January 30, 2019

Brittany Bull
U.S. Department of Education
400 Maryland Avenue, S.W.
Room 6E310
Washington, DC 20202

RE: Comments on Proposed Amendments to Title IX Implementing Regulations
DOCKET ID ED -2018-OCR-0064

Dear Ms. Bull,

The academic and professional disciplinary societies in science, technology, engineering, mathematics, and medical fields (STEMM) that are signatories of this letter (Signatory Societies) appreciate the opportunity to comment on the U.S. Department of Education's proposed Title IX implementing regulations, published on November 29, 2018, 83 FR 61462. As Signatory Societies, we are strongly committed to excellence in science, which depends upon setting the highest standards of excellence in STEMM education, research, and practice, and in the professional and ethical conduct of our members. Our members are faculty, researchers, practitioners, and students in STEMM fields; most are employed by or studying at research universities, other academic and research organizations, teaching hospitals, industry, and other STEMM-serving entities.

The Signatory Societies urge in this letter that the proposed rule changes should not be made final. We set forth below the strong scientific basis for a concern that the proposed amendments to Title IX regulations do not reflect the extant research and data on the nature and extent of harm caused by sexual harassment in educational programs. The research indicates the very real possibility that this proposal will have deleterious consequences, however unintended, for the safety and security of individuals and the contexts in which they study and work.

INTRODUCTION

STEMM fields are critically important to the economic strength, security, and prosperity of our nation, and the well-being of global society. Sexual harassment in STEMM fields is a significant barrier to the full participation of all of the talent in STEMM education, research, and professions, and undermines the integrity and quality of these fields. That is why we as the Signatory Societies are each taking action within our own organizations, as well as collectively across STEMM fields, to advance professional and ethical conduct, promote a supportive climate and culture, and prevent and address sexual harassment in STEMM. As scientists, we approach these aims with a commitment to research, data, and evidence-based policy, such as those set forth below. Appendix A provides more information about the Signatory Societies on this letter.

The Importance of Preventing and Addressing Sexual Harassment in STEMM — Women and people of color are a growing share of those enrolled in U.S. postsecondary institutions (see Tables 14 and 19 in https://nces.ed.gov/pubs2018/2018019.pdf), and are also a growing share of our nation's workforce (see T. Alan Lacey, Mitra Toossi, Kevin S. Dubina, and Andrea B. Gensler, "Projections overview and

highlights, 2016–26," *Monthly Labor Review,* U.S. Bureau of Labor Statistics, October 2017, https://doi.org/10.21916/mlr.2017.29). They represent the nation's great promise of intellectual contributions to the advancement of science and to the knowledge age. While sexual harassment may affect individuals of any gender, research demonstrates that women are by far the primary targets and, among women, that women of color are prevalent targets. The Signatory Societies recognize the moral imperative to eliminate sexual harassment in STEMM, and further that in our national and global interests we must ensure full participation. The United States cannot afford to waste our most abundant intellectual talent, nor can society-at-large afford to be deprived of the contributions of that talent.

What the Research Shows — Research and evidence demonstrate that there has been little systemic progress in reducing the barriers to inclusion associated with sexual and gender harassment. In the STEMM fields in particular, a recent 2018 consensus study by the National Academies of Sciences, Engineering and Medicine titled, *Sexual Harassment of Women: Climate, Culture and Consequences in Academic Sciences, Engineering and Medicine* (*Academies Report*), reported that sexual and gender harassment remain widespread and prevalent, and have negative outcomes for women, as well as others (albeit at lesser rates):

- Studies of workplace harassment show that rates of sexual harassment have not significantly decreased despite that laws have been in place to protect women from sexual harassment in academic settings for over 30 years (*Academies Report* pp. 39-41);
- Further, while anyone may experience sexual harassment, research shows that women in STEMM academia are more likely to experience sexual harassment, and at higher frequencies, and that in the vast majority of incidents of harassment of women, men are the perpetrators (*Academies Report* pp. 41-43);
- Greater than 50 percent of women faculty and 20-50 percent of women students encounter or experience sexually harassing conduct in academic science, engineering, and medicine (*Academies Report* p. 65);
- Women who have multiple societal identities targeted for bias, for example women of color, and "sexual- and gender- minority women" experience certain types of harassment, including gender and sexual harassment, at even greater rates than other women, and often experience sexual harassment as a manifestation of both gender and other kinds of discrimination (*Academies Report* pp. 44-46);
- The most common form of sexual harassment in academia, by far, is gender harassment (i.e., non-sexual behaviors that convey insulting, hostile, degrading, sexist, or sabotaging attitudes about members of one sex), and gender harassment has similar negative consequences for women as hostile environment and *quid pro quo* sexual harassment (*Academies Report* pp. 42, 25-27, 72);
- Many conditions that correlate with increased risk of sexual harassment appear in academia and higher education, particularly in STEMM fields (e.g., permissive, hierarchical, male-dominated organizations; protection for "star," or older generations of, faculty; work in isolating environments such as labs and field sites) (*Academies Report* pp. 52-56); and
- The impact of sexual harassment on students occurs at all grade levels and includes lowered motivation to attend class, paying less attention in class, lower grades, avoiding teachers with a reputation for engaging in harassment, dropping classes, changing majors, changing advisors, avoiding informal activities that enhance the educational experience, feeling less safe on campus, and dropping out of school (*Academies Report* pp. 72-73).

Title IX Is Not the Only Solution, But It Is a Necessary and Essential Foundation — Existing legal structures (including Title IX) alone are insufficient to create the needed changes of conduct to reduce barriers to full participation. The Signatory Societies fully appreciate that institutions and organizations, including each of ours, need to work individually and collectively to create and promote policies, practices, and other tools, beyond the requirements of Title IX, driven by ethics, equity, inclusion, diversity, and excellence in STEMM fields.

As importantly, we are not questioning the good faith of institutions of higher education (IHEs). We do not expect most IHEs to abandon aims of good policy simply because changed Title IX regulations would now allow them to do so.

Nevertheless, it is crucial that Title IX requirements support effective policy and other efforts in academia to prevent and eliminate sexual harassment as a barrier to the full and equal participation, and full development, of all promising and talented women and men alike. We are not suggesting that regulations should address every detail of how effective policy is designed and implemented. Regulations can, however, help emphasize important standards; and, where regulations apply, they should further effective policy.

COMMENTS

Major Concerns of the Signatory Societies — The Signatory Societies recognize that some changes may be needed to the Title IX regulations, or at least in the manner in which they have been enforced previously. Nevertheless, the overarching issue remains — namely, that sexual harassment continues to be widespread and damaging to women, particularly women of color, in STEMM education, research and practice. The Administration's proposal does not advance solutions to this problem, and some aspects of the proposal could very well exacerbate the harm. The Signatory Societies' comments focus on three foundational aspects of the proposed changes that raise substantial concern.

1. The Definition of Harassment Is Too Narrow And is at Odds with the Intent of Title IX — It is particularly concerning that the proposal severely limits the scope of harm required to meet the definition of harassment and trigger required action by IHEs and other institutions with federally funded educational programs. The proposal overall does not reflect the documented, continuing, long-term harms of harassment that limit, alter, and interfere with the full and equal opportunity to participate in, and benefit from, educational programs and activities mandated by Title IX. Evidence bears out that these harms are not limited to direct targets of harassment, but that "indirect" or "ambient" sexual harassment is felt by, and has negative effects, beyond—and even if not directed at—any individual(s) (*Academies Report pp.* 28, 78). The Administration's proposal evidences no recognition of these harms.

2. **The Circumstances Under Which Title IX Applies Are Too Restrictive —** The Administration's efforts to strictly narrow the circumstances under which Title IX requires a response under the definition of "education program or activity" will result in circumstances where one or more institutions, in principle, should have the responsibility, and do have the ability, to respond—but **no institution** would have an obligation under the proposed Title IX regulations to respond—to very significant incidents of sexual harassment, and even incidents of sexual assault. The Administration seems to be limiting "program or activity" too narrowly as to time, place, and parties, e.g., to a single institution's program **and** with all individuals directly affected having to be directly affiliated with that one institution. As explained below, this proposal would have an adverse impact and is unwarranted.

Particularly concerning is the example given by the Administration that an on-campus rape by an institution's students would not trigger an institution's obligation to respond under Title IX, if the victim were not formally a part of that institution's educational program. This unnecessarily narrow interpretation of "program or activity" under Title IX does not take into account what research shows: that sexual harassment affects those who are aware of incidents, and that the occurrence of sexual harassment may increase when nothing is done. *See e.g.*, *Academies Report* p. 47 ("the perceived absence of organizational sanctions increases the risk of sexual harassment perpetration"). Clearly, the fact of the rape, on its campus, by its students, regardless of the status of the victim, could create an unsafe, hostile environment for its students if the institution did nothing in response.

Another example of the problematic limitation of "program or activity" relates to the collaborative nature of STEMM education and research. Educational programs and research are commonly undertaken collaboratively among several institutions, involving multiple institutions' faculty, researchers, and students, and undertaken at one or more of the participating institutions' facilities, or perhaps, in other locales. If the target and accused in an incident of sexual harassment were not from the same institution, even though they were directly involved (and others from all the institutions were affected), one or more institutions should, as a matter of principle, have responsibility, and could in fact respond—but no institution would be obligated under the proposed Title IX regulations to respond to the incident. Such circumstances are not uncommon in instances of team science across two or more institutions. Graduate student trainees or early career scientists of one institution may be sexually harassed by peer or senior members of the team from another institution. Under the proposed regulations, these targets would be left without a Title IX regulatory recourse. This result is contrary to research showing that such harassment, if known in the field, may affect the safety, climate, and culture of the home institutions of all participating faculty, researchers, and students.

This highly limited definition of "program or activity" will frustrate the intent of Title IX, making no institution that is capable of responding, actually responsible under the regulations for responding to conduct that, in fact, negatively alters the culture and climate for students, faculty, and researchers, preventing full participation in the educational program and causing real harm.

3. **The Notice Requirements Are Too Restrictive —** The Administration's proposed notice requirement is similarly problematic in that it eliminates any incentives for educational institutions to become aware of sexual harassment (and thereby obligated to respond). While there may be sound policy reasons for providing that some individuals who regularly interact with students need not be mandatory reporters of sexual harassment whose knowledge is imputed to the institution (e.g., to encourage engagement and maintain confidentiality when desired by targets), limiting effective institutional notice to notice received by the highest-level officials in action-empowered roles goes too far. This is the case both logically and based on what we know about human and social dynamics. It creates an incentive to limit the power to act and to adopt policies that avoid notice of harassment. It also creates a likelihood that obvious, widespread, or openly-practiced harassment will go unrecognized or, at least, unaddressed. The notice requirement also fails to reflect any realistic assessment of how students think about "who is in charge," or who might be in in a position to take steps to end harassing conduct, and fails to take into account the "power dynamics" and "reluctance to report" often at play in sexual harassment cases.

CONCLUSION

Concerning Provisions of Proposed Regulations Are Without an Evidence-based Justification and Are Not Consistent with Title IX—There are a number of other concerning provisions that we could have taken up. However, the Signatory Societies have focused on three proposed fundamental provisions because they will reinforce barriers created by sexual harassment and leave no one with a regulatory obligation to address sexual harassment. These proposals are not mandated by, nor do they reflect, decades of administrative and court interpretations of Title IX. The Administration has provided no compelling reasons, or evidence, to demonstrate that its proposal is consistent with the broad intent of Title IX to eliminate sex-based discrimination in educational institutions.

Comment Period Should be Extended — The publication of these proposed rules during, and the establishment of a comment period that spans, the holiday season when it is difficult to engage stakeholders on a critical and complex issue, is a concern and justifies extension of the comment period by more than a few days.

Proposed Changes Should Be Delayed for Further Consideration — Uppermost, the scientific community is committed to the sound use of data as a foundation for making or altering policy to serve the best interests of our nation. Therefore, the Signatory Societies strongly recommend that the proposed rules should not be made final, with or without modification, until the Administration, with serious regard for the facts, evidence, and research referenced in this letter, reflects responsiveness to the prevalence and harm of sexual harassment in any new proposal. The Signatory Societies are available and committed to assist if called upon.

Thank you again for this opportunity to comment.

Sincerely,

American Association for the Advancement of Science
American Educational Research Association
AACCI - Cereals & Grains Association
Acoustical Society of America
Alliance for Academic Internal Medicine
American Anthropological Association
American Association for Dental Research
American Association for Public Opinion Research
American Association of Anatomists
American Association of Colleges of Pharmacy
American Association of Geographers
American Association of Physics Teachers
American Astronautical Society
American Chemical Society
American College of Obstetricians and Gynecologists
American College of Physicians
American Geophysical Union
American Mathematical Society
American Meteorological Society
American Neurological Association
American Philosophical Association
American Physical Society

American Physiological Society
American Phytopathological Society
American Political Science Association
American Psychological Association
American Society for Biochemistry and Molecular Biology
American Society for Cell Biology
American Society for Engineering Education
American Society for Pharmacology & Experimental Therapeutics
American Society of Agronomy
American Society of Naturalists
American Society of Nephrology
American Sociological Association
American Statistical Association
ASHRAE
Association for Women in Mathematics
Association of Academic Health Sciences Libraries (AAHSL)
Association of Anatomy Cell Biology and Neurobiology Chairs
Association of Psychologists in Academic Health Centers
Association of University Anesthesiologists
Association of University Radiologists
Biophysical Society
Cognitive Science Society
Conference Board of the Mathematical Sciences
Consortium of Social Science Associations
Council of Faculty & Academic Societies (CFAS)
Crop Science Society of America
Ecological Society of America
Federation of American Societies for Experimental Biology (FASEB)
Federation of Associations in Behavioral & Brain Sciences
Foundation for Science and Disability
Institute of Food Technologists
Institute of Mathematical Statistics
Linguistic Society of America
OSA, The Optical Society
Paleontological Society
Philosophy of Science Association
Rochester Academy of Science
Rural Sociological Society
SACNAS - Society for Advancement of Chicanos/Hispanics & Native Americans in Science
Society for American Archaeology
Society for Computers in Psychology
Society for Industrial and Applied Mathematics (SIAM)
Society for Neuroscience
Society for Personality and Social Psychology
Society for Text and Discourse
Society for the Psychological Study of Social Issues
Society for the Study of Evolution
Society of Experimental Social Psychology

Society of Systematic Biologists
Society of Teachers of Family Medicine
Society of Toxicology (SOT)
Society of University Surgeons
Soil Science Society of America

Appendix A to Societies Comment Letter on Proposed Title IX Regulations

The following information describes the Signatory Societies.

- The American Association for the Advancement of Science is the largest general scientific membership society in the world, and publisher of the *Science* family of journals. Our mission is to advance science, engineering, and innovation throughout the world for the benefit of all people.

- The American Educational Research Association is the largest research society dedicated to the scientific study of education and learning. Founded in 1916, the Association strives to advance knowledge about education, to encourage scholarly inquiry related to education, and to promote the use of research to improve education and serve the public good.

- AACCI - Cereals & Grains Association is a global, nonprofit association of nearly 2,000 scientists and food industry professionals working to advance the understanding and knowledge of cereal grain science and its product development applications through research, leadership, education, superior technical service, and advocacy.

- The purpose of the Acoustical Society of America is to generate, disseminate, and promote the knowledge and practical applications of acoustics.

- The Alliance for Academic Internal Medicine empowers academic internal medicine professionals and enhances health care through professional development, research, and advocacy. The Alliance includes more than 11,000 faculty and staff in departments of internal medicine at medical schools and teaching hospitals.

- With 10,000 members, the American Anthropological Association is the largest scholarly and professional society in the field. We publish 22 journals, stage 12 research conferences annually, support professional development, and advocate on a number of policy issues with a rich history of anthropological scholarship.

- The American Association for Dental Research (AADR) is a nonprofit organization focused on dental, oral and craniofacial research. AADR's Mission is to: (1) advancing research and increasing knowledge for the improvement of oral health, (2) supporting and representing the oral health research community, and (3) facilitating the communication and application of research findings.

- The American Association for Public Opinion Research (AAPOR) is the leading professional organization of public opinion and survey research professionals in the U.S. The Association embraces the principle that public opinion research is essential to a healthy democracy, providing information crucial to informed policymaking and giving voice to the nation's beliefs, attitudes and desires.

- The American Association of Anatomists (AAA) serves as the professional home for an international community of biomedical researchers and educators focusing on the structural foundation of health and disease. AAA's mission is to advance anatomical science through research, education, and professional development.

- The American Association of Colleges of Pharmacy (AACP) represents all US colleges and schools of pharmacy and their faculty. Since 1900 AACP has supported members as they strive to improve the quality of pharmacy education and prepare pharmacists and scientists to help people live healthier, better lives.

- The American Association of Geographers (AAG), founded in 1904, is a nonprofit scientific and educational society established to advance geographic research, education, and applications. Its over 12,000 members from more than 60 countries share interests in the theory, methods, and practice of geography, which they cultivate through the AAG's Annual Meeting, four scholarly journals (Annals of the Association of American Geographers, The Professional Geographer, GeoHumanities, and the AAG Review of Books), and extensive research and outreach projects around the world.

- The American Association of Physics Teachers is the premier national organization and authority on physics and physical science education with members worldwide. Our mission is to advance the greater good through physics education. We serve our members and the larger community through a variety of programs and publications. AAPT was founded in 1930 and is headquartered in the American Center for Physics in College Park, Maryland.

- Founded in 1954, the American Astronautical Society has long been recognized for the excellence of its national meetings, technical meetings, symposia and publications and for their impact on shaping the U.S. space program. Members have opportunities to meet with leaders in their field and in related disciplines, exchange information and ideas, discuss career aspirations and expand their knowledge and expertise.

- Founded in 1876 and chartered by the U.S. Congress, the American Chemical Society (ACS) is the world's largest scientific society. Our mission is to advance the broader chemistry enterprise and its practitioners for the benefit of Earth and its people. Our vision is to improve people's lives through the transforming power of chemistry.

- The American College of Obstetricians and Gynecologists (ACOG) is the nation's leading group of physicians providing health care for women. As a private, voluntary, nonprofit membership organization of more than 58,000 members, ACOG strongly advocates for quality health care for women, maintains the highest standards of clinical practice and continuing education of its members, promotes patient education, and increases awareness among its members and the public of the changing issues facing women's health care.

- The American College of Physicians (ACP) is the largest medical specialty organization and the second largest physician group in the United States. ACP members include 154,000 internal medicine physicians (internists), related subspecialists, and medical students. Internal medicine physicians are specialists who apply scientific knowledge and clinical expertise to the diagnosis, treatment, and compassionate care of adults across the spectrum from health to complex illness.

- The purpose of the American Geophysical Union is to promote discovery in Earth and space science for the benefit of humanity. We galvanize a community of Earth and space scientists

that collaboratively advances and communicates science and its power to ensure a sustainable future.

- Founded in 1888, the American Mathematical Society is dedicated to advancing research and connecting the diverse global mathematical community through our publications, meetings and conferences, MathSciNet, professional services, advocacy, and awareness programs. The AMS has 30,000 individual members worldwide and supports mathematical scientists at every career stage.

- The mission of the American Meteorological Society is to advance the atmospheric and related sciences, technologies, applications, and services for the benefit of society. AMS is a global community that is a trusted voice and committed advocate for weather, water, and climate science and service.

- From advances in stroke and dementia to movement disorders and epilepsy, the American Neurological Association has been at the forefront of research and practice since 1875 as the premier professional society of academic neurologists and neuroscientists devoted to understanding and treating diseases of the nervous system.

- The American Philosophical Association, the largest society of professional philosophers in North America, promotes the discipline and profession of philosophy, both within the academy and in the public arena. The APA supports the professional development of philosophers at all levels and works to foster greater understanding and appreciation of the value of philosophical inquiry. The APA is a member of the American Association for the Advancement of Science.

- Founded in 1899 to advance and diffuse the knowledge of physics, the American Physical Society is now the nation's leading APS organization of physicists with more than 55,000 members in academia, industry, and national laboratories.

- The American Physiological Society is a nonprofit devoted to fostering education, scientific research, and dissemination of information in the physiological sciences. The Society was founded in 1887 with 28 members and now has over 10,000 members, most of whom hold doctoral degrees in physiology, medicine and/or other health professions.

- The American Phytopathological Society is a non-profit, professional scientific organization representing nearly 5,000 scientists and practitioners of plant pathology who are dedicated to the study and management of plant disease, especially as it relates to feeding the ever-growing world population. APS is the premier society dedicated to high quality, innovative plant disease research and management.

- The American Political Science Association is the leading professional organization for the study of political science. APSA brings together political scientists from all fields of inquiry, regions, and occupational endeavors within and outside academe to deepen our understanding of politics, democracy, and citizenship throughout the world.

- The American Psychological Association is the leading scientific and professional organization representing psychology in the United States, with more than 115,700 researchers, educators, clinicians, consultants and students as its members. Our mission is to advance the creation,

communication and application of psychological knowledge to benefit society and improve people's lives.

- The American Society for Biochemistry and Molecular Biology (ASBMB) is a nonprofit scientific and educational organization with over 12,000 members. The Society's mission is to advance the science of biochemistry and molecular biology and to promote the understanding of the molecular nature of life processes.

- The American Society for Cell Biology (ASCB) is an inclusive, international community of basic biomedical researchers studying the cell, the fundamental unit of life. The ASCB has 8,000 members in all 50 states and 65 other nations. We are dedicated to advancing scientific discovery, advocating sound research policies, improving education, promoting professional development, and increasing diversity in the scientific workforce.

- The American Society for Engineering Education (ASEE) is a global society of individual, institutional, and corporate members founded in 1893. ASEE advances innovation, excellence, and access at all levels of education for the engineering profession. ASEE is broadly concerned with instruction, research, public service, professional practice, and societal awareness.

- The American Society for Pharmacology and Experimental Therapeutics (ASPET) is a scientific society whose members conduct basic and clinical pharmacological research and work for academia, government, large pharmaceutical companies, small biotech companies, and non-profit organizations. ASPET members work in a variety of different fields and include neuroscientists, toxicologists, chemical biologists, pharmacists, cardiovascular scientists, and many more.

- The American Society of Agronomy (ASA) is a progressive international scientific and professional society that empowers scientists, educators, and practitioners in developing, disseminating, and applying agronomic solutions to feed and sustain the world. Based in Madison, WI, ASA is the professional home for 8,000+ members and 14,000+ certified professionals (Certified Crop Advisers) dedicated to advancing the field of agronomy. ASA provides information about agronomy in relation to agronomic production, biometry and statistical computing, climatology and modeling, education and extension, environmental quality, global agronomy, and land management and conservation.

- The American Society of Naturalists is a membership society whose goal is to advance and to diffuse knowledge of organic evolution and other broad biological principles so as to enhance the conceptual unification of the biological sciences. (amnat.org)

- The American Society of Nephrology (ASN) leads the fight to prevent, treat, and cure kidney diseases throughout the world by educating health professionals and scientists, advancing research and innovation, communicating new knowledge, and advocating for the highest quality care for patients.

- The American Sociological Association, founded in 1905, is a non-profit membership association dedicated to serving sociologists in their work, advancing sociology as a science and profession, and promoting the contributions to and use of sociology by society.

- The American Statistical Association is the world's largest community of statisticians and the oldest continuously operating professional science society in the United States. Its members serve in industry, government and academia in more than 90 countries, advancing research and promoting sound statistical practice to inform public policy and improve human welfare.

- ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 56,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today.

- The Association for Women in Mathematics (AWM) is a non-profit organization representing more than 3500 members (women and men) of the mathematical community — from the United States and around the world. The purpose of the AWM is to encourage women and girls to study and to have active careers in the mathematical sciences, and to promote equal opportunity and the equal treatment of women and girls in the mathematical sciences.

- The Association of Academic Health Sciences Libraries (AAHSL) supports academic health sciences libraries and directors in advancing the patient care, research, education, and community service missions of academic health centers through visionary executive leadership and expertise in health information, scholarly communication, and knowledge management. AAHSL promotes the success of its members through relevant programming and services, benchmarking; advocacy, partnerships with like-minded organizations; and the development of a community of colleagues. It is comprised of the libraries serving accredited U.S. and Canadian medical schools belonging to or affiliated with the Association of American Medical Colleges (AAMC).

- The Association of Anatomy Cell Biology and Neurobiology Chairs is a North American medical school department chairs association with responsibilities for teaching anatomy, embryology, histology, and neurobiology as well as research.

- The Association of Psychologists in Academic Health Centers (APAHC) promotes the discipline and profession of psychology in academic health centers and affiliated units. APAHC's mission is to strengthen the role of psychology and behavioral science in health care research, clinical care, and the education of health professionals across disciplines.

- The vision of the Association of University Anesthesiologists is the furtherance of anesthesiology as a dynamic academic medical specialty, with a vibrant community of successful scientific, educational and medical leaders within the academic sector.

- Association of University Radiologists' purpose is to encourage excellence in radiological laboratory and clinical investigation, teaching and clinical practice; to stimulate an interest in academic radiology as a medical career; to advance radiology as a medical science; and to represent academic radiology at a national level.

- The Biophysical Society, founded in 1958, is a professional, scientific Society established to encourage development and dissemination of knowledge in biophysics. The Society promotes growth in this expanding field through its annual meeting, monthly journal, and committee and

outreach activities. Its 9,000 members are located throughout the U.S. and the world, where they teach and conduct research in colleges, universities, laboratories and government agencies.

- The Cognitive Science Society brings together researchers from around the world who hold a common goal: understanding the nature of the human mind. The mission of the Society is to promote Cognitive Science as a discipline, and to foster scientific interchange among researchers in various areas of study, including Artificial Intelligence, Linguistics, Anthropology, Psychology, Neuroscience, Philosophy, and Education. The Society is a non-profit professional organization and its activities include sponsoring an annual conference and publishing the journals Cognitive Science and TopiCS.

- The Conference Board of the Mathematical Sciences (CBMS) is the umbrella organization for 18 U.S.-based professional societies in the mathematical sciences, representing societies that collectively span K-12, college and university, research, and non-academic professionals.

- The Consortium of Social Science Associations (COSSA) is a nonprofit advocacy organization working to promote sustainable federal funding for and widespread use of social and behavioral science research and federal policies that positively impact the conduct of research. COSSA serves as a united voice for a broad, diverse network of organizations, institutions, communities, and stakeholders who care about a successful and vibrant social science research enterprise.

- The Council of Faculty & Academic Societies (CFAS) discusses and forms action plans on issues at academic medical centers.

- The Crop Science Society of America (CSSA) is a progressive international scientific society that fosters the mission of plant science for a better world. Based in Madison, WI, and founded in 1956, CSSA is the professional home for 4,000+ members dedicated to advancing the field of crop science. Crop science is highly integrative and employs the disciplines of conventional plant breeding, transgenic crop improvements, plant physiology, and cropping system sciences to develop and improve varieties of agronomic, turf, and forge crops to produce feed, fiber, food, and fuel.

- The Ecological Society of America is the world’s largest community of professional ecologists and a trusted source of ecological knowledge.

- The Federation of American Societies for Experimental Biology (FASEB) comprises 29 professional societies which collectively represent over 130,000 biological and biomedical researchers. FASEB's mission is to advance health and well-being by promoting research and education in biological and biomedical sciences through collaborative advocacy and service to our societies and their members.

- The Federation of Associations in Behavioral & Brain Sciences (FABBS) promotes human potential and well-being by advancing the sciences of mind, brain, and behavior; promoting scientific research and training in these fields; educating the public about the contributions of research to the health and well-being of individuals and society; fostering communication among scientists; and recognizing scientists who have made significant contributions to building knowledge.

- The Foundation for Science and Disability promotes the integration of persons with disabilities into all activities of the scientific community and of society as a whole, and promotes the removal of barriers that hinder successful integration.

- Since 1939, the Institute of Food Technologists (IFT) has been advancing the science of food and its application across the global food system by creating a dynamic forum where individuals from more than 90 countries can collaborate, learn, and grow, transforming scientific knowledge into innovative solutions for the benefit of people around the world.

- The Institute of Mathematical Statistics fosters the development and dissemination of the theory and applications of statistics and probability.

- The Linguistic Society of America (LSA) is a scholarly professional association dedicated to advancing the scientific study of language. Among other purposes, the LSA represents students and faculty at U.S. academic institutions offering courses and/or degrees in linguistics.

- The Optical Society (OSA) is the world's leading champion for optics and photonics, the science and application of light. OSA has over 22,000 members worldwide.

- Founded in 1908 in the United States, the Paleontological Society (PS) is an international nonprofit organization devoted to the advancement of the science of paleontology: invertebrate and vertebrate paleontology, micropaleontology, and paleobotany. The PS has about 1500 members, including professional paleontologists, academicians, earth-science teachers, museum specialists, university students, postdoctoral scholars, and avocational paleontologists.

- The Philosophy of Science Association promotes research, teaching, and free discussion of issues in the philosophy of science from diverse standpoints. To this end, the PSA engages in activities such as: the publishing of periodicals, essays and monographs; sponsoring conventions and meetings; and awarding prizes for distinguished work in the field.

- Based in Rochester, NY, the Rochester Academy of Science (RAS) is a non-profit organization that comprises five Sections (Anthropology, Astronomy, Fossil, Life Sciences, and Mineral) that have informative membership meetings, field trips, and public outreach activities. The RAS presents an annual Spring Lecture, hosts a Paper Session each November with more than 140 presentations, and awards of over $2,000 each year to undergraduate research projects in Western New York.

- The Rural Sociological Society is a professional social science organization made up of faculty, researchers, practitioners, and students whose focus is rural people and rural places with the goal of improving quality of life.

- SACNAS - Society for Advancement of Chicanos/Hispanics & Native Americans in Science is the largest multicultural and multidisciplinary STEM diversity organization in the country. Broadly inclusive, we work to foster the success of underrepresented students and professionals in attaining advanced degrees, careers, and positions of leadership in STEM.

- The Society for American Archaeology (SAA) is an international organization that, since its founding in 1934, has been dedicated to the research about and interpretation and protection of

the archaeological heritage of the Americas. With more than 7,000 members, SAA represents professional archaeologists in colleges and universities, museums, government agencies, and the private sector.

- The Society for Computers in Psychology (SCiP) focuses on computational models of cognitive processes, computational tools for data collection and analysis, human-computer interaction, knowledge representation, machine learning, Internet-based research, and technology in the service of improving and evaluating behavioral outcomes.

- Society for Industrial and Applied Mathematics (SIAM), headquartered in Philadelphia, Pennsylvania, is an international society of more than 14,500 individual, academic and corporate members from 85 countries. SIAM helps build cooperation between mathematics and the worlds of science and technology to solve real-world problems through publications, conferences, and communities like chapters, sections and activity groups.

- The Society for Neuroscience is a professional society, headquartered in Washington, DC, for basic scientists and physicians around the world whose research is focused on the study of the brain and nervous system.

- The Society for Personality and Social Psychology, founded in 1974, is the world's largest organization of social and personality psychologists. With over 7,500 members, SPSP strives to advance the science, teaching, and application of social and personality psychology.

- The Society for Text and Discourse is an international society of researchers who investigate all aspects of discourse processing and text analysis. The purpose of the Society is to consolidate research in discourse processing and to enhance communication among researchers in different disciplines. A second objective of the society is to contribute to the education and professional development of those in the field or entering the field.

- Founded in 1936, the Society for the Psychological Study of Social Issues is an association of scientists from psychology and related fields who seek to bring theory and practice into focus on human problems of the group, the community, and nations, as well as the increasingly important problems that have no national boundaries.

- The Society for the Study of Evolution was founded in March, 1946. The objectives of the Society for the Study of Evolution are the promotion of the study of organic evolution and the integration of the various fields of science concerned with evolution.

- The Society of Experimental Social Psychology (SESP) is an international scientific organization dedicated to the advancement of social psychological research. Our typical members have Ph.D.s in social psychology, and work in academic or other research settings.

- The Society of Systematic Biologists advances the science of systematic biology in all its aspects of theory, principles, methodology, and practice, for both living and fossil organisms, with emphasis on areas of common interest to all systematic biologists regardless of individual specialization.

- The Society of Teachers of Family Medicine is multidisciplinary medical organization dedicated to family medicine education and scholarship. STFM coordinates CME conferences and online education devoted to family medicine teaching and research, publishes and/or cosponsors three journals featuring original clinical and educational research articles, and leads other activities designed to improve the teaching skills of family medicine educators and learners.

- Founded in 1961, the Society of Toxicology (SOT) is a professional and scholarly organization of scientists from academic institutions, government, and industry representing the great variety of scientists who practice toxicology in the US and abroad. The Society's mission is to create a safer and healthier world by advancing the science and increasing the impact of toxicology.

- The Society of University Surgeons mission is to support and advance leaders in academic surgery. The education and training of surgeons has always been central to the mission of the SUS. Our members have played crucial roles in virtually all of the critical developments within the field of modern surgery, from the most basic scientific breakthroughs to the technological advances used at the bedside and in the operating room.

- The Soil Science Society of America (SSSA) is a progressive international scientific society that fosters the transfer of knowledge and practices to sustain global soils. Based in Madison, WI, and founded in 1936, SSSA is the professional home for 6,000+ members and 1,000+ certified professionals dedicated to advancing the field of soil science. The Society provides information about soils in relation to crop production, environmental quality, ecosystem sustainability, bioremediation, waste management, recycling, and wise land use.