

Report of the Committee of Qualifications and Membership (CQM) for FY2020 (July 1, 2019 – June 30, 2020)

Membership of the Committee

For the year ending June 30, 2020, the Committee on Qualifications and Membership consisted of the following members

- **Chair:** Emma Perry, Unity College
- Cristina Gouin, USDA - Animal and Plant Health Inspection
- HollyAnn Harris, Creighton University
- Douglas Jardine, Kansas State University
- Karen Sweazea, Arizona State University
- Robert Youker, Western Carolina University
- Allen Thomas, University of Nebraska – Kearney
- Geraldine Richmond, University of Oregon, ex-officio
- Sonya Smith, Howard University, ex-officio

Sigma Xi staff liaison: Eman Ghanem

CQM Fall Meeting on September 24, 2019 (virtual)

1. Selection of Chapter Awards

The committee discussed ranking of chapters' annual reports and selected the following chapters from 23 finalists to receive the 2019 awards:

Chapter of Excellence Award:

1. Louisiana Tech University
2. Centers for Disease Control and Prevention
3. A tie for third place between:
 - Ohio University
 - Virginia Tech University
 - Carnegie Mellon University

Chapter Program of Excellence Award:

1. Columbia-Willamette for the Wine Tasting event to raise funds for students travel
2. Georgia Institute of Technology for the Sigma Xi Monie A. Ferst Award Symposium in Honor of Carol A. Fierke
3. Brown University for the Brown University/Tougaloo College/Bryant University joint induction ceremony
4. A tie for fourth place between:
 - Rice University-Texas Medical Center for Biomaterials Lab Tour to engage high school students
 - Woods Hole for Mentoring Junior High School Students for Science Fair Projects

FY 2019 Top Electing Chapters

Overall

1. Brown University
2. Fordham University
3. Princeton

Area Groups, Industries, State & Federal Laboratories Constituency Group

1. Delta
2. Vermont

Baccalaureate Colleges Constituency Group

1. Carleton College
2. Swarthmore College

Comprehensive Colleges and Universities Constituency Group

3. Saint Joseph's University
4. Manhattan College

Research and Doctoral Universities Constituency Group

1. Brown University
2. Fordham University

Canadian/International Constituency Group

University of Alberta

Chapter awards were announced at the 2019 Annual Meeting and Student Research Conference in Madison, Wisconsin.

Spring Meeting, March 5-6, 2020

This meeting was held in-person at Sigma Xi Headquarters in the Research Triangle Park, North Carolina. Meeting was attended by the following committee members and Sigma Xi staff:

- **Chair:** Emma Perry
- Cristina Gouin
- HollyAnn Harris
- Douglas Jardine
- Robert Youker
- Allen Thomas
- Karen Sweazea (connected via Zoom)

Sigma Xi Staff:

- Eman Ghanem
- Jamie Vernon
- Deanna Welker

Agenda for the spring meeting covered the following items:

1. Recommendations for the Inaugural Cohort of Sigma Xi Fellows

The committee reviewed 33 nominations for the newly established distinction, Sigma Xi Fellows. For all nominees, committee members examined curriculum vitae and both nomination letters for evidence supporting the requirements of distinguished service to Sigma Xi and of significant contributions to several of the areas of the scientific enterprise as listed in the call for nominations. The committee was saddened to exclude two outstanding nominations from consideration for this honor due to a conflict of interest as they are currently serving on the Board Directors. Examples of distinguished service to Sigma Xi ranged from single handedly maintaining a chapter for twenty years, to having a substantial positive effect on the Society while President of the Society. Some individuals had been influential only within their chapters but had created significant programming and recruitment opportunities, others had a record of distinguished service on Sigma Xi committee and other leadership positions, yet others had served in both regards. Generally, all selected nominees have distinguished service to Sigma Xi and meet or exceed the requirements for the Fellow of Sigma Xi distinction. Successful nominees for this honor also excelled in several of the areas of the scientific enterprise. They are prominent researchers, mentors, communicators, educators, innovators, advocates and leaders. Most excelled in many of these areas leaving the Committee on Qualifications and Membership most impressed. In short, CQM was pleased and most honored to recommend the following twenty members for the

inaugural class of Sigma Xi Fellows:

James Baur

President at Science Solution, In.

For exceptional dedication to the accomplishment of the missions of Sigma Xi and the vitality of both its chapters and the society as a whole

Scott Burns

Professor Emeritus of Geology, Portland State University

For distinguished contributions to Geology, Soil Science, Terroir and Wines, Sigma Xi, community organizations, teaching, mentoring, lifelong learning, and colleagues world-wide

Millicent Goldschmidt

Professor Emerita, University of Texas Health Science Center – Houston

For distinguished scholarship, service to science and society, and for paving the road to women in STEM

Linda Meadows

Retired VP, Ohio State University Research Foundation

For showcasing Sigma Xi as a bright light and noble voice for scientific research in many venues during an unparalleled service progression as Chapter President, Region Director, Society President and Executive Director

M. Patricia Morse

Professor Emerita, Northeastern University

For distinguished contributions to research in the field of invertebrate zoology, STEM education, and scientific society leadership including as President of Sigma Xi and SICB

Ampalavanar Nanthakumar

Professor, State University of New York at Oswego

For distinguished contributions to Sigma Xi SUNY Oswego Chapter and remarkable research results in Statistics and Astrophysics

John Nemeth

President, Education and Research Consulting

For distinguished, ethical contributions to the scientific enterprise through university teaching and research, environmental consulting, community service, and nonprofit administration including as Sigma Xi CEO

Mark E. Peeples

Principal Investigator, Center for Vaccines and Immunity at The Research Institute at Nationwide Children's Hospital, and a professor of Pediatrics and of Molecular & Cellular Biochemistry at The Ohio State University College of Medicine

For distinguished, outstanding scientific research achievement, particularly with RSV infections in children, and record of teaching excellence and tireless work on behalf of Sigma Xi

Subrata Saha

Affiliate Professor, University of Washington

For pioneering research and bioengineering of innovative cell therapies for neurodegenerative conditions, and national leadership in advancing academic innovation.

Allen Taflove

Professor, Northwestern University

For pioneering work on finite-difference time-domain (FDTD) computational solutions of Maxwell's equations of electrodynamics and devoted service to Sigma Xi

Virginia Trimble

Professor, University of California - Irvine

For distinguished contributions to the field of astrophysics, exemplary scholarship as an educator and mentor, and for her dedication to Sigma Xi

Sarah Wyatt

Professor, Ohio University

For distinguished contributions in research, teaching and outreach. In particular, her leadership of the Ohio University Chapter and commitment to science literacy through Science Café

Henry (Gus) Buchtel

Associate Professor, University of Michigan

For distinguished contributions to the University of Michigan Chapter and the North Central Region of Sigma Xi, the Scientific Research Honor Society

Edward Fink

Laura H. Carnell Professor, Klein College of Media and Communication, Temple University

For distinguished scholarly contributions to the field of Communication Science and distinguished service to Sigma Xi chapters at the University of Maryland and Temple University

Donna Nelson

Professor of Chemistry, University of Oklahoma

For distinguished service to Sigma Xi, other scientific organizations, and the public; and for contributions to understanding additions to alkenes in research and in teaching

Elisabeth DiLalla

Professor, Southern Illinois University

For distinguished contributions to the field of Psychology and the broader scientific endeavor achieved through dedication to research, teaching and mentoring, and service

Tee L. Guidotti

Consultant in occupational and environmental health and medicine, sustainability

For distinguished service to Sigma Xi as president and member and for helping assure public health and safety worldwide through teaching, research, and ethical consulting

Paul Sanberg

Senior Vice President for Research, Innovation and Knowledge Enterprise, University of South Florida

For pioneering research and bioengineering of innovative cell therapies for neurodegenerative conditions, and national leadership in advancing academic innovation

Gene P. Siegal

Mowry Endowed Professor & Interim Chair, Genetics, University of Alabama Birmingham

For distinguished contributions as a physician scientist and for exemplary scholarship as a teacher, mentor, author, reviewer & editor and as a leader in academic medicine

Joseph Rachlin

Professor, Lehman College

For distinguished contributions and achievements in the biological sciences, science education, and scientific mentorship

The cohort was reviewed and approved by the Board of Directors during their spring 2020 meeting.

2. Chapter Grants

The committee reviewed three Science, Math, and Engineering Education (SMEE) grant applications and two Diversity Grant application; committee members unanimously voted to fund the following projects:

- SMEE grant application entitled “ Learning with All Your Senses: Building Manipulatives to Enhance Student Comprehension in STEAM Education,” submitted by the University of Delaware Chapter. Funding was approved for \$2,000.
- Diversity grant application entitled “Reap(d) what you sow,” submitted by the Rockford University Chapter. Funding was approved for \$1,000
- A S.T.E.M.O. Partnership: Increasing representation and accessibility,” submitted by the University of Alabama at Birmingham Chapter. Funding was approved for \$1,000

3. Petitions

The committee reviewed and unanimously approved the following petitions:

- Installation of a Sigma Xi chapter at Whitworth University, a Primarily Undergraduate Institution in Spokane, Washington
- Establishment of a Sigma Xi Club at Fuquay-Varina High School (Fuquay-Varina, North Carolina) in partnership with the University of North Carolina - Chapel Hill chapter

4. Membership Dues

- CQM submitted a recommendation to the Committee on Finance with the membership dues schedule for FY2022 (July 1, 2021 – June 30, 2022). The committee didn’t recommend any changes to the membership, Affiliate Circle, or Sigma Xi Explorers dues for FY2022.
- CQM recommended the establishment of a new member type dues category, Postdoc Rate - \$55 per year, limited to three years, renewable annually upon proof of continued status. Although this rate is equivalent to the current Transitional Rate, the proposed new dues type is a recognition of the role postdocs play in advancing postgraduate research in the US and worldwide. However, the Committee on Finance recommended combining the postdoc rate with the already existing transitional rate and creating a new membership dues type: “Transitional/Postdoc Rate.”

5. Committee Appointments

The committee reviewed and recommended the following candidates to serve a three-year term (July 1, 2020 – June 30, 2023)

- Doug Jardine, Kansas State University Chapter (second term)
- Karen Sweazea, Arizona State University Chapter (second term)
- Robert Youker, Western Carolina University Chapter (second term)
- HollyAnn Harris, Omaha Chapter (second term)
- Vusumuzi Leroy Sibanda, Columbia Willamette Chapter (first term)

All recommendations for committee appointments were approved by the Board of Directors during their spring 2020 meeting.