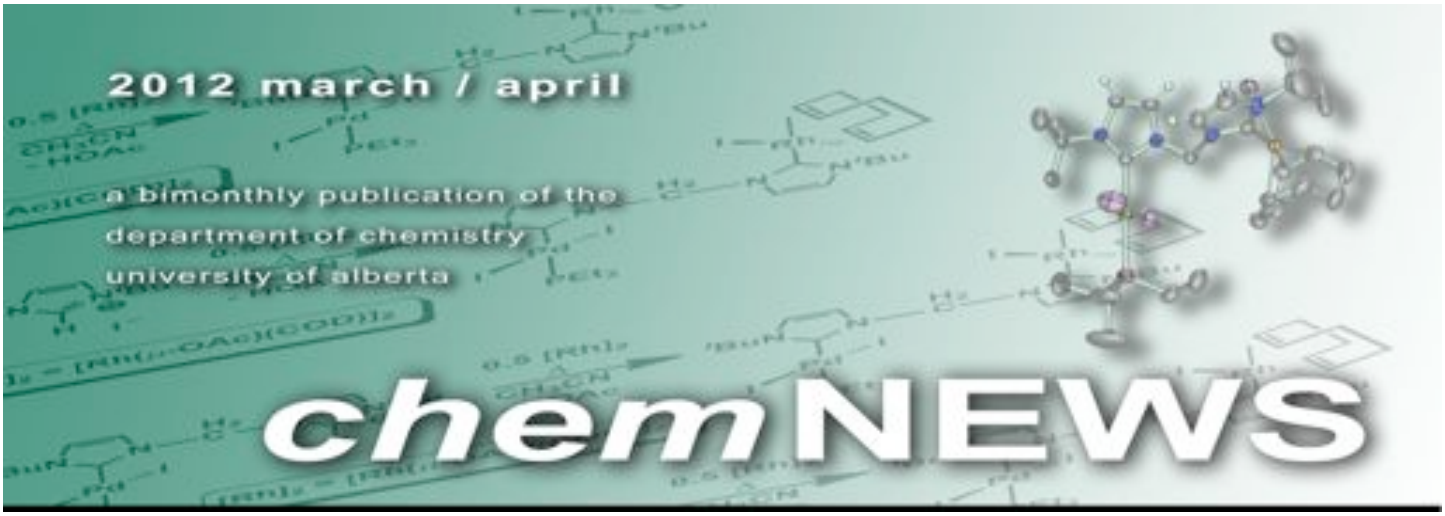


Inside this edition:

- Award-winning professors
- Latest staff and student achievements
- Featured article: "Trading Tuba for Test Tubes"
- Pi Day Photos
- HR Lunch and Learn Schedule
- Important Departmental Dates and Events, and much more!

BUILDING UPDATES will return

Important Dates & Events

April 13:	Last Day of Classes for Winter Term
April 24:	Celebration of Excellence in Teaching and Research
May 7:	First day of Classes for Spring Term
May 13:	Mother's Day
May 21:	Victoria Day – University Closed

ANNOUNCEMENTS

Laura Pham

CONGRATULATIONS TO...

- **Verner Lofstrand** (Dr. Stryker) passed his PhD candidacy exam February 6, 2012
- **Yongxin Zhao** (Drs. Harrison and Campbell) passed his PhD candidacy exam February 8, 2012
- **Andreas Ibrahim** (Dr. Campbell) passed his MSc defense February 16, 2012
- **Xiaoxia Ye** (Dr. Li) passed her PhD defense February 27, 2012
- **Alaaeddin Alsbaiee** (Dr. Fenniri) passed his PhD candidacy exam February 28, 2012
- **Hamid Ramezani** (Dr. Harrison) passed his PhD candidacy exam February 29, 2012
- **Anushka Jayasuriya** (Dr. Lowary) passed his PhD candidacy exam March 5, 2012
- **Christine Dunbar** (Dr. West)) passed her PhD candidacy exam March 12, 2012
- **Zahra Shire** (Dr. Loppnow) passed her MSc defense March 15, 2012
- **Mita Dasog** (Dr. Veinot) passed her PhD candidacy exam March 19, 2012
- **Katie Nizio** (Dr. Harynuk) passed her PhD candidacy exam March 20, 2012

Congratulations to PhD student **Jack Lee** (Dr. Hall) and crystallographer **Robert (Bob) McDonald** on the publication of their article titled "*Enantioselective Preparation and Chemoselective Cross- Coupling of 1,1-Diboron Compounds*" in the March 2012 issue of SYNFORM (https://www.thieme-connect.com/ejournals/category/synfacts/50232). The full article can be found at the following link: https://www.thieme-connect.com/ejournals/pdf/synfacts/doi/10.1055/s-0031-1290329.pdf

Congratulations to **Drs. David Bundle, Todd Lowary**, and **John Klassen** of the Alberta Glycomics Centre who were recipients of the prestigious Brockhouse Canada Prize for Interdisciplinary Research in Science and Engineering from the Natural Science Engineering and Research Council of Canada (NSERC). The Brockhouse Canada Prize recognizes outstanding Canadian teams of researchers from different disciplines who have combined their expertise to produce achievements of outstanding international significance in the natural sciences and engineering in the last six years. They, and their colleagues from the Department of Biological Sciences and the University of Calgary, were recognized for their collaborative contributions to novel strategies in combating infectious diseases such as E. Coli, Tuberculosis, and Clostridium Difficile.

Congratulations to **Dr. Todd Lowary** of the Alberta Glycomics Centre on receiving a Tuberculosis (TB) Biomarkers grant through the Bill & Melinda Gates Foundation's Grand Challenges in Global Health program. The program is an initiative that seeks to overcome persistent bottlenecks in creating new tools that can radically improve health in the developing world. Dr. Lowary's project is one of 10 Grand Challenges TB Biomarkers grants that were awarded. Dr. Lowary will be leading the groundbreaking research into TB biomarkers for the development of a low-cost, simple-to-use tool that can quickly and accurately diagnose TB in developing countries.

Congratulations to **Dr. Charles Lucy** who was the recipient of the 2012 3M National Teaching Fellowship. Dr. Lucy was one of four recipients at the University of Alberta. According to the Society for Teaching and Learning in Higher Education, the organization that administers the awards in conjunction with 3M, these individuals "embody the highest ideals of teaching excellence and scholarship with a commitment to enhance the educational experience of every learner."

Congratulations to **Dr. Michael Serpe**, one of four University of Alberta researchers to have won this year's Grand Challenges Canada competition. Dr. Serpe will receive $100,000 to develop innovative projects in different parts of the developing world aimed at saving lives or

Announcements, continued on p. 3

Contributions Welcome

This newsletter belongs to the department of Chemistry. So submissions of interest to our department are welcome.

Submissions can be up to 1000 words and are subject to editing. Send your submissions to: newsletter@chem.ualberta.ca

Please send submissions by the 20th of the month to ensure they can be featured in the next month's newsletter.

Announcements, continued from page 2

improving the well-being of millions of people. Dr. Serpe will work with colleagues in Nigeria and Pakistan to develop a device to test for multiple biomarkers—molecules that indicate the presence of diseases. The aim also is to make it less expensive than other tests on the market.

Congratulations to the following Celebration of Excellence in Teaching and Research winners:

- Faculty of Science Research Award: **Robert Campbell**
- Faculty of Science Award for Excellent Teaching: **Alex Brown**
- Faculty of Science Innovation in Teaching Award: **Jason Cooke**
- Kathleen W. Klawe Prize for Excellence in Teaching of Large Classes: **Yoram Apelblat**

WELCOME TO…

Welcome to **Mrs. Yifan Li** who will be joining the Department of Chemistry's Business Office on a part-time basis as a Financial Assistant. As Yifan is a shared appointed with the Department of Biological Sciences, she will be spending most of her time ainBiological Sciences. Yifan has a Bachelor of Applied Mathematical Statistics in Economics from the Shanghai University of Finance and Economics as well as a Diploma in General Accounting from École des métiers de l'informatique, du commerce et de l'administration Montréal. She also brings more than 10 years of financial and accounting experience to the Department. Yifan will be situated in the Business Office, or room E3-44, and is available every Wednesday and Thursdays from 1:00 to 4:30 PM.

Welcome to **Dr. Holly Freedman**, new Research Assistant with Dr. Gabriel Hanna's research group. Holly, a native of the US, previously worked in Edmonton as a postdoc in Prof. Jack Tuszynski's group in physics/oncology from 2006 to 2009, and has spent the past three years performing research in biophysics in Faro, Portugal. She is happy to be returning to Edmonton to work in the chemistry department, and can be found in room W4-56A#2.

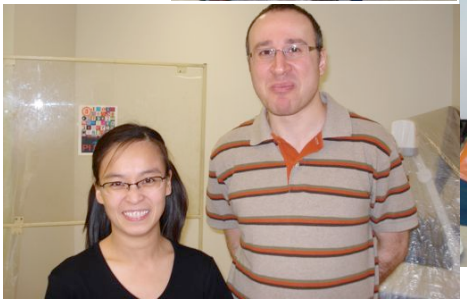
Do You Have an Idea…

…for a cost-saving measure or revenue-generating plan? Our suggestion box is at: mailto:suggestions@chem.ualberta.ca

University of Alberta '64 graduate **Hans J. Reich** receives James Flack Norris Award in Physical Organic Chemistry. See the full article in *Chemical & Engineering News*: http://cen.acs.org/articles/90/i8/James-Flack-Norris-Award-Physical.html

OK. NOW THAT ROLL-UP-THE-RIM IS NO MORE, I'M SAYIN' THAT'S IT. NO MORE MEDIUM TIM HORTON'S FOR ME. EVERY RIM ROLLED FROM START TO END OF THE CONTEST REVEALED THOSE DREADED WORDS: "PLEASE PLAY AGAIN." NO WINNING OF DONUTS, NO SCORING OF COFFEES. I WONDERED: DID OTHER SIZES OFFER BETTER LUCK? DID ANYONE WIN ANYTHING? DID ANYONE WIN ANYTHING ***BIG***?? CHEMNEWS WANTS TO KNOW. WRITE US AND WE'LL PRINT IT. -*BG*
newsletter@chem.ualberta.ca

Healthy Workplace Tip Will Return



Pi Day March 14, 2012

Pie Volunteer Targets: Laura Pham, Chuck Lucy, Greg Kaufman, Gabe Hanna, Arthur Mar

Trading Tuba for Test Tubes

Bonnie Gover

It's a good thing for Chemistry that Researcher and Professor Todd Lowary changed focus in his 20s. His original goal was to be a musician, he says. And he was reasonably good at it too—good enough to play in countless bands and orchestras in those early days. He is not sure at what point he decided to choose science over song but The Department and the international community are better for it—especially lately. Along with fellow Alberta Glycomics Centre collaborators David Bundle and John Klassen from the UofA, and Kenneth Ng and Glen Armstrong from the UofC, Dr. Lowary recently won the prestigious Brockhouse Canada Prize for Interdisciplinary Research in Science and Engineering from NSERC. Just before that, Dr. Lowary secured a $375,000 Bill and Melinda Gates Foundation's Grand Challenges TB Biomarkers Grant, which was matched 1:1 with a grant from CIHR. To top it off, in January, Dr. Lowary became the new Scientific Director of the Centre. I recently caught up with Todd to talk about his splendid contributions so far in 2012.

You just became the new Scientific Director of the Alberta Glycomics Centre: when did you actually move into the position and how is it going? Two or three years ago, [then Director David Bundle] created the Associate Director, Science position, which I was in and so this transition was planned. I've been in the Director role since January ,and given my role as Associate Director for the past two years, it's not been a very abrupt transition. Our biggest immediate challenge is that we have to go for renewal [of the centre].

How long has your group worked on the TB biomarkers project? My group has been involved in tuberculosis-related research since I started my career, which was 1996. Over that time the research project evolved to a point where we could make a legitimate claim that we had the necessary infrastructure, skills and experience to be able to go after identifying new biomarkers. There's a real desire to do a better job in diagnosing tuberculosis and then identifying the people who really need treatment. That's the motivation behind this. If we are successful, there's a potential to apply for more money where we would start to take the biomarkers we identify and incorporate them into devices for use in a clinical, real-world setting. That would be very exciting if that happens.

Were you surprised to know that you'd won the Brockhouse award? I knew we were nominated but I was surprised to get a call from Suzanne Fortier (the NSERC president) telling me that we had won the award. The competition for awards like this is extremely competitive and if you look at the previous winners, it's really some remarkable people, It's nice to be included in that group, I should also point out that we had tremendous local support, first from Fred West who suggested that we be nominated and then Dr. Renée Elio, an Associate VP-Research, who helped craft the nomination document.

This is the first time that the honour is awarded to a research group from Alberta. What does it mean to you personally and to your department to have received such a prestigious award? What's particularly gratifying is that our research area is one that's been an area of strength at the UofA for half a century. Raymond Lemieux established a group in carbohydrate chemistry in the Department of Chemistry in the early 1960. Dave Bundle was a post-doc with Ray in the '70s and Ole Hindsgaul—who was my PhD supervisor and later a member of the Faculty in the Department—was also a PhD student with Ray.

How many of your students are involved in this? Many of the coworkers in my group as well as the groups of the other awardees have been involved in projects that tie in to these collaborations. They are the ones who do all the work, Without the students, the post-docs, the research associates and the technicians, there's no way we would have gotten the award, It's their hard work that led to this recognition.

Five things you can't live without? Good beer, sushi/sashimi, the internet, the chair in my office, and prosciutto on anything; it doesn't matter.

Last word on tubas? Last year I donated my instrument [an expensive-at-the-time $4000 tuba bought in '82] to a small college close to where I grew up in the US. I hadn't played in years and so it was collecting dust. It was also the school where my band instructor was trained and so seemed like the right thing to do.

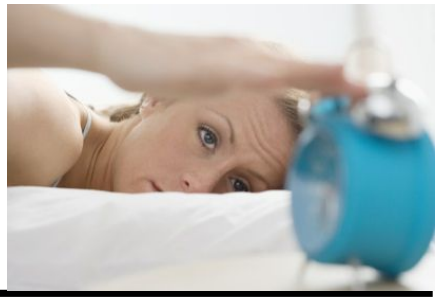
Congratulations, Dr. Lowary on your success! For more information on the awards and the Alberta Glycomics Centre, see http://www.glycomicscentre.ca

Health Promotion and Work*Life* Services (HPaWS)

LUNCH & LEARN

April 2012

12:05 – 12:55 p.m.



****Please note that staff and faculty will receive priority Lunch and Learn registration, with others being accommodated if space permits. To ensure a quality learning environment for all participants, registrants are asked to please endeavour to arrive at Lunch and Learns on time to minimize class disruption.****

Self-Esteem: What is it? How do you get it?

Irene Spelliscy, Homewood Human Solutions
Tuesday, April 3, 2012—Education South 254

This workshop takes a relaxed, lighthearted look at what healthy self-esteem is and how you get it. Participants will learn about different elements of self-esteem and get some practical ideas on how to build and nurture their self-esteem. Participants are also encouraged to share their experiences and to come up with some concrete goals to increase and maintain positive self-esteem.

Get Up! Get Active! - Kick Start Your Body

Greg Lembke, University of Alberta
Wednesday, April 11, 2012—Education South 113

You know that physical activity is an important part of maintaining good physical and mental health. Nonetheless, it can be difficult to get going. Join us as we explore the benefits of physical activity and the types of activity is important to include in your routine. Participants will also explore ways to get started, how to take their workouts to the next level, how to stay interested and how you can work with and around injuries.

Professionalism in the Workplace

Tracy MacLeod, Homewood Human Solutions
Thursday, April 19, 2012—Education South 113

People form judgments about you in the workplace based on your behaviour, attitude, speech and appearance. The impressions you communicate to others – positive or negative – can help you get ahead professionally, or can slow down your career progress and even sometimes create conflict in the workplace. This wellness session will give participants an understanding of the importance of professional behaviour in the workplace and what it involves.

Healthy Sleep Habits

Kristine Aanderson, Homewood Human Solutions
Thursday, April 26, 2012—Education South 113

We all feel so much better after a good night's sleep. Our thoughts are clearer, our reactions faster, and our emotions are less fragile. This wellness session introduces participants to the effects of sleep deprivation and reviews some key strategies for what you can do to promote healthy sleeping habits.

Bring your lunch and join us for these informative sessions. Seating is limited—please register at www.learningshop.ualberta.ca. For information about the Lunch & Learn program, contact the Health Promotion and Work*Life* Services office: hpaws@ualberta.ca.