

2024 Awards Ceremony

Sigma Xi, The Scientific Research Honor Society



View from above: Top of the smallest of the three main pyramids at Giza.

The University of Michigan Chapter Virtual (Zoom) Meeting

Wednesday, April 17, 2024 5:00-6:00 P.M.

PROGRAM

- I. *Welcome and Introduction*** Henry (Gus) Buchtel, Ph.D.
- II. *Introduction of 2024 Teacher of the Year:*** Peter Woo, Ph.D.
The Art of Teaching Science: Michael Lovelace, M.S.
- III. *Sigma Xi 2024 Science Fair Winners:*** Jack Cederquist, Ph.D.
Judy Bai (Greenhills School; Teacher Catherine Reynaud) "A ChatGPT Empowered Application in Biomedical Research."
Sherry Dong (Skyline High School; Teacher Casey Warner) "Single-cell Type Annotation with Deep Learning in 265 cell types for humans."
Tanay Panja (Huron High School; Teacher Andrew Collins) "IoT-based Aeration for Optimal MFC Energy Generation & Wastewater Treatment."
Kashvi Rai (Huron High School; Teacher Andrew Collins) "Analysis and Effects of Magnetic Gear Systems in Efficient Energy Transfer."
- IV. *Adjournment*** Henry (Gus) Buchtel, Ph.D.

SIGMA XI 2024 Teacher of the Year



Michael Lovelace: Mr. Lovelace has always had a love of math and science and graduated from Ann Arbor Huron High School in 1992. He went to the University of Michigan and earned a bachelor's degree in mechanical engineering in 1996 and a master's degree in Industrial & Operations Engineering in 1998. As Mr. Lovelace coached middle school and high school sports in the Ann Arbor schools during his college career, he found his true passion for teaching and coaching kids and so he went to Eastern Michigan University and earned a Secondary Professional Teaching Certificate with a math major and physics minor. Mr. Lovelace began teaching in Ann Arbor at Clague Middle School in 2000 and worked hard to develop and implement an exciting 8th grade physical science curriculum. After 6 years there he taught one year of math at Ann Arbor Huron before being on the startup team at Skyline High School in the math department in 2008. Mr. Lovelace has spent the past 16 years at Skyline High School working to teach, coach (Varsity Boys and Girls Basketball Programs) and lead students and staff in a positive and encouraging way.

Sigma Xi

The Scientific Research Honor Society

Sigma Xi was founded in 1886 by a group of Cornell students and a faculty member who believed the time had come to establish an honor society for scientists and engineers. The University of Michigan Chapter was established as the 16th Chapter of *Sigma Xi* in 1903.

Since 1886, *Sigma Xi* has grown to include more than 800 Chapters throughout the world. The Society now has approximately 90,000 Members and Associate Members. Chapters are found wherever scientific research is undertaken in nations throughout the world, in universities, colleges, industrial research facilities and government laboratories.

Sigma Xi Pledge: "***I hereby pledge myself, in accordance with the purposes and objectives of Sigma Xi, The Scientific Research Honor Society, to encourage original investigations in science, to foster companionship and cooperation among scientists, to maintain honor, integrity and honesty in all scientific activities, and to assume the other continuing responsibilities of membership.***"