



# Periodic Times

Wittenberg University Department of Chemistry  
*Catalyzing Student Success*

## 2016-17 Highlights:

Department hires Dan Marous ('09) as Visiting Assistant Professor.

Five alumni return to give seminars.

Alumni Travis Green and Nicole Perry receive graduate school awards.

Renovations to room 248 completed.

Dave Finster spends sabbatical writing on safety.

14 national conference presentations by professors and students.

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## Volume XI

Summer 2017

## Pete Hanson Accepts Dean Position at Chatfield College

Pete Hanson has accepted a position as Chief Academic Officer and Dean of Chatfield College. Chatfield College is a two-year, private liberal arts college with campuses in Cincinnati and Saint Martin, Ohio. Pete taught organic chemistry at Wittenberg for 17 years and recently developed our chemistry course for nursing students. He served as the chair of the Faculty Executive Committee and was a key member of the University Planning Commission. The Department held a lunch for the campus in his honor in May.



## Room 248 Renovation Project and Periodic Table Update

The Department worked with Wittenberg's Physical Plant to complete some much needed work to our main teaching classroom (room 248) this summer. A new instructor station, projector, tables, chairs, and flooring have been installed, the chalk boards have been replaced with marker boards, and the walls have been repainted. Importantly, the periodic table in room 248 was repainted by a local artist to include elements that have been named recently, bringing the total to 118. See our Facebook page for more photos ([www.facebook.com/WittChemistry](http://www.facebook.com/WittChemistry)).



# Summer Research 2017



Top: Sarah White, Stephanie Schmitz, Keaton Wood, Tanner Clarke. Bottom: Jack Snider, Emily Jenney, MacKenzie Freeman, Katie Robinson, (not pictured: Justin Unternaher).

Name (class year)	Hometown	Major(s)	Summer Project
Tanner Clarke ('18)	Lebanon, OH	BMB	The Reaction of Acetyl Cyanide with Fluoroacetylide: Associative, Dissociative, and Concerted Pathways
MacKenzie Freeman ('18)	Lewis Center, OH	BMB	Heavy Metals in Avian Eggs
Emily Jenney ('19)	Dayton, OH	Chemistry & Dance	Silicone Bracelets as Passive Samplers for DEET Quantitation
Katie Robinson ('20)	Beavercreek, OH	Undeclared	Conformational Change of the Glucose/Galactose-Binding Protein
Stephanie Schmitz ('18)	San Diego, CA	Chemistry & Chinese	Modification of Glassy Carbon Electrodes with Diazonium Compounds
Jack Snider ('19)	Beavercreek, OH	Chemistry	Investigating Roundup in Stream Water
Sarah White ('18)	Akron, Ohio	BMB & Philosophy	Measuring the Effectiveness of the Active Learning in Organic Chemistry Workshop
Keaton Wood ('18)	Mansfield, OH	BMB	Analyzing the Effects of a Better Leaving Group in Nucleophilic Acyl Substitution Using M06-2X and MP2
Justin Unternaher ('19)	Newark, Ohio	BMB	Nucleophilic Acyl Substitution of Acetyl Cyanide with Cyanide

## Alumni Notes

Travis Green ('15) was honored as a 2016 Outstanding Teaching Assistant at Bowling Green State University.

Nicole Perry ('14) received a Philanthropic Educational Organization Scholar Award. She is a Ph.D. student in the Department of Pharmacology at Vanderbilt University.

Rachel Saylor ('10) is a postdoctoral researcher at the University of South Carolina. She recently went to Germany for a research collaboration.

Lydia Kisley ('10) was named to the Forbes "30 under 30" list for 2017. She is a postdoctoral researcher at the University of Illinois.

Our 2016 alumni panel included Tabi Thompson ('06), Ryan Weiss ('08), Emily Daniels Weiss ('09), William Sutter ('11), Erik Werstler ('12) and Maggie Cole ('16).

Emily Daniels Weiss ('09) and Ryan Weiss ('08) are the proud parents of new little chemist, Allen Michael Weiss. He cleverly weighed 6.02 lbs at birth.

The following alumni returned to give seminar presentations in 2016-17: E. J. Taylor ('76); Nicole Perry ('14); Andrew Franjesevik ('14); Jill (Underwood) Peters ('12); and Jo Davisson ('78).

The Fall 2017 alumni panel included (left-to-right — see photo below) Jessica (Shellhouse)Toms ('04), Kevin To ('13), Chelsea (Horvath) Shugart ('16), Travis Green ('15), and Dan Marous ('09).



The Weiss family

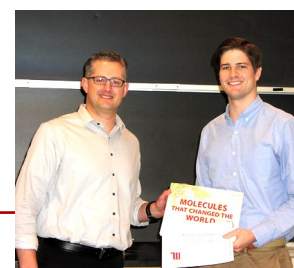


To include your updates in the next department newsletter and/or to send changes in e-mail addresses, write to [neelye@wittenberg.edu](mailto:neelye@wittenberg.edu)

### Dan Marous ('09) Hired as Visiting Assistant Professor



The department hired Daniel Marous ('09) as a Visiting Assistant Professor to teach courses in organic, biochemistry, toxicology, and chemistry for Wittenberg's Nursing program. Dan completed his Ph.D. in Pharmacology and Molecular Sciences from the Johns Hopkins University, where his research was in biochemistry and organic chemistry. He then worked as a postdoctoral scholar at the University of Notre Dame before returning to Wittenberg. He and his wife Mandy (Crosser) ('10) live in Springfield. The department is pleased to welcome back a BMB graduate to fill in for Pete Hanson's departure (see p. 1) and Amil Anderson's fall sabbatical leave.



Above: Dr. Houseknecht and Eric Samuelson.

Below: Dr. Cline, Ally Peebles and Erin Armitage.

### Chemistry & BMB Majors Receive Department and University Awards 2016-17

**Sartoris Award for Outstanding Senior Chemistry Major:** Phuc "Leo" Vo

**Outstanding Senior BMB Major:** Anna Gutridge

**Patterson Award for Outstanding Junior:** Jessica Skoglund

**James T. Gregory Award:** Anna Gutridge

**Organic Award:** Eric Samuelson

**General Chemistry Award:** Ally Peebles and Erin Armitage





To contribute to the chemistry department and/or Wittenberg's Annual Fund, send donations to:

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## Thanks to these recent chemistry department contributors

The department received generous gifts and bequests the past year from the following:

*Franta Fund:* Mrs. Virginia Franta

*Glasoe Fund:* Dr. Timothy and Mrs. Teri Knilians

*Sartoris Fund:* Dr. William H. Bunnelle & Ms. Leslie V. Evans

*Biochemistry Gift Account:* Ms. Keri L. Good

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Mrs. Christina Manuel  
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Mr. David L. Wackerow  
Ms. Lynn A. Werner &  
Mr. Mark C. Werner

## Remembering Virginia "Gynnie" Franta ('36)

Virginia "Gynnie" Franta (1914-2017), Wittenberg class of 1936, passed away on June 25, 2017. She received a 2008 Alumni Citation and the 2012 Wittenberg Medal of Honor in recognition of her many contributions to her alma mater and especially to its Department of Chemistry. We are forever indebted to her inquisitive mind and generous heart that have, among other things, funded our extensive summer research program. Over 100 students have benefitted from research made possible by the Franta fund, and her legacy will continue to make a significant impact for generations of students to come.

## Alumni participation in new student recruitment efforts

An important goal in the Chemistry Department's Strategic Plan is to attract more students to Wittenberg and to the Chemistry and Biochemistry/Molecular Biology (BMB) program. Alumni are an important part of this goal, and we are amazed by the outstanding response to our call for alumni participation in recruiting this spring. We sent an invitation to alumni via Facebook and LinkedIn and promptly received notes from almost 30 alumni volunteering to help in our efforts. With this large response, we were able to provide the contact information for over 200 prospective students that our alumni contacted by e-mail, phone or text messaging. We look forward to learning how many of the new class of Wittenberg students declare majors in Chemistry and BMB. The department greatly appreciates the help from all who participated in this recruitment effort. We plan to continue this effort in the spring, so please let us know if you are interested in helping again, or for the first time!

Interested in helping us  
recruit the class of  
2022?  
write to  
[neelye@wittenberg.edu](mailto:neelye@wittenberg.edu)



## Chemistry Department Papers and Conference Presentations, 2016-17

### Publications

*Safety in Academic Chemistry Laboratories*, 8<sup>th</sup> edition, **David C. Finster** (editor, co-author), ACS Committee on Chemical Safety publication. 2017

*How to RAMP Up Safety for Demos*, **David C. Finster**, InChemistry, April 20, 2017

Houseknecht, J. B. *Just-in-Time Teaching Organic Chemistry with iPads in The Flipped Classroom*; Muzyka, J. L., Luker, C., Eds.; ACS Symposium Series; American Chemical Society: Washington, DC, 2016, 81-92.

### Presentations

**Nick Rigel**, Natalie Nguyen, and Amil Anderson, "Using Molecular Dynamics Simulations to Analyze the change in the Free Energy of Binding of Glucose to GGBP caused by Mutation to Residue 213 from Ala to Trp", MERCURY Conference, July 21-23, 2016, Bucknell University, Lewisburg, PA.

**Nicholas R. Rigel** and Amil G. Anderson "Measuring The Binding Energy Of Glucose To GGBP Computationally", 31st Annual National Conference on Undergraduate Research, University of Memphis - April 6-8, 2017.

**Sabrina Davis**, Natalie Nguyen and Amil Anderson, "Calculating  $\Delta G$  Binding of Glucose for Asp→Cys-236 Mutated GGBP", MERCURY Conference, July 21-23, 2016, Bucknell University, Lewisburg, PA.

**Natalie Nguyen**, Sabrina Davis and Amil Anderson, "Measuring the Free Energy Change of Binding of Glucose to Glucose-Galactose Binding Protein", MERCURY Conference, July 21-23, 2016, Bucknell University, Lewisburg, PA.

*Preconcentration of Lead and Copper Ions with Carboxylate-Modified Nonporous Graphitic Carbon*, Riley Alexander, **Braden Crouse**, Kristin K. Cline, Pittcon, Chicago, IL, March 8, 2017.

*Why and how to use chemistry demonstrations*, **David C. Finster**, BCCE, Northern Colorado University, August, 2016

*A plan to help chemical health and safety take its rightful place in the chemistry curriculum*, **David C. Finster** BCCE, Northern Colorado University, August, 2016

*Teaching toxicology through a laboratory safety program*, **David C. Finster**, BCCE, Northern Colorado University, August, 2016

*Revising Safety Guidelines for Chemical Demonstrations*, M. Wilhelm, **D.C. Finster**, S. Sigmann, I. Cesa, BCCE, Northern Colorado University, August, 2016

*Teaching beyond our expertise: A student-led toxicology course*. **Houseknecht, J. B.** Oral presentation, 24th Biennial Conference on Chemical Education, Greeley, Colorado, 2016.

*Did the 2015 Active Learning in Organic Chemistry Mini-Workshop change anything?* **White, S. A.**; Houseknecht, J. B., Oral presentation, 24th Biennial Conference on Chemical Education, Greeley, Colorado, 2016.

*Development of an Aldehyde and Ketone Concept Inventory*, Leontyev, A.; **Houseknecht, J. B.** Oral presentation, 24th Biennial Conference on Chemical Education, Greeley, Colorado, 2016.

*Analyzing the Effects of a Better Leaving Group for Nucleophilic Acyl Substitution*, **Wood, K.**; Houseknecht, J. B. Poster presentation, 15th MERCURY Conference on Computational Chemistry, Lewisburg, Pennsylvania, 2016.

*Investigations into the Effect of SMD Solvent on Nucleophilic Acyl Substitution Reactions with M06-2X*, **Vo, P.**; Houseknecht, J. B. Poster presentation, 15th MERCURY Conference on Computational Chemistry, Lewisburg, Pennsylvania, 2016.

### Workshops

*Active Learning in Organic Chemistry. Chemistry Collaborations, Workshops and Communities of Scholars (cCWCS)* **Houseknecht, J. B.** Atlanta, June 12-15, 2017.



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## Chemistry & BMB Class of 2017



Back row left to right: Bryan Hoggatt, Casey Hobbs, Michelle Brunswick, Braden Crouse, Leo Vo, Devlin Gatz, Brandon Miner. Front row, left to right: Kathleen Jedreski, Anna Gutridge, Amber Luke, Natalie Nguyen.

## Chemistry Graduates

**Braden Crouse** was accepted to Ohio University's D.O. program and also received a job offer at Essex.

**Devlin Gatz** is seeking employment.

**Leo Vo** is pursuing a PhD in Biomedical Sciences at Columbia.



## Biochemistry/Molecular Biology Graduates

**Michelle Brunswick** is seeking a job in research and traveling the western U.S.

**Kendall Farmer** took summer school classes and is applying to a Physician's Assistant program.

**Anna M. Gutridge** received offers from OSU, Purdue, UM-Baltimore, University of Kentucky and Northeastern University, but will be attending Purdue University; Ph.D. Medicinal Chemistry Molecular Pharmacology program.

**Casey Hobbs** did not share her plans.

**Bryan Hoggatt** has been accepted to Palmer College of Chiropractic to pursue a doctorate.

**Kathleen Jedreski** accepted a Research Assistant position at Nationwide Children's Hospital.

**Amber Luke** plans to work as a lab tech until she finds a marine science job.

**Brandon Miner** is searching for employment.

**Natalie Nguyen** received offers from Cornell, Campbell, University of Chicago, University of Arizona, Duke, and Columbia. She first wants to travel Europe.



Photos from Pete Hanson's farewell reception. Left: Kay Reed stopped by. Above: Interim President Dick Helton and Pete Hanson ponder something important. Right: Statistics professor Doug Andrews and Pete.