

Sigma Xi

The Scientific Research Honor Society

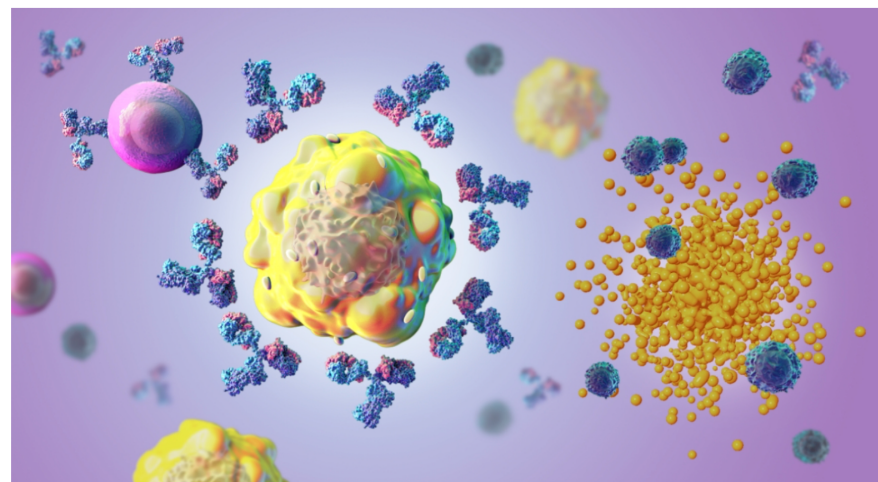
Sigma Xi was founded in 1886 by a group of Cornell students and a faculty member who believed the time had come to establish an honor society for scientists and engineers. The purpose of the society was to reward excellence in scientific research as well as to encourage a sense of companionship and cooperation among scientists in all fields. The University of Michigan Chapter was established as the 16th Chapter of *Sigma Xi* in 1903 when thirty-five faculty and students were granted a charter to establish a Chapter at Michigan. The first President of the local Chapter was Professor J. Playfair McMurrich.

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.***"

2024 Annual Meeting, New Member Induction and Awards Ceremonies

Sigma Xi, The Scientific Research Honor Society



The University of Michigan Chapter
Virtual (Zoom) Meetings

April 17 and May 1, 2024

OFFICERS

2024 Science/Math Teacher of the Year Award **Virtual Awards Ceremony, April 17, 2024**

Dr. Peter Woo is an organic chemist retired from pharmaceutical research and development at Pfizer Inc. Dr. Woo organizes and coordinates the choice of the Teacher(s) of the Year Awards. This year he will be presenting awards to the following co-winners of the award.

	2023-2024	2024-2025 Slate of Officers
President	Henry A. Buchtel	Henry A. Buchtel
Vice-President	Jack Cederquist	Bruce Maxim
Secretary	Cynthia Marcelo	Cynthia Marcelo
Treasurer	E. Margaret Evans	E. Margaret Evans
Council Members	Apryl Brown	Apryl Brown
	Anson Kairys	Michael Hortsch
	Bruce Maxim	Anson Kairys
	Peter Woo	Peter Woo
	Jeffrey Yackley	Jeffrey Yackley

Brief Biography

Michael Lovelace (Ann Arbor Skyline High School).

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.

Fifty-Year Members (1974-2024)

The following Chapter members are being honored for 50 years of active membership.

Donald W. Boettner (Elected by the University of Michigan Chapter). Dr. Boettner retired in 2009 after having spent 47 years working at the University of Michigan. He worked in the same unit all this time, but it kept changing its name: starting as the Computing Center, and ending up as ITS. He mostly worked as systems engineer and systems research programmer.

Jack East (Elected by the University of Michigan Chapter). *In Progress*

Lidia Kostyniuk (Elected by the State University of New York at Buffalo Chapter). Dr. Kostyniuk's professional career spans over 40 years and has included research, teaching and consulting in the area of transportation safety, risky driving behavior and mobility of special populations. Her most recent research efforts have focused on commercial vehicle safety, distracted and risky driving behaviors, and the process of driving cessation among older drivers.

Uichiro Narusawa (Elected by the University of Michigan Chapter). Dr. Narusawa is an Associate Professor Emeritus in the Mechanical and Industrial Engineering Department of the college of Engineering at Northeastern University in Boston MA. His most recent research focus was biomechanics on respiratory systems and turbine blade cooling. His dissertation at the University of Michigan was in the Fluid Dynamics Laboratory and investigated measurements of evaporation rates of water.

April 17, 2024 Teacher-of-the-Year Michael Lovelace



May 1, 2024, ANNUAL LECTURE

Kristin Koutmou, Ph.D.
Associate Professor, Department of Chemistry
University of Michigan

Control of protein synthesis by RNA modifications

NEW MEMBERS & PROMOTIONS - 2024

Full Members

Robert Michael Kaster
Kristin Koutmou
Di Ma
Linxi Zhang

Associate Members

Joshua Thomas Fox-Fuller
Savannah Gwynne Rose



The Chapter is very grateful for a generous donation from **Ms. Cathleen Zepelin** to establish a fund in memory of **Dr. Harold Zepelin (photo above)**, a *Sigma Xi* member, who died in 2006. The fund helps maintain the honorary nature of election to membership by paying initiation and membership fees for new members. Donations in support of Chapter activities from **Henry Buchtel**, **Margaret Evans** and particularly **Peter Woo** (Science Co-Teachers of the Year funding) are also gratefully acknowledged.

PROGRAMS

April 17, 2024 (Virtual at 5:00 PM)

Science & Math Teacher of the Year Award - 2024 Peter Woo, Ph.D.

Michael Lovelace, B.S., M.S

Sigma Xi 2024 Science Fair Winners Jack Cederquist, Ph.D.

Judy Bai (Greenhills School) A ChatGPT Empowered Application in Biomedical Research.

Sherry Dong (Skyline High School) Single-cell Type Annotation with Deep Learning in 265 cell types for humans.

Tanay Panja (Huron High School) IoT-based Aeration for Optimal MFC Energy Generation & Wastewater Treatment.

Kashvi Rai (Huron High School) Analysis and Effects of Magnetic Gear Systems in Efficient Energy Transfer.

May 1, 2024 (Virtual at 4:30 PM)

Welcoming Comments Henry (Gus) Buchtel, Ph.D.

Introduction of 2024 Sigma Xi Lecturer Bruce Maxim, Ph.D.

Sigma Xi Annual Lecture Kristin Koutmou, Ph.D.

*Induction of New Sigma Xi Members
and Sigma Xi Pledge for New (and Current) Members* Cynthia Marcelo, Ph.D.

Approval of 2024-2025 Slate of Officers Jack Cederquist, Ph.D.

Recognition of 50-year Sigma Xi Members Anson Kairys, Ph.D.

Adjournment Henry A, Buchtel, Ph.D.