# **Chemistry Department News 2017–18**

#### **EMU Student Wins Poster Award at International Conference**



The Society for Archaeological Sciences selected EMU graduate student Jennifer Campos Ayala for one of two R. E. Taylor Poster Awards at the 42nd International Symposium on Archaeometry in Mérida, Mexico. Jenn is a student in Dr. Ruth Ann Armitage's lab; her poster, "Purple Dyes from the Carlos Museum Pre-Columbian Textiles Collection: Direct Mass Spectrometry and HPLC Analyses", includes work that is part of an ongoing collaboration with conservators and art historians at the Michael C. Carlos Museum at Emory University. Posters were judged on "the significance of the archaeological problem, appropriateness of the methods used, soundness of conclusions, quality of the poster display, and oral presentation of the poster by the student" according to the SAS website. SAS describes the Taylor Awards as follows:

This prestigious award acknowledges innovative student contributions to archaeological research through the use of scientific methods, and has enhanced the careers of prominent young scholars and professionals for more than a decade. The award is named in honor of Professor Emeritus R. Ervin Taylor of the University of California at Riverside for his outstanding contributions in the development and application of radiocarbon dating in archaeological research and his dedication to the founding of the Society for Archaeological Sciences; his leading role as President (1980) and General Secretary (1981-2002) of the Society; and his committed service as editor of the SAS Bulletin. Professor Taylor's many valuable contributions were recognized by the SAA in 2004 with the Fryxell Award for Interdisciplinary Research. The award consists of \$100 US, a one-year SAS membership and subscription to the SAS Bulletin.

Jenn is the second EMU student to be recognized with a poster award at the ISA meeting. In 2012, EMU undergraduate chemistry student John Hopkins was selected as one of two Martin Aitken Award winners for his work presented at the 39th ISA in Leuven, Belgium.

In addition to this honor, Jenn has been recognized with an EMU Graduate School Research Support Award as well as the Martin and Antoinette Gorski Endowed Scholarship and the Summer Research Award. Jenn is beginning her second year in the EMU Chemistry Master's degree program, and is planning to continue her education with a Ph.D. in material science or analytical chemistry, which she hopes will lead to a job with NASA designing and building instruments for space missions.

Posted 6/13/18.

## **Emeritus Professor Ted Compere Passes Away**

We were sorry to learn of the passing of Emeritus Professor, Edward L. "Ted" Compere this past winter. Dr. Compere joined the EMU faculty in 1964 and retired in 1992, after 28 years. Professor Compere's specialty was polymer chemistry and he maintained an active research program, often in collaboration with our colleagues in the Polymers & Coatings program. He helped transform the research culture in the Chemistry Department. Among his many interests outside of Chemistry, he was an avid and accomplished tennis player. The department is very grateful for his contributions to the education of so many students.





Seven Chemistry Department MS Students Present at Graduate Research Conference

The Graduate Research Conference was held on March 16, 2018. Watch <u>a video</u> showing the seven chemistry students who presented at it.

Posted 4/13/18.

### April 13, 2018 News Briefs

- Jennifer Campos-Ayala (Armitage) received funding from the CAS Dean's Office to attend the International Symposium on Archaeometry in Merido, Mexico.
- Tyler Cooley (Friebe) received funding from the CAS Dean's Office to attend the National ACS meeting in New Orleans.
- Jeremy Ritchey (Guthrie) received funding from the CAS Dean's Office for his travel to the Canadian Society for Chemistry Conference in Edmonton, Alberta, Canada.
- Maria Milletti and Don Snyder were awarded Faculty Research Fellowships for next vear.
- Tim Brewer was awarded a sabbatical leave (and a Faculty Research Fellowship, which he will decline) for next year.
- Patreice Maier (Brewer), Kristine Platt (Milletti), Guadalupe Vazquez-Perez (Emal) and Marisa Gilliam (Albaugh) were awarded summer Undergraduate Research Stimulus Program (URSP) awards. The Chemistry Department received 4 of the 16 awarded in the university.
- Jocelyn Marsack (Edwards) was featured on EMU Today in a story highlighting some of the Undergraduate Symposium presentations.
- Ruth Ann Armitage was invited to give the keynote talk at an ACS Local Section event in Cleveland.
- Jeff Guthrie received funding from the CAS Dean's Office for his travel to the Canadian Society for Chemistry Conference in Edmonton, Alberta, Canada.
- Ruth Ann Armitage received funding from the CAS Dean's Office to attend the International Symposium on Archaeometry in Merido, Mexico.

# Larry Kolopajlo has Work Featured at the Faculty Showcase for Scholarly and Creative Activity



This year's Faculty Showcase was held on March 15, 2018. The Faculty Showcase celebrates faculty and their recently disseminated research, scholarly and creative activities from 2017. One

of the faculty members featured was Professor Larry Kolopajlo. Here he is shown signing a copy of a book to which he contributed a chapter titled "Green Chemistry Education in the Middle East."

The book is "*Green Chemical Processing, Volume 2: Developments in Research and Education*", Benvenuto, Ed,; De Gruyter, Berlin, 2017.

### **Sharon Vance Wins PTL Distinguished Teaching Award**

The Chemistry Department is very proud of Sharon Vance, winner of the EMU Part-time Lecturers Distinguished Teaching Award. Sharon is a homegrown EMU alum, having earned both her BS and MS degrees in our department. While a graduate student, Sharon worked as a laboratory teaching assistant, where she received excellent evaluations from both students and faculty. She developed great rapport with students with her down-to-earth approach. As a sign of things to come, she won our Graduate Teaching Award in 1994.

Sharon's fondness for teaching led her to join the department as a lecturer in 1996. Her instruction assignments have become quite varied in the past few years, from general education courses to the allied health course in organic and biochemistry (these are particularly difficult introductory courses---students



come in terrified about chemistry, and Sharon is able to allay their fears without lowering her standards), to majors courses in general chemistry and most recently, the biochemistry survey course. She has excellent teaching evaluations, and we hear only positive comments from her students.

Sharon is an all-around caring person who is sensitive to the needs of her students and friendly with her coworkers. She also is an excellent role model for young women with an interest in science. She regularly volunteers for outreach activities that require her time on weekends and over breaks, one example being "Digital Divas", exciting middle school girls about science. She has run a forensic science summer camp, and has participated in CSIE training, further demonstrating her commitment to teaching, even outside the classroom. With her great sense of humor and laid back nature, unexpected situations in the lecture or laboratory do not phase her; she handles them all professionally and never complains. She is willing to accept any assignment, even a course that meets late in the evening.

Prof. Nord, one of her nominators, stated: "I have assisted with the department's course scheduling for over 25 years. As such, I pay close attention to...ensure that we have the right people teaching the right courses. We can put Sharon into any introductory course (or more

advanced course, within her area of expertise) and we know that she will conscientiously do an excellent job, students will be happy with the quality of instruction received and they will be prepared for the next step of their educational journey. That's as good as it gets."

Congratulations, Sharon!

Posted 3/28/18.

#### March 16, 2018 News Briefs

- Margaret Champion (Evans/Heyl-Clegg) received the Best Abstract/Proposal Award in the sciences at this year's Graduate Research Fair.
- Robert Muterspaugh (Evans/Heyl-Clegg) was awarded \$750 for his research titled "Regulation of Extracellular IGFBP-3 by Humaninin A549 Cells."
- Heather Holmes was selected for the Chemistry GRE exam committee.

## February 14, 2018 News Briefs

- Cory Emal received a Provost's Research Support Award for his project, "Equipment to increase capacity and generate standard wort for Fermentation Science research projects."
- Jesse Smith (Backues), Ahmed Mohamed (Albaugh), and Maira Shoukat (Nord) each received an Honors Senior Thesis Research Award.
- Ronith Chakraborty and Jacquelyn Roberts (Backues), Alexis Marsh and Terence Stahl (Milletti), Zeineb El-Mohri and Marisa Gilliam (Albaugh), and Ifrah Skoukat (Nord) each received an Honors Undergraduate Research Fellowship for winter term.
- Jasmine Winzeler (Backues) was awarded travel funds from the CAS Dean's Office for the April trip to the Keystone Conference on Selective Autophagy in Kyoto, Japan.
- Robert Muterspaugh (Evans/Heyl-Clegg) was awarded a Graduate Travel Award through ASBMB (American Society for Biochemistry and Molecular Biology) for travel to the annual meeting in San Diego, CA in April.
- Cory Emal was interviewed by EMU Today TV about the Fermentation Science program. The program is on YouTube.
- Cory Emal also was awarded a Summer Research/Creative Activity Award for 2018.

### **Professor Amy Johnson Co-Leads Pop-Up Learning Community**

Professor Amy Johnson was one of the organizers and leaders of a pop-up learning community on climate change. Primary focuses included learning how to establish a productive dialogue and how to identify and deal with misinformation. The community involved an interdisciplinary team and over 150 students participated. Read the <u>full story</u>.





# **EMU's ACS Student Chapter Receives Honorable Mention for 2016-2017 Activities**

The ACS Committee on Education selects student chapters for distinguished programs and activities. Last year's EMU student chapter received Honorable Mention for its activities. Officers were Justin Powers and Natalia Anaya; chapter advisers were Tim Friebe and Jose Vites. The ACS student chapter meets in conjunction with the Chemistry Club.

Posted 1/08/18.

### **December 8, 2017 News Briefs**

• Amy Johnson received an eFellows award for "Integrating Early Engineering Experiences for Pre-service Integrated Science Teachers."

#### **Chemistry Undergrad Research Highlighted**



Undergraduate research in the Chemistry Department was highlighted on the EMU website with a feature article about the work being done by Professors Brittany Albaugh and Steven Backues and their students. Read the full story.

Posted 11/29/17.

### November 11, 2017 News Briefs

- Jeremy Ritchey (Guthrie) received funding from the Graduate School to support his research titled "Selection of Aptamer for Quantum Dot Labeled Glyphosate via Capillary Electrophoresis SELEX."
- Jeff Guthrie received a Provost's Research Support Award.
- Jennifer Campos Ayala (Armitage) received funding from the Graduate School to support her research titled "High Performance Liquid Chromatography (HPLC) Analysis of Ancient Textile Dyes from South America."
- Cory Emal received a James H. Brickley Award to support "Cicerone Certification: Faculty Preparation for a New Curriculum."
- Steven Backues received funding from the CAS Dean's Office for travel to the Keystone Conference on Selective Autophagy in Kyoto, Japan.
- Larry Kolopajlo published a chapter for the ACS Symposium Series titled "Analytical Methodologies for Arsenic, Selenium, and Mercury: A Historical Perspective."

### October 6, 2017 News Briefs

- Gavin Edwards received funding from the CAS Dean's Office for travel to the CPI Polyurethanes Conference in New Orleans.
- Nina Contis was an invited keynote speaker at the International Conference on Pure and Applied Sciences in Lahore, Pakistan.
- Tim Brewer became a grandfather. His daughter Katherine gave birth to a baby girl, Mia.
- Ruth Ann Armitage had a conference paper published in *Textile Specialty Group Postprints*.

### **Professor Steven Backues Receives Faculty Mentor Award**

At the College of Arts and Sciences fall meeting, Dr. Steven Backues, Department of Chemistry, was presented with the William Fennel Symposium Faculty Mentor Award. This award recognizes extraordinary leadership and guidance to undergraduate students and their research experience that includes presentation at the Undergraduate Symposium.

Dr. Backues was nominated by one of his research students, Jesse Smith, who wrote:



"Dr. Backues finds time to set aside five hours a week for individual meetings with his undergraduates. Additionally he organizes weekly laboratory meetings to ensure that each laboratory member is on the same page regarding individual projects... No matter how primitive the idea may seem, Dr. Backues is always willing to explain a concept to me and all of his other

[students]." Smith, a student researcher, chemist at Cayman Chemical, and a McNair Scholar, credits Dr. Backues for much of his success.

The award is named in honor of "Doc Fennel," Professor William E. Fennel, III, who joined the EMU faculty in 1970. He taught introductory biology classes—teaching close to 20,000 students. There are legends that he knew every student's name; and to this day, he still remembers! After his retirement, he continued as a strong supporter of the Undergraduate Symposium and the Kresge Science Initiative. Annually, a faculty mentor is recognized in his name, with a generous endowment established by one of his former students.

Posted 9/20/17.

# Professor Nina Contis's Views on Global Engagement Featured in Chemical & Engineering News

Dr. Contis recently had an article titled "Global engagement: A Competitive Advantage in the Practice of Chemistry" featured in Chemical & Engineering News. Dr. Contis is the chair of the ACS Committee on International Activities. Go to the article to learn how the ACS is moving forward in this important area.

Posted 9/12/17.



# September 8, 2017 News Briefs

- Terry Stahl (Milletti), Jaylen Taylor (Heyl-Clegg), Justin Powers (Emal), and Maira Shoukat (Nord) received URSP (Undergraduate Research Stimulus Program) awards for summer. Chemistry Department students received 4 out of the 14 awarded by the university.
- Adam Baraka (Evans), Carson Zois (Backues), Brianna Sohl (Holmes), and Hayley Cawthon (Backues) completed Honors theses.
- Jeff Guthrie was named a MVP (most valuable professor) by a student softball player and was honored at a game in April.
- Amy Johnson, along with Katherine Ryker (Geography and Geology), was interviewed on NPR to publicize support for the importance of science, science funding, and the important role of women in STEM fields.
- Anna Eitel (Heyl-Clegg/Evans) was awarded travel funds from the Dean's Office to attend the American Society for Biochemistry & Molecular Biology Conference in Chicago, IL, last April.
- Maira Shoukat (Nord) and Terrance Stahl (Milletti) received Honors Undergraduate Fellowships for Summer and Fall 2017.

- Steven Backues was the recipient of this year's William Fennel Symposium Faculty Mentor Award. Hedeel Evans, Heather Holmes, and Ross Nord were also nominated.
- Hedeel Evans, Jeff Guthrie, and Debbie Heyl-Clegg, with students Murali Jujjavarapu, Nathan Hendrickson, Anna Eitel, Yeji Park, Jennifer Garvey, Rebecca Newman and Daniel Esckilsen, had a paper accepted in Peptide and Protein Letters.
- Cory Emal and Gregg Wilmes received a check for \$2500 to the Fermentation Science Program from Brothers from the Arm of Honor Alumni Association. Their cider (served at the department banquet) also won an award.
- Cory Emal was issued a patent, *Plasminogen Activator Inhibitor-1 Inhibitors And Methods Of Use Thereof.*
- Hedeel Evans was awarded a Provost's Research Support Award.

# A Special Message for Alumni

We are very interested in hearing from you and in keeping in touch with you. If you send us your address or email address, we will be sure to keep you on our mailing list for the newsletter and the annual departmental banquet.