

Sigma Xi

The Scientific Research 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 517 Chapters throughout the world. The Society now has approximately 90,000 active 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 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."***

2015 ANNUAL BANQUET

Sigma Xi



The University of Michigan Chapter
Weber's Inn
Atrium Ballroom

April 22, 2015

5:30 P.M.

OFFICERS

	2014-2015	2015-2016 Slate of Officers
President	George Graham	George Graham
Vice-President	E. Margaret Evans	E. Margaret Evans
Secretary	Henry A. Buchtel	Henry A. Buchtel
Treasurer	Richard Robertson	Richard Robertson
Council Members	Karen Adams	Karen Adams
	Stanley Berent	Marilee Benore
	Elizabeth Duell	Francine Dolins
	Cynthia Marcelo	Elizabeth Duell
	Peter Woo	Cynthia Marcelo
		Peter Woo
		Stanley Berent, <i>ex officio (ex-President)</i>

2015 Science/Math Teachers of the Year Awards

Biographies

Dr. Peter Woo is retired from being an organic chemist at Pfizer Pharmaceutical Company, which provides the funding for these awards. Dr. Woo organizes and coordinates the choice of the Teachers of the Year Awards; this year he will be presenting awards to the following co-winners of the Award.

Mrs. Soon Lee Morningstar (Clague Middle School; Science & Math, 7th and 8th grades). She was nominated by her school principal, Ché Carter, as clearly one of the best he has seen in his tenure; she is a teacher who leads, cares, and inspires, unmatched in passion and skill set. Mrs. Morningstar received a B.S. in Health Science, Grand Valley University, Allendale, MI, in 1995, and a Master's in Education at Aquinas College, Grand Rapids, MI, in 2000. She joined Clague Middle School in 2000. [see insert for full bio]

Ms. Bridgette Joy Sparks (Saline High School; Chemistry and AP Chemistry). She was nominated by Dr. Julie Helber, School Principal, as an outstanding teacher who truly embodies the art and science of teaching. Ms. Sparks had a BA Biochemistry, Mills College, CA in 1994, and MA education, University of California, Berkeley, in 1998. She taught in Cleveland, keeping high risk teens interested in getting a diploma and passing proficiency tests. She joined Saline High School in 2001. [see insert for full bio]

Fifty-Year Members (1965-2015)

Hugh Aller and Margo Aller (016 - Elected by the University of Michigan Chapter) During most of their scientific lives, Drs. Aller and Aller have worked as radio astronomers to study the relativistic jet outflows emanating from active galactic nuclei powered by supermassive black holes. Their work was made possible by data obtained with the 26-meter radio telescope operated by the University of Michigan until June 2012 on Peach Mountain in Dexter.

Bruce Arden (016 - Elected by the University of Michigan Chapter)

Henry (Gus) Buchtel (036 - Elected by the McGill University Chapter) is a neuropsychologist at the VA Ann Arbor Healthcare System and at the University of Michigan in the Neuropsychology Section. His research has focused on perception, language and memory abilities of patients with brain damage, especially those with epilepsy.

James Downward (063 - Elected by the Massachusetts Institute of Technology Chapter)

John Drach (027 - Elected by the University of Cincinnati Chapter) After completing his Ph.D. in Biochemistry, Dr. Drach worked for four years in the drug metabolism group of A.J. Glazko at Parke, Davis & Co. in Ann Arbor. In 1970 he accepted the position of assistant professor at the U-Michigan and spent the rest of his career there (joint appointments in the School of Dentistry and the College of Pharmacy) becoming a full professor in 1980 and chair of the Dental School basic science department in 1985.

William Darrel Ensminger (133 - Elected by the Rockefeller University Chapter)

Eugene Goodson (027 - Elected by the Purdue University Chapter)

George Arthur Lavoie (063 - Elected by the MIT Chapter)

Troy Alvin Smith (016 - Elected by the University of Michigan Chapter) Dr. Smith was employed by the US Army Corps from 1948-1959 and then worked for Brown Engineering Company in Huntsville Alabama as Chief Structural Engineer (1959-1960). From 1960-2012 he was an Aerospace research Engineer with the US Army, Redstone Arsenal, AL.

2015 *Sigma Xi* Banquet Address

Shining Light on the Brain: Bilingualism, Imaging Tools and the Brain



Ioulia Kovelman Ph.D.
Department of Psychology
Center for Human Growth and Development
University of Michigan

Dr. Kovelman received her doctorate in Psychological and Brain Sciences at Dartmouth College. She then went to MIT for postdoctoral work on neuroimaging (fMRI) investigations into the basis of language and reading development in children with typical and atypical reading development. She is an assistant professor of Psychology in the College of Literature, Arts and Science and an assistant research professor at the Center for Human Growth and Development, where she is the co-director of the pediatric multimodal fNIRS laboratory.

NEW MEMBERS - 2015

Full Members

Francine Leigh Dolins*
Ioulia Kovelman*
Shiuhyang Kuo

Yujing Liu
William Robert Lloyd III
Shanshan Wan

Associate Members

Irisa Danielle Arney
Cristina Peggy Bigras*
Kimberly Ann Brink*
Margaret E. Echelbarger*
Catharine E. Fairbairn*

Junaira Jilani
Katherine Kitchen Andren*
Carolyn Jean Mingione*
Mine Muyan

FIFTY-YEAR MEMBERS (1965-2015)

Hugh D. Aller (016 UM) **John C. Drach (027 Cincinnati)**
Margo F. Aller (016 UM) **William Ensminger (133 R'feller)***
Bruce W. Arden (016 UM) **Eugene Goodson (027 Purdue)**
Henry Buchtel (036 McGill)* **George Lavioe (063 MIT)**
James Downward (063 MIT) **Troy Alvin Smith (016 UM)**

***Present at Banquet**

The Chapter is grateful for a very generous donation from Ms. Cathleen Zepelin to establish a fund in memory of Dr. Harold Zepelin, 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. The Chapter is also very grateful for a grant from Pfizer Foundation (established by Pfizer Inc, the pharmaceutical company) that is used for our awards for the Teachers of the year. Finally, donations in support of Chapter activities from Henry Buchtel, Elizabeth Duell and Margaret Evans are also gratefully acknowledged.

PROGRAM

Reception & Banquet

Welcome Margaret Evans

Induction of New Sigma Xi Members and Sigma Xi Pledge for New Members Richard Robertson and Henry Buchtel

Southeastern MI Science Fair Awards Elizabeth Duell and Cynthia Marcelo

Junior Division

Kellen Black (Forsythe Middle School): Which Animal Manure is the best Fertilizer for Pumpkin Plants?

Shea O'Brien (Forsythe Middle School): How Safe is your Medicine Cabinet?

Sydney Dillon (Saline Middle School): How Sweet It Is: Are you Drinking Too Much Sugar?

Senior Division

Monica Choi (Greenhills School): Significance of Seed Structure in Ginger and Banana Plants

Jeremy D'Silva (Gabriel Richard) :The Ebola Epidemic in West Africa: Developing a transmission model to compare the effectiveness of interventions

Science & Math Teachers of the Year Awards - 2015 Peter Woo

Soon Lee Morningstar (Clague Middle School)
Bridgette Joy Sparks (Saline High School)

Recognition of 50-year Sigma Xi Members Karen Adams

Approval of 2015-2016 Slate of Officers Stanley Berent

Introduction of 2015 Sigma Xi Lecturer Margaret Evans

Sigma Xi Banquet Lecture Ioulia Kovelman, Ph.D.

Adjournment Margaret Evans