

January 20, 2010

## FROM THE HEAD

### *Managing with limited resources*

As 2010 unfolds, we find most of the programs in the Department of Geoscience at an historical high water mark in terms of enrollment. At the same time, the Department, Faculty of Science and the University as a whole struggle to cope with challenging fiscal constraints. This “perfect storm” of high enrollments and inadequate resources places a major strain on our programs. Nowhere is this more strongly felt than in laboratory courses that require the use of microscopes and other equipment, which must be shared between increasing numbers of lab sections.

How did we get to this situation? Some of the explanation arises from provincial programs that were used by the department in the recent past to fuel faculty growth. Now called Enrollment Planning Envelope (EPE – formerly the ACCESS program), these programs were used to create a number of faculty positions in Geoscience over the past 3-4 years in support of new programs, such as the Concentration in Petroleum Geoscience. Although I was not involved in creating these proposals (and only in a very minor way in their implementation since my arrival two years ago), my sense is that the extra funding was used by the university almost exclusively for the creation of new faculty positions and TA funding and not (as outlined in the original proposals) to improve teaching infrastructure – like new microscopes. The painful irony is that, despite apparent major growth in student enrollments in our programs, the Department is still identified as not meeting its EPE targets. I believe this anomaly reflects improper counting of FTE numbers, and the department is working to resolve this issue. Nevertheless, while the numbers of students and faculty grew, some of the necessary supporting investments did not.

Reasons for the current reality of fiscal restraint are numerous and have been discussed in various venues around campus. They involve investment losses in 2008-

2009 resulting from global market collapse; pressures arising from the growing provincial deficit; court rulings that required the university to transfer funds into academic pension plan to cover present and future needs; increased costs, such as vehicle rental charges, that profoundly affect our budget; and university collective-agreement commitments to salary increases for all staff that exceed budget growth. In our context, it is ironic that much of the current provincial budget situation can be attributed to geological factors – namely, game-changing developments in the production of unconventional gas south of the border, which have driven gas prices and provincial royalties downwards. Again, a “perfect storm”.

What are our options for moving forward? The Department is aggressively seeking alternative ways to fund infrastructure developments, including through major fund-raising efforts. By making use of overhead funds from some research contracts, the Department is already investing in new microscopes that will be used in the EEEL building that is taking shape outside our doors. In short, we find ourselves in a difficult situation that will likely start to improve in the next few years. Everyone’s patience and understanding is deeply appreciated.

## IN THE DEPARTMENT

### **FATS**

**Friday, January 22, 4:00 p.m., ES162**

**Dr. Scott Raymond, *Department of Archaeology, Corn and the Origins of Settled Life in South America***

### **Annual Robbie Burns Ceilidh**

**Friday March 5, Irish Cultural Centre**

More information to follow at a later date

### **MSc Defense**

Wednesday, January 27, ES 136

Presentation: 11:00 a.m.

### **David Patruyo, A Computer Model of a 3-Dimensional Point Bar System**

### **People News**

**Brendan Mulligan** an MSc Graduate in the Department of Geoscience is now working on the CIDA-funded project in Bolivia.

### **Special Recognition**

**Chris Clarkson** was featured in the January 14<sup>th</sup> UToday news covering the topic of, "**Exploring new ways to recover natural gas**". For more information visit:

<http://www.ucalgary.ca/news/utoday/january14-2010/EnCana>

Dr. R.M. Butler Memorial Best Paper Presented at Canadian International Petroleum Conference (CIPC) 2009 1st Runner up Award for the paper "LiDAR Technology as a Means of Improving Geologic, Geophysical and Reservoir Engineering Evaluations: From Rocks to Realistic Fluid Flow Models" by Alfarhan et al., 2009 with co-authors **Rudi Meyer** and **Federico Krause**

## **PUBLICATIONS**

Poutanen, M., Dransch, D., Gregersen, S., Haubrock, S., Ivins, E.R., Klemann, V., Kozlovskaya, E., Kukkonen, I., Lund, B., Lunkka, J.-P., Milne, G.A., Mueller, J., Pascal, C., Pettersen, B.R., Scherneck, H.-G., **Steffen, H.**, Vermeersen, B., and Wolf, D. (2010). **DynaQlim - Upper Mantle Dynamics and Quaternary Climate in Cratonic Areas**. In: New Frontiers in Integrated Solid Earth Sciences. Springer Books, 349-372, doi:10.1007/978-90-481-2737-5\_10

Choi, B.-Y., Yun, S.-T., **Mayer, B.**, Chae, G.-T., Kim, K.-H., Kim, K. & Koh, Y.-K (2010): **Identification of groundwater recharge sources and processes in a heterogeneous alluvial aquifer: results from multi-level monitoring of hydrochemistry and environmental isotopes in a riverside agricultural area in Korea**. – Hydrological Processes, 24: 317-330.

Aravena, R. & **Mayer, B.** (2010): **Isotopes and Processes in the Nitrogen and Sulfur Cycles**. – In: Environmental Isotopes in Biodegradation and Bioremediation (Aelion, C. M. et al., eds.), pp. 203-246. Lewis Publishers.

## **. . . ELSEWHERE**

### **McConnell Club Talks 2010**

Geological Survey of Canada - Calgary

Rundle Room, 10:00 a.m.

Everyone is welcome

- **Wednesday, February 17, 2010**  
**Jack Wendte**, (GSC-Calgary), **The role of dolomitization in the form of pores of dissolution origin in both limestones and dolostones.**
- **Wednesday February 24, 2010**  
**Martin Fowler**. (GSC-Calgary) ,**Identifying Future Hot Areas for Arctic Oil and Gas Production**
- **Wednesday, March 10, 2010**  
**Godfrey Nowlan** (GSC-Calgary)
- **Wednesday, March 24, 2010, 10:00 a.m., Rundle Room**  
**Jesse Carrie** (GSC-Calgary) **Biogeochemical dynamics of mercury and organic matter in the Mackenzie River Basin and its impact on Arctic freshwater fish**
- **Wednesday, April 7, 2010, 10:00 a.m., Rundle Room**  
**Maowen Li** (GSC-Calgary) **Combined FT-IR, FT-ICR MS and GC-MS approach for characterizing crude oil acidity**

### **CSPG Technical Luncheons**

- **January 21, 2010**, Telus Convention Centre  
**Toni Simo**, ExxonMobil, **Isolated Carbonate Platforms and Mounds (ICPM): Initiation, Growth and Demise**
- **February 8, 2010**, Telus Convention Centre  
**Bill Martindale**, Consultant, **Reefs Under Stress – Bermudian Reefs and their Devonian Counterparts**
- **February 23, 2010**, Telus Convention Centre  
**Larry Lane**, Geological Survey of Canada, **Phanerozoic Structural Evolution of Eagle Plain, Yukon**

**CSEG Technical Luncheon**

February 10, 2010, 11:30 a.m., Telus Convention Centre

**Carmen Dumitrescu, *Characterization of a Heavy Oil Reservoir using Vp/Vs Ratios and Neural Network Analysis***

**CONFERENCES****GeoCanada 2010**

May 8-16, 2010

'Metamorphic extravaganza', in association with the GeoCanada 2010 meeting.

The metamorphic events consist of:

- **Sa-Su May 8-9, 2010**

Theriak-Domino phase equilibrium modeling short course, presented by Christian de Capitani

- **M-T(-W) May 10-11(-12), 2010**

Special session: Interplay between Thermodynamics, Kinetics and Deformation in Metamorphism

- **Th-Su May 13-16, 2010**

Field trip: Barrovian and Buchan metamorphism and their tectonic juxtaposition in southeastern British Columbia

**Registration commences March 1, 2010.**

For more information visit:

<http://www.geocanada2010.ca/>.

