

# Periodic Times

Wittenberg University Department of Chemistry  
*Catalyzing Student Success*

VOL. 17

ACADEMIC YEAR 2023-2024

## Top stories in this newsletter



Dept. bids farewell to Stephanie Eveland Parrot (p.3)



Dan Marous named Lilly Fellow (p.3)



Witt experiences total solar eclipse (p.6)



New instrumentation added to the lab (p.6)



Class of 2024 graduates (p.7)

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## Research Students Present Posters at Multiple National Meetings

Six Wittenberg students and their research mentors traveled across the US to present their summer research findings in February, March and July, 2024. Paige Kaiser ('24) and Kristin Cline flew to San Diego for Pittcon. Paige presented her poster and they enjoyed talks by alumni Lydia Kisley ('10) and Michelle Peace ('91). Branden Nicholas ('24), Paige Rudolf ('25), and Andy Dozal ('26) presented posters at the American Society for Biochemistry and Molecular Biology (ASBMB) National Meeting in San Antonio, accompanied by their research mentors Dan Marous and Margaret Goodman. Victoria Pipinich ('25), Maddie Pawlak ('26) and Ray Dudek presented at the Spring 2024 meeting of the American Chemical Society in New Orleans. Paige Rudolf presented at the Biennial Conference on Chemical Education held in Lexington, Kentucky in July. Professors Dudek, Houseknecht and Marous also attended BCCE.

Student travel was made possible by the Franta Fund for Chemistry. See p.8 for photos.

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## Chemistry Department Faculty Lead FIRE Week Activities

As part of the new Connections Curriculum, Wittenberg University instituted FIRE Week: Focused, Integrated, Reflective, Experience. Spring 2024 was the third year of offering FIRE Week experiences and the first time that Chemistry Faculty participated.

Professor Ray Dudek taught a week-long course on the Business of Craft Beer, which included a lesson in homebrewing and trips to local craft breweries.

Dr. Stephanie Eveland Parrot co-led (with Education Professors Mike Daiga and Layla Besson) a trip with over 30 students to the Great Smoky Mountains National Park Institute at Tremont. The students learned about teaching STEM subjects, focusing on experiential learning pedagogy. The experience included campfire songs, stargazing and a roller coaster.

(Click [here](#) for more information on FIRE week at Wittenberg).

## Thank you to our Donors!

*Per University policy, we will no longer report donor names in our newsletter.* But we are pleased to report that the department continues to receive generous donations. Funds given explicitly to the Chemistry Department and our endowment earnings have been used this year for a new ion chromatograph and a new atomic absorption spectrometer, to fund the summer research program, for six new students who have received Chemistry Special Interest scholarship awards, and \$22 K for four need-based Virginia E. Franta Chemistry Awards.

To contribute to the chemistry department and/or the Wittenberg Fund, [click here](#):

Or mail donations to:  
Wittenberg Fund  
Wittenberg University  
PO Box 720  
Springfield, OH 45504

## Alumni and Friends Updates

David Mowry ('08) was promoted to Senior Manager, Modeling and Computational Design at OmniAb, Inc.

Lydia Kisley ('10) received a 2023 Cottrell Scholar Award from the Research Corporation for Science Advancement.

Rachel Saylor ('10) was granted tenure at Oberlin College.

Maddy Miller ('16) is a postdoctoral research scientist at Eli Lilly in the Immunology and Biotechnology Discovery group, researching potential therapeutics for idiopathic pulmonary fibrosis and systemic sclerosis.

Nick Rigel ('18) received his PhD from the Department of Chemistry and Biochemistry at The Ohio State University.

Amanda Lam ('22) accepted a position as Chemistry Lab Manager (Organic/Inorganic) at University of Illinois Urbana-Champaign.

Caroline Barth ('21) completed her Masters from Bowling Green State University and is Executive Director of the Clear Lake Township Land Conservancy in Indiana.

Hope to see you at Homecoming! October 3-6, 2024

Click [here](#) for information

## Staff News, Presentations and Publications



L-R: Ray Dudek, Jennifer Gile, Stephanie Eveland Parrott, Justin Houseknecht, Kristin Cline, Daniel Marous

Dr. Stephanie Eveland Parrott has accepted a position at the University of Iowa. This spring she co-lead a FIRE week experience (see p.1). The department is grateful for her many contributions over the past four years and sad to see her leave.

Dr. Ray Dudek led a FIRE week experience on the Business of Craft Beer (see p.1).

Dr. Kristin Cline attended a meeting of the ACS 2025 Instrumental Analysis Examination Committee in San Francisco in August 2023 to work on drafting a trial exam.

Dr. Daniel Marous was appointed BMB Program Director and was awarded a Lilly Faculty Fellowship. Click [here](#) for more information.

Jennifer Gile was recognized for having completed 5 years of service to the University.

### Workshop facilitation

Justin Houseknecht, *Active Learning in Organic Chemistry: Improve student learning and engagement with formative assessment and collaborative learning*. BCCE, Lexington, KY, July 31, 2024.

### Presentations

Paige Kaiser and Kristin K. Cline, *Preliminary Survey of Soil Volatiles Using Headspace Solid Phase Microextraction and GCMS*, Pittcon, San Diego, CA, February 28, 2024, poster.

Kristin K. Cline, *Lab Practicals: Are they Practical for Analytical Courses?*, Midwestern Universities Analytical Chemistry Conference, Iowa City, IA, November 3, 2023, oral.

Ray Dudek, "The Elements of a Chemistry Program", Biennial Conference on Chemical Education, Aug 2024, University of Kentucky, Lexington, KY, poster.

Ray Dudek, "Kinetics Experiments that are Green and Inexpensive", American Chemical Society National Meeting, March 2023, New Orleans, LA, oral.

Victoria Pipinich and Ray Dudek, "Analysis of Heavy Metals in Dark Chocolate", American Chemical Society National Meeting, March 2023, New Orleans, LA, poster.

Paige Rudolf, Andy Dozel, and Daniel Marous. "Using Undergraduates to Screen Soil for Antibiotic-Producing Species" Poster, Biennial Conference on Chemical Education, Lexington, KY (July, 2024).

Paige Rudolf and Daniel Marous. "Antibacterial and Synergistic Effects of Antibiotics, Essential Oils, and Essential Oil Components against *E. coli* and *S. epidermidis*" Poster, American Society for Biochemistry and Molecular Biology National Meeting, San Antonio, TX, (March, 2024)

Andy Dozal and Daniel Marous. "Testing for Antibiotic Producing Bacteria in Soil" Poster, American Society for Biochemistry and Molecular Biology National Meeting, San Antonio, TX, (March, 2024).

Leontyev, A.; Houseknecht, J. B.; Muzyka, J.; Welder, C. *Results of the 2021-23 Active Learning in Organic Chemistry Workshops and Faculty Learning Communities*. Biennial Conference on Chemical Education, Lexington, July 31, 2024.

## 2024 Student Award Winners

**Sartoris Award for Outstanding Senior Chemistry Major:** Paige Kaiser

**Outstanding Senior BMB Major:** Branden Nicholas, Olivia Norbut

**Patterson Award for Outstanding Junior Chemistry Major:** Victoria Pipinich

**James T. Gregory Award:** Paige Kaiser

**Organic Chemistry Award:** Josh Putka

**General Chemistry Award:** Hailey Mulvihill and Taylor Rausch

**Franta Chemistry Interest Scholarship:** Lucas Berner, Abbey Brunelle, Alex Couch, Ibrahim Dia, Cam Gladden, Owen Gulvas, Abby Holman, Guy Howell, Alex Martin, Shannon Morrissey, Hailey Mulvihill, Ava Otey, Sifen Semu, Chris White, Oliver York

## University Awards to Chemistry and BMB majors

**M. Alice Geiger Award:** Parker Hayes

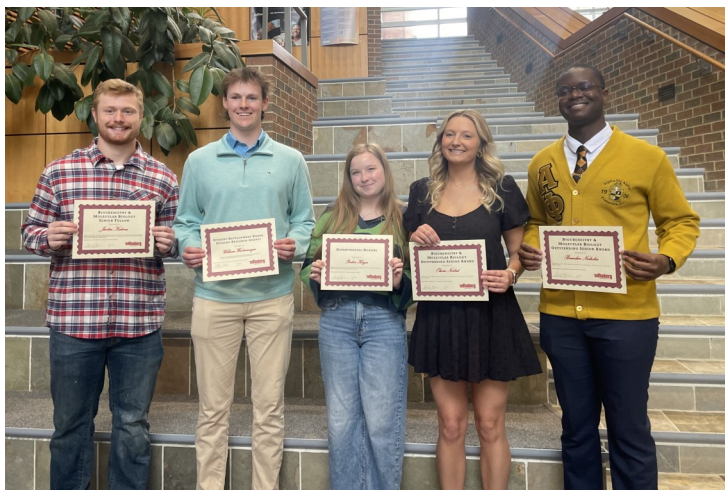
**Martin Luther King Jr. Award:** Branden Nicholas

**Champion City Award for Community Impact:** Branden Nicholas

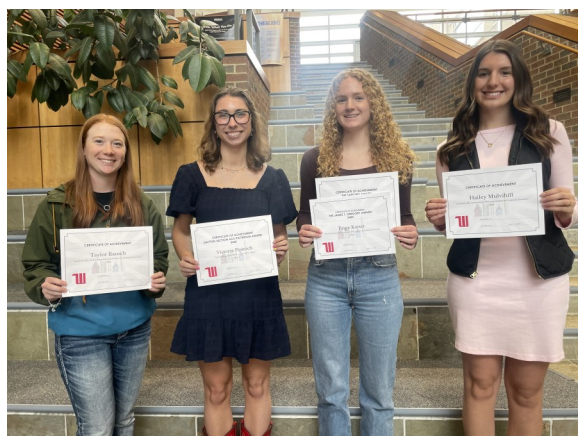
**Copeland Community Service and Social Justice Award:** Parker Hayes

**Presidential Scholar:** Justin Katona

**Alma Mater:** Victoria Pipinich



Top (L-R) BMB award winners Justin Katona, Will Westermeyer, Parker Hayes, Olivia Norbut, Branden Nicholas. Right: Chemistry award winners, L-to-R: Taylor Rausch, Victoria Pipinich, Paige Kaiser, Hailey Mulvihill.



## Summer 2024 Research

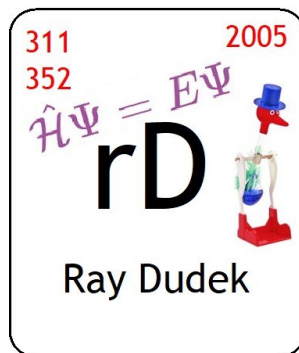
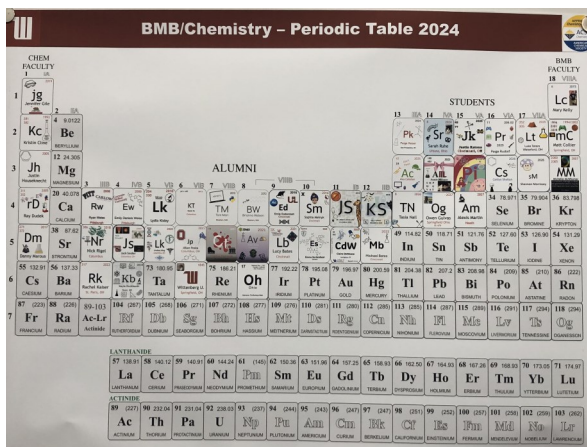
Summer researchers, top, L-to-R:  
Victoria Pipinich, Luke Teters, Owen  
Gulvas, Derek Stinefield.  
Bottom row: Paige Rudolf, Caitlyn  
Shelton, Hailey Mulvihill, Tasia Nall,  
Celeste Hartings



| Name<br>(class year)       | Hometown            | Major(s)             | Summer Project   |
|----------------------------|---------------------|----------------------|--|
| Owen Gulvas<br>(*27)       | Springfield,<br>OH  | Chemistry            | Detection of Volatile Organic Compounds in Soil Using Solid-Phase Microextraction and Gas Chromatography-Mass Spectrometry |
| Celeste Hartings<br>(*27)  | Tipp City, OH       | BMB &<br>Mathematics | Evaluation of Antibiotic Resistance in Staphylococcus Epidermidis  |
| Hailey Mulvihill<br>(*27)  | Florence, KY        | BMB &<br>Mathematics | Examining tRNA Quality under Oxidative Stress Conditions   |
| Tasia Nall<br>(*26)        | Indianapolis,<br>IN | Chemistry            | Biocides, Chelating Agents, and their Observational Effects on E. coli   |
| Victoria Pipinich<br>(*25) | Fort Worth,<br>TX   | Chemistry            | Analysis of Heavy Metals in Dark Chocolate and Cocoa Powder  |
| Paige Rudolf<br>(*25)      | Saint Paris,<br>OH  | BMB                  | Screening Soil for Antibiotic-Producing Bacteria   |
| Caitlyn Shelton<br>(*26)   | Powell, OH          | Chemistry            | How NAC and OCD Affect the Gene Expression of the Dopamine 4 Pathway   |
| Derek Stinefield<br>(*25)  | Alexandria, IN      | BMB &<br>Mathematics | Mathematical Descriptions of Yeast Growth Curve Perturbations  |
| Luke Teters<br>(*25)       | Waterford, OH       | Chemistry            | Analyzing Anions in Tea, Water, and Soil Samples with Ion Chromatography   |

## Make an Element

The Chemistry Department created a periodic table featuring elements to represent faculty, staff, students and alumni. If you wish to generate an element and be added to the periodic table, email Ray Dudek (rdudek@wittenberg.edu) for a template and instructions. We are hoping to get enough alumni to fill out the lanthanide and actinide sections of our periodic table.



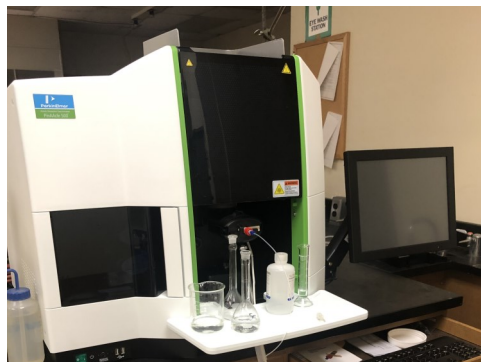
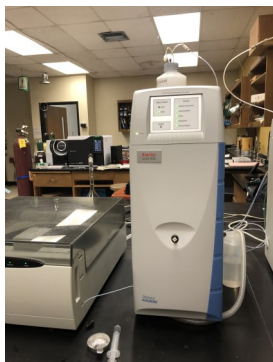
## Wittenberg Community Celebrates Total Solar Eclipse



Springfield was in the path of totality for the April 8, 2024 solar eclipse and the Wittenberg community gathered in the stadium to experience this once-in-a-lifetime opportunity. The Chemistry department hosted a blueprinting activity, using pre-eclipse sunlight to produce images on chemically-treated fabric and paper. The Wittclipse logo (left) was designed by chemistry major Victoria (Pip) Pipinich ('25). For more photos of the event, see p. 9.

## New Equipment Purchased for Teaching and Research

This year, the department purchased two new instruments for research and teaching. Our AAAnalyst 200 atomic absorption spectrometer, purchased in 2000, ceased working in spring 2024. The new Perkin Elmer PinAAcle is being used for summer research, and will be used in analytical and physical chemistry courses. The Thermo Fisher ion chromatograph is being used in summer research to detect anions in water, soil and tea samples, and will be incorporated into analytical courses.



Left: ion chromatograph  
Right: atomic absorption spectrometer

# Class of 2024



left-to-right: Cami Duncan, Sarah Ruhe, Olivia Norbut, Parker Hayes, Brandon Nicholas, Laura Stauffer, Connor Runyan, Paige Kaiser, Emma Lindsey. Not pictured: Jessica Wells.

## Post graduation plans for our majors:

**Cami Duncan** (BA, BMB) is seeking employment in the BMB field.

**Parker Hayes** (BS, BMB) was accepted to the Peace Corps and will be serving in Guyana.

**Paige Kaiser** (BS, Chemistry) is seeking employment in the chemical industry.

**Emma Lindsey** (BS, BMB) is applying to medical school.

**Brandon Nicholas** (BS, BMB and BA, Psychology) was accepted to the Peace Corps and will be serving as a community health facilitator in Vanuatu.

**Olivia Norbut** (BA, BMB) is applying to PA school.

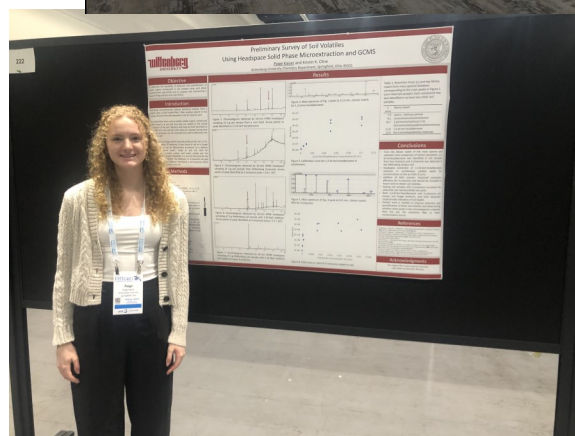
**Sarah Ruhe** (BA, BMB) is a Microbiology Quality Analyst at Givaudin.

**Connor Runyan** (BA, BMB) is working as a Clinical Data Coordinator at Medpace.

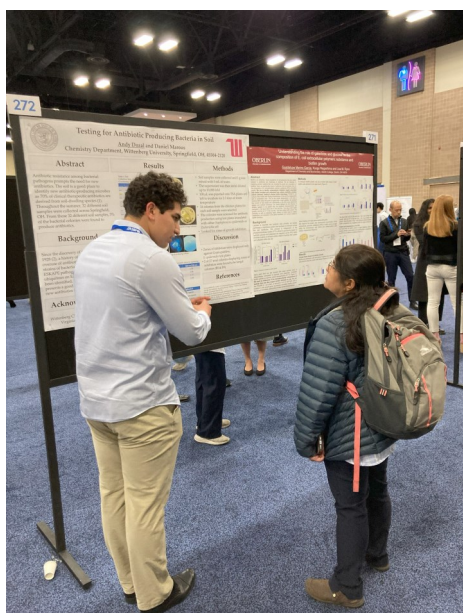
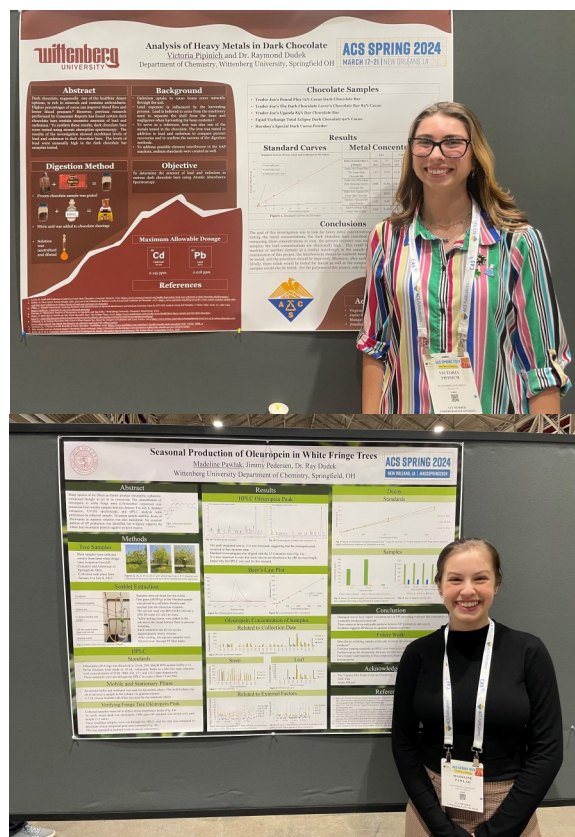
**Laura Stauffer** (BA, BMB) has been hired by the Kao Corporation as a quality control chemist in their finished product lab in Cincinnati.

**Jessica Wells** (BA, BMB and BS, Psychology) is working for UMCH Family Services as a Care Coordinator.

# National Meetings



Left: Andy Dozal ('26), Paige Rudolf ('25), Branden Nicholas ('24) at ASBMB in San Antonio. Above: Paige Kaiser ('24) at Pittcon in San Diego. Below: Victoria (Pip) Pipinich ('25) and Maddie Pawlack ('26) at ACS in New Orleans.





# WittClipse



Left: Students participate in cyanotype printing of the WittClipse logo.

Below: Photos taken during totality on April 8, 2024, at approximately 3:12 p.m.



To



include your updates in the next department newsletter or to volunteer for serving on the alumni panel or presenting a seminar, send information to Mary Kelly at [m21@wittenberg.edu](mailto:m21@wittenberg.edu)

Check out the department postings on [Youtube](#), Instagram and [Facebook](#).



WittChem



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Wittenberg University Department of Chemistry

PO Box 720, Springfield, OH 45506

(937) 327-6435