

October 2022

### Next Section Meeting

Date: Thursday, October 20  
Time: 7:00 pm (light refreshments will be available at 6:30pm)  
Location: Apache Rooms  
Rogers Student Center  
Tyler Junior College  
1401 E. Lake St.  
Tyler, TX 75701

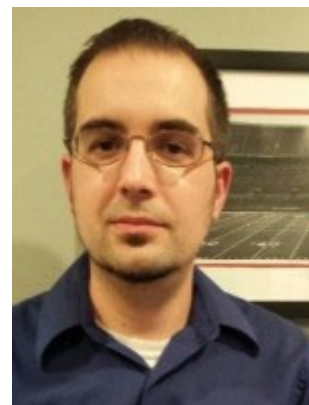
### Medicinal Chemistry in Animal Health and the Unique Challenges

Dr. Matthew Bedore  
Zoetis, Inc.

Medicinal chemistry in human health is a well-documented discipline but the challenges facing an animal health medicinal chemist are often less known and can vary from their human health counterpart. One such example is in heartworm (*Dirofilaria immitis*) prevention in companion animals which is becoming increasingly problematic due to developing resistance against current macrocyclic lactone (ML) treatments. In order to combat resistance, new substrate is being sought to achieve HW prevention. Depsipeptides, such as emodepside, represent an exciting class of molecules which have shown efficacy against ML resistant heartworm strains in dogs. Initial structure-activity relationship development and navigation of complex synthetic challenges led to the identification of new depsipeptides with improved in vitro potency and larval stage selectivity over emodepside. The unique challenges of this class of compounds for treating canine heartworm disease and the overall differences in early discovery for animal health will be discussed from a medicinal chemistry perspective.

### Speaker Bio

Dr. Matthew Bedore is a Cleveland, Ohio native who graduated from Miami University in Oxford, OH with a bachelor's degree in chemistry in 2003. Dr. Bedore then attend The Ohio State University for his doctorate degree working on the synthesis of the natural product amphidinol 3 with Professor Leo A. Paquette. Upon completion of his Ph.D. in 2008, Dr. Bedore joined the MIT-Novartis Center for Continuous Manufacturing as part of Professor Tim Jamison's lab. There he investigated using flow chemistry to enable organic synthesis in such reactions as aminolyses of



epoxides, Vorbrüggen glycosylations, and photochemical deoxygenation of ribonucleosides. Dr. Bedore began his professional career at Kalexsyn, a CRO located in Kalamazoo, MI in 2010. He specialized in early medicinal and process chemistry and was named Associate Director of Chemistry in 2016. He successfully led teams in programs aimed at the discovery of rapamycin analogs for mTORC1 inhibition and thio-dissacharides for pulmonary fibrosis. In 2017, Dr. Bedore joined Zoetis, the world's leading animal healthy company, and was promoted to Senior Principal Scientist in 2020. At Zoetis, Dr. Bedore represents Zoetis on all external medicinal chemistry efforts across the organization, is the lead medicinal chemistry representative for the atopic dermatitis and pain/inflammation therapeutic areas and is a project team leader for Zoetis's heartworm lead seeking program.

\* \* \* \* \*

### **We Need You!**

Our section elections will be held soon. You may have noticed that we have no Secretary this year. We need people who are willing to serve in leadership roles within the section. This year, every position will be voted on. You can make a difference by becoming involved in the decision-making process of our section. The following positions are one-year terms: Chair-Elect (with an additional year as Chair), Secretary, and Treasurer. The following positions are three-year terms: Councilor and Alternate Councilor.

The Chair-Elect is responsible for planning the meetings for the year that they chair the section. They have the opportunity to attend the ACS Leadership Institute in January (all expenses paid). They submit a short report to ACS in the spring.

The Chair chairs an executive committee meeting at the beginning of the year. They preside over each meeting and in the fall develop the slate for section elections. They submit an annual report and ensure the officers have completed their parts of the report, in the spring to ACS.

The Secretary is responsible for taking minutes at the executive committee meeting, sending out the newsletters (which are prepared by the newsletter editor), and filing reports required by ACS.

The Treasurer is responsible that financial obligations of the section are paid, and for filing financial information with ACS and the IRS.

The Councilor represents the section at the ACS Council meetings held in conjunction with National Meetings. Most of the expenses for attending Council are covered for each meeting. The Alternate Councilor fills the attends Council when the Councilor is unable to attend. Both officers have the opportunity to serve on a variety of ACS committees and/or task forces. The Councilor approves the annual report that is submitted to ACS.

If you are willing to serve in any of these positions or would like more information regarding the position, please contact Sean Butler ([sbutler@uttyler.edu](mailto:sbutler@uttyler.edu)) by Monday, October 17, 2022. Ballots will be sent by the end of October.

### Upcoming Dates

October 16-22	National Chemistry Week: The Fabulous Fibers: The Chemistry of Fabrics
October 20	Matthew Before, Zoetis, Inc. @ Tyler Junior College, Tyler, TX
November 6-9	Southwest Regional Meeting @ Baton Rouge, LA

### 2022 Section Officers

Chair	Sean Butler	<a href="mailto:sbutler@uttyler.edu">sbutler@uttyler.edu</a>
Chair-elect	Catherine Elueze	<a href="mailto:catherine.elueze@tjc.edu">catherine.elueze@tjc.edu</a>
Treasurer	Jerome Stavinoha	<a href="mailto:jstavinoha@gmail.com">jstavinoha@gmail.com</a>
Secretary		
Councilor	Mike Sheets	<a href="mailto:psc.cornerstone@gman.com">psc.cornerstone@gman.com</a>
Alt. Councilor	Philip Verhalen	<a href="mailto:philip.verhalen@gmail.com">philip.verhalen@gmail.com</a>

### Section Website

[www.acs.org/easttexas](http://www.acs.org/easttexas)

Newsletter Editor	Ruth Hathaway	<a href="mailto:ruthhathaway@msn.com">ruthhathaway@msn.com</a>
-------------------	---------------	--