

Volume 1, Issue 3

April 2016

Created By: Emily Szott

Western Illinois University

## Women In Science

Science · Technology · Engineering · Math



- Mission Statement
- Upcoming Events
- E-board Elections
- Guest Speakers
- Interesting research
- New WIS Historian
- WIS Living Learning Community
- Photos from WIS
- Women in Science today featuring:  
Hannah Drake and  
Paris Hamm
- Good luck on Finals!!!

### For More Information

Wiu.edu/WIS

Faculty Advisor:  
Dr. Rose McConnell  
Currens Hall 214

President:  
Rachel Hamilton  
Rm-hamilton@wiu.edu

Like us on Facebook!

www.facebook.com/wiuwis

### Our Mission

The mission of WIU Women in Science is to foster scientific research and scholarly activities, provide opportunities for women and to encourage the career advancement of women in the STEM disciplines

#### Participating departments:

Biological Sciences, Chemistry, Geography, Geology, Mathematics, and Physics

### Elections for E-board!

Elections for executive board are quickly approaching and will be held at the WIS meeting on Monday, April 18 at 5:30 in the Physical Sciences Library. All positions are open. Positions include President, Vice President, Treasurer, Secretary, Historian, and Liaison.

### Guest Speakers

Thank you to WIU professor Dr. Miller-Hunt for attending a WIS meeting to talk about her experiences in the field.

Thank you to Dr. Kristi Green, the Director of Pharmacy and Services at McDonough District Hospital, for sharing her knowledge and thoughts on life.

Thanks also to Dr. Shannon VanVleet-Dexter for taking time to talk to WIS students about working in Physical Therapy at McDonough District Hospital.

### Upcoming Events:

**April 14-15** – Biology Symposium

**April 18** – E-board voting and Chemistry Carnival

**April 20** – Thomas E. Helm Undergraduate Research Day

**April 23** – Trip to Science Center in St. Louis

**May 2, 4, & 5** – Book Auction

### Interesting Research by Women in Science

Check out this TED talk by astronomer Tabetha Boyajian to learn about “The most mysterious star in the universe”!

[https://www.ted.com/talks/tabetha\\_boyajian\\_the\\_most\\_mysterious\\_star\\_in\\_the\\_universe](https://www.ted.com/talks/tabetha_boyajian_the_most_mysterious_star_in_the_universe)



## New WIS Officer!

Welcome to Catherine Tate, our new Historian this semester! She is a biology education major.



## Women In Science

*Science · Technology · Engineering · Math*



### Women in Science LLC

This upcoming fall semester, Women in Science will have a Living Learning Community in Henninger Hall for First-Year Students. The floor will be open to freshmen math and science majors. As part of the Women in Science LLC, freshmen will participate in special activities and will have upper-class peer mentors to help them get involved in the scientific community of Western Illinois University.



Hannah Drake (left) presenting her research at a WIS general assembly meeting.



Dr. Kristi Green – Director of Pharmacy and Services at McDonough District Hospital – speaking with WIS about her experiences.

## Ground Breaking Research Conducted by Today's Women in Science

**Paris Hamm** – Congratulations to Paris for presenting her research, **Natural biota of Western bats may combat the spread of white-nose syndrome**, at the regional Phi Sigma Biological Sciences Symposium at Illinois State University, and receiving 2nd place in the graduate oral competition.



Paris Hamm (left) and Amanda Deardeuff (right) at WIU Graduate Research Day.

**Hannah Drake** – My research is based in the air sensitive coordination chemistry of W, Mo, and Cr. Our starting material is the group six metal carbonyl complex  $M(CO)_6$  ( $M = Cr, Mo, \text{ or } W$ ). We have two expected products either  $M(CO)_5Ph_2P(CH_2)_nPPH_2$  or  $M(CO)_5Ph_2P(CH_2)_nPPH_2M(CO)_5$ . In the previous complexes M is Cr, Mo, or W and the carbon backbone of the phosphine ligand is either 1, 2, 3, 4, or 5 'CH<sub>2</sub>' groups. The difference between the two sets of complexes is that in one set the phosphine ligand is coordinated to only one metal and the other end is dangling in space. In the other set of complexes the phosphine ligand is bridging both metal centers. Once each compound in the series is synthesized, they will be used to observe electron donating and withdrawing abilities between the dangling end of the  $(Ph)_2P(CH_2)_nP(Ph)_2$  (where  $n=1-5$ ) ligand and the metal center. This research is important because it broadens our current understanding of the bonding abilities different phosphines to different metals. It also broadens our current understanding of phosphine cone angles and chelation of ligands coordinated to a metal center.

**GOOD LUCK TO EVERYONE ON FINALS THIS SEMESTER AND ENJOY YOUR SUMMER!!!**