

Biology and Beyond



February 2024

Welcome Back!

We hope that everyone had a great winter break and that you are all refreshed and ready to start spring semester. We have a lot going on this spring and next fall so keep an eye on the newsletters as they come out. There were a number of office staffing changes over interim. Kelly is still working in the Biology office, but if you stop by you'll meet Christie as well. These wonderful ladies will cover all the Halsey departments, rather than just Biology but they should be able to point you in the correct direction!

It's Internship Season!

Spring is internship searching season! Internships and volunteer experiences can be excellent additions to your education. There are many ways to find an internship. Many opportunities are advertised on online job boards, government, and company websites. Bulletin boards on campus are also good places to look for advertised internships. Recent examples of internships conducted by UWO students include

positions at local health departments, state laboratories of hygiene, and wastewater treatment plants.



Once you have secured a biology, microbiology, or environmental health related internship/volunteer position, it's time to think about earning elective requirements and credits towards your bachelor's degree. The Biology Department offers three different internship options for biology (Bio 300), microbiology (Bio 301), and environmental health (Bio 302) related



experiences. Students can earn up to three credits per semester for an internship, depending upon the number of hours worked. If you are interested in

learning more~ <u>please contact either Dr.</u> <u>Lucas (lucasjr@uwosh.edu) or Dr.</u> <u>Mueller-Spitz (muellesr@uwosh.edu) to</u> <u>schedule an appointment</u> and complete necessary paperwork to earn internship credits.

<u>Meet the Department –</u> <u>Dr. David Krause</u>

My specialty is microbiology. I teach Bio105 as well as the Microbial Physiology lab, Medical Bacteriology and Medical Mycology. I am offering a course on Fermentation and



Brewing Science for fall 2024 – so keep an eye out for that! I became interested in Microbiology as a student at the U. of Florida when I started homebrewing beer, realizing that I was more interested in the organisms doing the fermentation than the chemical processes. I started in research as an undergraduate, where I studied proteinprotein interactions in halophilic archaea. I earned my Ph.D. from the U. of Illinois



studying genome evolution in hot-spring archaea. However, I wanted to study metabolic evolution. For my postdoctoral research I moved to UW-Madison, where I switched systems to

budding yeasts whose metabolism had been studied for decades, but whose evolution was not yet fully understood.

My research lab at UWO explores the relationship between genotype and phenotype using different species of yeast. Currently, we are trying to understand how two groups of budding yeasts independently evolved the ability to grow without oxygen, how lager yeasts have adapted to growing in the cold, how yeasts compete for iron in their environment, and how yeasts deal with having to choose between respiration and fermentation. The link at the center of all these projects is genetics, and yeasts are wonderful model genetic organisms.

If you are interested in learning more about yeast genetics research, email me at **krausedj@uwosh.edu**.

EXPL®RE LIFE

Announcing the Sheldon J. Cooper Scholarship



The Department of Biology is pleased to announce a new scholarship this spring in honor Dr. Sheldon Cooper. Dr. Cooper joined the department in 2001 and retired in 2022. He also served as Co-Chair from 2009-2022. Dr. Cooper is an ornithologist and physiologist who specializes in the ability of birds to adapt to the cold. The Sheldon J. Cooper scholarship is open to all Biology or Biomedical Science majors with a 3.0 or higher GPA. Students must write a statement describing their career goals and

commitment to the field of biology or medicine. Special preference will be given to students who wish to pursue a graduate degree. Look for this scholarship in Academic Works (the normal scholarship site) this spring.

Thinking about Graduate School?Do you have a year before you apply to professional school? Do you want to get a Ph.D., but you aren't ready for UW Madison yet?Did you know that the Biology department offers two different types of Master's (M.S.) degrees? One degree is research-based and one requires a professional internship. We have research opportunities in the fields of ecology, immunology, cell biology, entomology, genetics, botany, microbiology, paleontology, freshwater science, parasitology, genomics and molecular biology.If you are interested or want more information, please contact Dr Bob Stelzer	team incudes professors and staff from Biology, Anthropology, Environmental Studies, Chemistry, Geology and Engineering Technology. The form below incudes more information and an application. <u>Click here to apply</u> Feel free to reach out to me or other team
please contact Dr. Bob Stelzer	members with any questions!
(<u>stelzer@uwosh.edu</u>).	Dr. Bob Stelzer (stelzer@uwosh.edu)
Fond du Lac/Fox Campus News	<u>/s</u> <u>Biology Club Corner</u>

We are excited to announce that the <u>UWO Fox Cities</u> <u>Biology Club</u> is preparing to kick off its first meeting for the Spring semester this February! With a focus on fostering a community of passionate biology enthusiasts, the club will gather to vote on future activities and set the stage for an engaging semester ahead. Join us for our <u>first meeting on</u> <u>February 22nd from 12:30 -1:30 pm (room TBD)</u> to learn more about what the Biology Club stands for and how you can be a part of this exciting journey! For more information, please feel free to contact Nariman Hussein (adviser, <u>husseinn@uwosh.edu</u>) or Abigail Thomas (president, thomasab@uwosh.edu)

- The Oshkosh campus
- Biology Club meetings for spring will be set soon! Look for flyers and emails with more details after the semester starts.
- Pre-Med Club will be meeting every other Thursday at 5 pm this semester. The first meeting date will be announced soon so look for flyers and email

Coming this semester...Volunteer opportunities in the Greenhouse!

Do you love plants? Want to stay warm in the cold February and March months? The Biology department is developing staffing positions for the Halsey Greenhouses and Herbarium. These positions will start as unpaid with the possibility of moving to a paid position in summer or fall. Interested? Email Dr. Lisa Dorn (<u>dorn@uwosh.edu</u>) or Dr. Laura Ladwig (<u>ladwigl@uwosh.edu</u>) for more information.