



2019 Newsletter



WDCAG2019 (Uvic) field trip to SNIDZEL (Gowland Tod Park) led by the SNIDZEL Resiliency Project's Tiffany Joseph and Sarah Jim (Tsartlip Nation)



T-Shirt Stenciling at WDCAG2019
(photos: Ken Josephson)

WDCAG Newsletter 2019

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WDCAG PRESIDENT'S MESSAGE (submitted by Claire Hay, University of the Fraser Valley)

Welcome to the current edition of the *WDCAG Newsletter*. My name is Claire Hay and I assumed the role of WDCAG President at our last AGM in Victoria in March 2019. The WDCAG and its annual meetings have been a part of my geographic identity since 1996 when I attended my first meeting at UNBC. I was a new MSc student at UAlberta and I was presenting my honours research at my very first conference where I was the last speaker of the day. I was terrified but excited. That experience has stuck with me; the WDCAG provides students of all levels the opportunity to try out the conference-thing, gain experience, receive feedback on their ideas and network with geographers from a myriad of sub-disciplines and fields. The CAG (our national organization) served much the same purpose while promoting the discipline of geography in Canada. I encourage all of you to support the WDCAG and CAG through membership, attendance at regional and national meetings and supporting students in their geographic adventures.

UPDATES FROM ANNUAL MEETING

The 61st Annual Meeting of the WDCAG was held at the University of Victoria on the traditional territory of the Songhees, Esquimalt and WSÁNEĆ peoples on March 8-9, 2019. The theme of this year's conference was *Language in Action*. The WDCAG Executive and membership extends its thanks to **Cameron Owens** and **Ken Josephson** for their dedication to organizing a fantastic conference and to all student volunteers. This conference had an attendance of 289 including 211 (mostly undergraduate) students. Students and faculty presented 71 oral presentations, 10 workshops and panel discussions, and 53 poster presentations. I hope many of you can visit UVic again in May for this year's annual CAG meeting.

Each year, the WDCAG acknowledges the outstanding student research being conducted across the division. Awards are presented for posters and oral presentations for undergraduate, masters and doctoral levels. Student presentations were judged by faculty and winners were announced during the banquet. A special thank you to chief judge, **Sophia Carodenuto** for all of her assistance. The winners were:

Best poster presentations:

- **Undergrad - Brittany Coulter** (UVic): Mid-Holocene advance of Camp Glacier, Ha-Iltzuk Icefield, Southern British Columbia Coast Mountains
- **Masters - Nicholas Parlato** (UNBC) Mountains of paperwork, forests of laws: Challenges in forming 'Territories of traditional nature-use' in southern Yakutia (Russia)
- **PhD - Christine Todd** (UVic) Tourism geographies and alternative imaginaries: Unsettling discourses and destination branding

Best oral presentations:

- **Undergrad - Katie Hughes** (UVic) A volumetric analysis of tsunamigenic landslides at Harrison Lake
- **Masters - Darcen Esau** (UBC-O) Impact of environmental imagery in wine labeling on the sensory taste of wine
- **PhD - Aimee Benoit** (ULeithbridge) Belonging: A conceptual lens for exploring socio-spatial inequalities in neighbourhoods
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Annually, the WDCAG presents awards for scholarly distinction, teaching excellence and service to the discipline. This year, the following colleagues were recognized for their achievements:

- J. Alistair McVey Award for Teaching Excellence – Dr. **John Belec**, UFV
- The William C. Wonders Award for Scholarly Distinction - Dr. **Rubin Rose-Redwood**, UVic

Congratulations to all our award winners.

WDCAG EXECUTIVE 2019-2020

President	Claire Hay (UFV)
Past President	Leith Deacon (Guelph)
Secretary-Treasurer	Craig Coburn (ULethbridge)
Members-at-Large	David Jordan (TWU) Steven Marsh (UFV) Henry Frew (Carrick House Consulting) Joanne Moyer (Kings U)
Student Representatives (2-4)	Alberta TBA British Columbia – Travis Gingerich (SFU), Glen Thielmann (UNBC)
<i>Western Geography</i>	Human Editor –Joanne Moyer (Kings U.) Physical/GIS Editor – Craig Coburn (UofL)
Archivist	
Awards Officer	David Jordan (TWU)
BC Education Chair	Pam Shaw (VIU); Tom Waldichuk (TRU)
WDCAG Newsletter Editor	Daniel Brendle-Moczuk (UVic)
Webmaster	Daniel Brendle-Moczuk (UVic)

Thanks to all colleagues for agreeing to serve on the WDCAG Executive. We are always looking for members to join the WDCAG executive. Time commitments are limited; with executive meetings held at the annual meetings and occasional email correspondence. If you would like to join us, please let me know.

UPDATES FROM CAG

In May, it was my pleasure to represent the WDCAG at the National Executive of the Canadian Association of Geographers during the annual meeting held at the University of Winnipeg. I want to comment on a couple of items that may be of interest.

CAG Statement on Collegial Conduct and Respectful Exchange: <https://www.cag-acg.ca/statement-on-collegial-conduct>

Over the past few years, the CAG has been developing a framework and formal statement on collegial conduct and respectful exchange. The premise behind this statement is to ensure that all the conduct of all members of the CAG respects diversity and non-discrimination. The statement is to encourage CAG leadership and members to consider and critically engage with these matters in their professional practices. I ask that all WDCAG members review the CAG statement.

CAG Awards Revisions Subcommittee: At the CAG meeting in Winnipeg this summer, the National Executive was made aware of concerns from the membership (and in particular the Feminist Intersectional Solidarity Group) of the under-representation of women and minorities in awards presented by the CAG. To address this, the CAG struck a subcommittee to revise procedures around the nomination and awarding of our national awards. These are now in place for the 2020 round of awards. For more background information please see this link:

https://docs.wixstatic.com/ugd/513bc6_e9f2dec766854b5399be9ba65843bd8d.pdf

Taking the lead from the CAG Executive, I will be undertaking a similar review of the procedures and criteria in place for our WDCAG awards. Unfortunately this will not be completed for the upcoming award season.

WDCAG ANNUAL MEETING 2020

Great News! UNBC will host WDCAG2020 March 13-14, 2020.

If you have any questions or comments, please do not hesitate to contact me at claire.hay@ufv.ca.

WDCAG Newsletter Editor's greeting

Hello! Hope you enjoy this 2019 issue. Thanks to all news providers who make time to contribute!
daniel Brendle-Moczuk, MLIS, Geospatial & Social Sciences Data Librarian, UVic

Interviews:

Afia Raja, Assistant Professor, Geography and the Environment, University of the Fraser Valley (UFV)

<https://www.ufv.ca/geography/faculty-and-staff/faculty-members/raja-afia.htm>

1. Tell us what you recall about your childhood that may have influenced you to become a geographer.

I have always enjoyed tourism; what initially attracted me towards geography as a child, was the clustering of places which can be covered in a single trip. Eventually, the intriguing human geography of diverse places caught my attention.

2. What made you study at a university and why?

I had been a high achiever throughout my academic career, my father is a civil engineer. I was so fascinated by his work that I decided to take up areas around this profession.

3. Ultimately, how did you choose or end up as a geography & environment professor?

I ended up choosing teaching accidentally, as I was offered a faculty position soon after my undergrad with a gold medal. I took this opportunity to test my teaching skills and gradually started enjoying the process. It is so satisfying to see your knowledge spread, grow and nourish!

4. Tell us about some of your **career highlights** in regards to:

4.a. students/teaching

My teaching style reflects my exposure to a wide range of teaching methodologies practiced in different environments and I am comfortable in conventional as well as non-conventional classroom settings.

My teaching philosophy is student-centered teaching that permits discussion and student involvement. In my view, students learn the most when there are high, but attainable, expectations on their performance. I believe that my duty is not only to teach students but also to mentor them for future challenges.

I taught different Urban Planning & Policy, Geography, GIS and Sustainability courses for fourteen years at undergraduate and graduate level at various departments of The University of Engineering and Technology, Lahore-Pakistan. However, the core responsibility was to teach various subjects towards the fulfillment of Bachelors & Master's degree in City & Regional Planning and Master's degree in Community Development and Environmental Management.

4.b. research

My publications and current working papers are primarily in the areas of GIS-based urban planning and decision making, sustainability, neo-urbanism, livability, environmental planning, geospatial planning.

I believe in pursuing research that is motivated by its rational and practical implications. This allows for the use of research implications in the classroom. My PhD dissertation aimed to investigate the linkages of transportation activities policies etc. with the urban form involving the study of unveiling travel behaviour and its impacts on livability, sustainability and compact development.

I worked on a research project entitled "Exploration of the opportunities and barriers to both cluster/cottage housing and employer-assisted housing (EAH) in Corvallis" as a GIS expert. It was a joint project of City Club of Corvallis and Oregon State University Policy Analysis Laboratory (OPAL).

Interview with Afia Raja (con't)

5. Any advice, lessons learned, for undergraduates, graduates and faculty?

The root word of “education,” educare, means “to draw out” or “bring to light.” In this sense, good teachers pull out of students a capacity for enriching knowledge which is already lying within them. I have experienced this being a part of a diverse student community at Texas A&M where we had students from different countries of the world co-coordinating and working together as a team to conduct various academic assignments and practical projects.

The preeminent fact about educational institutions is that they have an environment where people from poles apart, diverse cultures, languages, interests and fields come together to perform their assigned roles. Whether it is students, teachers or the administrative staff, there is a variety of people interacting together for class assignments, projects and many other related tasks.

A momentous tip to be aware of is that each individual has his/her strengths and weaknesses. Some students may be shy but at the same time are great creative thinkers or some may have difficulty speaking fluent English but they maybe superb analysts so on and so forth.

Consequently, each of us in our diverse institutions have the responsibility of bringing out the best in other. As a teacher, we have a greater responsibility to understand this complexity. My own best teachers brought forth my best efforts by performing this magic and I try to match this as well.

My efforts as a teacher have totally changed; now I try using mediums other than the conventional class presentations, assignments and labs. A teacher never fully knows who their best pupil was nor who learned the most—it may have been the one who said the least, maybe the shy one.

Thus as an educator it is our responsibility to learn from the mistakes (Course evaluation comments is what I thoroughly go through) understand the audience that we are dealing with and come up with a plan that will invest the best value for money paid for the course they have taken with you. This involves values in all forms: Academic, ethical, cultural and mental.

Thank you Afia!

Interviews:

Olaf Niemann, (soon to retire) Professor, BC Leadership Chair in Hyperspectral Remote Sensing
<http://geog.uvic.ca/olaf/home.html>

1. Tell us what you recall about your childhood that may have influenced you to become a geographer.

I spent my formative years travelling. My father was a sea captain and I spent considerable time with him at sea. Most of the time we sailed between the east coast of North America and South and East Africa, but there were also a number of trips to Europe. This continued after I became a teenager when I worked summers as an Ordinary Seaman on freighters, also between Europe and North America and southern Africa. Having the opportunity to experience the range of diversity led me to my career.

2. What made you study at a university and why?

Good question. I guess it was expected. My parents had very little formal education growing up during the Depression in relatively large working class families. It was always seen as a path to success, until I studied Geography which they couldn't get their heads around.... It was not the classical career path that they had chosen (i.e. lawyer, doctor, business, etc), but I guess they had no one to blame but themselves after exposing me to the sights and cultures of the world!

3. Ultimately, how did you choose or end up as a remote sensing professor ?

I originally planned on becoming a geomorphologist, even to the point of completing a M.Sc. in fluvial geomorphology at the UofA under Bruce Rains and John Shaw. Between my undergraduate and graduate training however I spent a year in The Netherlands in Enschede at ITC, which is now part of the University of Twente. There I took a programme in Geomorphic Mapping and (very classical) air photo interpretation. This also exposed me to very early generations of EO satellite data (Landsat 1). We had to rely on visual interpretation of these images as the necessary tools and resources for digital processing were beyond reach. I was fascinated by the potential however.

After my M.Sc. I worked in Edmonton for a few years with a computer science graduate who was working on an early GIS package. Between us we cobbled together a very primitive PC with a 26 Mb hard drive the size of desk(!) and software to enhance and classify Landsat data. I did this for three years putting together an interesting portfolio of projects mostly in Alberta, but also in northern Saskatchewan. When the Alberta economy collapsed in 1984 I returned to the UofA for a Ph.D.

I had had an opportunity to see for myself where some of the strengths and weaknesses of digital remote sensing were, and so I knew what I wanted to look into for my Ph.D. During that period I also contracted part time for what was then the Alberta Research Council working on digital elevation modelling and applying these to soil surveys. In 1988 a faculty position at UVic came up, and I was lucky enough to get it, and I've been here since.

4. Tell us about some of your **career highlights** in regards to:

4.a. students/teaching

Working as an academic at a mid-size university like UVic has meant that it's always been about the student. I have had the privilege of teaching at the graduate and undergraduate levels where I have been fortunate enough to have worked with some interesting and gifted students over the years. This year I will graduate the last of 45 graduate students! Watching them mature into their chosen careers is the most rewarding part of my career.

Interview with Olaf Niemann (con't)

4. Tell us about some of your **career highlights** in regards to:

4.b. research

Most of research has focused on the use of remote sensing technologies to solve practical problems. As such I have had a very collaboration-focused research career. The most rewarding part focused on working with the BC forest industry to provide LiDAR-based tools for forest resource management. This was a long process as it took years to convince them of the LiDAR data that they were ignoring (ie the stuff over the bare earth model) which contained most of the information that they needed to assess their inventory base.

4.c. humorous events

The day an undergraduate student came up to me after a lecture and informed me that I taught her mother remote sensing as well. That was the signal for me that I had been around here for too long!

5. Any advice, lessons learned, for undergraduates, graduates and faculty?

Never be afraid to take risks and to fail at something. It's the only way to learn. Corny, but true!

Congratulations on your long, productive, & rewarding career Olaf! Enjoy your retirement. You deserve it!

WDCAG INSTITUTIONS NEWS & REPORTS

Augustana Campus of the University of Alberta (submitted by Glen Hvenegaard)

The Augustana campus offers a minor in geography and interdisciplinary majors in Environmental Science (BSc) and Environmental Studies (2 BA streams: general and outdoor education).

Glynnis Hood was on sabbatical from July 2018 to June 2019. The main focus of Glynnis's sabbatical was writing her book *The Ecology of Semi-aquatic Mammals*, with a planned release date of Fall 2020 with Johns Hopkins University Press. Over the past year she also co-authored *A geochemical perspective on the natural abundance trace elements in beaver (Castor canadensis) from a rural region of southern Ontario, Canada*, which is published in *Science of the Total Environment* (672: 40–50; doi.org/10.1016/j.scitotenv.2019.03.303). She has two other papers in revision. Her conference presentations range from Denmark to Cleveland, as well as more local ones in Alberta. She continues to conduct research on wetland biodiversity, wildlife ecology, landscape connectivity, and methods to reduce human-beaver conflicts through adaptive management.

Glynnis's MSc Student, **Melissa Dergousoff** is now writing her thesis *Trace metal concentrations in the tissue of beavers (Castor canadensis) from Alberta's boreal forests*. Melissa is co-supervised by Dr. William Shotyk from the Department of Renewable Resources (UofA).

Adjunct professor and sessional instructor, Dr. **Dee Patriquin** taught our Environmental Impact Assessment course (Fall 2018) and Resource and Environmental Management course (Winter 2019). She also works full-time as a Senior Environmental and Regulatory Planner with WSP.

Glen Hvenegaard taught climatology, wildlife diversity, environmental interpretation, and a capstone course last year. His students completed community service-learning assignments on many projects, including an environmental board game, school composting, museum research, science fair, and a waste sort. Two directed studies students investigated nesting preference and dispersal dynamics of purple martins.

On the research front, Glen and co-authors wrote *Tourism and Visitor Management in Protected Areas: Guidelines for Sustainability*, published by the IUCN (and translated into Spanish and French). He published papers in the *Journal of Rural and Community Development* (citizen engagement, implementing sustainability plans), *Human Dimensions of Wildlife* (bluebird trail managers), and the *Journal of Park and Recreation Administration* (park research priorities). He also presented papers on teaching, interpretation, wildlife, visitor management, and resource management in Canada, USA, and France. Glen and colleagues collected another summer's worth of data about the outcomes of personal interpretation in Alberta's provincial parks and the use of science in park decision-making.

Greg King led courses on biogeography, sustainability and climatology last year. The sustainability course was a course specifically developed for Augustana's new 3-week semester (which takes place every September and January) and focused on exposing students to current sustainability science and local and regional solutions. Greg established the Augustana Tree-Ring Lab with the goal of using dendrochronology as a method to investigate environmental change. Research projects include continued work on northern ecosystem change, specifically vegetation and impacts on caribou in the Northwest Territories, through a CIMP-funded project and a new set of projects investigating tree growth and dynamics within the urban forest. Over the past year with excellent work from several student RAs, we have established a neighbourhood and campus-based inventory of more than 3500 trees. Greg also attended an arboriculture and urban forest educator's symposium in Chicago and is in the process of developing a course on urban ecology and a dendrochronology field course. Greg is currently on parental leave with his son until January 2020.

Augustana is also home to the Augustana Miquelon Lake Research Station. The station hosts students, researchers, and communities for teaching, research, and local partnerships. Glynnis took over from Glen as manager in July 2019. In September 2019, Glynnis and Glen taught a Field Studies course at the Station. Students developed and conducted research projects on many topics, such as ant mounds, park interpretation, beaver foraging of aspen, garter snakes, and shorebirds. See <http://www.augustana.ualberta.ca/research/centres/amlr/> For information about our teaching or research, contact [Dr. Glen Hvenegaard](#), [Dr. Glynnis Hood](#), or [Dr. Greg King](#).

Camosun College (submitted by Emrys Prussin)

Faculty News

Chris Ayles is continuing in his position of President with the Camosun College Faculty Association and subsequently stepped back from his teaching role. **Emrys Prussin** is filling in for him, and has been made continuing. **Trisha Jarrett** has taken on the role of Chair with the Environmental Technology Program.

We also welcome back term instructors **Chloe Fox** and **Ben Paquette-Struger**, who are teaching Geography of BC and Natural Hazards (respectively). **Francis Yee** returns in a post-retirement position teaching Human Geography.

The Fall 2019 offering of Biogeography has started a native plant nursery to provide plants for an on-campus Garry Oak restoration project. This course has also partnered with Tsawout Elder **Earl Claxton Jr.** for two field-days to learn about local plants at PKOLS and the salmon run at Goldstream.

Douglas College (submitted by Sarah Paynter)

2019 Iceland Field School

Three instructors and 12 students participated in our June 2019 Iceland Field School. They explored breathtaking landscapes and studied how the island nation is working to provide opportunities for alternative energy and sustainable development, including waste management services, energy use, biodiversity, and urban design. The group visited glaciers, geysers, active fumaroles, and volcanic landscapes to learn about processes shaping the Earth's surface. They also investigated Iceland's position within the North Atlantic region, its history, culture, and socio-economic environment. Douglas College faculty lead field studies and worked with local educational host, GeoCamp, to organize learning opportunities with local experts.

A common theme running through the Iceland Field School was how physical landscapes have affected human geographies and how humans have adapted and modified physical environments. Today, Iceland is a top tourism destination which is putting enormous pressure on the environment as people flock to waterfalls, glaciers, lava fields, hot springs, and other sites.

GEOG 1120 – Earth Environments – Air, Land, and Water, taught by Kathy Runnalls, is a lab science course that introduces students to physical landscapes and processes. Iceland is a perfect laboratory for teaching students about plate tectonics, seeing active volcanoes, geysers, lava fields, and experiencing the Mid-Atlantic Ridge, first hand.

GEOG 1190 – The Regional Geography of the North Atlantic, taught by Susan Smythe, covers a broad range of human and physical geographies from the early settlement of Iceland, the Icelandic Sagas through to the modern day. Steeped in history and culture, students saw landscapes from the early settlements of turf houses through to modern, sleek Icelandic architecture while considering national Icelandic identity.

GEOG 2311- Urban Environmental Sustainability, taught by Mike McPhee, focuses on the sustainability of cities throughout the world, looking at topics such as energy, green spaces, urban habitats, waste management, transportation, and climate change. Students studied how different cities have approached these issues and applied what they learned to the capital city of Reykjavik.

Langara College (submitted by Colin Mills)

Department News

The Langara College Geography Department is collaborating with the Department of Classical Studies to offer a 2020 European Field Studies in Italy program.

Katrina Erdos (Geography) and **Jen Knapp** (Classical Studies) are planning a field study program for May – June, 2020. Students can earn 6 UT credits: Geography 1195 (Exploring Landscapes, Culture, and Tourism) and Classical Studies 2276 (Greek and Roman Art and Archaeology). Classes will be from May 4 to May 15 at Langara campus in Vancouver, and from May 18 to June 3 in Sicily, Naples, Rome, and Venice. We'll be looking at thousands of years of geography, art, architecture, and history, while considering their interrelationships with landscapes, economies, migration, culture, and identity.



(photo: Katrina Erdos)

Complete information is available at www.langara.ca/programs-and-courses/field-schools/study-europe/ or contact Katrina (kerdos@langara.ca; local 5907) or Jen (jknapp@langara.ca; local 5481) for more info.

Medicine Hat College (submitted by Ben Moffatt)

As usual, the entire Geography Department of Medicine Hat College (that means me, **Ben**) travelled eastward for the Annual General Meeting of the Prairie Division of the C.A.G (PCAG). This year the trip was a short one, a mere 900km return as the meeting was held (for the first time) at Saskatchewan Polytecnic in Moose Jaw, Saskatchewan.

Prairie Divisional meetings are a treat. While smaller than the WDCAG, papers presented on Saturday morning run the gamut of Geographers' interests. Typically three or four concurrent sessions comprise the academic sessions that are followed by a lunch break. Many undergraduate and graduate students take advantage of these sessions to present their works-in-progress. This year there were twenty-five papers along with 20 or so poster presentations.

Following lunch there is always a field trip (or two...often one focusing on Human concerns while another is often more concerned with Physical Geography). This year there was only one field trip led by Dr. **David Sauchyn** of University of Regina that travelled southeastward, skirting the now derelict film sets of Corner Gas (certainly these should have been preserved as a National Historic site!) and to the Claybank Brick Plant and Dirt Hills. Each location is fascinating in its own way. Topics of concern and focus included the geography of Canadian primary and secondary industry to the unique effects of the Wisconsin glaciation in this region.

For a change there was no Prairie challenge that disrupted the trip (no mechanical failures, no off-road experiences and, at least on Saturday, no Prairie weather changes to deal with...all of which have usually been experienced when Dr. Sauchyn has led the expeditions).

Upon our return to the interesting campus of Sask Poly it was time to prepare for the highlight of the PCAG – the annual banquet, guest speaker and the conference's wrap up: The Annual Slide Competition. This year the guest speaker was Dr. **Soe Myint** of Arizona State University, the current Fulbright Canada Research Chair in Water, Environment and Clean Energy at the University of Regina. He has been awarded a NASA research grant (and serves as Principal Investigator) titled "Changing Landscapes, Urban heat Island and the Effects on City Water Conservation Policy".

Anyone who has ever attended a meeting of the PCAG will rave about experiencing the annual Slide Competition. Entrants bring images collected throughout the year and these are displayed for all to see and to voice their opinions about. Judges decide winners in each category (Physical Geography, Human Geography, Humour and Prairie Scenes) on the basis of noise generated by the audience. In the past a set of rules has been invoked...no stomping, shouting, table pounding and cutlery bashing or throwing, for example, since audience participation has often been so 'active'. Despite that, all await the ultimate compliment to the entrants of the tie-breaking method of the traditional 'clap-off'. Make a vow to someday, somehow, attend the PCAG just to participate (and perhaps enter) the Slide Competition.

As is often the case, Sunday's weather saw a dire change. I drove home in a September snow storm....usually it is a wonderful time to drive across the fall Prairie landscape; crops are being harvested, leaves changing colours and there is often a Roughriders game on the radio to make the kilometers pass easily...not this year, what is usually a four hour drive became a seven hour one as I finally arrived back in Medicine Hat just before dark, with 10 centimeters of snow on the ground.

Yet once again it was a great weekend; listening to papers, hearing what 'new' up-and-coming Geographers are up to, field tripping, making new acquaintances and seeing old friends....and even driving home in a raging snow storm. I must say I enjoy the PCAG and will always make an attempt to attend and I think more British Columbian and Albertan Geographers should too!

Okanagan College (submitted by Todd Redding)

The Department of Geography, Earth and Environmental Science at Okanagan College now features seven full-time continuing members: **Arthur Green, Terence Day, Barbara Ramovs and Markus Heinrichs, Stephanie Bunclark, Wei Zang and Todd Redding.** We also currently have two term faculty members: **Chad Ellis and Chani Welch.**

The biggest undertaking of the past year was hosting the National Association of Geoscience Teachers (NAGT) – Pacific Northwest Section annual conference and field tour at our Penticton Campus. Attendees came from BC, Washington, Oregon and Dakota. The conference day followed by two days of field trips in the south Okanagan was fun and informative and featured significant sampling of the local terroir!



NAGT 2019 conference participants on top of Munson Mountain in Penticton. June 2019 (photo: Todd Redding)

Simon Fraser University (SFU) (submitted by Tracy Brennand)

There has been a lot going on in SFU Geography's undergraduate program over the last year. Over 600 students are currently registered in our major, minor and certificate programs, and our courses have almost 4,000 enrollments across three very busy teaching semesters. With that level of sustained activity, our programming has expanded and changed over the years to meet the needs and interests of our students.

The most notable recent changes include the reorganization of our B.A. program more explicitly toward Human Geography which, while maintaining our undergraduate education's dedication to the breadth of geographic knowledge, gives students who want to focus on social science a more appropriate program structure. Our Bachelor of Environment in Global Environmental Systems (GES) is an integrated mix of social and earth systems science, and has proven very attractive to students, as the number of majors continues to grow. Indeed, since the GES program is clearly filling the programming role that the B.A. Environmental Specialty once did, we have closed the latter and restructured the GES to even better prepare the next generation of environmental leaders.

The Physical Geography program reorganization is currently underway. We are streamlining the degree and integrating options for two different professional accreditations from which students can choose: the Professional Geoscientist, which has long been on offer, and the Professional Agrologist. Both accreditations give students designations that are increasingly important to finding employment in environmental services and natural resource sectors.

All of our programs include opportunities for experiential learning. Of particular note, in this past year, is the acquisition of a number of 2.5 m diameter helium-filled balloons, and a set of light-weight time-lapse cameras for student use. During the annual physical geography field school, held near Kelowna this year, students mounted temperature/pressure probes, GPS receivers and cameras and mapped a deforested landscape. The students dynamically solved challenges in the field, successfully producing merged and scaled aerial photographs. Next year we plan to advance the methods by having students modify some of the cameras with different filters in order to remotely evaluate vegetation health.



SFU (con't)

Student News: Undergraduate Kudos

Ruslan Rydvanskiy, who graduated in Spring 2019 with a BA in GEOG and the SIS Certificate, won the 2019 Canadian Association of Geographers Undergraduate Award. Each year, The Canadian Association of Geographers presents awards to the most outstanding students graduating in Geography honours/majors programmes at universities across Canada. He started his MSc with Dr. Nick Hedley in Geography at SFU.

Russell Copley, who graduated in Spring 2019 with a BA in GEOG, Minor in Health Sciences and the SIS Certificate, won the Peter Schaub Memorial Book Prize Award. This prize was established to honour the memory of Peter Schaub, a former Dean's medal award winner and outstanding geography student who was an active participant in the Geography Student Union (GSU). We award this prize annually to a Geography major student from the graduating class who has made a significant contribution to the Department through the Geography Student Union.

Anthony Lee, who graduated in Spring 2019 with a BA in GEOG, SIS Certificate and Environmental Literacy Certificate, won the Kim Fofonove Memorial Book Prize Award. The prize was established by members of the Department and by friends of former geography student Kim Fofonove. Each year this prize is awarded to an outstanding geography major or honours student from the graduating class. Anthony served on the GSU executive during Fall 2018. He was also the Departmental Representative (attended the Departmental Meetings as the undergraduate representative). He is working full time for Skytrain as a GIS Analyst.

Ruby Barnard is in her final year of undergraduate studies, completing her BA in Geography. She won the Warren Gill Memorial Award that recognizes leadership and service within the community by a Human Geography student. She has volunteered with a Youth Team on Salt Spring Island teaching respectful relationships curriculum to students at local schools. She has also done volunteer work in Kenya educating local youth on health topics.

Graduate Program

Our mentorship-based Graduate Studies Programs comprise a vibrant group of 60 emerging scholars with a wide range of expertise in geography, studying for Masters and Doctoral degrees. In the past year, twelve graduate students successfully completed their degrees and several more have obtained important scholarships and awards. These outcomes highlight the excellence of our graduate students and the high quality of their research activities.



The Physical Geography Field School took place in the Spring of 2019 near Kelowna, B.C

Completed theses September 2018 – August 2019

Aminipouri, Mehdi (PhD), "Evaluating heat vulnerability and the impact of urban street tree planting on radiant heat exposure: Examples from Vancouver's neighborhoods: (Kirsten Zickfeld)

Anderson, Taylor (PhD), "Towards the integration of complex systems theory, geographic information science, and network science for modelling geospatial phenomena" (Suzana Dragicevic)

Gareis, Jolie (PhD), "Arctic deltas as biogeochemical hotspots affecting the delivery of nutrients and dissolved organic matter to the Arctic Ocean" (Lance Lesack)

Fox, Liam (MA), "Regulating in the public Interest? Canadian energy regulation as institutional fix for sovereign legitimacy" (Geoffrey Mann)

SFU (con't)

Completed theses September 2018 – August 2019

Wallstam, Maria (MA), “The making of a middle class housing crisis: The ideology and politics of foreign real estate investment in Vancouver 2008 – 2018” (Geoffrey Mann)

Bergstresser, Mitchell (MSc), “Composition of aquatic microbial communities and their relation to water-column methane cycling among Mackenzie Delta lakes, Western Canadian Arctic” (Lance Lesack)

Cao, Cora (Cong) (MSc), “Exploring deep learning methods for analyzing land use change” (Suzana Dragicevic)

Geeves, Kimberley (MSc) “Carbon quality and quantity in lake sediments and their relationship with pore-water and lake-water methane among lakes of the Mackenzie river Delta, Western Canadian arctic” (Lance Lesack)

Huxter, Emily (MSc), “Streamflow characteristics of intermittent streams in the Okanagan, British Columbia, Canada” (Lance Lesack)

Shen, Shuoge (MSc), “Integration of GIS and soft computing for suitability evaluation of high-density urban development: The logic scoring of preference method” (Suzana Dragicevic)

Valerio, Margaret (MSc) “Exploring the relationship between vertical mixing, overturning circulation, AABW volume, and ventilation age during the last glacial maximum” (Kirsten Zickfeld)

van Duynhoven, Alysha (MSc), “Evaluating long short-term memory networks for modeling land cover change” (Suzana Dragicevic)



Awards:

- Dania Clarke, SSHRC CGSM
- Véronique Émond-Sioufi, SSHRC Doctoral
- David Swanlund, SSHRC CGSD
- Christopher Ilori, SFU Big Data Graduate Scholarship
- Christopher Ilori, Coastal Zone Canada Association Graduate Scholarship
- Christopher Ilori, Patricia Gallagher Award in Coastal Science
- Tingan Li, Simons Foundation Award
- Zach Cameron, Canadian Pacific / Teck Resources Award
- Alex Smith, SFU ESRI Canada Center of Excellence (ECCE) Student Associate Achievement Award

Trinity Western University TWU (submitted by David Jordan)

Undergraduate Program

The Geography program and Environmental Studies programs were recently merged into a stand-alone academic Department bridging two Faculties at TWU. The Department of Geography and Environment (GENV) offers a BA major in Geography, BA major in Environmental Studies and a BSc. major in Environmental Science, along with corresponding minors and concentrations. We also recently approved a GIS certificate program and are in the process of rolling it out. Undergraduate student enrollment is healthy with approximately 30 majors spread across the three degree options in any given year. Core faculty in the new Department include Dr. **Geraldine Jordan** (GEOG), Dr. **David Clements** (BIOL), Dr. **Maxwell Ofosuhene** (GEOG), **David Jordan** (GEOG) and **Karen Steensma** (BIOL).

Departmental Research

Besides regular course work a number of students have been actively involved in conducting research and managing our newest land resource, the Thomas Blaauw Ecoforest, a 25-acre riparian forest situated in the Glen Valley area of Langley Township. The forest is a rare remnant of undeveloped floodplain and glacial upland forest of the type that once covered much of the Fraser valley (Blaauw EcoForest on Facebook). This past summer a documentary film crew from our Media and Communications Department spent a couple days shooting footage of our student lead researchers conducting field work as part of a production to promote the GENV programs and Department. In other Departmental research news, we were recently awarded a significant grant from the City of Burnaby Parks Department to conduct a climate resilience study on the forest in Central Park, Burnaby. GENV majors **Delia Anderson** and **Natalie Cook** (BA Geog) will be working as field research assistants this fall.



GENV BSc. major **Delia Anderson** demonstrates groundwater monitoring research to the documentary film crew as Dr. **David Clements** looks on behind the tree to the left.

TWU (con't)

WDCAG Annual Meeting 2019

In March 2019 the GENV Department including faculty members Dr. **Geraldine Jordan** and **David Jordan** lead a strong contingent of students to the WDCAG annual meeting in Victoria, BC.

The following students presented research posters at the conference:

Nate Yeung: Mapping High School Catchment Areas in the Bellevue School District (Bellevue, WA, USA)

Natalie Cook, Katharine Sell: Exploring the dendrochronological landscape of the Blaauw Eco-forest, Langley, BC

Natalie Cook: Spatial Analysis of Accessibility to Water Fountains at Trinity Western University Langley, B.C. 2018

Brendan Dixon: Infrastructure Changes on Trinity Western University Campus, Langley, BC, 2001-2018

Vanessa Jones: Spatial Analysis of Japanese Knotweed (*Reynoutria japonica*) Chemical Spray Treatments in the District of Mission, BC (2013 – 2018)

Virginia Oeggeli: Drainage and Road Influences on the Distribution of Knotweed (*Reynoutria* sp.) in Langley, British Columbia

Aurora Sarchet: Using GIS to Assess Nature Trail Accessibility and their Proximity to Aquatic Habitats at Trinity Western University, Langley (BC) 2018

GENV and BIOL 4th year student **Samit Sanhu** gave an oral presentation on his undergraduate thesis research entitled: Dendrochronological Investigation of Western Hemlock (*Tsuga Heterophylla*) in Blaauw Eco-Forest, Langley BC, co-authored with his thesis supervisor **David Jordan**.

Dr. **Geraldine Jordan** presented the following findings emerging from her Environmental Health Lab's research work this past year: (1) Evaluating the Scientific Reliability and Validity of a Health Impact Assessment - Using GIS Methodologies and Spatial Planning Approaches (2) No trucks: Civic engagement helps to shape transportation planning near two elementary schools in the Township of Langley, BC



TWU GENV students pose on the University of Victoria campus prior to the start of the WDCAG conference, Saturday March 9, 2019.

Thompson Rivers University (TRU) (submitted by Tom Waldichuk)

Greetings from Thompson Rivers University, Department of Geography & Environmental Studies.

Faculty News & Selected Publications:

Darryl Carlyle Moses has been busy working on various scholarly activities. In the fall, Darryl published a paper in the journal *Advances in Water Resources* with colleagues from Japan, Spain, Germany and the United States entitled “Expressing stemflow commensurate with its ecohydrological importance”. Darryl was also part of a team of faculty at TRU, including Dr. **David Hill**, who supervised one of our undergraduate students who published their work as a technical note in the *Journal of Hydrology* in the spring. This spring Darryl was the invited speaker to open a session at the European Geophysical Union in Vienna, Austria. Darryl also presented or was a co-author of presentations and posters at the American Geophysical Union Annual Meeting in Washington, DC., the Japan Geoscience Meeting, the Urban Forestry in Municipalities and Interface Areas of Interior British Columbia Networking Event, and the WDCAG. Darryl has been busy over the last year as a co-editor and chapter contributor to a new Ecological Studies Series (Springer) volume slated for release in November 2019 entitled Forest-Water Interactions. Darryl continues as the Department advisor and subject matter expert for transfer credit assessment requests. Last year Darryl taught the lower-level hydrology course, our introductory weather and climate course, a third-year micrometeorology course and supervised nine students doing directed studies research, most with a focus on urban biophysical environments.

David Hill taught GEOG 2700 Introduction to Geographical Analysis in the fall. In the winter term he was on sabbatical and travelling through the US while working on his research. During this time he was funded by an NSERC Engage grant to explore image analysis in support of precision forestry.

Recent publications:

Turner B, **Hill DJ**, Carlyle-Moses DE, and Rahman M (2019). Low-cost, high-resolution stemflow sensing.

Journal of Hydrology 570:62-68. <https://doi.org/10.1016/j.jhydrol.2018.12.072>

Hill DJ & Babbar-Sebens M (2019). The promise of UAV-assisted adaptive management of water resource systems.

Journal of Water Resources Planning and Management 145(7). [https://doi.org/10.1061/\(ASCE\)WR.1943-5452.0001081](https://doi.org/10.1061/(ASCE)WR.1943-5452.0001081)

Mufford JT, **Hill DJ**, Flood NJ, and Church JS. (2019). Use of unmanned aerial vehicles (UAVs) and photogrammetric image analysis to quantify spatial proximity in beef cattle. *Journal of Unmanned Vehicle Systems* 7(3): 194-206.

<https://doi.org/10.1139/juvs-2018-0025>

Crystal Huscroft had a busy year as she accepted a 9 month position as Interim Associate Dean of the Faculty of Arts. However, she still managed to co-teach an Environmental Geoscience Field School with Darryl Carlyle-Moses as well as two Geomorphology courses (see photo). Her current projects include completing an Open Textbook for Introductory Geomorphology and Hydrology courses with colleagues from across BC (please contact her if you are interested in participating). She is also exploring how a sense of belonging can be increased in introductory courses through participation in short discipline-specific activities. In November 2018, she presented the following talk:

Huscroft, C, 2018. The assessment of field skills using ESRI StoryMaps platform. Geological Society of America Annual General Meeting.

Indianapolis, Indiana. Nov.3-7, 2018.

Geography 3080 Geomorphology
Fall 2018, Kamloops
(Crystal Huscroft photo)



TRU (con't)

Michael Mehta continues with his research on air pollution and published an article in *The Conversation* on how wood smoke from residential wood burning practices continues to create health hazards for tens of thousands of Canadians every winter. He delivered several community talks on air pollution and wildfires throughout the province last year, and gave a keynote lecture on solar energy at the BC Tech Summit, a talk on air pollution monitoring at the WDCAG meeting in Victoria, and a keynote at UBC on nanotechnology and the challenges associated with communicating difficult science to the lay public. He taught a range of courses in Geography and Environmental Studies and in the Department of Sociology and Anthropology.

Kim Naqvi is revising key courses to reflect rising concerns around both climate instability and political instability. With a teaching load of eight courses comprising six to seven topics, this has to be tackled slowly. But, following a round table discussion on first year texts at the 2018 WDCAG, she is experimenting with restructuring the course around exploring the cultural and economic landscape as the outcome of changing beliefs. This re-centres material around a shift from “sacred” to “instrumentalist” approaches to the meaning of space, and economic practice. In this experimental first term, the course uses selections from multiple texts, primarily John Rennie Short’s *Human Geography: A Short Introduction* and the 10th Ed *Human Geography* by Mercier and Norton, with support from Oxford University Press. It’s a bit of a crapshoot, and she hopes the upcoming WDCAG will be a chance to explore its effectiveness with colleagues. Continued development of a popular course on the Geography of Consumption has increased emphasis on both theoretical approaches to consumption studies, and policy efforts at national and international scales.

Gilles Viaud is currently working with Dr. Terry Kading, a political scientist colleague at TRU, and with **Brayden Wilson**, a recent TRU graduate and now Master’s student at the University of Waterloo School of Planning, on a research collaboration around the issue of aging in the small city. They are currently working on a joint paper that uses Kamloops as a case study to illustrate the comparative challenges faced by smaller urban places in meeting the growing accessibility needs of a senior population that increasingly desires – and which is also strongly encouraged by health and service providers, to age in place. Gilles had the pleasure earlier this year to supervise a very interesting undergraduate thesis titled “An analysis of urban sprawl in small cities: a case study in Kamloops, British Columbia.” The author, **Samantha Horner** (2019), produced a very thoughtful and comprehensive analysis of sprawl in the small city and developed an original, empirical but low-tech approach to capture it. The thesis was submitted in partial fulfillment of the requirements for the TRU Degree of Bachelor of Interdisciplinary Study.

Tom Waldichuk continued to Chair the department over the past year. In November he organized a presentation by Roland Neave who was a geography student at Cariboo College back in the 1970s and wrote *Exploring Wells Gray Park* which just came out in its 6th edition. In early Dec.2018, news broke of the previously unreported giant cave in the park. In the winter term, Tom taught introductory Environmental Geography 1100. As a project, he had the students evaluate how well residents clear snow from neighbourhood sidewalks during the month of February. Luckily, we had one of the coldest Februaries on record, so students were able to make observations after several snowfalls, which was quite an experience, especially for international students from warmer climates. The course was part of a project organized by the TRU research office to emphasize research in introductory courses. Senior geography student **Raelene Mahon** was the “Research Coach” who helped the students. At the end of term, the students displayed their results in poster format at a mini-conference (“Research Coach Showcase”), with students from the other courses involved in research projects.

TRU (con't)

Tom Waldichuk (con't)

In the winter, Tom started teaching his Geography of Japan 3700 field course. The course culminated in a two-week field trip to Japan from May 9 to 22. The group consisted of 11 students, two who were auditing, Dale Parkes, a TRU colleague who teaches architectural and engineering technology, and Tom's spouse Helen. We spent a week in Tokyo at Bunkyo Gakuin University, two days in our sister city Uji, and four days in Hirosaki City.



Geog3700 Japan field course on Kamloops Street, Uji City (Sister city of Kamloops) (Helen Markano)



Owani Ski Resort Hot Springs, Aomori Prefecture, Japan (T.Waldichuk)



Geog3700 Japan field course at Odaiba, Tokyo Bay (Helen Markano)

Hirosaki Castle with Mt. Iwaki in the background (T.Waldichuk)

This was the first time Tom led students to northern Japan. The students enjoyed meeting other students at our partner school – Hirosaki University. While there, we visited the famous Hirosaki castle, nearby Owani ski resort where there is a hot springs footbath outside the train station, and we had nice views of Mt. Iwaki.

TRU (con't)

Tom Waldichuk (con't)

Tom also attended the Japan Studies Association of Canada conference at the U. of Alberta in the middle of October 2018 where he gave a presentation on the tourist walking routes in Bunkyo Ward of Tokyo, which was also authored by the students in his 2017 Japan field course. He presented this same talk at the CAG conference in Winnipeg on May 27. At the WDCAG conference at the U. of Victoria on March 9, Tom presented on "Student Satisfaction with an International, Human Geography Field Course in Japan", which dealt with his field course in Japan. On May 4, Tom presented at the BC Studies Conference at TRU and gave a presentation on "Agricultural Diversity in BC's Thompson and Cariboo Regions."

Publication:

Yu, R., Du, D., Hughes, A., Jules, G., Lane, L., Li, D., Ness, V., Rookes, C., Turner, B., **Waldichuk, T.**, Welychko, N., Woolverton, N., & Zhou, Z. (2019). The tourist walking routes of Bunkyo Ward, Tokyo: Foreign perceptions of walkability. In Aya Fujiwara and James White (Eds.), *Japan's World and the World's Japan: Images, Perceptions, and Reactions*. The 31st Japan Studies Association of Canada Annual Conference Proceedings. October 11-14, 2018, University of Alberta, Edmonton. Pp.125-151.

Student News

TRUGS (Thompson Rivers University Geography Society) under the leadership of Claire Irvine, was involved in "Adopt a road" clean-up, hikes at Wells Gray, multiple fundraisers, and other social events.



TRUGS organized a bus to take students to and from the WDCAG conference at UVic.

About 25 students attended the conference, and a number of them presented. Several students also presented at the TRU Undergrad conference (see below).



TRU (con't)

Student Oral Presentations at WDCAG conference at the UVic, March 9, 2019

Claire Irvine: Urban heat islands: What their effects are, and how to mitigate them

Brendan Makar: Stormwater Management

Kaitlin Jaap: Stratigraphy of the Thompson River Valley, Peterson Creek, Kamloops BC

Student Poster Presentations at WDCAG conference at UVic

Hanna Martens: Pro-environmental behaviour and local food production in Kamloops, BC

Selena Schut: The effects of urban landscaping on groundwater recharge

Breana Rusnell, Narain Spolia, & Darryl Carlyle-Moses:

Size matters: Stemflow, soil-water recharge and spatial-scaling

Katryna Barone: The effects of urbanization on the biogeography of grizzly bears in western Canada

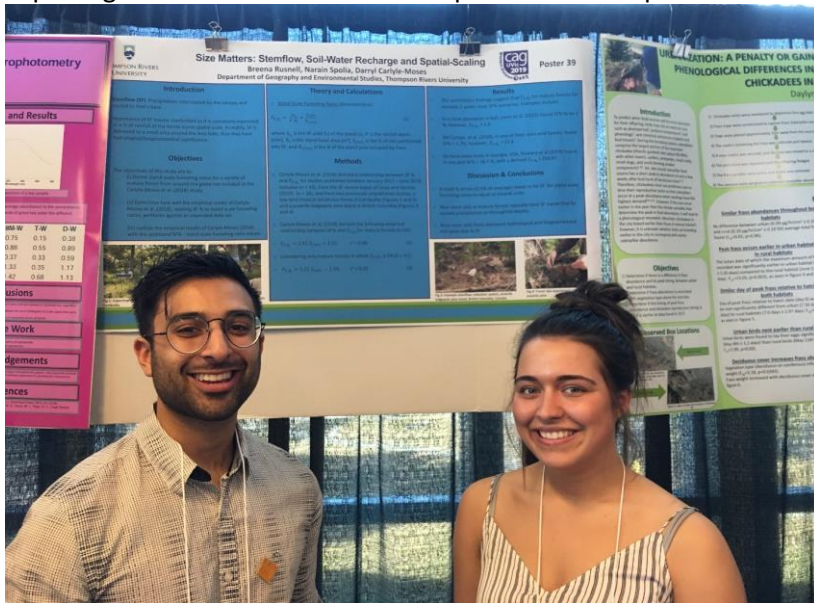
Brittni Baker, Scott Cramer, Marina Keast, Brandon Makar, Katherine Rottler, Selena Schut, Zhe Li, & Michael

Mehta: A day in the life of your lungs: Geospatially-based real-time air quality monitoring of PM2.5

14th Annual TRU Undergraduate Conference Presentations, March 29 & 30: Posters

Hanna Martens (Faculty supervisors: Drs. Lyn Baldwin & Kim Naqvi):

Exploring the link between local food production and pro-environmental behaviour in Kamloops, BC



Narain P. Spolia & Breana Rusnell (Faculty supervisor: Dr. Darryl Carlyle-Moses)

The Influence of spatial scale on the quantitative importance of stemflow

Oral Presentations:

Richmond Ho Shing Yu (Faculty supervisor: Tom Waldichuk)

Student cities: Examining how international students transform the economic, social and political fabric of town-grown communities.

Paige N. Hauser Faculty supervisor (Dr. Lisa Cooke)

Decolonizing young minds? Or recolonizing them through 'Big Ideas' presented in new packaging: An interrogation of settler colonialism operating through BC's new curriculum.

Other student news: TRU undergraduate and WDCAG student representative Brandon Turner published:

Turner, B., Hill, D.J., Carlyle-Moses, D.E., & Rahman, M. (2019). Low-cost, high-resolution stemflow sensing.

Journal of Hydrology 570, 62-68. <https://doi.org/10.1016/j.jhydrol.2018.12.072>

Finally, thank you to **Claire Irvine** for the amazing work she did for TRUGS as President and for organizing the bus trip to Victoria for the WDCAG conference.

University of the Fraser Valley (UFV) (submitted by Claire Hay)

Department News

The Department of Geography and the Environment now has a new home. As of April 1st, we are now the School of Land-Use and Environmental Change (SLUEC) housed in the Faculty of Science at UFV. The school is home to a number of programs: BA/BSc Geography programs, Bachelor of Environmental Studies (and BES-Natural Sciences) and Bachelor of Agricultural Science. **Jonathan Hughes**, our biogeographer, will be the inaugural Director of the SLUEC effective January 1st 2020.

Student News

This past convocation season, SLUEC graduated approximately 30 students from our Geography programs. We also presented our annual awards:

- Canadian Association of Geographers Annual Award – **Lauren Westhaver**
- Association of American Geographers Annual Award – **Shayla Bird**
- Doug Nicol Memorial Award – **Lauren Westhaver**

Lauren also received the Faculty of Science Dean's Medal for the highest GPA from a BSc program. Congratulations at all our award winners.

Faculty News

After a long time with no new faculty (read over 10 years), SLUEC is pleased to introduce 2 new assistant professors.

Dr. **Stefania Pizzirani** is an environmental researcher, an ally to Indigenous peoples, a teacher, a learner, and a mother. Prior to working at UFV, she completed a postdoctoral research fellowship in the Faculty of Forestry at the University of British Columbia where she worked with and for the Heiltsuk Nation in Bella Bella, BC. This collaborative project was entitled, "Developing spatial and participatory resolutions for the Canadian Aboriginal housing crisis". The context of this project was focused on developing, implementing, and assessing community-led housing solutions to alleviate and meet housing demands.

Stefania completed her PhD in New Zealand in 2016 where her research focused on forestry resource management with key Māori community members. Applying a kaupapa Māori approach (which embraces traditional beliefs, ethics, and ways of being), she worked closely with the participants using a comprehensive life cycle sustainability technique which provided environmental, social, and economic data regarding forestry options. The process provided the participants with a framework to develop a clear pathway to achieving the collective vision of their community.



Also joining the school is Dr. **Afia Raja** who comes to us most recently from the Department of Geography & Sustainability at the Western Oregon University as Assistant Professor of Sustainability.



Afia graduated from Texas A & M University (TX, USA) in 2012 earning her doctoral degree in Urban and Regional Science. Being a Fulbright PhD scholar, she had to leave the US immediately after the completion of her doctorate, to serve Pakistan as of J-1 exchange visitor home-residency conditions. She worked in Pakistan as Assistant Professor (Tenure track), at a leading Engineering University (UET) Pakistan, where she taught different Urban Planning, Geography, GIS and Sustainability courses for fourteen years at undergraduate and graduate level at various departments of the University. However, the core responsibility was to teach various subjects towards the fulfilment of Bachelors & Master's degree in City & Regional Planning and Master's degree in Community Development and Environmental Management. Additionally, she has also supervised many research projects/dissertations at the same institute.

UFV (con't)

In December 2018, **Cherie Enns** successfully defended her PhD in International Policy and Program Management at Ardhi Regional University in Tanzania. Congratulations Cherie!

Finally, some sad news. Former GATE member and UFV administrator, Dr. **Ken Brealey** passed away recently after a battle with cancer. Ken joined UFV in 2002 and served as department head, associate dean and associate vice president. Ken's professional work involved cartography, historical geography and First Nation's ideologies of land use and mapping. Due to the work contained in Ken's thesis, he was called upon to be an expert court witness to present historical and cartographical evidence on the territoriality of First Nations.



University of Lethbridge (submitted by Laura Chasmer)

The Department of Geography and Environment at the University of Lethbridge boasts leadership in areas of geographical information science (GIS), remote sensing, water research and rural and urban studies. Our programs offer students the opportunity to engage in experiential learning in GIS and remote sensing, field study at the University of Lethbridge West Castle Field Station, and through numerous field activities in Canada and abroad.

Department News

The Department of Geography recently changed its name to the *Department of Geography and Environment* and created a new revamped website; thanks to Dr. Marcus Dostie. <http://www.uleth.ca/artsci/geography/about>

The Department of Geography and Environment also now offers undergraduate and master's degrees in remote sensing (a combined degree with the Department of Physics and Astronomy).

Faculty members and students have also been highly productive, publishing more than 100 journal articles over the past two years, and members sit on the editorial boards of six journals.

Research activities in the Department have also been disseminated at a broad range of conferences with more than 150 presentations, including AGU, CAG, Canadian Symposium on Remote Sensing, CGU, and others, many of which are student presentations. Dr. **Chris Hopkinson** will be chairing the Canadian Symposium on Remote Sensing this summer in Yellowknife NWT <https://crss-sct.ca/conferences/csrs-2020/>. We have also recently (in the last two years) joined the Northern Scientific Training Program, thanks to activities by Dr. **Phil Bonnaventure**.

Other newsworthy items: CRC Tier II assistant professor Dr. **Julie Young** has recently published a book with Dr. **Susan McGrath** (editors) Emeritus professor at York University in Toronto: *Mobilizing Global Knowledge – Refugee Research in an Age of Displacement* (<https://press.ucalgary.ca/books/9781773850856/>).

The book reflects on the lessons learned from the Refugee Research Network: how the network tried to build networks for knowledge production and mobilization and what they able to accomplish together, including the challenges of bridging silos, sectors, and regions and engaging across global North-South tensions. The key question motivating this collection was: What are the contributions of a research network to thinking about the broader ethical, methodological, and practical questions engaged by research in the field of refugee studies?

In regards to large funding initiatives, Dr **Chris Hopkinson** was awarded \$1.3 million to acquire a Teledyne Optech Inc. Titan multi-spectral airborne lidar system for rapid mobilization to understand natural disasters. Two of our Department members have also received large within university awards including a Board of Governors Teaching Chair awarded to Dr. **Kevin McGeough** and a Board of Governors Research Chair to Dr. **Chris Hopkinson**.

This year, we also continued our *Friday Afternoon Seminar Series*, the third Friday of each month.

- Dr. Scott Heckbert (Chief Environmental Scientist, Alberta Energy Regulator): Data to decision – Environmental modelling and community-based monitoring
- Dr. Patricia Burke Wood (Professor of Geography, York University): The Geography of the Crown – Law and the political geography of settler colonialism
- Dr. David Schroeder and Hillary Cameron (FireSmart Program, Government of Alberta): FireSmart Vegetation Management Research in Alberta

University of Lethbridge (con't)

Student News:

The University of Lethbridge graduated 3 PhD students this year and 8 Master's students:

- **Fariborz Mansouri Kouhestani** (PhD): Engineering Design and Optimization of Large-scale Solar Photovoltaic and Wind Turbine Installation in an Urban Environment (Dr. **Jim Byrne**)
- **Seyedeh Shaghayegh Mirmasoudi** (PhD): High-resolution Modeling of Climate Change Impacts on Water Supply and Demand; and GHG Emissions in an Okanagan-Similkameen Subwatershed, British Columbia, Canada (Dr. **Jim Byrne**)
- **Zhouxin Xi** (PhD): Fine-scale Inventory of Forest Biomass with Ground-based Lidar (Dr. **Chris Hopkinson**)
- **Kyle Bexte** (MSc): A spatio-Temporal Analysis of Near-Surface Air Temperature within the West Castle Watershed, Alberta (Dr. **Phillip Bonnaventure** and Dr. **Matthew Letts**)
- **Trina Burgess** (MA): Residential Location of Millennials: A Calgary case study (Dr. Ivan Townshend)
- **Kelsey Cartwright** (MSc): Spatio-temporal Variations in Snow Depth and Associated Driving Mechanisms in a Temperate Mesoscale Mountainous Watershed (Dr. **Chris Hopkinson**)
- **Rafaela De Castro Marasco** (MA): The Divided City: Income Inequality and Housing Disadvantage in Calgary (Dr. **Ivan Townshend**)
- **Trevor Deering** (MSc): Mapping Soil Properties in the West Castle Watershed, Alberta (Dr. **Stefan Kienzle** and Dr. **Ravinder Virk**)
- **Martha Lucia Astorquiza Enriquez** (MSc): Environmental Impact and Management of Food Packaging at the University of Lethbridge with Respect to Sustainability and Students' Choices (Dr. **Jim Byrne** and Dr. **Daniel Johnson**)
- **Madeleine Garibaldi** (MSc.): A high Arctic microclimatic hotspot assessment Cape Bounty, Melville Island, Nunavut (Dr. **Phillip Bonnaventure**)
- **Maxim Okhrimenko** (MSc): Applications of multi-spectral lidar: River channel bathymetry and canopy vegetation (Dr. **Chris Hopkinson**)

Student Awards in 2019 include:

- **Aimee Benoit**: "Belonging: A conceptual lens for exploring socio-spatial inequalities in neighborhoods".
- Best PhD presentation award at WDCAG in Victoria
- **David McCaffrey**: "Assessing historic change in subalpine forest: A case study in the West Castle Watershed"
- Best MSc Thesis: Canadian Remote Sensing Society
- **Zhouxin Xi**: Runner-up best oral presentation at the Canadian Symposium on Remote Sensing
- **Taylor Myndio**: ESRI Canada Scholarship for best poster



Geography Club
Milk River Ridge
hike with Rene
Barendregt

University of Northern BC (UNBC) (submitted by Gail Fondahl)

Faculty News/ Department News

Congratulations to geographer **Dr. Sinead Earley** as she starts her new tenure-track position in Environmental Policy at UNBC in the Environmental and Sustainability Studies Program. After three years with UNBC Geography as a lecturer (2015-2018), she assumed her new role as of July 1st, 2019. We are delighted to have her back at UNBC.

Geographer **Dr. Tristan Pearce**, originally from Prince George has come home to join UNBC as Canada Research Chair in the Cumulative Impacts of Environmental Change. While his home base is in the Department of Global and International Studies, we look forward to plenty of interaction and collaboration, and are thrilled to have him join our growing community of geographers.



Dr. Brian Menounos (Canada Research Chair in Glacier Change) was a winner of CUFA BC's 2019 Distinguished Academic Awards, both for his research, and his communication of this research to the public and policy makers.

Dr. Neil Hanlon became Vice President of the Canadian Association of Geographers (CAG). Two of CAG's Study Groups are chaired by UNBC professors: **Drs. Gail Fondahl** and **Catherine Nolin** co-chair CAG's Indigenous Peoples Working Group, and **Dr. Zoe Meletis** took over this year as chair of the Feminist Intersectional Solidarity Group (formerly the Canadian Women and Geography Study Group).

Dr. Greg Halseth (Canada Research Chair in Rural and Small Town Studies) and **Marleen Morris**, co-directors of UNBC's Community Development Institute, hosted a visit by Senator Yuen Poo Woo in July, to meet with leaders from First Nation leaders, industry, community organizations, and academics, in Prince George and Fort St. John.



Dr. Zoe Meletis continued her leadership work in organizing the 2018 iteration of *Inspiring Women Among Us*, a series of public lectures, workshops, and other events throughout the Fall 2018 term, leading up to the December 6th **National Day of Remembrance and Action on Violence Against Women**.



In May, UNBC hosted the Canadian Cartography Association meeting, with **Dr. Roger Wheate** organizing. The event included a keynote by Chris Bradley of the Canadian Royal Geographic Society, on his creation of the *Indigenous Peoples Atlas of Canada*. The accompanying giant floor map brought many curious visitors to the library.

UNBC (con't)

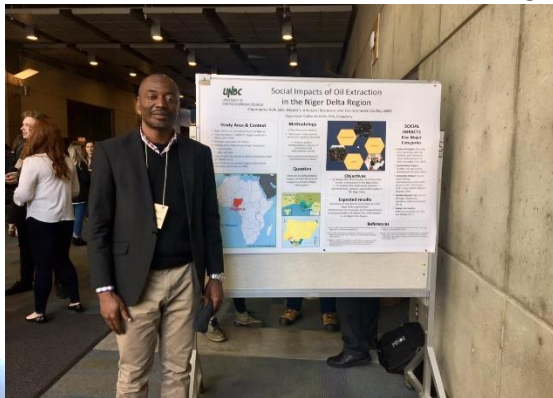
On the student front, UNBC's inaugural cohort of Research Ambassadors (<https://www.unbc.ca/research/research-ambassadors-program>) included, among the six students chosen two geographers, MA candidate **Tsattia Adzich** (Supervisor G. Fondahl) and PhD Candidate **Kristen Keita** (Supervisor E. Petticrew). These students champion student research at UNBC through numerous outreach activities.

Adam Hawkins, PhD Candidate (Supervisor **B. Menounos**) recently won a UNBC Senate Student Leadership Award in Community Leadership, for his work with Prince George Search and Rescue.

Delegation to WDCAG: UNBC undergraduates, graduates and faculty traveled south to Victoria for the 2019 WDCAG, and enjoyed presenting a number of posters and papers, on topics ranging from telegeriatrics to bridge pier scouring, from media coverage of the grizzly bear hunt debate to transgendered experiences in Northern BC.

Nicholas Parlato won the Masters Level Poster award, for his poster on "Mountains of Paperwork, Forests of Laws: Challenges in Forming 'Territories of Traditional Nature Use' in Southern Yakutia".

Also, UNBC took home the much coveted Scavenger Hunt Trophy.



Obumneme Achunike



Closer to home, **Dr. Catherine Nolin** and her students from her 2018 Guatemala UNBC Geography + Rights Action Field School shared their impressions and reflections in an inspiring and emotional *Guatemala 2018: Social Justice Experiential Art Exhibit and Presentation*. The event included both a play reading in which the students took part, and presentations of artworks of many media, motivated by their time in the field.

And farther away, two of Dr. Fondahl's students, **Nicholas Parlato** and **Tsattia Adzich**, joined her and the members of her research team (Russia, Finland, & Lithuania) in Blagoveshchensk, Russian Federation, to present their MA research, under the aegis of the SSRHC-funded project "Indigenous Territorial Rights in the Russian Federation." The 3rd International, Interdisciplinary Tungusic Conference' attracted many scholars from Russia, China and other countries, and even more Evenki (Tungusic) activists and community members, making for an even richer-than-expected exchange.



UNBC (con't)

Students always love a good fieldcourse, and one offered this spring by Drs. Faran Ali and Ellen Petticrew at UNBC's Quesnel River Research Centre, drew a lot of interest. The students were immersed in studies of ecohydrology, limnology and fluvial geomorphology as well as in plenty of frigid water.



Geography also continues to serve as home to Post-Doctoral Fellows Dr. May Farrales, Dr. Dawn Hoogeveen, Dr. Kriti Mukherjee, Dr. Marieka Sax, and Dr. Vanessa Sloan Morgan.

Graduate Students Completed

Tsattia Adzich, MA IDIS (Supervisor G. Fondahl), *Storying Urban Indigeneity in the Russian Far East: Evenki Women Navigating Yakutsk, Sakha Republic*

Charlotte Connolly, MA NRES (Supervisor: C. Nolin), *Exploring Canada's Extractive's Approach to Development: The Nexus of Law, Violence and Development in the Case of Tahoe Resources Inc. in Guatemala*

Sean O'Rourke, MA IDIS (Supervisor G. Fondahl), *"It's Good for the Soul:" Evenki Traditional Land-Use and Meaning in Life*

Nicholas Parlato, MA IDIS (Supervisor G. Fondahl), *A Critical Legal Geography of "Territory of Traditional Nature-Use" (TTP) Formation in the Sakha Republic (Yakutia), Russia*

Alexandra Pedersen, PhD Geography, Queen's University (Supervisors: W.G. Lovell and C. Nolin) *¡Somos La Puya! (We Are La Puya!): Community Resistance to Canadian Mining Company Operations in Guatemala*

Selected Publications

Bolch, T., **Shea, J.M.**, Liu, S. et al. (2019). Ch. 8: Status and Change of the Cryosphere in the Extended Hindu Kush Himalaya Region. In *The Hindu Kush Himalayan Assessment: Mountains, Climate Change, Sustainability, People, K Fujita* (ed.), pp. 209-255. Dordrecht: Springer.

Buse, C., **Halseth, G.**, **Sax, M.**, Jackson, J., Nowak, N., Fyfe, T. and Fresco, T. (2019) Locating community impacts of unconventional natural gas across the supply chain: A scoping review. *The Extractive Industries and Society*, 6 (2): 620-629.

Fondahl, G., Filippova, V., Savvinova, A., Ivanova, A., Stammler, F., Hoogensen-Gjørsv, G. (2019) Niches of agency: Managing state-region relations through law in Russia, *Space and Polity* 23(1): 49-66.

Forensic Anthropology Foundation of Guatemala (FAFG) [**C. Nolin**] (2018) *Bangladesh Human Rights and Victim Documentation Project: Scoping Mission Final Report*. Submitted to U.S. Department of State's Bureau of Democracy, Human Rights, and Labor (DRL), 1 August.

UNBC (Con't)

Halseth, G., Markey, S., Ryser, L. (eds.) (2019) *Service provision and Rural Sustainability: Infrastructure and Innovation*. London and New York: Routledge.

Hanlon, N., MacLeod, M., Reay, T., Snadden, D. (2019) Partnering for health care sustainability in smaller urban centres: Why and how a health authority chose to 'go upstream'. In *Service Provision and Rural Sustainability: Infrastructure and Innovation*. G. Halseth, S. Markey and L. Ryser (eds.), pp. 80-94. London and New York: Routledge.

Hanlon, N., Reay, T., Snadden, D., MacLeod, M. (2019) Creating partnerships for health care reform: Moving beyond a politics of scale? *International Journal of Health Services* 49(1), 51-67. DOI: 10.1177/0020731418807094.

Litt, M., **Shea, J.M.**, Wagnon, P., Steiner, J., Koch, I., Stigter, E., Immerzeel, W. (2019) Glacier ablation and temperature indexed melt models in the Nepal Himalaya. *Nature Scientific Reports*, <https://doi.org/10.1038/s41598-019-41657-5>

Markey, S., **Halseth, G.**, Argent, N., Boron, J., **Ryser, L.** (2019) Bending the arc of the staples trap: Negotiating rural resource revenues in an age of policy incoherence. *Journal of Rural Studies* 67: 25-36.

Meletis, Z. (2019) The feminist fork in the road: Focusing on mentoring as support and strategy in the absence of magical insights for getting more men "on board". *Irish Geography* 52.1: 117–122.

Menounos, B., Hugonnet, R., Shean, D., Gardner, A., Howat, I., Berthier, E., Pelto, B., Tennant, C., Shea, J.M., Noh, M.J., Brun, F. (2019). Heterogeneous changes in western North American glaciers linked to decadal variability in zonal wind strength. *Geophysical Research Letters*. 46(1), 200-209

Nolin, C. (2018) Rapid appraisal tool and testimonio/documentary gathering, FAFG's *Bangladesh Human Rights and Victim Documentation Project*, Dhaka, Bangladesh, 15 April.

Nolin, C. and FAFG Bangladesh Human Rights and Victim Documentation Project Team (2018) Questionnaire, FAFG's *Bangladesh Human Rights and Victim Documentation Project*, Cox's Bazar, Bangladesh, 15 April.

Ryser, L., Halseth, G., Markey, S., Gunton, C. and Argent, N. (2019) Path dependency or investing in place: Understanding the changing conditions for rural resource regions. *The Extractive Industries and Society*, 6: 29-40.

Sloan Morgan, V., Castleden, H., & Huu-ay-aht First Nations. (2019) "Our Journey, Our Choice, Our Future": Huu-ay-aht First Nations' Self-Government enacted through the Maa-nulth Treaty with British Columbia and Canada. *Antipode*, 51(4), 1340–1364.

Sloan Morgan, V., Castleden, H., & Huu-ay-aht First Nations. (2018) "This Is Going to Affect Our Lives": Exploring Huu-ay-aht First Nations, the Government of Canada and British Columbia's New Relationship Through the Implementation of the Maa-nulth Treaty. *Canadian Journal of Law and Society / Revue Canadienne Droit et Société*, 33(3), 309–334.

Snadden, D., Reay, T., **Hanlon, N.** and MacLeod, M., 2019. Engaging primary care physicians in system change – an interpretive qualitative study in a remote and rural health authority in northern British Columbia, Canada. *British Medical Journal Open* 9:e028395. DOI: 10.1136/bmjopen-2018-028395.

Tuulentie, S., Kietäväinen, A., **Halseth, G., Ryser, L.,** and Simila, J. (2019) Local community participation in mining in Finnish Lapland and Northern British Columbia, Canada – Practical applications of CSR and SLO. *Resources Policy* 61: 99-107.

University of Victoria (UVic) (submitted by Kinga Menu)

Faculty News & Selected Publications:

Sophia Carodenuto's article Governance of zero deforestation cocoa in West Africa: New forms of public–private interaction. *Environmental Policy and Governance* 29(1), 55-66 on sustainable cocoa production in West Africa received significant media attention around Valentine's Day; see

<https://www.cbc.ca/news/canada/british-columbia/convoluted-chocolate-supply-chain-environmental-impact-1.4999126>

<https://www.vicnews.com/news/future-of-chocolate-could-be-grim-says-victoria-based-expert/>

<https://www.iheartradio.ca/cfax-1070/news/climate-change-putting-pressure-on-global-cocoa-production-1.8699981>

Carodenuto, S. (2019). Access to information and local democracies: a case study of REDD+ and FLEGT/VPA in Cameroon. *International Forestry Review* 21(3), 267-278.

Denise Cloutier received UVic Provost's Engaged Scholar Award for her work on community health in elderly populations.

Cloutier, D.S., Penning, M.J., Nuernberger, K., Taylor, D. & MacDonald, S. (2019). Long-Term care service trajectories and their predictors for persons living with dementia: Results from a Canadian study. *Journal of Aging and Health* 31(1), 139-164.

Funk, L. M., Stajduhar, K. I., Giesbrecht, M., **Cloutier, D.**, Williams, A., & Wolse, F. (2019). Applying the concept of structural empowerment to interactions between families and home-care nurses. *Nursing Inquiry* e12313.

Maycira Costa and her research team created the first digital map of BC's historical coastal kelp forests to investigate the loss of kelp. The new reference map will help address questions related to the habitats of salmon, herring, and many other species that rely on kelp for protection and food.

Brown, L.N., Borstad, G.A., Ersahin, K., Loos, E., Selbie, D., **Costa, M.**, & Irvine, J.R. (2019). Satellite-based time series of chlorophyll in Chilko Lake, British Columbia, Canada. *Canadian Journal of Remote Sensing*, 1-18.

Kockel, A., Ban, N. C., **Costa, M.**, & **Dearden, P.** (2019). Evaluating approaches for scaling up community-based marine protected areas into socially equitable and ecologically representative networks. *Conservation Biology*.

Chris Darimont was elected (through a peer nomination process) to the Royal Society of Canada (RSC) as a new member of the College of New Scholars, Artists and Scientists for their academic excellence and making "remarkable contributions" in the arts, humanities and sciences, and Canadian public life.

Mihalik, I., Bateman, A.W., & **Darimont, C.T.** (2019). Trophy hunters pay more to target larger-bodied carnivores. *Royal Society Open Science* 6(9), 191231.

Westwood, A.R., Otto, S.P., Mooers, A., Darimont, C. et al. (2019). Protecting biodiversity in British Columbia: Recommendations for developing species at risk legislation. *Facets* 4, 136-160.

Collins, D., Alexander, C., & **Darimont, C.T.** (2019). Staqeya: the lone wolf at the edge of its ecological niche. *Ecology*, 100(1), e02513.

UVic (con't)

Phil Dearden along with Kesho Trust founder Bruce Downie led a team of visiting Maasai from Tanzania to connect with First Nations on Vancouver Island and in the Yukon in May. The visit, funded by a SSHRC grant, was designed to provide opportunities for these indigenous communities to learn from each other re experiences with conservation and livelihoods within their particular geographical contexts. The nations shared many rich moments celebrating their similarities and differences and are now working on future linkage possibilities. The visit was followed up by a field school to visit the Enguserosambu Forest Trust in Loliondo, Tanzania by Dearden, Downie and 19 Geography students in August. The focus of the visit was “Conservation in a Crowded World” and involved outstanding wildlife viewing in Serengeti and Saadani National Parks and Ngorongoro Wildlife Conservation Area as well as extensive interactions with the Maasai communities in Loliondo. Students got firsthand insights into some of the challenges facing remote communities in these areas and the challenges facing conservation efforts in the face of poverty, cultural erosion, political uncertainties and global climate change.

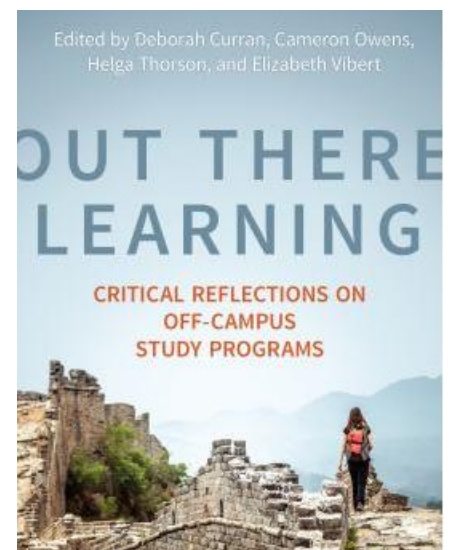


Photo by Phil Dearden of Maasai visitors at Targish-Carcross Community Centre, Yukon.

Cam Owens along with Deborah Curran, Helga Thorson, and Elizabeth Vibert contributed to and edited

Out there learning: Critical reflections on off-campus study programs to demonstrate the value of short-term off campus study programs. It is often assumed these programs have great pedagogical benefit but Owens and the other authors wanted to subject this claim to critical scrutiny. Importantly, there is the question of how students can work with communities they visit rather than extract from them. Owens’ field programs include a component where students invest the knowledge and enthusiasm gained in the field into projects that will benefit the community.

See section on UVic Geography’s Field Schools on page 57.



UVic (con't)

CindyAnn Rose-Redwood and **Reuben Rose-Redwood** published an edited book entitled *International Encounters: Higher Education and the International Student Experience* (2019). The book draws attention to the diverse experiences of international students from around the world studying in the United States, United Kingdom, Canada, and Australia. They also recently completed a report entitled, *Internationalizing Geography: International Student Perceptions & Experiences in UVic's Geography Department* (2019), which considers how geography departments can enhance the international student experience as part of the internationalization of higher education.

Reuben Rose-Redwood received the Western Division of the Canadian Association of Geographers William C. Wonders Award for Scholarly Distinction for his work on urban and critical geographies.

Rose-Redwood, R., Sotoudehnia, M. & Tretter, E. (2019). "Turn your brand into a destination": Toponymic commodification and the branding of place in Dubai and Winnipeg. *Urban Geography* 40(6), 846-869.

Rose-Redwood, R., Vuolteenaho, J., Young, C. & Light, D. (2019). Naming rights, place branding, and the tumultuous cultural landscapes of neoliberal urbanism. *Urban Geography* 40(6), 747-761.

Randy Scharien received the UVic Faculty of Social Sciences Early Career Research Excellence Award for his work on remote sensing of Arctic sea ice.

Landy, J.C., Tsamados, M. & **Scharien, R.K.** (2019). A facet-based numerical model for simulating SAR altimeter echoes from heterogeneous sea ice surfaces. *IEEE Transactions on Geoscience and Remote Sensing* 57(7), 4164-4180.

Cafarella, S.M., **Scharien, R.**, Geldsetzer, T., Howell, S., Haas, C., Segal, R., & Nasonova, S. (2019). Estimation of level and deformed first-year sea ice surface roughness in the Canadian Arctic Archipelago from C-and L-Band synthetic aperture radar. *Canadian Journal of Remote Sensing* <https://doi.org/10.1080/07038992.2019.1647102>

Crystal Tremblay led a study that looked at the economic and social impact of the charity sector in Greater Victoria. The first study of its kind utilized 80 in-depth surveys completed by local charitable organizations and found that the charity sector generated over \$4 billion in economic activity in Greater Victoria in 2016 alone.

"Significant impact" is also being made by the sector towards the United Nations' 17 "sustainability goals".

Cox, R.S., Hill, T.T., Plush, T., Heykoop, C. & **Tremblay, C.** (2019). More than a checkbox: engaging youth in disaster risk reduction and resilience in Canada. *Natural Hazards* 98(1), 213-227.

Peredo, A.M., McLean, M., & **Tremblay, C.** (2019). Indigenous social innovation: what is distinctive? In *Handbook of Inclusive Innovation: The Role of Organizations, Markets and Communities in Social Innovation*. Edward Elgar, 107-28.

UVic (con't)

Field Schools

Physical Geography 2019

In late summer 2019, **Dan Smith** led 12 students for a week near Bridge Glacier in the Lillooet Icefield area. This remote backcountry field camp offered students a chance to learn a variety of basic field research techniques in physical geography, while immersing themselves in the pristine beauty of the British Columbia Coast Mountains!

Tanzania Field School 2019

In August 2019, **Phil Dearden** and **Bruce Downie** with 19 students travelled to Tanzania to visit urban markets, rural villages, luxury tourist camps, Maasai communities, and conservation areas including Tanzania's iconic Serengeti National Park and World Heritage Site. Students explored the relationship between Tanzania's rich resource base and its struggle for equitable development, and in the process were able to compare their own experience with the very different experience of Tanzanians.

Urban Europe Sustainability 2019

In May 2019, **Cam Owens** and 18 students travelled to Western Europe to learn about cultural geography and innovations in urban sustainability in. Countries visited included Spain, France, Germany, Denmark, and the Netherlands.

Indigenous Knowledge, Science & Resource Management 2019

In May 2019, 17 students led by **Chris Darimont** travelled to Bella Bella and the remote Koeye River Lodge. Weaving together Indigenous Knowledge and science in the context of natural resource use and management, students had a chance to interact with the Koeye watershed's natural features as well as with Knowledge Holders, scientists, and other community members.

Ahousaht 2019

In May 2019, **Dave Duffus** along with TAs Rianna Burnham and Alex Goudine led 12 students to the remote village of Ahousaht on Flores Island. Students had a chance to learn about field methods used in biogeography, as well as the unique geography of whales.

Mountain Meteorology 2019

During Reading Break in February 2019, 20 students led by **Shannon Fargey** travelled to Mount Washington Alpine Resort & Strathcona Provincial Park. There they learned about measuring and monitoring of snowpack, extreme weather, and climate in coastal mountain ranges, along with challenges associated with alpine tourism operations due to weather and climate extremes and hazards.

Clayoquot 2019

This Spring Term, 17 lucky students spent their semester up in Tofino, living and learning in the beautiful Clayoquot Sound. Topics studied included: Disaster Management & Community Resilience; Coastal Meteorology, Planning, and Geomorphology; Community-engaged Conservation of Coastal and Marine Resources; and Rainforest Biocultural Ecology

Student news:

Claire Lee, Pierre-Jean Harnois, Alexandra King, Jack Nyren, Keegan Paterson, Julian Pick, Hana Travers-Smith, Lexy Stewart were all recipients of awards and recognized as "Rising Stars" by the Universality of Victoria.

Mike Newton received the 2019 Web Map Award from the Canadian Cartographic Association for his outstanding story map that he created as part of GEOG 329: GIS Applications and Tools. See <https://arcg.is/1q0CD>

Finally, come to **Victoria** for **May 25 to 29, 2020** as UVic will host **CAG2020** along with CARTO_ACMLA & CCA!

Vancouver Island University (VIU) submitted by Michele Patterson

Department News

Beginning this academic year (2019/2020), VIU Geography will be offering an optional Internship opportunity for Geography Major and Minor students in their 3rd or 4th year. Internship programs are a way for students to gain work experience in their field of study, through career development and placement.

For the fourth year in a row, Geography was a popular “major” at for *GrandKidsU* – an institution-wide program for grandparents and their grandchildren where students participate in two days of faculty-facilitated learning workshops in a University setting. This year's Earth Explorers collaborated to design a new park, made weather observations (shown right), used GPS to go geocaching for treasure, experimented with erosion and deposition in our stream table, and successfully recovered lost treasure in our escape room challenge. Kudos to technician **Jessica Craig** for designing and hosting the workshops.



Faculty News

Alan Gilchrist has just completed a research leave to develop a water budget model for several key watersheds on Vancouver Island. The main aim of this project is to develop a quantitative understanding of the various flows in the hydrological cycle. This information will be used to help inform water management decisions so that human water use on the Island is sustainable. Significant progress has been made and Tim Sivak, a student in VIU's Masters of GIS Applications, who has been working on the project successfully defended his thesis in August 2019. During the year Alan also contributed to the process that updated Regional District of Nanaimo's Drinking Water and Watershed Protection Action Plan 2.0, and he also worked on the WorkSafeBC led initiative to improve health and safety training in BC engineering and geoscience degree programs.

Don Alexander presented at the 2019 WDCAG conference in Victoria with VIU Psychology Professor Lindsay McCunn on the subject of “Towards a Place-making Matrix for Urban Development.” He also presented a paper, “The Political Economy of Energy Megaprojects: The Case of British Columbia, Canada,” as part of a panel on Critical Geographies of Energy Infrastructure at the annual *Association of American Geographers* conference, Boston, April 2017. In addition, he has continued his work as co-chair of Vancouver Island University's *Sustainability Advisory Committee* and on the Annual Urban Issues Film Festival, now into its fourteenth year.

Jeff Lewis continues as a faculty Advisor for ACER, “Awareness of Climate Change through Education and Research”, funded by NSERC and SSHRC. ACER is a public outreach initiative led by an inter-disciplinary group of students and faculty at Vancouver Island University, which is dedicated to increasing the public's understanding of the science and implications of climate change through presentations, hands-on demonstrations and interactive activities. ACER held a successful 2019 Climate Change symposium on Local Solutions and is currently working on hosting another symposium in the spring of 2020. In 2019, Jeff gave a number of climate change presentations to various groups including the Engineering and Geoscientists of BC (formerly APEGBC), the Strathcona Emergency Planning Committee, and the Campbell River Regional District. Jeff was also awarded the 2019 Provost Award for Excellence in Teaching Design and Practice, specifically for Teaching Design and Practice that Enhances Deep Learning.



VIU (con't)

GEOG 467 Field Studies in Geography photos (taught by Jeff Lewis and Michele Patterson)



Students take streamflow measurements – Englishman River, Parksville, BC



Surveying for Sea Star Wasting Syndrome – Deep Bay, BC



Michele Patterson is now Chair of VIU's Geography Department and GIS Programs. She continues to teach a variety of human geography courses at all levels of the undergraduate program. She also co-led an international interdisciplinary field school ("Cultural Contact Zones") in May 2019 to Trieste Italy. Students from both Geography and English spent two weeks exploring a very multi-cultural city in northern Italy (shown left). The trip will be repeated in May 2020. Michele also contributes to the broader VIU community through roles in the BC Professionals Climate Adaptation Network, the VIU Campus Mobility Committee, and the VIU Interdisciplinary Learning Centre Committee.



Pam Shaw is delighted to report that the Master of Community Planning Program has just started its 5th year with another full cohort. Three classes have now graduated and are now engaged across the globe in addressing a wide range of planning issues. The program continues to focus on creating applied opportunities for students: projects for 2019/20 include engaging with the Town of Qualicum Beach on concept plans for a key downtown site; working with the City of Nanaimo on the update to the City's official community plan; and partnering with K'omoks First Nation on a site development project. The program is adding a new Certificate in Urban and Regional Planning that will be available to the wider community. Pam is also the Research Director of the Mount Arrowsmith Biosphere Region Research Institute (MABRRI), and recently presented at the UNESCO EuroMAB Conference in Dublin. The Institute continues to publish the International Journal of Biosphere Reserve Research, which is a digital,

open access publication (see biospherejournal.org). MABRRI continues to engage graduate and undergraduate students in a variety of research projects relating to human/nature interactions in fragile environments. Please also join us in congratulating Geography Department faculty member Dr. Pamela Shaw, RPP, FCIP, on her induction into the Canadian Institute of Planners College of Fellows!

Photo: Faculty member Dr. **Pam Shaw** discusses small coastal city urban design – Qualicum Beach, BC

VIU (con't)

Hannah Wilson collaborated with students and researchers affiliated with the *Mount Arrowsmith Biosphere Region Research Institute* (MABRRI) to develop a methodology for mapping vulnerable Garry oak ecosystems (GOEs) located within the MABR. The method used a combination of field work and satellite image analyses to determine and visualize the location, extent, and vulnerability of GOEs. A summary of this work was featured in VIU's Annual Research and Creativity Activity Highlights publication (shown right).



Matt Bowes and his 4th year Applications in Natural Resource Management students partnered with the City of Parksville and the Mount Arrowsmith Biosphere Region Research Institute (MABRRI) for outreach, education and interpretation planning for the Parksville Wetlands. The team engaged with the community, developed non-personal park interpretation that captured the flora and fauna of the park, and wrote technical report '*Parksville Wetlands Education and Outreach Program*' for the City of Parksville. Funding was provided by the City of Parksville. Matt's current research '*Land Access and Conflicting Place Meanings on Westwood Ridge*', is funded by the VIU Research and Scholarly Development Committee (RSACD) and involves Matt's 3rd year Cultural Geography and Directed Studies students. Other research projects include *Off the Grid on the Grid: Alternative Living Within Local Bylaws and Zoning*. This Fall, Matt is taking over the organization of the Urban Issues Film Festival, from long-time organizer Don Alexander for 13 years running. Thematically driven, Matt and students invite VIU and the public to explore the urban environment through the medium of film.

Brad Maguire and co-author Brian Klinkenberg of UBC recently had an overview of Brad's PhD thesis published in *Applied Geography*. Their paper, "Visualization of Place Attachment" discusses how GIS can be used to create maps showing the place attachment of individuals and groups using maps. The research for this paper was conducted in Colliery Dam Park, located just south of the VIU Nanaimo Campus. In conjunction with Dr. Jerome Lesemann of the VIU Earth Sciences Department, Brad has begun work on Remote Predictive Mapping of the Keewatin region of Nunavut. Supported by a \$35,000 grant from the NRCAN Geo-Mapping for Energy and Minerals (GEM) program, Jerome and Brad will develop methods to automatically search for eskers and other glacial landforms on digital elevation models. This project is supported by two student researchers, Yiqing Luo (VIU Master of GIS Applications program) and Anju Suresh (VIU Advanced Diploma in GIS Applications).

GIS faculty **Paul Zandbergen**, **Dave Cake**, and **Michael Govorov** continue to teach in our ADGISA and MGISA programs.

Paul Zandbergen reports that the Master of Geographic Applications started its 4th cohort this Fall. Several students from previous MGISA cohorts are pursuing publication of their research in peer-reviewed publications. Existing research has been completed on topics such as the use of UAVs for terrain data acquisition, the development of software to model marine oil spills and the tracking of seabirds using miniature GPS units. Paul is also putting the final touches on a new book with ESRI Press called *Python Scripting for ArcGIS Pro*, to be published in early 2020. The older edition of this book is widely used as a textbook in GIS programming classes.

Tripp, Michael has worked on "Russian National Parks: Continuity and Change in Perceptions of Environmental Empowerment as a Territorial Construct" which is in peer review for the anthology *Revolutionary Aftereffects: Material and Cultural Legacies of 1917 in Russia Today*, University of Toronto Press. He also conducted research and is a contributing author for Nabuhiro Shiba, Professor Emeritus, University of Tokyo, "A Professor of the Russian Language in Tokyo, Dusan Todorovic and his early life," for the journal, *The 20th Century Through Historiography and Textbooks*.

Student News:

We're proud to announce 2019's award winners:

- Carto Cup: **Andrew Wilson**
- Best presentation at Geography Research Day: **Steve Hextall**
- Award for service to the Geography Department: **Caleb McIntyre**
- CAG Undergraduate Award: **Steve Hextall**
- Lady Rose Prize: **Steve Hextall**

Recent Selected Publications:

Alexander, Don

2019. "Remembering the work of our elders: Ray Spaxman." *Planning West* 61(3): 26-27.

2019. "Remembering the legacy of Shirley Chan: Saving Vancouver's Chinatown neighbourhood." *Planning West* 60 (1): 12-14.

2018. "Remembering the work of our Elders: Arthur Manuel." *Vancouver Observer*, 6 November 2018.

<https://www.vancouverobserver.com/%5Btermalias-raw%5D/remembering-work-our-elders-arthur-manuel>

2018. "Harold Steves: Unconventional Planner." *Planning West*, no. 3 (Summer): 27.

Macguire, Brad

Macguire, B., & Klinkenberg, B. (2018). Visualization of place attachment. *Applied Geography*, 99, 77-88.