Subject to change

10:00 a.m. Sigma Xi Chapter Development Workshops

> 11:00 a.m. Delegate Orientation

1:00 p.m. Assembly of Delegates-1

2:45 p.m. Regional Caucus Meetings

4:00 p.m. Constituency Caucus Meetings

5:15 p.m. Assembly of Delegates-2

7:30 p.m. Sigma Xi Chapter Development Workshops



Sigma Xi Annual Meeting
& Student Research Conference

Madison, Wisconsin www.sigmaxi.org/amsrc19

Thursday events are for Sigma Xi chapter delegates only

Subject to change

Life & Health Track	Energy Track	Water Track	Research Enterprise & Professional Development Track	Science Communication, Education, and Public Engagement Track	Research Ethics Track		
8:00–8:30 a.m. Welcome and Opening Remarks: Jamie Vernon and Geri Richmond							
8:30–9:30 a.m. Plenary Session– May Berenbaum, University of Illinois at Urbana-Champaign							
9:30 a.m.–12:00 p.m. Professional Headshot Photography							
9:45–10:45 a.m. Keynote– Challenges of Developing New Vaccines for Neglected Diseases While Facing 21st Century Forces Peter Hotez, Baylor	9:45–10:45 a.m. Contributed Talks– Maxwell Zombies, Fuel Economy Standards, Heavy Duty Vehicles, Conflict in Climate Change Mitigation	Keynote– Smart Sea Level Sensors Conomy Heavy Duty S, Conflict te Change Keynote– Smart Sea Level Sensors Kim Cobb, Georgia Institute of Technology 10:00 a.m.–12:00 p.m. Workshop– Part 1		9:45–10:45 a.m. Keynote– Topic TBA Dietram Scheufele, University of Wisconsin, Madison	9:45–10:15 a.m. Ethical Issues in Conducting Field Research Richard Miller, Texas A&M University- Kingsville		
College of Medicine	O .		Technical Mindset to a Technical Leader				
11:00 a.m.–12:00 p.m. Contributed Talks– TBA	11:00 a.m.–12:00 p.m. Contributed Talks– Biomass Cookstoves, Air Quality, Charcoal Chain Greening, Thermal Insulation	11:00 a.m.–12:00 p.m. Mapping the U.S. Food–Energy– Water Nexus at the Mesocale: the FEWSION Project and the Creation of the FEW-View™ Visualization System Richard Rushforth, Northern Arizona University	Mindset Dennis Hess, Georgia Institute of Technology	11:00 a.m.–12:00 p.m. Contributed Talks– Service-learning, Civic Engagement, Digital Earth, Aquarium of the Pacific	11:00 a.m.–12:00 p.m. Harnessing the Humanities for the Anthropocene Problem Alex Levine, University of South Florida		



12:00 a.m.-1:15 p.m.

Strategies for Long Life Batteries–Inspiration from Batteries that Power Implantable Medical Devices Walston Chubb Award for Innovation Talk and Lucheon–**Esther Takeuchi**, Stony Brook University and Brookhaven National Laboratory

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Life & Health Track	Energy Track	WaterTrack	Research Enterprise & Professional Development Track		Science Communication, Education, and Public Engagement Track	Research Ethics Track
1:30–2:30 p.m. Panel Discussion– Making Environmental Information Matter To Those Who Need It Most Curt Collier, Groundwork USA	1:30–2:30 p.m. Keynote– On the Road to Sustainable Production of Fuels and Chemicals from Biomass Tim Donohue, University of Wisconsin, Madison	ТВА	1:30–2:30 p.m. Workshop– Part 2 Transitioning from a Technical Mindset to a Technical Leader Mindset Dennis Hess	1:30– 3:30 p.m. Workshop– Scientists in Public Service– Running	1:30–2:00 p.m. Advancing Science and Serving Society– Enlightenment and the Responsibilities of the Enlightened Bassam Z. Shakhashiri, University of Wisconsin, Madison	1:30–3:30 p.m. Symposium– Framing the Conversation– Scientists and Engineers as Collaborators
2:30–3:30 p.m. Student Oral Presentations	2:30–3:30 p.m. Contributed Talks– Blockchain in the Energy Industrty, Circular Economy	2:30–3:30 p.m. Joseph Cotruvo, Joseph Cotruvo & Associates, LLC	2:45–3:30 p.m. Contributed Talks–Teaching at Primarily Undergraduate Institutions, Universal Technological Education	for Office as a STEM Candidate Harmony Knutson, 314 Action	2:00–3:30 p.m. Panel Discussion– Moderated by Dieram Schuefele , University of Wisconsin, Madison	with Communitites to Co-Design Innovative Solutions for Resilience and Sustainability

3:30–5:00 p.m. **Professional Poster Session**



5:00–6:15 p.m. at Researchers Use the Inter

Plenary Session–Ways that Researchers Use the Internet to Address Global Environmental Changes, **Vint Cerf**, Google. Followed by an interview by **Joe Palca**, NPR

> 6:30–7:30 p.m. Reception in Honor of Vint Cert

> > 8:00-10:00 p.m.

Pre-Student Research Conference session featuring ice breakers, orientation, networking tips, and poster presentation advice by **Darcy Gentleman**, DJG Communications, LLC

Subject to change

Student Research Conference	Research Enterprise & Professional Development Track	Science Communication, Education, and Public Engagement Track		
	8:00–9:00 a.m. Continental Breakfast and Judges Orien	tation		
	9:00 a.m.–12:15 p.m. Student Research Poster Session			

9:00 a.m.-12:00 p.m. and 3:30-5:30 p.m. Exhibits-Graduate School and Career Fair

12:15–1:15 p.m.
Young Investigator Award Talk and Luncheon–
Ariana Sutton-Grier, University of Maryland, College Park
Coastal Wetland Blue Carbon–The Best Climate Change Solution You Have Never Heard Of?

		2:00–3:15 p.m. Panel Discussion Our Changing	222422	I	2:15–5:15 p.m.	1:30–2:30 p.m. Keynote– Joe Palca, NPR	
2:30–3:30 p.m. Student Oral Presentations	2:30–3:30 p.m. Student Oral Presentations	Academic Environments Deborah Good, Virginia Tech	2:30–4:30 p.m. Workshop– Business Not Taught in Science Class	ТВА	Workshop– Climate Disruption– Carbon Dioxide, Ice, and Water	2:30–5:30 p.m. Workshop– Principles of Slides-Based Talks	2,20,5,20,
			Joseph Sabol, Chemical Consultant		Bassam Shakhashiri and Jerry Bell University of Wisconsin, Madison	Darcy Gentleman, DJG Communications, LLC	3:30–5:30 p.m. Radio Pioneers Talk Series Leslie Cruis, retired National Security Agency Vijayand Kowtha, Naval Research Laboratory

Subject to change

1:00–5:00 p.m. Professional Headshot Photography



5:30–6:30 p.m.

John P. McGovern Science and Society Award Lecture

Ashanti Johnson, Fort Valley State

Effective Strategies for Advancing Diversity and Inclusion in STEM–

Lessons Learned and Work Still Yet to Be Done

Student Presentation Awards

7:00–7:30 p.m. Reception



7:30–9:30 p.m.
Banquet featuring Gold Key Award Ceremony video, William Procter Prize for Scientific Achievement Lecture Presented by **Ben Santer**,
Lawrence Livermore National Laboratory, Student Choice Award
Announcement, and Sigma Xi Induction Ceremony

9:45–11:00 p.m. Entertainment

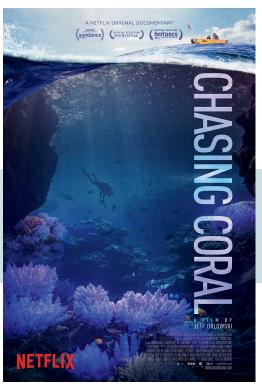
Program at a Glance Subject to Change

9:00 a.m.-4:00 p.m. STEM Artwork Exhibit



9:00 a.m.-4:00 p.m. STEM Film Presentations





12:00-2:30 p.m. Screening of the Documentary Chasing Coral, followed by panel discussion

Sunday's events are free admission and open to the general public.