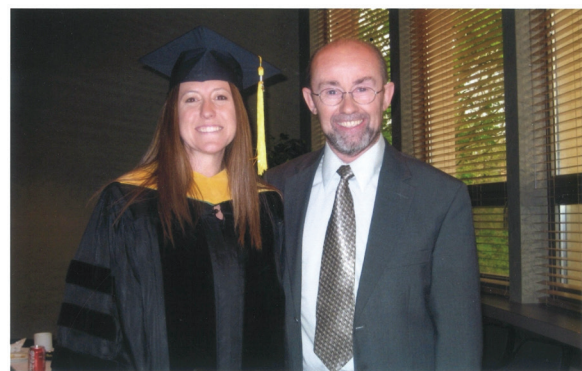




Two-time Western Michigan University alumna, Erica Wehrwein, stands with her high school biology teacher and lifelong mentor, Ferne "Bud" Ellis, at her Michigan State University Ph.D. graduation ceremony in 2008. Ellis is also a two-time graduate of Western, earning his bachelor's in biology and chemistry in 1971 and a masters in biology in 1973. Over his nearly 40-year teaching career, he was recognized as the 1983 National Exemplar in Biology Teaching by the National Science Teachers Association and the 1993 Michigan's Outstanding Biology Teacher by the National Association of Biology Teachers.



# INSPIRING STUDENTS IN SCIENCE

Western Michigan University alumna Erica Wehrwein knows how important it is to have teachers who encourage and inspire you.

For Wehrwein, that encouragement came from her high school biology teacher Mr. Ellis.

"He really got me and my interest sparked in research. I just remember him showing me his master's thesis book in class and at the time I thought 'no way,'" says Wehrwein, who went on to earn both bachelor's and master's degrees in biomedical sciences from Western. "He was one of my biggest inspirations in life and he continues to mentor me to this day."

Now, as an associate professor of physiology at Michigan State University, Wehrwein is being recognized for her teaching as the 2022 recipient of the Arthur C. Guyton Distinguished Educator Award by the Teaching Section of the American Physiological Society.

To be considered for this award, Wehrwein had to be nominated by an APS member, provide summaries of student course evaluations, have letters of support from coworkers and students, and exhibit a strong dedication to the physiology education field in the classroom and community.

"I was feeling really intellectually stimulated, but over time I started to realize there was something missing in my heart. I loved the work that I was doing, but it just wasn't quite as deeply fulfilling as teaching was," says Wehrwein.

Wehrwein is now able to merge her diverse professional skills and passions at MSU, where she leads a capstone experience course, helping students through human physiology research projects while also mentoring them in grant writing, offering professional development, and teaching.

She is also the physiology department's youth program director, in charge of physiology outreach ranging from hosting K-12 children on campus in camps to classroom visits to science festivals, with the major event being physiology understanding (PhUn) Day at Impression 5 science center.

"I get to do it all. I didn't have to pick. Isn't that cool?" says Wehrwein.

## BEYOND THE CLASSROOM

When Wehrwein first started developing the capstone course, she found herself with more

"I started calling up universities with similar physiology programs, and we slowly started forming this little grassroots network that launched into an official organization called the Physiology Majors Interest Group," says Wehrwein who founded the organization in 2014.

Made up of 300 worldwide university faculty involved in physiology education, this consortium of educators developed a set of recommended curriculum guidelines for undergraduate physiology majors. This group and its guidelines have been key in a new APS strategic initiative to launch a national Center for Physiology Education.

"The Center is the single most exciting and important thing I think I've ever worked on. It is just a once-in-a-lifetime opportunity to launch something like that and the potential impact it can have globally on our discipline is huge," says Wehrwein, who serves as co-chair of the CPE developmental task force that developed the center's mission and goals and will serve on the advisory board when it launches.

With the data and research collected by her grassroots organization and the development of the center, Wehrwein says that it's a "real full-circle moment" providing a national means to address her initial questions regarding what her students need to succeed.

## WMU ALUMNA NAMED DISTINGUISHED EDUCATOR OF THE YEAR

"It's very humbling to realize that maybe I'm someone's Mr. Ellis. I take that with a huge sense of responsibility," says Wehrwein. "I was lucky I had really great teachers in my life and it's a way of kind of honoring that."

## A PATH TO TEACHING

In retrospect, it seems inevitable that Wehrwein would find herself teaching. But it took her some time to recognize this calling.

"During undergrad, I was taking advantage of every possible thing," says Wehrwein, who served as a tutor, teaching assistant, researcher, nurse's aid, and even coached cheerleading in Galesburg, Mich. during her time at Western. "I remember having this breakdown at the time thinking, 'but those are each different paths, right? What am I going to do?'"

That initial uncertainty about which path to take led Wehrwein to pursue her master's degree at Western under the guidance of Dr. John Spitsbergen, then assistant professor of biological sciences and current department chair. She went on to earn a Ph.D. in Physiology from MSU and work as a postdoctoral fellow at the Mayo Clinic. But she continued to find herself seeking opportunities to teach at all grade levels from elementary to medical students.

questions than answers. She wanted to understand what the students really needed from this course and that information hadn't been systematically collected.

Through the physiology department's undergraduate curriculum committee, chaired by Wehrwein, she sought to determine how well the entire physiology program was servicing students' needs.

"Now we have national guidelines and a network of programs and resources available to assess students and the curriculum," says Wehrwein. "Everything has been sort of synergistic and building on each other to come together for the benefit of students."

Wehrwein was also the recipient of the 2020 Donald F. Koch Quality in Undergraduate Teaching Award as part of MSU's All-University Awards. ♦



Wehrwein teaching elementary school students how to take blood pressure during a physiology summer camp for gifted 3rd and 4th graders as part of MSU gifted and talented education programming.