

^{revised} The Blue Ridge Chemist

Since 1947 the Official Local Section Publication of the Virginia Blue Ridge Section, American Chemical Society

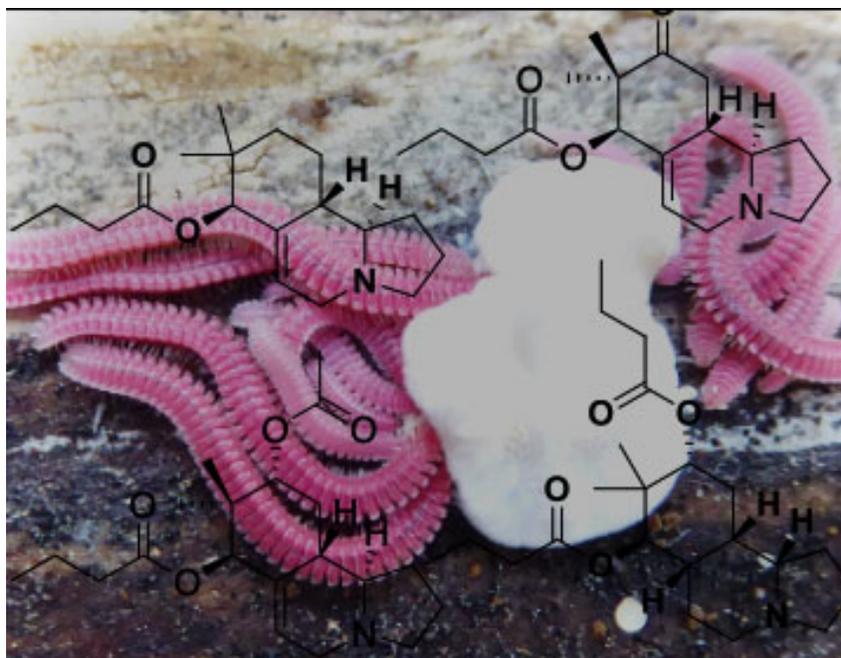
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Roanoke College Hosts the September Meeting



Meeting Information

- 711th Meeting of the Virginia Blue Ridge Section, American Chemical Society.
- Emily Mevers will speak on “*Psychedelic Millipedes*”

Agenda for Thursday, September 14, 2023

- ~~5:30 to 6:00 PM Social Time, Pickle Lounge, Colket Commons~~ canceled
- 6:00 to 7:00 PM Dinner, Colket Commons
- 7:00 to 8:00 PM Lecture, Massengill Auditorium

Dinner will be a trip through the Roanoke College dining hall. No RSVP is required.

Keynote Speaker: Dr. Emily Mevers

Assistant Professor of Chemistry

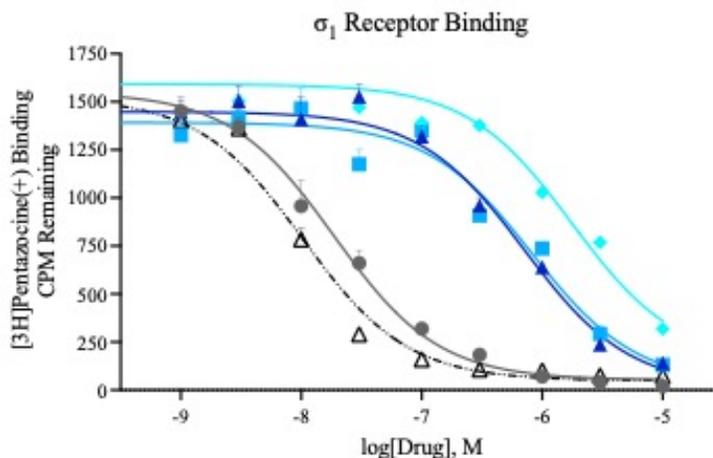
Virginia Tech

Emily Mevers grew up in southwestern Florida where she became passionate about the marine environment. Ultimately, this childhood background seeded her interest in natural products chemistry! She received her B.S. in Chemistry at the University of South Florida in 2009, where she conducted undergraduate research in Bill Baker's laboratory studying terpenes from nudibranchs (the coolest invertebrates!). She then went on to obtain her Ph.D. in 2014 at UCSD under the mentorship of William Gerwick studying toxic secondary metabolites produced by marine cyanobacteria. Her continued passion for natural products chemistry led her to join Jon Clardy's lab at Harvard Medical School as a Postdoctoral Research Fellow. In 2020, Emily began her independent career at Virginia Tech, and her research group focuses on understanding the ecological role of natural products and leveraging this information for commercialization.



Lecture Abstract: *Psychedelic Millipedes!*

Natural products, small molecules produced in nature, are commonly deployed as defensive agents. These molecules have formed the basis for many of today's drugs. Millipedes have evolved specialized glands to store structurally diverse chemical defenses, including cyanide-containing metabolites, alkaloids, and oxidized aromatics. Our study into the excretions of understudied millipedes, *Ischnocybe plicata* and *Andrognathus corticarius*, led to the isolation and characterization of many new oxidized alkaloids that have potent and selective binding affinity (see diagram below) for a neuroreceptor called sigma-1. Some of the natural products we have discovered are potential candidates for pain medications to replace current opioids. In my lecture I hope to convey the technical challenge, the potential significance, and the sheer joy of discovering previously unknown and potentially useful organic compounds in the glands of creepy, colorful critters that live in Appalachian forests and beyond.



Local Section Business

Nominations – including self-nominations – are being accepted for the position of Chair-Elect. We continue to welcome your suggestions for new leadership in the Section. If you are interested in serving, or if you know someone else who would enjoy serving, please contact Owen Lofthus at Virginia Western Community College (olofthus@viriniawestern.edu). The Chair position of the Local Section operates on a three-year cycle. In the first year, the Chair-Elect has few duties but learns how the Executive Council functions. In the second year, the Chair presides over two semi-annual business meetings, among other duties. In the third year the Past-Chair has no specific duties. Therefore, if “fear of the unknown” is keeping you from volunteering, know first that the Local Section does not conduct a great deal of complex business; second, that you will have guidance and support from your Executive Council colleagues as you take on your responsibilities in the second year of the cycle; and third, that there is NOT a requirement that the Chair needs to attend any specific number of local section meetings, although one would hope that an engaged Chair would want to attend at least some of them.

Directions to Roanoke College

From I-81 take exit 140 (Route 311) and proceed southbound on Thompson Memorial Drive, toward Salem. Turn right onto Peery Drive to enter the campus. You may park in one of the lots ahead, which are near the Colket Center, or you may take High Street, Clay Street, and Market Street to park near Massengill Auditorium. For disability access routes, please contact Gary Hollis. The talk is in Massengill Auditorium, while the social time and dinner will be held in the Pickle Lounge of the Colket Center.

