

Beyond the Bubble

a look at life outside Illinois Wesleyan University

Why did you choose to attend the Scripps Institute in California?

In the search for new medicines, many molecules must be synthesized and tested. I would like to be at the forefront of this process, making new compounds efficiently and in the most environmentally-friendly manner possible.

In order to become the best medicinal chemist possible, it is especially important for me to become a skilled synthetic organic chemist. The Scripps Research Institute (TSRI) is an ideal place for me to accomplish such a goal.

TSRI is the world's largest independent non-profit biomedical research facility. The exceptionally qualified faculty (three Nobel Laureates and several of the world's premier synthetic chemists, among others), and the high caliber facilities serve to enable virtually limitless scientific exploration. Additionally, the emphasis on an interdisciplinary approach to medicinal challenges has allowed for me to learn a great deal about other fields of research such as biochemistry, molecular biology, and immunology.

Can you talk a little about the work you are currently doing?

My research focuses on the elucidation of a particular chemical reaction (the Inverse Electron Demand Diels-Alder (IEDDA) Reaction). In previous studies, many different starting materials have been shown to successfully undergo the IEDDA reaction to form a variety of products. For example, the IEDDA reactions of 1,2,4- and 1,3,5-triazines have been used to make such drugs as Bleomycin A (anti-cancer) and Streptonigrin (antibiotic).

ALUMNI PROFILE: ERIN ANDERSON, CLASS OF 2007 CHEMISTRY MAJOR FUTURE PHD/MEDICINAL CHEMIST

Previous studies have shown the IEDDA reaction to be very effective in these cases, but little had been done to determine if 1,2,3-triazines could undergo this reaction to form pyridines. Pyridines are known to be biologically active molecules. Nexium, the number three best selling pharmaceutical in 2008 is a pyridine.

By seeing how well this reaction works, we can determine if it should be added to the "chemical toolbox" that is used by synthetic medicinal chemists to make pharmaceuticals. After rigorous examination, I can confidently state that the IEDDA reaction with 1,2,3-triazines can be used to synthesize a large variety of molecules. Future work will involve using this methodology to construct a pharmaceutically active family of natural products.

What do you hope to do with your PhD upon completion?

After finishing my doctorate, I plan on obtaining a post-doctoral fellowship in a laboratory that studies neglected and infectious diseases. Through this further training, I hope to gain medicinal chemistry skills as well as to obtain experience in biochemistry and molecular biology experimental design and laboratory techniques.

Upon the completion of this training I hope to embark upon a career as an independent researcher, where I would



like to perform medicinal chemistry research to investigate the development of therapeutics for diseases affecting low-income populations.

Through my research at IWU under Dr. Ram Mohan, I learned to appreciate the importance of green chemistry and I will focus on carrying out my research in an environmentally benign and sustainable manner. As someone who has been blessed with a great education and a strong capacity for science, I would like to use my gift [See *Bubble* on Page 2]

Career Connections

a newsletter from the hart career center

March 2010

Following Your Dream is the Art Decision

When I was in fourth grade I won an award from my village for a drawing I did of an alligator. It was a sweet alligator. If that alligator were a real alligator it likely would have been the foremost attraction in the world's best zoo, except it definitely would have escaped from the zoo with relative ease because no walls could contain that alligator's sheer might. The zookeepers would have been all like, "Epic alligator don't leave us!" and that alligator would have pulled down his shades and suavely been all like, "Later gators."

Over the years, I continued to draw that same alligator to the delight of crowds everywhere. When it came time to apply to colleges I considered sending in that alligator to schools instead of the requested application forms. Like I said, it was a sweet alligator. Upon receiving my first several letters of rejection, though, I realized that my creative passion of alligator-drawing was not in line with any future professions. In order to advance in the professional world, I would need to abandon my dream.

Fortunately, for many past, present, and future IWU students, attachments to the various arts can translate into long-lasting employment without the abandonment of any dreams. Art, Music, and Theater Art majors in particular are finding ways to turn dreams into real world jobs.

Arts

Photo Courtesy of www.finearts.ohio.edu

For some, following their passions has lead to impressive entrepreneurial efforts. Justin Ahrens '94, a graphic design major and education minor, is now owner and creative director of Rule29, a strategic creative firm that strives to make creative matter. Said Ahrens of his ability to combine artistic interests with a business, "IWU taught me that any experience is what you make of it."

Ahrens also stated that his time at IWU increased his awareness of local and global issues, which has helped shape the nature of Rule29. "We volunteer our services to help in our neighborhood and in other places like Sub-Saharan Africa," said Ahrens, "IWU as a whole, and the great experience I had in the Art School, really gave me a jumpstart to try to make a difference in the world."

Like Ahrens, Max Lewendel '04 was able to found the Icarus Theatre Collective in London. Lewendel majored in Theatre Arts and minored in French and Business while at IWU, and said, "The ability to customize my degree and blend my business acumen with the theatre world has helped immeasurably in building my own business 5,000 miles away." Continued Lewendel, "I was able to get a hand in all aspects of theatre and an overview of all business elements at

IWU, which laid a good foundation for my work here."

More recent arts graduates have found ways to enter the professional world, too. Music major Michael Zaremba Jr. just graduated this past December and has already found a position as the Director of Graduate Relations and Recruitment at the Morris Graduate School of Management at Robert Morris University Chicago. Said Zaremba, "Studying musicology and double bass performance prepared me for beginning my professional career in a number of different ways."

Zaremba stated his musicology studies greatly improved his critical thinking abilities, historical perspective, and group work capabilities. "I continuously apply the concepts learned at IWU as a performer, listener, and employee," said Zaremba.

In short, Zaremba feels his art experience at IWU was a huge asset in finding a job in this tight economy. "Having a strong background in performing arts (in addition to another field of study) is an excellent way to impress employers," said Zaremba, "Fine arts are an excellent way to further your education and marketability."



Upcoming Career Events!

It's a LinkedIn Party!

Beyond the Bubble {Continued from page 4}

to help those in need. I believe that science can truly make our world a better place to live in and that my calling is in the field of medicinal chemistry.

When did you decide this was the career path for you? Did any of your experiences at IWU influence the decision?

I decided to go to graduate school in chemistry during my sophomore year at IWU. I took organic chemistry with Dr. Mohan, and I fell in love with the artful logic of small molecule synthesis. That same year I started doing research in Dr. Mohan's lab, working on the development of environmentally friendly reactions. I found it rewarding to use my skills as a chemist to make the world a safer place.

My research under Dr. Mohan also provided me with the opportunity to go to the 2005 national ACS meeting, where my decision to be a medicinal chemist was confirmed. At the meeting,

I listened to Dr. Joseph Fortunak speak about his work on the development of malaria drugs. His presentation motivated me greatly, and eventually, I would like to be able to do similar research to bring affordable medicines to under developed countries. It excites me to know that every day, my research brings a cure closer for those in need.

Do you have any advice regarding changes in technology that students should be aware of?

Recently, many research journals have been going completely electronic. The publishers are releasing articles more quickly than ever; as a result, it can take a bit more diligence to stay up to date on the research in your field. There is no substitute for reading journal articles. Classes teach you the basic principles of your field, but in order to come up with novel ideas you must know what has been done since your textbook was

published and what is currently being done.

What general advice would you give to current IWU students?

"A man must wait an awfully long time for a roasted chicken to fly into his mouth."

**Check out
the new Career
Center Blog at
[blogs.iwu.edu/
ccenter](http://blogs.iwu.edu/ccenter)**

A LinkedIn Job Search

In his blog "How to Change the World," esteemed business author and venture capitalist Guy Kawasaki highlights 10 ways to use LinkedIn to find a job. There are likely many more, but for now, these 10 ways should get you started:

1. Get the word out - Make sure your network knows you're looking for a job. The more people that know, the better chance you have.
2. Get recommendations from your colleagues.
3. Find out where other people with your background are working - You can search by keyword skills to see which companies employ people like you.
4. View the career paths of a company's current employees - This will help you get an idea what background the company is looking for.
5. Check if a company is still hiring.
6. Get to the Hiring Manager - If you're only 2 degrees away from the person posting the job you can get in touch.
7. Get to the right HR person - If you can't get to the Hiring Manager, you can possibly target your application a little more within HR.
8. Find out the secret job requirements - You can get the inside scoop from any connections at the company.
9. Find startups to join.
10. Build your network before you need it - Don't wait until you're a senior and need to find a job to build your network and attempt to get recommendations.

Career Center Events

Date: 4/9
Event: *Economies of Nature*
Time: Noon
Location: Hansen Student Center
Description:
Guest alumni presenter Jay Truty '96 will present this talk about finding a "green career". Jay is the founder of Ecosystem Capital, LLC, which specializes in the development of innovative conservation finance strategies.

Date: 4/6
Event: *Crystal Ball Coffeehouse*
Time: 7 p.m.
Location: Welcome Center Auditorium

**Link of the
Month: [www.lindsey-
pollak.com](http://www.lindsey-pollak.com)**

A Suit and Tie on Your Social Media: Get Professional with LinkedIn

So, have you heard of this Facebook thingy? You have? You're kidding! No way. Like, really, no way! Isn't it cool? How you can keep in touch with all your friends, and write hilarious status updates, and post photos of yourself doing all sorts of crazy things (like that time you ate a whole banana in one bite? Crazy!)?

You know what might be even cooler (and what's cooler than cool? ICE COLD!)? How about a professional social networking site that could realistically help you get a job?

LinkedIn is the world's largest professional network with over 60 million members and counting. In short, LinkedIn is all about the ever important concept of networking. The site keeps you in touch with business contacts you have already made and then helps you connect with relevant contacts that they have already made.

Lindsey Pollak, Gen Y Specialist and global campus spokesperson for LinkedIn, described the site as "essentially an online resume with a lot more information." Indeed, your profile becomes your own "personal brand" you are trying to market to employers.

Filling out your profile page won't mean a lot of busy-work recopying your resume either. You can simply upload a completed resume to the site and LinkedIn will fill in all the relevant information for you.

LinkedIn's best feature, though, is its ability to facilitate discussion between people who have something in common professionally. As Pollak explains, "If you and I are connected, I can see who you are connected to. And let's say my dream

is to work at Nike and you were connected to somebody at Nike: I could say 'Hey, I noticed you're connected to this person.' It kind of opens your eyes to three degrees of separation away from you."

Where uncovering these degrees of sep-

Don't worry if your list of first degree professional connections is not particularly expansive at this point. Remember, 1st degree connections are only the start! Let's say you are able to get just 10 connections to begin. There's a good chance that these connections, possibly bosses

and managers at previous jobs or internships you've had, have many connections of their own. To play it safe, let's say they each have 50. Well, you've just created a 2nd degree network of 500 professionals. Not too shabby.

LinkedIn also offers targeted job postings based on the list of specialties and industries in your profile. Likewise, you can search for a wide array of positions through the site's data-

base – many of which you won't be able to find elsewhere.

Simply having a presence on the site can help your cause, too. Said Pollak, "In this day and age companies are so relying on sites like LinkedIn to help them find talent that it would be a big mistake not to be in that area."

"If you're willing to take the time to get a little bit out of your comfort zone and be on a professional online community, as opposed to the personal world of Facebook, you can really stand out as a student because most students aren't on it," Pollak explained, "If most students aren't on it, and you look professional, of course you're going to be the one who stands out to an employer because you're one step ahead of your peers."

LinkedIn Starter Guide

The following tips, courtesy of the LinkedIn Learning Center, will help you build a solid foundation on LinkedIn. Failure to follow the tips will result in nausea, upset stomach, and potentially heartburn.

1. Own a Profile That Truly Represents You!

- a) List your current and past work positions and education
- b) Add a profile photo to let your charming looks do the trick
- c) Add a great summary paragraph - this is you in a nutshell
- d) Do not just leave your profile semi-updated - complete profiles are 40

times more likely to appear in search results

2. Ensure Your Connections Represent Your "Real-World" Network!

- a) You can import contacts from your email account to see who you know that is already on LinkedIn
- b) Take note of LinkedIn's recommended colleagues from organizations you have already worked with

3. Leverage the Power of Your LinkedIn Network!

- a) Post a question to the "Answers" section to tap into the knowledge of over 60 million professionals
- b) Look up an interviewer's profile before you actually meet them

aration may have been an arduous process in the past, LinkedIn makes the process very simple. Names of contacts will have a number next to them indicating how close you are to them. Contacts you have already made are 1st degree, their contacts are 2nd degree (i.e. you know someone who knows them), contacts of those 2nd degree professionals are 3rd degree... and you get the picture.

LinkedIn describes this setup as "not just a group of connections, but a network that's alive and ready to help." Even when you're just starting out with your profile, you will not be left alone in the dark about who to contact. LinkedIn provides names of professionals already on the site from company's you claim to have experience with on your resume.