# WINTER 2019

# TO EARTH AND BEYOND

### **Alumni Newsletter**



**EARTH SCIENCES** 

## A MESSAGE FROM THE CHAIR DR. PATRICIA CORCORAN

I've been department chair for almost 21 months and the job is never dull! We have been fortunate in welcoming two new faculty members (Nigel Blamey, Katsu Goda), but we had to say farewell to Audrey Bouvier and Tony Withers, who played an important role in the successful functioning of our department. Although they are missed, we wish them all the very best with their move to the University of Bayreuth.

In January, Bob Linnen, Neil Banerjee, Nigel Blamey and I attended the annual AME Roundup in Vancouver. I was pleased to be given the opportunity to introduce our new Dean of Science, Matt Davison, who for the first time, tasted a sample of "fun" in the geological style! Matt comes from the Department of Statistical and Actuarial Sciences at Western, although I love to emphasize that his undergraduate work was focused on geophysical engineering. Also joining us in Vancouver were Paula Luchak (Director of Alumni Relations and Development-Science) and Kate Huner (Research & Development Officer) from the Dean's Office. Roundup was followed by PDAC in March, with several of our students presenting posters and attending our annual alumni reception at the Royal York Hotel in Toronto. Matt Davison and I also had the opportunity to "tug" over a bar of gold (see photo in upper right corner).

Between September, 2018 and March, 2019, we've hosted a string of incredible weekly colloquium speakers that brought news of topics spanning seismic risks, mercury pollution, meandering rivers, exploration geology to the ethics of geoscience. Our C. Gordon Winder Scugog public lecture was given by Barbara Sherwood Lollar, who taught us the mysteries and complexities of deep subsurface life.

We are also preparing for the early retirement of Gail Atkinson at the end of 2019. Gail is a research powerhouse who has led many good fights in the past years presenting and defending departmental initiatives and programs. We will be sad to see her go, especially during a critical time for our department with respect to the upcoming external reviews of our undergraduate and graduate programs. Our associate chair-graduate affairs (Robert Shcherbakov), associate chair-undergraduate affairs (Dazhi Jiang), associate chair, faculty relations (Liz Webb), and our academic program coordinator (Amy Wickham) are working hard on preparing the review briefs.

Finally, I'd like to finish with a reminder that March was also the month for Geoball – the department's annual formal event for students, staff, faculty and their guests. In addition to a lovely dinner and speeches from an undergraduate, graduate and faculty representative, Geoball is an evening for laughs and dancing (see photos below). Alumni are always welcome!

Best wishes for an early spring, and keep on rockin'! Patricia

# **New Faces of Earth Sciences**



ACTING ADMINISTRATIVE ASSISTANT

Jan Millett

### WELCOME TO THE Department

Welcome to the Earth Sciences Family Baby Jack born to Catherine Neish & Baby Mina born to Erika Gongora this February!

## Welcome New Grad Students! Russ Mauritz

Russell Ashton, M.Sc. Geology Mauritz Van Zyl, M.Sc. Geophysics Xiaochen Zhang, M.Sc. Geology

## Congratulations to our graduate students who successfully defended their theses this Fall!

#### Geology

Lindsay Debono, M.Sc. (Osinski) Liam Innis, M.Sc. (Osinski) Mitch Galarneau, M.Sc. (Flemming) Jordan Hawkswell, M.Sc. (Osinski) Annika Van Kessel, M.Sc. (Bouvier & Linnen) Alana Crump, M.Sc. (Longstaffe) Zach Morse, Ph.D. (Osinski) Ramjay Botor, M.Sc. (Banerjee)

#### Geophysics

Mark Novakovic, Ph.D. (Atkinson) Alex Bilson-Darko, M.Sc. (Molnar) Reynold Silber, Ph.D. (Secco)

# **IN THE NEWS!**

Earth Sciences professor Roberta Flemming is leading a team of researchers to develop a compact instrument that could be deployed on rovers to analyze mineral and rock structures in place on the Red Planet's surface, wherever they are found. The project is backed by the Canadian Space Agency (CSA). https://news.westernu.ca/2019/01/western-led-team-may-unlock-rocky-secrets-mars/

## What's New in the Geoscience Collections Facility?

Since September 2018, our curator has been working with a team of 15 work study students and volunteers to sort, incorporate, and catalog the very best specimens from a large donation of minerals into the Dana Collection. These mineral specimens were donated to our department in 2006 by Armin Walter, and they have more than doubled the size of the Dana Collection. The collection is very close to completion (within the next few weeks) and the next step will be to create a database that is searchable online.

The first round of renovations to the facility was completed in January 2019. This included the replacement of the ceiling and flooring, and painting of the entire area. Renovations still to be completed are security features mandated by Campus Police. We are still fundraising to purchase table display cabinets for the space, and to convert our current exterior access door from an emergency exit, to a door that can be used for special events – please contact Paula Luchak (Paula.Luchak@uwo.ca or 519-661-2111 ext. 86642) if you are interested in donating to the Geoscience Collections Facility.

Our next steps with regards to the collections are to complete the verification of the Suffel Collection Catalog (just over half way completed) and to begin moving the Suffel Collection from the Somerville House Tunnel to our new space in North Campus Building. Our new wall display cabinet will be installed this summer and we are hoping to open in the fall with an alumni welcome event. Please stay tuned for future updates!

Keep up to date with Departmental News: https://www.uwo.ca/earth/about\_us/news/index.html

## **Alumni Relations & Development Update**

I am very pleased to confirm that thanks to our generous alumni and friends, we have reached our \$350,000 target to name the geoscience collections facility after Dick Hutchinson. In order to celebrate the naming of the collections suite, the Department of Earth Sciences will be hosting an event to unveil the naming of the suite in the fall of 2019. The event details are still in progress and a date will be selected shortly. Please keep your eyes on your email for updates regarding the date for the celebration.

Although we have raised the \$350,000 to name the suite after Dick Hutchinson, the collections suite is still in need of display cabinets and other suite upgrades. We are also fundraising for the following priorities in the Department: Field Schools/Courses and The Robert Hodder Chair in Economic Geology. If you would like more information on how you could help, please contact me.

We hosted our annual alumni events at the Mineral Exploration Roundup in Vancouver in January and at the Prospectors and Developers Convention in Toronto in March. As usual, we had a superb turnout for both events. If you did not receive an email invitation to the events, please let me know and I will be sure to update your email address for invitation purposes.

In January of 2019, alumnus, James M. Franklin, PhD, 1970, was inducted into the Canadian Mining Hall of Fame at a ceremony in Toronto. A distinguished geoscientist, James Franklin spent much of his career with the Geological Survey of Canada (GSC) documenting the complex evolution of the Canadian Shield and the link to its phenomenal mineral wealth. During his 35+ year career, his most outstanding contributions relate to volcanogenic massive sulphides, for which his geological understanding has been communicated throughout the industry and resulted in exploration successes. During his time as Director of GSC'S Seafloor Minerals Program, they discovered modern massivesulphide deposits on the mid-ocean ridges off the west coast of Canada. While GSC's Chief Scientist from 1993 to 1997, he established the popular "Bacon and Eggheads" forum in Ottawa to inform and educate Canadian government on the importance of science to the country's economy. Franklin is well known and respected as a supporter of various industry associations and causes, as well as a mentor of young geoscientists. Congratulations from all your friends back at Western!



For further information on other alumni activities, news or ways to support the Department, please contact me at your convenience.

#### Paula Luchak

Director of Alumni Relations and Development – Science Paula.Luchak@uwo.ca 519-661-2111 ext. 86642

### ALUMNI FEATURE: ED HORNIBROOK

Greetings from the Okanagan Valley, BC. I was a Ph.D. student in the Earth Sciences Department at Western from 1991 to 1997 supervised by Fred Longstaffe and Bill Fyfe. I studied the isotope geochemistry of methane cycling in wetlands, working mainly on the Sifton Bog in London and the Point Pelee Marsh near Learnington. I continued working with Fred as a postdoctoral fellow from 1997 until 2000 when I moved to the UK for a faculty position in the Earth Sciences Department at the University of Bristol. My wife Patrice (also a UWO alumnus who completed a Ph.D. under Fred's supervision) and I had three daughters while living in England. We moved back to Canada in 2015 for my current position in the Department of Earth, Environmental and Geographic Sciences at the Okanagan campus of the University of British Columbia in Kelowna BC. I have served as Department Head for the past four years. I'm still building a new lab at UBC and planning to return to fieldwork in northern Canada this summer. It would be great to hear from anyone who also worked or studied in the Earth Sciences Department at UWO in the 1990s (ed.hornibrook@ubc.ca).

Gorne

unni

# **Colloquium Speakers**

Dr. Merrin Macrae, University of Waterloo: "A profile of catastrophic earthquake risk in Canada"

**Dr. Katsu Goda, Western University:** "Stochastic Representation of Earthquake Rupture: Applications in Earthquake and Tsunami Research"

**Dr. Carl Mitchell, University of Toronto Scarborough:** "Monitoring gaseous mercury with a precise, accurate and inexpensive passive sampler and potential applications to the Minimata Convention on Mercury"

Dr. Desmond Moser, Western University: "Atomic Worlds; 3D Maps of Time in Minerals from Planetary Crusts"

**Dr. Paul Durkin, University of Manitoba:** "Revisiting fluvial meander-belt deposits with implications for interpretations of the McMurray Formation"

Dr. Gail Atkinson, Western University: "Unnatural Tremors: The science of fracking and earthquakes, and why it matters"

**Dr. Christopher Weisener, University of Windsor:** "Unraveling Complexity in Environmental Geochemistry: Making sense out of chaos?"

Dr. Murray Journeay, Natural Resources Canada: "A profile of catastrophic earthquake risk in Canada"

Dr. Alan J. Wilson, Society of Economic Geologists: "Life as an Exploration Geologist: What you need to know!"

Dr. Chris Yakymchuk, University of Waterloo: "Recent advances and future challenges in metamorphic petrology"

Dr. Fred Longstaffe, Western University: "Light Stable Isotopy of Clay Minerals - Mysteries in the Sheets"

**Dr. Barbara Sherwood Lollar, University of Toronto:** "Exploration for Deep Subsurface Life: What Captain Nemo got right and wrong"

Dr. David Abbott, AAPG Distinguished Lecturer for Ethics: "Fundamentals of Geoscience Ethics"

David Gray, 2018-2019 CSEG Distinguished Lecturer - "An Unconventional View of Geoscience"

Dr. Derek Thorkelson, Simon Fraser University - "Precambrian Secrets of Yukon"

2019 C. Gordon Winder Memorial SCUGOG Public Lecture

**Exploration for Deep Subsurface Life** - What Captain Nemo got right and wrong -

#### Dr. Barbara Sherwood Lollar

Canada Research Chair in Isotopes of the Earth and Environment The University of Toronto





# **Geoball 2019**

















#### www.uwo.ca/earth/alumni

Follow us! @westernuEarth

Western

**F**A