



### Inside this edition:

New Web Site in the Works

Payroll-Related Reminders

Google Update

Green License for Researcher  
Dennis Hall

Important departmental  
dates, announcements,  
healthy workplace tips and  
much more!

## NEW WEB SITE IN THE WORKS

*Tyler Peterson*

As you may know, the department has been hard at work on a new website for several months. We've chosen to use the University's content management system known as Sitecore. This gives us a flexible, easy to manage site that adheres to the University's vision of a global visual identity.

Michael Ferguson, the department's longtime webmaster, spearheaded this initiative and worked with Marketing and Communication's Web Strategy team to get a site set up. I joined the department's website team and have assumed the role of webmaster in order to ease the load on Mike and allow him to focus on his work and research in the X-Ray Crystallography lab.

In 2009, the Academica Group for the University of Alberta reported that 88% of all U of A applicants identified websites as their "most-used information source" when researching their options. Accordingly, it's crucial that we update our website to meet the needs of prospective students. The new site will take a marketing heavy approach with extra emphasis on recruitment.



The site is getting closer to completion and we're hoping to launch sometime in February. Closer to launch, I will provide a link to a beta version of the site in a department wide email to elicit feedback and suggestions. We're really excited about this and hope that you like it as much as we do! Thanks very much for the support!

## Important Dates & Events

February 11:	First Chemistry Annual Badminton Smackdown
February 14:	Valentine's Day
February 20:	Family Day (University Closed)
February 21 - 24:	Reading Week
March 14:	Pi Day



# ANNOUNCEMENTS

Laura Pham

## CONGRATULATIONS TO...

- **Dinesh Sreedharan** (Dr. Clive) passed his PhD candidacy exam October 4, 2011
- **Md. Shafiul Azam** (Dr. Gibbs-Davis) passed his PhD candidacy exam October 6, 2011
- **Owen Scadeng** (Dr. West) passed his PhD candidacy exam October 7, 2011
- **Zhizeng Gao** (Dr. Vederas) passed his PhD candidacy exam October 11, 2011
- **Julian Diaz** (Dr. Gibbs-Davis) passed his PhD candidacy exam October 12, 2011
- **Amgad Albohy** (Dr. Cairo) passed his PhD candidacy exam October 19, 2011
- **Elizabeth Corkum** (Dr. Bergens) passed her PhD candidacy exam October 21, 2011
- **Sonja Francis** (Dr. Bergens) passed her PhD candidacy exam October 24, 2011
- **Brent Rudyk** (Dr. Mar) passed his PhD candidacy exam October 24, 2011
- **Matt Zamora** (Dr. Cowie) passed his PhD defense October 25, 2011
- **Sarah Regli** (Dr. Veinot) passed her MSc defense October 26, 2011
- **Mohammad Ibrahim** (Dr. Lucy) passed his PhD candidacy exam October 28, 2011
- **Shereen Elbayomy** (Dr. McDermott) passed her PhD candidacy exam December 2, 2011
- **Mahmoud Bahnasy** (Dr. Lucy) passed his PhD candidacy December 5, 2011
- **Reza Poopari** (Dr. Xu) passed his PhD candidacy exam December 5, 2011
- **Zahra Dezhahang** (Dr. Xu) passed her PhD candidacy exam December 7, 2011

- **Urmi Bhakta** (Dr. Hall) passed his PhD candidacy exam December 14, 2011
- **Hassan El-Saidi** (Dr. Lowary) passed his PhD defense January 16, 2012
- **Michael Reid** (Dr. McDermott) passed his MSc defense January 19, 2012
- **Michael Slaney** (Dr. Cowie) passed his PhD defense January 19, 2012
- **Tiffany MacDougall** (Dr. Cowie) passed her PhD defense January 26, 2012

Congratulations to **Dr. Clarissa Sit**, a recent PhD graduate from Dr. Vederas' research group. Clarissa received an Alberta Innovates Health Solutions postdoctoral fellowship for her current appointment with Professor Jon Clardy at Harvard Medical School. Clarissa was one of 14 successful applicants in the October 2011 competition, and the only one among all of the recipients, who will be training at a university outside of Alberta.

Congratulations to both **Katie Miltran** from the Gibbs-Davis group and **Xi Wang** from the Stryker group who won Faculty of Science Awards for Excellence in Research at the inaugural Undergraduate Research Initiative Poster Session.

Congratulations to **Dr. Steve Bergens** and **Jeremy John** as they were recently featured in the Science Contours (Faculty of Science) magazine for their catalyst research work. They were recognized for their discovery of an active catalyst that has the potential to improve the efficiency and environmental impact of chemical industries such as agrochemicals and pharmaceuticals.

The Interdepartmental Science Students' Society (ISSS) had their second annual Instructor Appreciation Night on January 26<sup>th</sup>. The following members of our department received recognitions:

### Teaching Assistants

Christine Dunbar  
Parnian Lak  
Hamid Ramezani  
Sarah Regli  
Gaetano Stellaci

### Professors

Dr. Yoram Apelblat  
Dr. Wolfgang Jaeger  
Dr. Christie McDermott

## 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 20<sup>th</sup> of the month to ensure they can be featured in the next month's newsletter.

Do You Have an Idea...



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

## WELCOME ...

Welcome to **Dr. Mykola Kondratenko**, who has joined the research group of Dr. Richard McCreery as a postdoctoral fellow. Mykola received his PhD in organic and materials chemistry from McGill University and has research experience with molecular rectifiers, polymers for organic electronics, and single wall carbon nanotubes.

Welcome to **Dr. Alexandr Belovodskiy**, who has joined the research group of Dr. Frederick West as a postdoctoral fellow. After receiving his PhD from the N.N. Vorozhtsov Institute of Organic Chemistry in Russia, Alexandr spent some time training with Dr. Louis Fensterbank in Paris, France at the Université Pierre et Marie Curie. His research experience encompasses the chemistry of natural and bioactive

compounds, organometallic chemistry, medicinal chemistry, and computational chemistry.

Welcome to **Dr. Maribel Funes-Huacca**, who has joined the research group of Dr. Ratmir Derda as a postdoctoral fellow. Maribel received her PhD in analytical chemistry from the University of São Paulo, Brazil and has held various research positions before joining Dr. Derda's group. Maribel is a chemist with a background in microbiology, phylogenetic analysis, genotyping, and DNA/RNA manipulation sequencing.

Welcome to **Dr. Defian (Tim) Gao**, who joined the research group of

Dr. Dennis Hall as a postdoctoral fellow. Tim received his MSc and PhD in organic chemistry from the University of Calgary. Tim also has several years of work experience in the pharmaceutical industry and is very familiar with the research and development that goes into pharmaceutical products.

Welcome to **Dr. Vishal Rajput**, who has joined the research group of Dr. David Bundle as a postdoctoral fellow. Vishal received his PhD in organic/medicinal chemistry from the Central Drug Research Institute in India. Prior to joining Dr. Bundle's group, Vishal was training as a postdoctoral fellow at Lund University in Sweden with Dr. Ulf Nilsson.

### Payroll Related Reminders

#### CPP and EI Contributions

CPP and EI Contributions will begin again in January for contributing employees. For updated 2012 rates, please refer to [Deduction Rates 2012 – CPP, EI, and WCB](#).

#### TD1 Forms (Personal Tax Credits Return)

2012 TD1 and TD1 AB forms are now available from the HRS forms cabinet at [www.hrs.ualberta.ca/forms](http://www.hrs.ualberta.ca/forms).

The 2012 federal basic personal amount has increased from \$10,527 to \$10,822. If employees have a TD1 total claim amount other than basic, please request that they complete a new TD1 and compare to their Fed Net Claim Amount and AB Net Claim amount shown in the Tax Data section of their online January 2012 Pay Cheque through Bear Tracks. Updated TD1 forms can be forwarded to Payroll Operations.

#### 2011 T4 and T4A Slips

Current and past employees are encouraged to access 2011 T4 and T4A tax slips online using Bear Tracks. Tax slips are scheduled to be available for Bear Tracks release on **February 13, 2012**. Printed tax slips will not be mailed until the end of February.

To access tax slips online, employees must provide their consent to receive a T4/T4A electronically. To provide consent, employees can use the Tax Slip Consent page within Bear Tracks. Online slips are available to all current or former employees who have received taxable earnings or benefits in the taxation year being reported.



## Google Update

*Shelley Garrett*

Thank you to all who attended the uAlberta Google Apps Town Hall on January 16<sup>th</sup>. I think those who did attend left with a sense of excitement about Google apps and their potential. You can view the slides at the [VPIT website](#). These slides are different than shown at the town hall, including more notes for those of you who could not attend.

Our migration to Google Apps is only weeks away. Dates are still being confirmed, but we have some tentative dates for training which will be held here in W1-50. If users would like to take Gmail Level 2 or Google Docs training they can book directly with TTC in one of the available classes online. You can also view the video tutorials at the [AICT helpdesk website](#).

### **Tentative Dates for Training:**

#### **Gmail Level 1**

Feb. 16<sup>th</sup> from 1:30 - 4:30

Feb. 21<sup>st</sup> from 1:30 - 4:30

#### **Gmail Calendar**

Feb 17<sup>th</sup> 1:30 - 4:30

Feb 22<sup>nd</sup> 1:30 - 4:30

There will be more emails coming out in the next few weeks with confirmed dates for training, links for registration, and the confirmed migration date. Take some time over the next few weeks to clean up any old mail that you don't need or don't want to migrate over, for example, your trash. If you have any questions, please feel free to contact your IT staff (Shelley or Tyler) and we will do our best to answer your questions.

## *Healthy Workplace Tip*

*Dayna Morris*

It's that wonderful time of the year when the days are so short, we find ourselves fighting the urge to hibernate. Try to break up your day by getting outside when there's natural light to enjoy. This can help fight that urge to sleep and help you become reenergized.





# Green License for Researcher Dennis Hall

Bonnie Gover



Dennis Hall holding actual molecule model of green catalyst  
[photo courtesy UofA Creative Services]

Professor and chemist Dennis Hall talks to ChemNews about a promising new development that was recently licensed by GreenCentre Canada. GreenCentre is an organization that partners government and industry to transform green research into commercially viable solutions. Because the organization accepts only 10% of proposed ideas, Hall's research is significant. His development of a chemical process uses a green catalyst that could potentially change the way pharmaceuticals are produced. Instead of the toxic solvents and high temperatures commonly used in the production of pharmaceuticals, Hall's green catalyst could make production more efficient and environmentally friendly.

**Q: Firstly, how long have you worked on this process?** We have been working on developing and optimizing amidation catalysts for close to 5 years. The project benefited a lot from an NSERC I2I grant (Idea-to-Innovation) in the early stages.

**Q: Were you surprised to know that GreenCentre bought it?** Not so much because their mandate is to help commercialize green technologies developed by Canadian researchers. I am happy they were interested. It took a lot of time and effort to negotiate a license. Darrell Petras and Vicki Lui from TecEdmonton spent a lot of time on this file to insure

we would obtain an agreement that was fair to all parties involved. I am very grateful to them. They took care of all the legal aspects so I could focus on my research.

**Q: For those of us who don't know, how does this work going forward, now that GreenCentre has the license? Do they pay the UofA? In perpetuity? Royalties?**

The agreement involves royalties to be paid on future successful commercialization of this technology. The GreenCentre acts as an intermediate. They are now working with us to further improve the technology and develop specific applications to make it attractive to potential industrial clients. They also participate financially and strategically in intellectual protection.

**Q: Can you tell me about the work that led to the development of the process?**

The project was started in the lab by a former PhD student, Raed Al-Zoubi, who is now an assistant professor in Jordan. It was just another curiosity-driven project that I proposed to Raed one day. Raed took the challenge and it quickly gave promising and surprising results. We were interested in the applications of boronic acids in catalysis, and direct amide bond formation between carboxylic acids and amines was deemed to be a challenging but very important process to develop in the pharmaceutical industry.

**Q: How does the process itself work?**

Existing methods for direct amide bond formation between carboxylic acids and amines necessitate large amounts of coupling reagents that are often toxic and expensive, and they generate a lot of waste. Our method uses a small amount of boronic acid (the catalyst) and it generates only water as the by-product. Most of the time, no further product purification is necessary. Those attributes make it a greener method for producing amides.

**Q: What does it mean to you personally and to your department to have GreenCentre pick it up?** For me, in the short time, it is rewarding to have the

opportunity to develop real-life applications of our research. Like many academic chemists, I do a lot of fundamental work and we rarely have a chance to apply our discoveries. For our Department, I truly hope this will lead to more interest and involvement in the growing field of Green Chemistry. There is enormous potential for collaboration and funding in this field of research, and the public perception of Green Chemistry is very good.

**Q: How did you celebrate?** I'm sorry to say we didn't celebrate. Maybe we should, but sometimes I feel too busy to celebrate and I just want to move on to the next thing. Honestly, this is just the start. I feel like the time to celebrate will come when we succeed with a commercial application. Many scientists feel the same. If you stop and rest on your laurels, you will miss out on the next thing.

**Q: What happens now? Are you currently working on your next discovery?** Yes! This project has lots of interesting branches: further catalyst improvements, mechanistic studies, etc. I need more excellent students and postdocs to help advance this chemistry.

**Q: Five things you can't live without?** My family would count for four (my wife and three daughters), and my boronic acids.

Congratulations, Dr. Hall on your success!

For more information, see the newly-released 2<sup>nd</sup> edition of "Boronic Acids" that Hall edits. It features one of Hall's group's top catalysts on the cover page.  
<http://www.chem.ualberta.ca/~dh/all/>



**February 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.\*\***

## **Greening Meetings and Events**

**Lyndsay Hobbs, Office of Sustainability**  
**Thursday, February 2, 2012—Education South 113**

The options available to reduce the environmental footprint of events and meetings are diverse. By "greening" your events and meetings you can work towards creating and meeting goals for sustainability within your office, and foster pride by identifying achievements and celebrating successes. You will leave this workshop knowing what a "green" meeting or event looks like and how you can take steps—big or small in your workplace.

## **Disordered Eating: What's the big deal?**

**Dianne Drummond, Alberta Health Services**  
**Wednesday, February 8, 2012—Education North 2-101**

*\*\*Join us for this event to mark Eating Disorder Awareness Week (February 5-11)!\*\**

The term disordered eating is all around us, but what does it mean? Dianne Drummond, Prevention and Health Promotion Consultant with Addiction & Mental Health, Alberta Health Services – Edmonton Zone, will explain the full spectrum of disordered eating, from general unhappiness with appearance and consequent excessive dieting, to the extreme end of eating disorders. Explore the affect that normative disordered eating has on both physical and emotional health, and learn what to say and do if someone you know is struggling.

## **Communication in Intimate Relationships**

**Cecile Schultz, Homewood Human Solutions**  
**Thursday, February 16, 2012—Education South 113**

Conflict is essential to a healthy relationship. When a relationship works, it works, in part, because conflict is faced and worked through, feelings are expressed and understood, and a generally positive atmosphere is maintained. In this session, you will learn the building blocks for good communication and constructive conflict resolution; the common issues that lead to communication break downs; tactics to use to de-escalate conflict or reduce emotional upset; awareness of your personal and mutual contributions to conflict and; strategies to develop goodwill and strengthen your intimate relationship.

## **Bollyrobics**

**Deepti Sami, Bollywood Beats**  
**Thursday, February 23, 2012—W1-17 Van Vliet**

Do you love the energy of Bollywood dance? Bollyrobics is a unique and fun dance workout that incorporates various Bollywood styles, with roots in traditional Indian dance. It is designed to tone, build muscle and increase overall fitness while taking away the monotony of a regular workout regime. Bollyrobics is all about the coordination of the hands, feet, hips and belly, but rest assured that no dance experience is required to enjoy this activity!

## **Mix and Mingle**

*\*\*Get ready to be engaged—this session is interactive!\*\**

**Kim Arsenault, Meridian Learning and Development**  
**Tuesday, February 28, 2012—Heritage Lounge, Athabasca Hall**

You've probably heard it said before: it's not what you say; it's how you say it! This particularly applies when it comes to starting a conversation and keeping it going. This fun and active workshop is designed to give you an edge in business and personal settings where you are asked to mingle. You will get practice in the art of "small talk", big impressions and keeping a conversation going. Learn to handle that initial uncomfortable moment, those nasty interruptions and create positive feelings with your greetings.

Bring your lunch and join us for these informative sessions. Seating is limited—please register at [www.learningshop.ualberta.ca](http://www.learningshop.ualberta.ca). For information about the Lunch & Learn program, contact the Health Promotion and WorkLife Services office: [hpaws@hrs.ualberta.ca](mailto:hpaws@hrs.ualberta.ca).