

COLLEGE OF ARTS AND SCIENCES

Marilyn Withrow, '71, Donates Gift to Purchase Chemistry and Microbiology Equipment

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Advanced Microscopes and Instruments Improve Lab Research

BOILING SPRINGS, N.C.—Alumna Marilyn Withrow, '71, has made a generous gift to enhance the Gardner-Webb University chemistry and microbiology programs. This multi-year commitment provides advanced equipment and protects the investment by including funds for maintenance and upkeep.

Susan Manahan, assistant professor of biology, said the donation of 22 microscopes for the microbiology laboratory replaces all of the old microscopes and will greatly enhance the viewing experience of the students in lab activities. Students in Microbiology for the Health Sciences, General Microbiology, Genetics, Cell Biology, and Immunology will use the microscopes to focus on a variety of samples.



- ▲ Marilyn Withrow's donation was used to equip a teaching microscope with a camera and connect to a monitor. This setup allows the instructor to show students what to look for in their own microscopes.
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“In addition, we were able to purchase and equip a teaching microscope with a camera that will be connected to the new monitor to show students what to search for and focus on when viewing their own microscope slides,” Manahan explained. “With the software that comes with the camera, we will be able to take photographs of images on slides and even make short videos.”

The chemistry department acquired Thermo Scientific UV-VIS Spectrophotometers, which identify the presence of chemical compounds and measure their concentration. Dr. Stefka Eddins, professor of Chemistry, shared that the new equipment replaced two aging, soon-to-be-defunct, instruments.

The purchase allows the department to continue to meet the needs of students in classes, such as General Chemistry II, Analytical Chemistry I and II, Physical Chemistry I and II, Biochemistry, and Inorganic Chemistry. “These classes are taken by biology, chemistry, biochemistry, and exercise science majors,” Eddins offered. “Our hands-on approach to teaching our students how to use chemical instruments, including the two new spectrophotometers, sets us apart in that our students acquire real, hands-on, laboratory experience and are not just mere observers.”



▲ Photo by Shira Edwards / GWU Photo Staff



▲ Photo by Samantha Holt / GWU Photo Staff

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In addition to the instruments, the department also purchased accessories for automated spectrophotometric analysis, as well as an explosion-proof refrigerator. These pieces of equipment will expand the ability to perform chemical analyses efficiently and store various reagents safely.

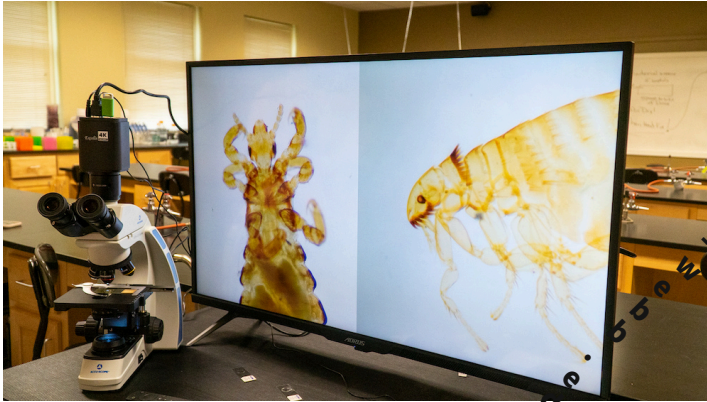
Marilyn and her husband, David, '72, are longtime supporters of their alma mater, and Marilyn is a former trustee. When David passed away in 2020, the family established the David E. Withrow Endowed Athletic Scholarship to support student-athletes. In addition, David's relatives supported the construction of the Withrow Science Building. This building was dedicated in 1966 and named in honor of GWU trustee and benefactor, A.T. Withrow of Charlotte, N.C.

As students were introduced to the new microscopes, they were excited to see sharper images and smaller details of the microorganisms. One of those students is senior Helena Berczes, who is double majoring in biology with a concentration in biomedical sciences and American Sign Language with a minor in interpreting. A laboratory associate, who assists other students in the microbiology lab, Berczes expressed her thanks for the gift and explained how the donation affects everyone in the Department of Natural Sciences.

"I'm excited for people coming through the department to use the new equipment and be able to see everything so much more clearly," Berczes noted. "Even the older scopes that we had on the (microbiology) side of the department, were moved over to general biology. I heard one of the professors say that those scopes are better than the ones they had, so actually it has benefited the entire department even if they are not using the brand new ones."

Blake Henkel, a junior who is also majoring in biology with a concentration in biomedical sciences, admired the innovative features available on the new microscopes. He wants to be a dentist and said learning to recognize microorganisms prepares him for dental school. "Not only does it help us identify what we need to identify, but also to retain and recall what these organisms look like," he explained.

Learn more about the programs in the Department of Natural Sciences.



View more photos [here \(https://photos.gardner-webb.edu/2023/February-2023/Mural-NaturalSciencesMicroscope/\)](https://photos.gardner-webb.edu/2023/February-2023/Mural-NaturalSciencesMicroscope/).

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