehensive universities in the 2015 QS World University Rankings. We currently number 22 research and teaching faculty, amongst them Canada Research Chairs, Michael Smith Scholars, Fellows of the Canadian Geographical Society, SFU excellence in teaching awardees, and other award holders.

Geography's enduring strength relates to its nature as an interdisciplinary discipline. Geography may be defined as how place and space shapes physical and social processes, and their interactions, as they work themselves out in differentiating and integrating the earth's surface. Geography as a discipline has no monopoly on this perspective but concerns for how and why places around the globe are different and how and why places are integrated (across space) are at the heart of modern geographical thinking.

## RESEARCH STRENGTHS

all In October 2014 in the Globe and Mail G highlighted SFU Geography as "one of the top Geography programs in the world"

We rank an impressive 7th of all Geography Departments in Canada, 2nd amongst Canadian comprehensive universities in the 2015 de QS World University ms Rankings

"The most important thing I have learned in my degree is a geographic approach to problem solving. Geography reminds us that space and place are important, and an education in geography provided me with a nuanced understanding and appreciation for spatial variation and difference, as well as a critical suspicion of generic 'one-size-fits-all' approaches and interventions."

*Jeffery Morgan, Faculty of Environment Dean's Convocation Medalist 2015.* 

Our members have research strengths in geographical political economies, global environmental change, water sciences, the city, spatial health and spatial information theory. We explore topics as disparate as, economic development, medical tourism, cultural theory, augmented reality, mountain tourism, sustainable development, health services, the politics of property, cellular automata, environmental economic geography, urban planning and policy, limnology, industrial location dynamics, landscape ecology, resource depletion, health informatics, conservation, port cities, political economy, soil-plant relationships, political ecology, fluvial geomorphology, policy transfer, ecological modelling, climate change, and paleoglaciology.

Underscoring our national and international acclaim, this year we hosted the 9th annual Critical Geographies mini-conference, the 64th Canadian Association of Geographers annual meeting (>400 participants) and the 16th International Medical Geography symposium.

## GRADUATE AND UNDERGRADUATE PROGRAMS

We have more than 50 graduate students in the MA, MSc and PhD programs who are collaborating on research projects with our award winning faculty and ~500 undergraduate student majors enrolled in BA and BSc programs. We also offer Certificates in Urban Studies and Spatial Information Science and our BSc program fulfils the curricular requirements for Professional Environmental Geoscience and Professional Agrologist accreditations. Our students actively participate in co-op and exchange programs, and, with large numbers of non-geography students sampling what geography has to offer (more than 80 courses spanning human geography, earth system dynamics and geographic and spatial information science), course enrolments exceed 4300 each year.

## COMMUNITY ENGAGEMENT

This year Geography faculty have been engaged in several community projects. The EcoUrbanism research project is investigating what is happening to urbanism on the ground in model sustainable neighbourhoods. The Food as harm reduction (FaHR) project is investigating the health effects of food for people who use drugs.

The Landscapes of Injustice project is documenting, explaining and analyzing the process when the Canadian government uprooted over 21,000 people of Japanese ancestry from coastal British Columbia and began the forced sale of Japanese Canadia property, destroying their neighbourhoods, and betraying the promise that the Canadian government would "protect and preserve" their land and possessions.

The (Re)Claiming the New Westminster Waterfront project is collecting and sharing the stories of the people who worked on the waterfront in New Westminster.

We have also made inroads into alumni engagement through invitations to special events and the inaugural publication of a Departmental newsletter.

The field is our natural laboratory and we value experiential learning in its many varied forms. Most of our Earth System Dynamics courses and several Human Geography courses feature field trips that range from local activities within lecture courses to regional and international residential field schools. Students learn about Urban Geography through an innovative U-Pass Field Trip on their own schedules. Several upper division capstone courses are designed around collaborative research projects with community participants. ~50 geography students per year participate in the Co-op program.

## PEOPLE IN THE NEWS

**Kirsten Zickfeld's** invited Perspective article on the time lag between carbon dioxide emission and maximum warming was selected to appear in the March Highlight collection of Environmental Research Letters.

**Lance Lesack's** research reveals local spring warming, not warmer winters, is driving a more rapid ice breakup on the Mackenzie River delta. Multiple media outlets covered the story.

Jeremy Venditti led a recent study which found that rivers flow in a much more complex pattern than was originally thought. Multiple media outlets and news websites carried the story.

**Meg Krawchuk** discussed the active fire season in British Columbia with multiple media outlets.

**Valorie Crooks'** medical tourism research was featured in an award-winning CBC radio series and CTV news segment.

**Nick Hedley's** CLIVE (Coastal Impact Visualization Environment) took 1st place in an MIT contest.

Graduate student **Andrew Longhurst's** research found violations of the employment standards legislation intended to protect temporary workers. His findings were published in a Canadian Centre for Policy Alternatives report entitled Precarious: Temporary Agency Work in British Columbia and garnered considerable media attention.

> Employment rates amongst SFU Geography graduates are high (typically >95%), with average starting salaries in the \$45-50k range across a diversity of occupations.

SFU Geography graduate students represent five continents, and more than a dozen countries.

## SCHOOL OF RESOURCE AND ENVIRONMENTAL MANAGEMENT

http://www.rem.sfu.ca

he School of Resource and Environmental Management (REM) provides an opportunity for interdisciplinary research and education on natural resource and environmental issues of local, national, and international interest. REM offers graduate programs in various areas of resource and environmental management and a selection of undergraduate courses that can complement a wide array of undergraduate degrees at SFU.

The School of Resource and Environmental Management was founded in 1979 with a mandate for interdisciplinary and applied graduate education and research. REM currently has 19 faculty members (3 of them are cross-appointed with other units within SFU), 47 Adjunct Professors, and 6 postdoctoral fellows, as well as an average enrollment of just over 100 graduate students, including about 25 PhD's. REM has built a strong international reputation as a top Canadian graduate program in resource and environmental management.

### GRADUATE PROGRAM

The curricula of both the Master of Resource Management (MRM) and the PhD expose students to knowledge-based scientific integration among the core disciplines of resource and environmental management (i.e. ecology, other natural sciences, economics, policy and planning). The graduate students in the planning stream complete a MRM (Planning) that is certified by the Planning Institute of British Columbia. Masters students also have the opportunity to participate in Co-op to gain valuable work experience during their degree program.

#### UNDERGRADUATE PROGRAM

Beginning Fall 2015, REM has expanded into undergraduate programming with a Minor in Resource Management. This minor is open to all SFU students as it will complement a diverse array of major degrees. Solving contemporary environmental problems requires an academic background that integrates both natural and social sciences. The Minor in Resource and Environmental Management will provide SFU undergraduate students with the basic skills and understanding they need to integrate natural and social systems concepts into resource management applications.

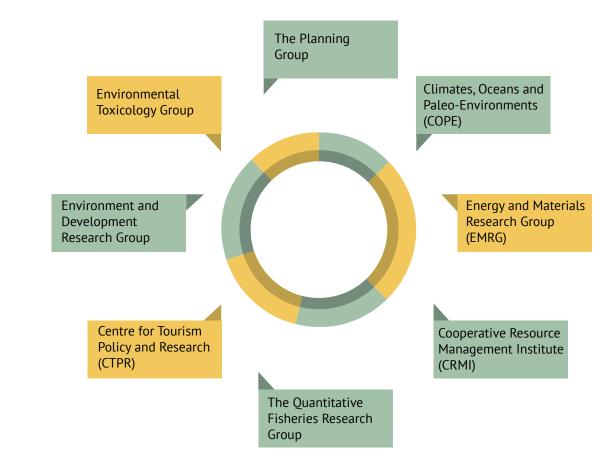
# in the news

**Canadian Study: Fewer Orangutans left? - Radio Canada International** SFU environmental PhD candidate, Brent Loken, published study on Orangutans features the use of camera trap to estimate population numbers.

**UNESCO Scientists Call For 70% Emissions Reduction by 2050 - Hybrid Cars** SFU environment professor Jonn Axsen says strong climate policy is the most important way to encourage widespread adoption of PEVs.

#### **Falling oil prices pose another delay for B.C. pipelines - The Globe and Mail** Mark Jaccard, an energy economist at Simon Fraser University and climate activist, said companies plan such projects on a much longer timeline, even if price crashes shock the public, the media and sometimes politicians.

# NETWORKS, CENTRES, INSTITUTES, AND RESEARCH GROUPS IN REM



# The problem with (self-regulated) environmental assessments - BC Business

SFU ecology professor Jonathan Moore is featured in a story on the role of environmental assessments on the viability of BC resource sector projects.

#### New study links river system stability to biodiversity -The Vancouver Sun

Jonathan Moore, assistant professor in Biology and REM as well as Liber Ero Chair of Coastal Science and Managemer at SFU, is the lead on a study entitled Emergent stability in a large, free-flowing watershed, which is published today in Ecology magazine.

	What does the Pineapple Express actually mean for BC? - The Vancouver Sun SFU REM Professor, Dr. Karen Kohfeld, explains the weather phenomenon referred to as a Pineapple Express.
S	Water resources - CBC Radio - On the Coast SFU Ph.D. candidate Steve Conrad talked about the SFU Pacific Water Research Centre and what the Centre is doing to help conserve water.
nt n	Wet Boot Science - Globe and Mail The Libre Ero Foundation wants to give researchers like Jonathan Moore the freedom to tackle crucial conservation

problems in new and novel ways.

# FENV PROGRAMS

## ENVIRONMENTAL SCIENCE

The **Environmental Science Program** (EVSC) provides a broad multidisciplinary undergraduate education with a solid background in the natural and mathematical sciences. Our goal is to train the next generation of a solid background in the natural and mathematical sciences. Our goal is to train the next generation of scientists to deal with the environmental problems that we face today and new problems as they emerge. Students are engaged in local communities, across Canada and internationally. EVSC graduates work in environmental consulting, industry, government and a wide variety of non-governmental organizations, applying what they learned at SFU to real-world environmental problem solving. Students take a common first year

of courses in environmental science, geography, earth science, biology, mathematics and statistics, chemistry and physics. Then students specialize in one of four concentrations: 1) Applied Biology, 2) Environmental Earth Systems, 4) Water Science and 4) Environmetrics (statistics applied to environmental problems).

## 2014 Accomplishment

- 1) The program has grown rapidly from a small undergraduate program with approximately 40 students to the second largest program in the Faculty of Environment with ~230 majors.
- 2) "Introduction to Environmental Science" is now being taught 5 times per year at the Burnaby, Surrey and Vancouver campuses with plans to expand the offerings to 7 times per year, exposing hundreds of undergraduate students to the science underlying environmental problems.
- 3) The program continues to attract some of the top undergraduate students in the province who consistently win the top entrance scholarships at SFU for their study of Environmental Sciences (see the student profiles).

The large network of environmental scientists at SFU provide research experiences for our undergraduates in their labs and in the field. Experiential learning opportunities are a core component of many of our courses via field trips, field work and hands on demonstrations. Our co-op program offers further opportunities to work for a wide range of environmental consultancies, NGOs, industry as well as municipal, federal and provincial governments. For example, Tessa Ramburn is a co-op student working on Drosophila suzukii or the Spotted Wing Drosophila, an invasive pest in North America as well as in Europe, at the Centre for Agricultural Bioscience International (CABI), in Delémont, Switzerland.

Our graduates are active in the community are passionate scientists. Tesicca Truong, a second-year Environmental Science student, was named on Starfish's Canada's Top-25 Environmentalists Under 25 in both 2012 and 2013, and was nominated for the Greenest City Leadership award in 2015, and is involved in a wide range of other environmental leadership activities.

## DEVELOPMENT AND SUSTAINABILITY

he Development and Sustainability Program (DEVS) of the most important global and local issues of our time – increasing inequality and the sustainability of our environment and our communities. We offer innovative and dynamic programs at the graduate level with a Graduate Certificate and now at the undergraduate level with the recent launch of a minor in Development and Sustainability.

The DEVS program is an exciting approach because it is founded on a collaboration of minds and disciplines. DEVS is driven by a steering committee of highly qualified and committed faculty and staff drawn from across the University. The DEVS group, a larger group of academics at SFU, further support the program through DEVs related research, teaching, graduate student





## SUSTAINABLE COMMUNITY DEVELOPMENT

ustainable Community Development (SCD) aim to integrate economic, social and environment objectives in community development. SCD builds the relationship between economic factors and other community elements such as housing, education, the natural environment, health, accessibility and the arts. SCD has emerged as a compelling alternative to conventional approaches to development, a participatory, holistic and inclusive process that leads to positive, concrete changes in communities by creating employment, reducing poverty, restoring the health of the natural environment, stabilizing local economies, and increasing community control.

The mission of the SFU Centre for Sustainable Community Development (CSCD) is to support the sustainable development of communities through education, research and community mobilization. It provides research, training and advisory services throughout BC and Canada as well as internationally. supervision and as guest speakers. The design of the academic programs reflects the FENV vision that there is no single disciplinary answer to sustainability and development.

Our society needs solutions that span the sciences, the humanities, social sciences, business and the arts. Real sustainability and true development require mutual learning between the Global North and the Global South and the willingness to disband approaches that have failed and be courageous as we forge new directions. Our academic programs, by design, draw on this collaborative inter-disciplinary approach to provide an incubator for change agents. We aim to expand our students' intellectual horizons and career choices so that they can confront the development challenges that face all societies.

ns
tal
on
er
ne

CSCD offers an undergraduate certificate and postbaccalaureate diploma (also available through distance education), graduate support, and non-credit professional programs.

CSCD's strength in research and teaching lies in the fact that these activities are highly interconnected. Our academic and professional courses draw heavily from our research record, and in turn, our teaching informs our research. The diversity of sustainable community development approaches creates multiple avenues for research. This diversity also translates into a broad and interdisciplinary curriculum that appeals to a range of students, who are attracted to the principles of sustainable development and are searching for ways to integrate these principles into their own work. In our professional programs, our course participants demand up-to-date and relevant courses. As such, our strong record of research puts us at the forefront of sustainability education, again attracting a range of interested and highly motivated students.

# PROFESSIONAL DEVELOPMENT

In addition to serving student needs through undergraduate and graduate degree options, the Faculty of Environment is building a Professional Development Unit, focused on delivering training through certificates and advanced certificate programs. The offerings are of geared towards both environmental professionals in need of skills upgrading as well as non-specialists who wish to be better informed about the environmental challenges that touch each and every one of us.

For further information, please contact Dr. Joanna Ashworth, Director of Professional Programs (jashwort@sfu.ca).

## COMMUNITY ECONOMIC DEVELOPMENT CERTIFICATE

he Certificate Program for Community Economic Development is a part-time other life obligations. It starts with a onelive, scheduled web-conference courses over the course of several months, and finishes

building a sustainable, local economy today. We only teach methods that work, methods and communities with limited resources.

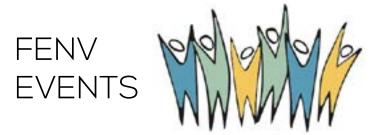
Course topics include Indigenous Economics, Principles & Practice for Local Prosperity, Sustainability, Social Entrepreneurship & Enterprise, Co-operative Economics, a Social Decentralization (to name a few). And, for the past two years, we have awarded \$25,000 to 'Social Innovation Challenge."

For further information contact Nicole Chaland certced@sfu.ca.

## WORKING WITH UNIVERSITY OF TORONTO

A two-day workshop rocasses Greenhouse Gas Emissions Accounting and Reporting will be offered in collaboration with the School of the Environment, downtown Vancouver. Tools and techniques will be presented for effective greenhouse gas inventory quantification – from planning, calculating, managing and reporting GHG emissions in the context of changing

For more information, please contact Laurie Wood at lauriew@sfu.ca or Leigh McGregor



## BREAKING THE ICE

On December 2nd, 2014, the Faculty hosted a series of Lightning Talks, Poster sessions and a Seasonal Gathering to highlight interdisciplinary research and "break the ice" across the individual units.

Presentations included:

- Archaeologist Dennis Sandgathe, showing how more effective cold-weather clothing could explain why modern humans outlived their Neanderthal genetic cousins:
- Geographers Kirsten Zickfeld and Geoff Mann, on Carbon Emissions, Climate Change science, adaptation and policy implications;
- Themes covered water-related research in areas of REM's Jonn Axsen assessed Canada's readiness to adopt Ecological Conservation, Socio-economic issues, Health, electric vehicles, in place of the standard internal Climate Change, Urban Sustainability, Governance and combustion engine; Technological Innovations.
- Archaeologist Dana Lepovsky described a "clam garden" Contributors included Jonathan Moore. Liber Ero Chair research collective combining ecological experiments, in Coastal Science and Management, with community archaeological surveys and excavations with traditional partners, Harvey James Russell Jr. and Jen Gordon from the Aboriginal knowledge along the Pacific Northwest; Lax Kw/alaams Fisheries; Leah Bendell with partners from BCIT and the Tseil-Waututh Nation; Tim Takaro, Health Geographer Paul Kingsbury explored cultural Sciences; Mike Smith, UBC, with SFU Geographer Jeremy geographies of desire and power, showing how social Venditti; John Clague (Earth Sciences); Deb Hartford (ACT bonding through community events contributes to SFU); Jesse Galicz, (UniverCity); Murray Rutherford (REM); "spontaneous cultural combustion"; Mark Roseland (REM); Steve Conrad (REM); Sean Markey, Associate Dean and Associate Professor, REM, and Carmen • REM's Frank Gobas explored the feasibility of Rosen, Artistic Director of the Still Moon Arts Society.
- constructed wetlands for the treatment of contaminated water generated through the oil sands process;
- We were also pleased to highlight the water research underway at other leading universities, such as the • Geographer Nadine Schuurman illustrated how GIS University of Victoria POLIS project, PICS, UBC, BCIT and mapping can contribute to understanding global health the Urban Water Research at Ryerson University. and providing access to meaningful health services.

Graduate student research posters from Sinead Murphy, Jonathan Cripps, Dana Ehlert, Joseph Bailey, Antonia Rodrigues, Julia Jackley, Alisha Gauvreau, Dave Scott, Ross McCarter and Laurie Darcus – ensured that exemplary student research was equally profiled on this important day.

Wrapping up with a social gathering of cocktails and appetizers helped to bring a spirit of camaraderie and companionship across the borders of individual units – a spirit that the Faculty of Environment will continue to foster through similar events in future.

*There are a number of special events that are either* organized or supported by the Faculty of Environment. Here we report on two such events, each unique in their own wav.

## THE CANADIAN WATER SUMMIT AND SFU BLUE

- Beyond building internal collaborations, it is equally important to engage external partnerships in support of key environmental challenges. For this reason, we were pleased to support the 6th Annual Meeting of the Canadian Water Summit, convened in Vancouver from June 24-26, 2015, attracting industry partners, academics, students, NGOs and members of the broader community to discuss the water/energy nexus.
- And on June 24th, the Faculty of Environment hosted SFU BLUE, showcasing some of our leading water researchers together with their community partners, in the beautiful Morris J. Wosk Centre for Dialogue, Asia Pacific Hall.

A keynote presentation from BC's Minister of Environment, the Honourable Mary Polak was followed by a lunchtime address by SFU President Andrew Petter, and a closing session, hosted by the Honourable Judith Guichon, Lieutenant Governor of British Columbia.

Finally, the event helped us to launch the Pacific Water Research Centre, ensuring that similar activities would be supported in future.

# MEET A FENV ALUMNUS AND STUDENT

THE SURE WAY TO MISS SUCCESS IS TO MISS THE OPPORTUNITY.

# CITED AS A TOP ENVIRONMENTALIST UNDER 25.

# WESLEY REGAN

SFU GEOGRAPHY ALUMNI

Wes holds a BA in Human Geography, a certificate in Urban Studies and completed the Community Economic Development certificate, a program in which he went on to teach. While completing his bachelor's degree, he was placed in a co-op work term with Building Opportunities with Business, a nonprofit, Vancouver-based community economic development agency. This led directly to his six-year term as the Executive Director of the Hastings Crossing Business Improvement Association, Canada's first Social Innovation Business Improvement Area. Here Wes worked with a range of non-profit, government and private sector partners on projects relating to community economic development, social innovation and social inclusion, sustainability and community engagement in Vancouver's DTES. Just recently, he made a career change and is currently running to represent the communities of Vancouver East in Parliament.

Passionate about his city and his neighbourhood, Wes serves on numerous volunteer boards including LOCOC BC, CRED BC (Conversations for Responsible Economic Development) and is also a member of the BC Partners for Social Impact, a Provincial Think Tank working to support social innovation and social enterprise throughout the Province. He is also passionate about food systems and urban sustainability and is a founding board member of the Vancouver Urban Farming Society and co-founder of Urban Stream, a food systems technology start-up with operations in BC and Alberta.

# **TESICCA TRUONG**

ENVIRONMENT UNDERGRADUATE STUDENT

- esicca is a fourth-year Environmental Science Honours student, minoring in Environmental Education. Her passions lie at the intersection of sustainability, youth empowerment and community building. She was named on Starfish's Canada's Top-25 Environmentalists Under 25 in both 2013 and 2014, and was awarded the 2015 Greenest City Leadership Award with the City of Vancouver.

During her first year at SFU, Tesicca became the youngest member on the Mayor of City of Vancouver's Engaged City Task Force. She also chaired the Board of Sustainable SFU and the Environmental Representative for SFU Senate and the Simon Fraser Student Society.

Academically, she participated in 'Change Lab'-a course that encourages students to develop sustainability projects and co-founded Play without Plastics, an intergenerational environmental education program.

Currently, she works at both SFU Public Square organizing *We the City 2015 Community Summit* and within the Faculty of Environment coordinating the first Enviro Frosh. Feel free to connect with her at ttruong@ sfu.ca.





We would like to take this opportunity to thank the many alumni, faculty, staff, individuals and organizations who have made gifts to the Faculty of Environment over the past year. Their contributions are providing much needed support for research, students and community engagement activities.

anadian Pacific, HeliCat Canada, Avalanche Canada Foundation, Canadian Avalanche Association, and Avalanche Canada for their support of Dr. Pascal Haegeli, who will hold an academic appointment at the School of Resource and Environmental Management and a Research Chair in Avalanche Risk Management (recently approved by SFU Senate and pending Board of Governors' approval in late September, 2015). This research chair will combine the traditional, physically oriented studies with human dimensions research on risk perception, decision-making, risk communication and health behavior. This innovative research perspective will create the interdisciplinary foundation necessary for the development of more effective prevention initiatives.

The Community Evolution Foundation for their support of community economic development initiatives in Bolivia. This important project will lead to greater community self-reliance, helping residents manage economic activities not only to create wealth and income, but also to support social and environmental well-being.

The Bertha and Louis Weinstein Research Fund

for their support of Dr. Francesco Berna's research, which examines prehistoric settlements by searching for traces of the fires they set. This gift is helping us understand the occupation pattern and the use of fire in the Upper Palaeolithic Site of Manot Cave in Western Galilee.

**David and Alix Patterson** for their ongoing support for the Alix Vikki Patterson Endowment Fund. Passionate about creating and implementing the dynamics for a world that offers quality of life for all, Alix established a successful green company that sold an extensive line of products that were sustainable, environmentally friendly and ethically made. This award provides much needed support to Faculty of Environment students hoping to transform the world in their own way.

**Patricia Goeson** for establishing the Wayne Goeson Memorial Award in memory of her husband, an avid fisherman who was passionate about fish conservation and the preservation of fish habitat. The award will recognize and provide funding to graduate students who are conducting research related to the ecology and conservation of fish and their aquatic habitats.

Tony Allard for his contribution to two important initiatives in the Centre for Coastal Science and Management. Support for salmon research in Rivers Inlet is helping SFU researchers address some of the pressing questions regarding the decline of the Central Coast sockeye salmon populations, including the possibility of pathogens that can cause substantial mortality in salmon farms transferring from farmed Atlantic salmon to nearby wild Pacific salmon and vise versa – and then spreading to more remote populations. A gift to Take A Stand is bringing filmmakers, SFU scientists, high school educators and graduate students together to help educate BC youth on protecting our coastlines and environment.

# IN MEMORIAM

Tragically, not all news this year is positive. It is with the deepest sadness that we report on the August 2015 passing of our wonderful friend and colleague, Dr. Wolfgang Haider, Director of the School of Resource and Environmental Management.

It is hard to imagine the Faculty of Environment without Wolfgang's presence. He was a staunch believer and defender of REM's extraordinary legacy and international reputation, just as he was also a gentle soul with a kind heart and the warmest smile.

Despite my relatively recent arrival to SFU, we had become friends rather than simply colleagues over this past year. Those who knew Wolfgang will understand how it was impossible to spend time with him - discussing REM strategic plans, faculty renewal, tourism research and always, his wife and children - without becoming his friend.

Perhaps it is all the more genuine a testimonial to his impact to recognize that he will be sorely missed not only by those who were his friends for years but also, those whose lives were made richer for knowing him for a shorter time.

Certainly, we will each have our stories and our irrepressible memories of Wolfgang - an extraordinary colleague, mentor, intellectual leader and friend.

In that important sense of how he touched us all, we will each keep him close. If you would like to support a scholarship fund for REM students in Dr. Haider's memory please contact Wanda Dekleva (wdekleva@sfu.ca) at 778 782-8859.

Ingrid Leman Stefanovic,





#### ARCHAEOLOGY

Academic Administration

Burley, David Chair

#### Faculty

- Berna, Francesco Burley, David Cardoso, Hugo Collard, Mark D'Andrea, Angela Galdikas, Birute Jamieson, Ross Lepofsky, Dana Muir, Bob Nicholas, George Reimer, Rudy Welch, John R. Yang, Dongya
- Assistant Professor Professor Assistant Professor Professor Professor Professor Associate Professor Professor Senior Lecturer Professor Assistant Professor Associate Professor Associate Professor Yellowhorn, Eldon Associate Professor

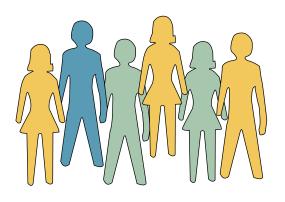
#### GEOGRAPHY

#### Academic Administration

Brennand, Tracy Chair

#### Faculty

Blomley, Nicholas Professor Brennand, Tracy Associate Professor Clapp, Alex Associate Professor Associate Professor Crooks, Valorie Professor Dragicevic, Suzana Gill, Alison Professor Hayter, Roger Professor Hedley, Nicholas Associate Professor Holden, Meg Associate Professor Associate Professor Kingsbury, Paul Knudby, Anders Assistant Professor Krawchuk, Meg Assistant Professor Lesack, Lance Professor Mann, Geoffrey Associate Professor Professor McCann, Eugene Pierce, John Professor



#### Staff

Locher. Peter Guzzo Bonifacio, J Papaianni, Chris Van Rassell, Jenn Vintila, Vlad Winter, Barbara Wood, Shannon

Technician Undergraduate Program Assistant Manager, Academic Programs/Services Grad Program Assistant Undergraduate Academic Advisor Museum Curator Lab Manager & Collections Curator

#### Schmidt, Margaret Associate Professor Schuurman, Nadine Professor Sturgeon, Janet Associate Professor Venditti, Jeremy Associate Professor Zickfeld, Kirsten Assistant Professor Balram, Shivanand Senior Lecturer Winton, Ivor Senior Lecturer

#### Staff

Au-Yeung, Chris Baker, Anke Chen, Joyce DeGrace, Paul Kelly, B Jae Klasen, Tiina Multani, Ravinder Ng, John Song, Justin Walter, Marion Secretary

Technician Manager, Academic Programs/Services Secretarv Coop Coordinator Manager Logistics and Operations Secretary Undergraduate Advisor Technician Technician

## RESOURCE AND ENVIRONMENTAL MANAGEMENT

#### **Academic Administration**

Haider, Wolfgang Chair

#### Faculty

Assistant Professor Axsen, Jonn Cooper, Andrew Associate Professor Cox, Sean Associate Professor Gill, Alison Professor Professor Gobas, Frank Gunton.Tom Professor Haider, Wolfgang Professor Jaccard, Mark Professor Knowler, Duncan Associate Professor Kohfeld, Karen Associate Professor Lertzman, Ken Professor Markey, Sean Associate Professor Moore, Jonathan Assistant Professor Pinkerton, Evelyn Associate Professor Roseland, Mark Professor Rutherford, Murray Associate Professor Salomon, Anne Assistant Professor Welch. John Associate Professor Williams, Peter Professor

## FENV DEANS OFFICE AND PROGRAM ADMINISTRATION

#### Academic Administration

Stefanovic, Ingrid Leman	Dean of Environment
Clapp, Alex	Associate Dean
Markey, Sean	Associate Dean

#### Staff

Benisch, Stevie Black, Michele Burns, Dan Dekleva, Wanda Goettler, Sandy McGregor, Leigh Wood, Laurie Van Vliet, Angie

Coordinator Academic Programs **Director Administration** Manager Curriculum Advancement Director Undergraduate Advisor Mgr Recruitment/Community Liaison **Coordinator Science Programs** Secretary

#### 26

#### Staff

Fan, Min-Hua May Secretary Lee, Laurence Phillips, Elissa Schischmanow, Iris Secretary

Computer Systems Admin Manager, Academic Programs/Services

**Centre for Sustainable Community Development** Director Roseland, Mark

**Evironmental Science** Venditti, Jeremy Director

**Development and Sustainability** Francis, June (BUS) Director

# FACULTY OF ENVIRONMENT



# STAY IN TOUCH

Faculty of Environment Simon Fraser University Suite 8800 TASC 2 Burnaby, BC V5A 1S6 Ph. 778 782-3254 Fax. 778 7782-8788 email: fenv-info@sfu.ca

fenv.sfu.ca