



ALUMNI

NEWSLETTER

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DES Upcoming Events

PDAC 2014: March 2-5
Join us at the 5th annual Alumni and Friends Reception on March 2

Earth Sciences Year End Banquet: April 5
Copper Cliff Italian Club

GAC-MAC 2014: May 21-23
University of New Brunswick, Fredericton

MERC Upcoming Events

MERC Modular Courses
(8-10 days courses which can be used as credit for graduate degrees)

- Exploration for Magmatic Ore Deposits: **April 2014**
- Mineral Exploration in Volcanic Terranes: **September 2014**
- Exploration Geochemistry: **December 2014**

For more information and New MERC Professional Development Courses, visit:
merc.laurentian.ca

Yellowstone River, Yellowstone National Park,
Wyoming-Montana border, U.S.A.
Photograph: Linette MacInnis, MSc Candidate

Message from the Department Chair

Dr. Daniel J. Kontak



Dear students, alumni and friends,
Well, the 2012/2013 academic year has passed and I am happy to say it was another successful one with lots of pleasantries to reminisce about.

The year began with the 4th year and graduate field schools with Dr. Gibson flying across the continent to deliver these. Record enrolment at all levels, a good thing, meant class rooms were rarely empty with lectures and labs occurring from early hours to late in the day and double labs for many courses - 4 in 1st year was a big challenge which we handled most successfully. In early fall the Goodman School of Mines (GSM) became a reality at LU, in part



graduate field trip of 15 keeners who visited the gigantic porphyry IOCG

to David for his substantial gift that made this possible. The academic year

Success does not happen without support and effort.

due to the efforts of Dr. Leshner, and I expect that DES will play a significant role in this initiative as it unfolds. The new director, Dr. Bruce Jago, has made DES his official "academic" home and we are delighted to be working with him. Speaking of this, Ms. Nicole Tardif will be missed as she crosses campus to become the Program Co-ordinator for the GSM - we wish her only the best in this new endeavour. The modular courses at Christmas (Lithogeochemistry) and February break (Hydrothermal Ores) were again highly successful and well attended, as was a combined undergraduate and

systems of northern Chile under blue skies and sunshine in late April. Once again the department exited on mass to experience the always populated and popular PDAC conference in Toronto and held its 4th annual alumni and friends night among an overflowing and very boisterous geology crowd!

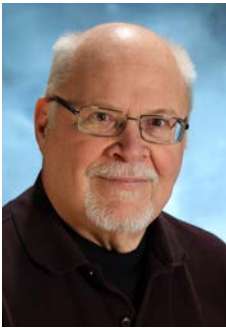
The end of the year banquet at the Italian Club in Copper Cliff was again well attended, as we celebrated the efforts of the honour thesis students and the 2013 graduating class. A highlight was the first annual David Beilhartz (class 1984) award for the best student thesis presentation - a BIG thank you

ended with the 3rd year field school, the annual S-IMEW event hosted in part at LU with DES staff (Drs. Thurston, Tinkham), and a field course on greenstone Au systems (Drs. Gibson, Smith, Poulsen). As if this were not enough, the largest collaborative research program in mineral deposit research (NSERC-CRD) was finalized and announced in May with the \$12M+ initiative headed by Dr. Mike Leshner and run out of DES. As this is my last duty as Chair, I thank all for their support and welcome Dr. Bruno Lafrance as the incoming Chair.

It has been a successful year for MERC!

Our membership is growing (see www.merc.laurentian.ca) and we initiated new NSERC and industry funded base metal and gold research projects in Snow Lake Manitoba (VMS), the Ring of Fire in Ontario (Chromite), the Cote Lake gold deposit, Ontario.....plus others.

Our graduate modular course curriculum continues to educate students from across Canada and globally and we have expanded our course offerings to include a new “Greenstone Gold and Base Metal Exploration Field Course” taught by Howard Poulsen, Harold Gibson and Richard Smith. The 7 day mapping course was designed for professional geoscientists who have recently entered the exploration sector, or for professionals who are new to gold and base metal exploration in Precambrian Shields. The course attracted 21 participants from industry and government. Future professional short courses will include (1) Advances in Surficial Geochemistry (Feb. 2014), (2) the Economics of Exploration in Difficult Times (April, 2014) and (3) a field trip focusing



DR. JOHN A. AYER

on the Metallogeny, Stratigraphy and Tectonics of the Abitibi Greenstone Belt (May 2014).

MERC hired Dr. John Ayer as a part-time Associate Director in February 2013. John worked for 7 years in the exploration industry and for 28 years for the Ontario Geological Survey. MERC is very fortunate to have John join our team and he will work to move our initiatives forward and to provide a closer liaison with our industry members and sponsors.

We have also created a new website with a members-only page. The members page contains PDF copies of recent MERC journal publications, reports, posters and presentations organized by ore deposit types and themes. In addition, it will contain PDF copies of undergraduate and graduate student CVs.

Upcoming MERC Modular Professional Development Courses (8-10 days courses which can be used as credit for a M.Sc. degree) include:

- 1) Exploration for Magmatic Ore Deposits (April 2014)
- 2) Mineral Exploration in Volcanic Terranes (September 2014)
- 3) Exploration Geochemistry (December 2014)

For more information visit www.merc.laurentian.ca

MERC Hosts the Largest Collaborative Research and Development Project Ever Funded by NSERC!

Mineral exploration in Canada is increasingly focused on concealed and deeply buried targets, requiring more effective tools to detect large-scale ore-forming systems and to vector from their most distal margins to their high-grade cores. The CMIC-NSERC-sponsored “Exploration Footprints” project involves more than 40 researchers from 24 universities across Canada and 28 mining, mineral exploration, and mineral exploration service companies in the Exploration Innovation Consortium (EIC) of the Canadian Mining Innovation Council (CMIC), is aimed at improving exploration success by developing practical applications and approaches to the acquisition, management, integration, and analysis of geological, geochemical, mineralogical, petrophysical, and geophysical data that can be used to identify the ore-system footprint at its most distant edge and at depth. It is also providing fundamental new knowledge about the unique combinations of geological processes that have been responsible for some of the largest concentrations of metal in the Earth's crust.

With \$5.1M in cash from NSERC and more than \$7.2M in cash and in-kind funding from CMIC-EIC, the first 5-year phase of the project involves multidisciplinary integrative research at three major ore systems: the Canadian Malartic gold system in Quebec, the McArthur River



Millennium uranium system in Saskatchewan, and the Highland Valley copper-molybdenum-gold system in British Columbia. The research is integrating existing exploration data and in-house company knowledge with new data, providing a foundation for technological advances in remote detection of ore deposits and for mapping at depth or under shallow cover.

The project is being directed by Drs. Michael Leshner (DES/MERC) and Mark Hannington (U Ottawa/MERC) with the assistance of Cathy Nadjiwon (Research Network Manager) and Aaron Brubacher (Information Technologist).

DR. MIKE LESHER



Goodman School of Mines is finally here!

The Goodman School of Mines (GSM) officially opened its doors on January 2, 2013.

The GSM as I call it, was made possible through a very generous investment by Dundee Securities founder Ned Goodman and family. The Goodman family's investment was bolstered with a significant investment by David Harquail on behalf of Franco Nevada Corporation. Our office is staffed by Denyse Leroy, my Administrative Assistant, and me. We are in the process of hiring a Program co-ordinator, a person who will be integral to the development of new educational programming for undergraduate and graduate students as well as returning professionals and life-long learners.

Six disciplines under-pin the Goodman School of Mines. These six disciplines – Earth Sciences, Engineering, Commerce, Indigenous Studies, Occupational Safety and Health and Biology/Restorative Ecology – define the Mining Cycle. It is very likely the GSM will be the only mining school on the planet that will boast educational programming across the breadth of the mining cycle, from discovery and mine building, to site restoration a process interwoven with the development of safe and sustainable mining practices, the growth of health communities and full



BRUCE C. JAGO

participation by Indigenous communities.

The primary role of the Goodman School of Mines is to broaden and enrich the graduate and undergraduate learning experience. We will do this by developing new interdisciplinary minors and certificate courses for undergraduate and graduate students as well as modular courses and workshops of interest to students and returning professionals. We also will be providing significantly enhanced support for student field schools, international field trips and scholarships across all six disciplines.

After several months of consulting university, community and industry stakeholders, we have begun the process of collaborating on the development of new courses. Short-term priorities are on the development of interdisciplinary minors (e.g. Occ. Safety, Indigenous Relations and Restorative Ecology), workshops (e.g. Resource Development and Indigenous Communities) and modular courses (e.g. MMBA, Exploration Targeting and Mine Finance). Look for some of these starting this fall.

If you are interested in making your mark and contributing to the success of the Goodman School of Mines, please contact Tracy MacLeod at the Development office or me, the Executive Director.

BRUCE C. JAGO, P.Geo
Franco Nevada Founding Executive Director Goodman School of Mines

DES – MERC – Goodman School of Mines – Scotiabank

4th Annual Alumni and Friends Reception

Toronto, ON – March 4, 2013



- 1 Alumni and Friends
- 2 Undergraduate students:
Lindsay Lotan and
Melissa-Jane Pecman
- 3 Alumna Ruth Debicki
(MNDM) with husband Ed
(Geoscience Laboratories)
- 4 Dr. Bruno Lafrance
(DES Chairman) with
Alumnus Galen McNamara
(Claude Resources Inc.)
- 5 Graduate students: Heather
Carson (Ph.D. candidate and
Past SEG Student Chapter
president) and Laura Katz
(Ph.D. Candidate)
- 6 DES undergraduate
students
- 7 Dr. John Ayer (MERC), Dr.
Bruce Jago (Goodman
School of Mines), Dr. Harold
Gibson (MERC/DES), Greg
Huffman (Scotiabank and
DES Alumnus), Dr. Dan
Kontak (DES) and Dominic
Giroux (LU President)
- 8 Alumna Nicole Tardif
(LU) with undergraduate
students Spencer Lee and
Jessica Niemi
- 9 DES students Rémy Poulin
(MSc candidate) and Geoff
Podrucky (undergraduate)
- 10 Dr. Steve Piercey (MUN)
with DES Alumni
Greg Huffman (Scotiabank),
Steve Gregory
(KGHM International)
and Galen McNamara
(Claude Resources Inc.)
- 11 Goodman School of Mines,
Mineral Exploration
Research Centre and
Department of Earth
Sciences Booth. Booth
638 – visit us next year!
- 12 Alumni Kristan Straub
(Xstrata) with wife
Jennifer and LU President
Dominic Giroux

DES – MERC – Goodman School of Mines – Scotiabank

4th Annual Alumni and Friends Reception

Toronto, ON – March 4, 2013

Our annual alumni and friends reception was a great success once again this year! There were over 150 people who attended and networked with the faculty and students of the Department of Earth Sciences. This year’s reception was partially funded by the Goodman School of Mines and our Alumni at Scotiabank; Greg Huffman and Mike Hocking! Thank you for all of your continuous support and we look forward to seeing you again next year!





Students at the Chuquicamata mine in Chile.

The LU-SEG Student Chapter has had a very active and successful academic year for 2012/2013. During the fall semester, fieldtrips were organised to Wallbridge’s Broken Hammer deposit, and several underground tours to Vale’s Coleman Mine. For the first time, graduate students from the LU-SEG student chapter participated in the Student Minerals Colloquium at PDAC, where 15 students presented current research at Laurentian University relating to economic geology. Throughout the year the student chapter also hosted a series of lectures that were designed to introduce undergraduate students to different careers in geology. These talks were presented by speakers from industry, academia, government, and engineering who all offered a

unique perspective to the students. In addition, the student chapter hosted an SEG sponsored guest lecture by José Perelló on “Porphyry Deposits in Chile” just prior to the student-run fieldtrip in April 2013. During the Chilean field trip, the students visited active mines and a variety of ore deposit types including; Cu-Au porphyry, IOGC, and epithermal deposits. The field trip was made possible by generous donations from various industry sponsors (Wallbridge Mining Co. Ltd., MacAvoy Resources, PDAC, SIMEW) as well as the Department of Earth Science and the Goodman School of Mines. Thank you to all who helped make all of these great professional learning opportunities possible!

Date	Event	Participants	Company	
13 October 2012	Fieldtrip to Wallbridge’s Broken Hammer	9	Wallbridge	
28 November 2013	Underground Tour of Vale’s Coleman Mine	7	Vale	
30 November 2012	Christmas Party	App. 50		
18 January 2013	Underground Tour of Vale’s Coleman Mine	10	Vale	
4 March 2013	PDAC Mineral Colloquium	10	PDAC/SEG	
13 April 2013	Fieldtrip to Chile	15		

	Guest Speakers			Title
5 November 2012	Joshua Bailey		Wallbridge	Discovery and Development in the Sudbury Basin: Platinum Group Metals, Copper and Nickel
12 November 2012	David Burrows		Vale	Choose your own Adventure - Careers in Economic Geology
19 November 2012	Sonia Prefonatine/Jack Parker		OGS	Careers in Geoscience with the Ontario Geological Survey
14 February 2013	Dr Martin Hudyma		Bharti School of Engineering	Mining Opportunities for Geologists: Joining the Dark Side
1 March 2013	José Perelló		Thayer Lindsley Visiting Lecturer - SEG	Porphyry Deposits in Chile
11 March 2013	Dave Richardson		Xstrata	Exploration and Mine Geology Slide Show

	Non-SEG Affiliated			
16 March 2013	Introduction to Exploration Hydrocarbons	20		Organised by Katie Hahn and Karin Ostler

Experiences at Laurentian University:

MONIKA HARING Ph.D. candidate

I completed my B.Sc. in geology at Laurentian University in 2010. I chose Laurentian the first time because of the program’s great reputation and interesting course selection. After finishing my undergraduate studies, I left Sudbury for the University of Western Ontario to complete my M.Sc. in geology, which was funded by the Ontario Graduate Scholarship and the Alexander Graham Bell Canada Graduate Scholarship.

My thesis studied Si/Al cation ordering in pyroxene from the Allende meteorite. I successfully defended in the fall of 2012, and am now back at Laurentian for my Ph.D. I am working with Dr. Andrew McDonald, and am funded by the Alexander Graham Bell Canada Graduate Scholarship and the Peacock Memorial Prize.

I chose to return to Laurentian rather than any of my other options in part due to my very positive undergraduate experience here. I fit in well with the departmental culture, and get along with the professors.

The excellent lab facilities and project opportunities sure didn’t hurt, either.

MONIKA HARING
Ph.D. candidate



DES Students who graduated in 2012-2013



4th year Geology students:
Back, Left to right: Courtney Raday, Brent Rouble, Courtland Betts, Andrew Nyman, Kris Ruffo, Devin Lippett, Tom Raskevicius; Front: Karin Ostler and Danielle Venne

2012 2013 - June

- B.Sc.**
David Grabiec - *Geol/Bio*
Jerry Janik - *Geol*

M.Sc.
Ed Nelles

Ph.D.
Joshua Mukwakwami
Kirk Ross
- B.Sc.**
Shauna-Lee Hewitt - *Geol*
Iain Campbell - *Geol*
Carson Cybolsky - *Geol*
James Nopper - *Geol*
Courtney Raday - *Geol*
Eric Wilcox - *ENES*
Christina Beaton - *Geol*
Courtland Betts - *Geol*
Wendy Gionet - *Geol*
Samuel Grasis - *Geol*
Hannah McCurdy-Adams - *ENES***
Jessica Niemi - *Geol*
Andrew Nyman - *Geol*
Thomas Raskevicius - *Geol*
Danielle Venne - *Geol***



**** Cum Laude**

M.Sc.
Craig Fitchett
Sarah Gordon
Devon Parry
Sonia Préfontaine

You're invited!

This annual event, held at the Italian Club in Copper Cliff, is where our undergraduate and graduate students are recognized for their outstanding achievements in Geology and Environmental Geosciences. It is held in conjunction with the final undergraduate thesis presentations, which are followed by an evening of socializing with students, alumni, professors, staff and friends, a dinner, and an awards ceremony. All Alumni are invited to this event and we hope to see more of you there next year!!

The 2012-2013 award winners are:

- **Danielle Venne:** Lafrance, Best undergraduate thesis presentation, David Beilhartz award, \$1,000
- **Karin Ostler:** McDonald, Most promising graduating undergraduate student
- **John Hechler:** Spiers, Best graduate seminar 2012-2013
- **Omid Mahmoodi:** Smith, Best graduate seminar 2012-2013

- **Olaniyan Oladele:** Smith, Best graduate seminar 2012-2013
- **Craig Stewart:** Kontak, Best graduate seminar 2012-2013

Other student awards received in 2012-2013 are:

- **Haring, Monika:** McDonald, 2013 MAC Peacock Memorial Prize, \$1,500
- **Haring, Monika:** McDonald, NSERC PGS-D, 2013, 3 year(s), \$21,000/year, \$63,000 total
- **Kerr, Mary:** McDonald, MAC Undergraduate Student Award, 2012-2013, Membership and \$100 gift certificate
- **Spath, Charles:** Leshner, Ontario Graduate Scholarship, 2013, \$15,000
- **Spath, Charles:** Leshner, SEG Foundation Newmont Mining Fellowship, 2013, \$10,000
- **Walker, Joseph:** Leshner, SEG Senior Undergraduate Honours Thesis Scholarship, 2013, \$1,000

- **Wawrzonkowski, Paul:** McDonald, MAC Undergraduate Student Award, 2012-2013, Membership and \$100 gift certificate
- **Wawrzonkowski, Paul:** McDonald, KGHM Scholarship, \$3,000
- **Engelbert, Margaret:** Gibson, Roland and Rae Horst Award \$5,000
- **Toth, Zsuzsanna:** Lafrance, Roland and Rae Horst Award \$10,000

2012

- **Kolaj, Michal:** Smith, NSERC CGS-D, 2012, 3 year(s), \$35000/year, \$105,000 total
- **Lodge, Robert:** Gibson, SEG CFA, 2012, \$4,800
- **Raskevicius, Thomas:** Leshner, SEG Senior Undergraduate Honours Thesis Scholarship, 2012, \$1,000
- **Raskevicius, Thomas:** Teck Undergraduate Scholarship, 2012, \$10,000

For tickets and information:
des@laurentian.ca

If you have an item of interest,
or any news of your activities
(or those of your classmates),
please let us know.
Do keep in touch!



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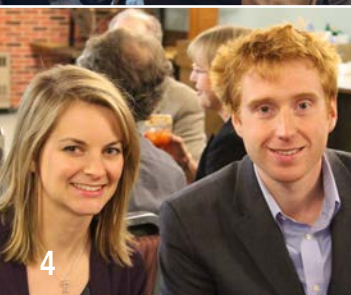
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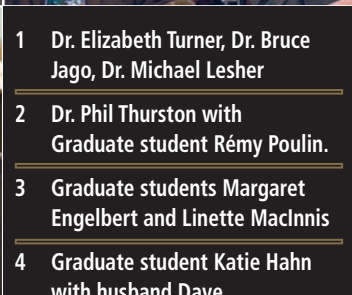
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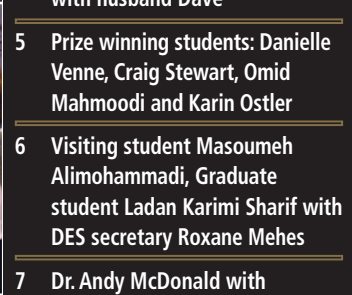
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(Photos taken at the 2013 Year End Banquet.)

