



# 2019 E EMERGING RESEARCHERS NATIONAL CONFERENCE IN STEM R N

FEBRUARY 21-23

WASHINGTON, D.C.





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2019 Emerging Researchers National (ERN)  
Conference in STEM  
Program Book

Co-hosted by the  
American Association for the Advancement of Science (AAAS)  
Education and Human Resources Programs (EHR)

National Science Foundation (NSF)  
Division of Human Resources Development (HRD)  
Directorate of Education and Human Resources

NSF Directorate for Engineering (ENG)  
Office of Emerging Frontiers in Research and Innovation (EFRI)

National Society of Black Physicists (NSBP)



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# Overview of the Conference

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## Emerging Researchers National (ERN) Conference in STEM

The 2019 Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM) is hosted by the American Association for the Advancement of Science (AAAS), Education and Human Resources Programs (EHR) and the National Science Foundation (NSF) Division of Human Resource Development (HRD), within the Directorate for Education and Human Resources (EHR). The conference is aimed at college and university undergraduate and graduate students who participate in programs funded by the NSF HRD Unit, including underrepresented minorities and persons with disabilities.

In particular, the conference seeks to highlight the research of undergraduate and graduate students who participate in the NSF Research Experiences for Undergraduates (REUs) Program and the following NSF HRD-funded programs:

- Alliance for Graduate Education and the Professoriate (AGEP);
- Centers of Research Excellence in Science and Technology (CREST);
- Emerging Frontiers in Research and Innovation (EFRI-REM) Scholars;
- EntryPoint;
- Historically Black Colleges and Universities Undergraduate Program (HBCU-UP);
- Louis Stokes Alliances for Minority Participation (LSAMP) and LSAMP Bridges to the Doctorate;

- National Society of Black Physicists (NSBP) Scholars<sup>1</sup>;
- Research in Disabilities Education (RDE); and
- Tribal Colleges and Universities Program (TCUP).

The objectives of the conference are to help undergraduate and graduate students to enhance their science communication skills and to better understand how to prepare for science careers in a global workforce. Towards this end, the general format for the 2-1/2 day conference includes:

- Student poster and oral presentations.

Other conference activities include workshops focused on:

- Strategies for applying for and succeeding in graduate programs and finding funding for graduate school;
- Career preparation for the STEM workforce, including employment searches and retention; and
- Understanding STEM careers in a global context and identifying international research and education opportunities for undergraduate and graduate students and faculty.

Exhibitors include representatives from academic, government, business, and the non-profit sector with information about graduate school admissions, fellowships, summer research opportunities, professional development activities, and employment opportunities.

For more information, visit the Web site at <http://www.emerging-researchers.org/>.

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<sup>1</sup>The National Society of Black Physicists (NSBP) is working with AAAS to increase the number of African American and other underrepresented minority physics students who participate in the ERN conference.

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## The National Science Foundation (NSF) Division of Human Resource Development (HRD)

prosperity by supporting the broader participation and success of individuals currently underrepresented in STEM and the institutions that serve them.

The **Division of Human Resource Development (HRD)** serves as a focal point for NSF's agency-wide commitment to enhancing the quality and excellence of STEM education and research through broadening participation by historically underrepresented groups – minorities, women, and persons with disabilities. Priority is placed on investments that promise innovation and transformative strategies and that focus on creating and testing models that ensure the full participation of and provide opportunities for the educators, researchers, and institutions dedicated to serving these populations. Programs within HRD have a strong focus on partnerships and collaborations in order to maximize the preparation of a well-trained scientific and instructional workforce for the new millennium.

### **HRD VISION:**

HRD envisions a well-prepared and competitive U.S. workforce of scientists, technologists, engineers, mathematicians, and educators that reflects the diversity of the U.S. population.

### **HRD MISSION:**

HRD's mission is to grow the innovative and competitive U.S. science, technology, engineering and mathematics (STEM) workforce that is vital for sustaining and advancing the Nation's

# About

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## The National Science Foundation (NSF) Directorate for Engineering (ENG) Office of Emerging Frontiers in Research and Innovation (EFRI)

The Office of Emerging Frontiers in Research and Innovation (EFRI) has been established as a result of strategic planning and reorganization of NSF Engineering Directorate (ENG). Motivated by the vision of ENG to be the global leader in advancing the frontiers of fundamental engineering research, EFRI serves a critical role in helping ENG focus on important emerging areas in a timely manner. Each year, EFRI will recommend, prioritize, and fund interdisciplinary initiatives at the emerging frontier of engineering research and education. These investments represent transformative opportunities, potentially leading to: new research areas for NSF, ENG, and other agencies; new industries or capabilities that result in a leadership position for the country; and/or significant progress on a recognized national need or grand challenge.

The EFRI process of selecting, announcing, and funding new frontier areas will function throughout the year, ensuring continual input and feedback from the engineering community on promising future research opportunities. This input comes from such diverse sources as workshops, advisory committees, technical meetings, professional societies, proposals and awards, and NSF committees of visitors.

From this comprehensive input, ENG identifies, evaluates, and prioritizes those frontier topics that best match the EFRI criteria (transformative, addressing a national need or grand challenge, multi- or inter-disciplinary, an area where the community is poised to respond, and clearly demonstrating ENG's leadership role).

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## The National Society of Black Physicists (NSBP)

Founded in 1977 at Morgan State University, the mission of the National Society of Black Physicists (NSBP) is to promote the professional well-being of African American physicists and physics students within the international scientific community and within society at large.

The organization seeks to develop and support efforts to increase opportunities for African Americans in physics and to increase their numbers and visibility of their scientific work. It also seeks to develop activities and programs that highlight and enhance the benefits of the scientific contributions that African American physicists provide for the international community. The society seeks to raise the general knowledge and appreciation of physics in the African American community.

More information about NSBP is located online at <http://nsbp.org/>.

## The American Association for the Advancement of Science (AAAS)

The American Association for the Advancement of Science is an international non-profit organization dedicated to advancing science around the world by serving as an educator, leader, spokesperson and professional association. In addition to organizing membership activities, AAAS publishes the journal *Science*, <http://www.sciencemag.org/>, as well as many scientific newsletters, books and reports, and spearheads programs that raise the bar of understanding for science worldwide.

AAAS was founded in 1848, and includes some 261 affiliated societies and academies of science, serving 10 million individuals. *Science* has the largest paid circulation of any peer-reviewed general science journal in the world, with an estimated total readership of one million. The non-profit AAAS is open to all and fulfills its mission to "advance science and serve society" through initiatives in science policy; international programs; science education; and more. For the latest research news, log onto EurekAlert!, <http://www.eurekalert.org/>, the premier science-news website, a service of AAAS.

## Membership and Programs

Open to all, AAAS membership includes a subscription to *Science*.

Four primary program areas fulfill the AAAS mission:

- Science and Policy
- International Activities
- Education and Human Resources
- Project 2061

## AAAS Mission

AAAS seeks to "advance science, engineering, and innovation throughout the world for the benefit of all people." To fulfill this mission, the AAAS Board has set these broad goals:

- Enhance communication among scientists, engineers, and the public;
- Promote and defend the integrity of science and its use;
- Strengthen support for the science and technology enterprise;
- Provide a voice for science on societal issues;
- Promote the responsible use of science in public policy;
- Strengthen and diversify the science and technology workforce;
- Foster education in science and technology for everyone;
- Increase public engagement with science and technology; and
- Advance international cooperation in science.

Visit the AAAS website at <http://www.aaas.org/>.



Shirley M. Malcom



Iris R. Wagstaff



Quincy Brown

Dear ERN Conference Participants:

Welcome to the 2019 *Emerging Researchers National (ERN) Conference in Science, Technology, Engineering and Mathematics (STEM)*. This is the ninth ERN conference hosted by AAAS, the publisher of the *Science* family of journals, and supported by the National Science Foundation (NSF). We welcome this collaboration with NSF and applaud the Foundation's continuing commitment to develop STEM talent from all sectors and groups in our society and to support strategies to reach underserved populations nationwide.

This year we have more than 1,300 participants from more than 260 institutions. Nearly 70% of the conference participants are undergraduate and graduate student researchers who are supported by the NSF Human Resources Development (HRD) Programs; Research Experiences for Undergraduates (REU); the Directorate for Engineering (ENG), Office of Emerging Frontiers in Research and Innovation (EFRI) Research Experience and Mentoring (REM) Program; and other federal programs, including the National Institutes of Health, NASA, and USDA.

Plenary sessions will include two panels. One highlights selected ERN alumni who have excelled in the STEM world. We will hear from Isa Watson (*CEO & Founder, Envested*), Kaaba White (*Engineer, Naval Sea Systems Command*), and Deonnia N. Pompey (*PhD Candidate, University of Alabama at Birmingham*) regarding the impact of the ERN conference on their educational and professional development. The other panel is a TED Talk style session that features innovations in STEM with panelists Livia Eberlin (*Assistant Professor of Chemistry, University of Texas at Austin*), Captain Barrington Irving, (*Founder, Experience Aviation*), and Shaun Kane (*Professor of Computer Science, University of Colorado at Boulder*).

In other plenary sessions, Ashanti Johnson (*Co-Founder, Sportin' the Grades Nonprofit Organization, President and CEO, Minorities Striving and Pursuing Higher Degrees of Success Professional Development Institute, and Chief Executive Officer, Cirrus Academy*) and Richard Tapia (*Mathematician and Professor, Department of Computational and Applied Mathematics, Rice University*) will discuss their STEM research and education, career paths and outreach activities.

This is the second year that ERN has included the *HBCU Making & Innovation Showcase* to encourage and support increased participation in STEM-related innovation and entrepreneurship activities by students at HBCUs. Sixteen student teams from HBCUs will share innovative prototypes using hardware and software that address one of the seventeen sustainable development goals of the United Nations and present their work during the ERN conference to a team of inventors and researchers. We also have several new ERN workshops and sessions focused on: *Tech Transfer for Faculty; Beyond the Lab; Effective Science Communication Strategies for the Public; Opportunities in Science Policy - AAAS Science and Technology Policy Fellowships; Leveraging Student Research Experiences to Bridge the Gap for Underrepresented Minorities in STEM Careers; The National GEM Consortium Info Session; and Drop-In Presentation Clinics*. Finally, this year we will hold the first student orientation session to assist attendees on how to best leverage the ERN conference experience and hone their presentation skills.

We will preview the four winning videos from the fourth ERN *Science in a Minute* student video competition. The EFRI-REM Networking dinner will feature Ayanna Howard (*Linda J. and Mark C. Smith Professor and Chair of the School of Interactive Computing at Georgia Tech*). Our continuing workshops will include staff and members of the National Society of Black Physicists, the Association of American Medical Colleges (AAMC), Institute for

Broadening Participation (IBP), and NSF Division of Graduate Education. And for on-site student presenter support, we are once again offering workshops and coaching on presenting oral and poster presentations.

We appreciate the continued support and efforts of exhibitors at this Conference, many of whom are NSF grantees of the NSF Alliances for Graduate Education and the Professoriate (AGEP), Integrative Graduate Education Research Traineeship (IGERT) and NSF INCLUDES Programs. From our evaluations, we know that many ERN attendees have benefited from services and programs provided by the exhibitors.

We are most appreciative of the STEM professionals who serve as role models and mentors and help with the judging of student oral and poster presentations, including alumni of the David and Lucile Packard HBCU Graduate Scholars Program, L'Oréal USA For Women in Science (FWIS) post-doctoral fellowship program, the AAAS Science and Technology Policy Fellows, and the SACNAS Summer Leadership Institute.

We encourage all students to make new contacts, build scientific communications skills, and attend the workshops to build knowledge about graduate school and careers.

As a professional society, AAAS is *working to advance science, engineering, and innovation throughout the world for the benefit of all people*. We encourage all participants to visit [aaas.org](http://aaas.org) to find out about our grants and awards, professional development opportunities, and our *Force for Science* effort. It is our hope that you will expand your STEM workforce knowledge at this Conference.

Sincerely,



Shirley M. Malcom, *Senior Advisor, and Director of SEA Change, AAAS*  
Iris R. Wagstaff, *Program Director, AAAS*  
Quincy Brown, *Program Director, AAAS*

# Conference Staff

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## NSF and AAAS Staff

### NSF Directorate of Education and Human Resources (EHR) and Division of Human Resources Development (HRD) Senior Managers

Karen Marrongelle, *Assistant Director EHR*  
Sylvia M. James, *Deputy Assistant Director (Acting) EHR*  
Jermelina Tupas, *Division Director (Acting) HRD*  
Jody Chase, *Deputy Division Director (Acting) HRD*

### HRD Program Directors

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Jessie DeAro, *ADVANCE, ECR*  
Earnestine Easter, *HBCU-UP, ECR*  
James Hicks, *LSAMP*  
Martha James, *INCLUDES, LSAMP*  
LeRoy Jones, *LSAMP*  
Mark H. Leddy, *ECR, AGEPE*  
Nafeesa Owens, *EASE*  
Claudia Rankins, *HBCU-UP, CAREER, CREST*  
Victor Santiago, *CREST, HBCU-UP*  
Marilyn J. Suiter, *TCUP, HBCU-UP*  
Regina Sievert, *TCUP, CREST*

### NSF Office of Emerging Frontiers in Research and Innovation (EFRI)

Sohi Rastegar, *Director of EFRI*  
Louise R. Howe, *Program Director*  
Garie Fordyce, *Program Manager*  
Brian Gray, *AAAS Science and Technology Policy Fellow*

### NSF Division of Engineering Education and Centers (EEC)

Dana Denick, *Associate Program Director*

## AAAS Education and Human Resources (EHR)

Shirley M. Malcom, *Senior Advisor, and Director of SEA Change*  
Yolanda S. George, *Deputy Director*  
Iris R. Wagstaff, *Program Director*  
Quincy Brown, *Program Director*

## AAAS EHR Conference Staff

Donna Behar  
Betty Calinger  
Jennifer Carinci  
Tarrick Clayton  
Barbara Goldstein  
Janaya Thompson

## AAAS Departments

AAAS Programs/Membership Department

## Pongos Interactive

Chrissy Rey  
Dawn Smith

## Colella Digital

Michael Colella

## ERN Advisory Board

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Carmen K. Sidbury, *The Sidbury Group, LLC*

## Chief Poster and Oral Presentation Judge

Jonathan Lambright, *Savannah State University*

## Assistant Judge

Patrick Dean, *Savannah State University*

## Thursday, February 21, 2019

- 11:00am - 3:00pm **Pre-Conference Packard Scholar Meeting (Invitation Only)**  
*Washington Room 5*
- 3:00pm - 9:00pm **Conference Registration Opens**  
*Convention Registration and Lobby*
- 1:00pm - 7:00pm **Exhibitor Setup**  
*Exhibit Hall A*
- 4:00pm - 5:45pm **Student Orientation & Presentation Skills Workshop (optional for early arrivals)**  
*Washington Room 3*
- 4:00pm - 6:00pm **Judges' Orientation**  
*Maryland A&B*
- 5:00pm - 6:00pm **ADA Resource Room Opens**  
*Maryland A&B*
- 5:00pm - 6:00pm **HBCU Making & Innovation Showcase Orientation Session**  
*Washington Room 1*
- 6:00pm - 8:00pm **Opening Plenary Session 1 and Dinner**  
*Marriott Ballroom*
- AAAS Welcome:**  
**Shirley M. Malcom**, *Senior Advisor, and Director of SEA Change, AAAS*
- Welcome Remarks:**  
**Karen Marrongelle**, *Assistant Director, Directorate for Education and Human Resources (EHR), NSF*
- Linda G. Blevins**, *Deputy Assistant Director, Engineering Directorate, NSF*
- Johnathan Holifield**, *Executive Director, White House Initiative on HBCUs*
- Willie Rockward**, *NSBP President, Chair & Professor, Department of Physics, Morgan State University*
- Quincy Brown**, *AAAS Program Director, HBCU Making & Innovation Showcase*
- Keith Shoates**, *VP, Office of CEO, Vista Equity Partners*

## ERN Alumni Panel and Q&A

**Panel Intruccion:** **Claudia Rankins**,  
*Program Director, NSF, EHR*

**Moderator:** **Kelly Mack**, *VP, Undergraduate STEM Education, Association of American Colleges and Universities and Executive Director, Project Kaleidoscope*

**Panelists:** **Deonnia N. Pompey**, *PhD Candidate, University of Alabama at Birmingham*

**Omar Alberto Movil-Cabrera**,  
*Associate Professor, Chemical Engineering, Polytechnic University of Puerto Rico*

**Kaaba White**, *Engineer, Naval Sea Systems Command*

**Isa Watson**, *CEO & Founder, Invested*

**ERN Agenda Review and Announcements:** **Iris Wagstaff**, *AAAS Program Director, AAAS*

8:00pm - 10:00pm **Exhibit Hall Opens - Session 1**  
*Exhibit Hall A*

## Friday, February 22, 2019

- 7:00am - 6:30pm **Registration**  
*Convention Registration and Lobby*
- Judges' Room and ADA Resource Room Opens**  
*Maryland A&B*
- 7:00am - 7:45am **Oral Presentations Session 1 (Setup)**  
*(See handout for room assignments.)*
- Poster Presentations Session 1 (Setup)**  
*Exhibit Hall A*
- 8:00am - 9:45am **Networking Breakfast and Plenary Session 2**  
*Marriott Ballroom*

# Agenda

**AAAS Welcome:**  
**Rush Holt**, *CEO AAAS and Executive Publisher, Science*

## **Panel on STEM Innovations**

**Moderator:** **Sanna Gaspard**, *Founder and CEO, Rubitection Inc.*

**Panelists:** **Captain Barrington Irving**, *Founder, Experience Aviation*

**Livia Eberlin**, *Assistant Professor of Chemistry, University of Texas at Austin*

**Shaun Kane**, *Professor of Computer Science, University of Colorado at Boulder*

## **Q&A**

9:45am - 10:00am

## **Break**

10:00am - 12:15pm

**Poster Presentations Session 1**  
*Exhibit Hall A*

**Oral Presentations Session 1**  
*(See handout for room assignments)*

**These Include:**  
**Biological Sciences (Graduate Students)**  
*Virginia A*

**Biological Sciences (Undergraduate Students)**  
*Marriott Balcony A*

**Chemistry & Chemical Sciences (Undergraduate Students)**  
*Park Tower Room 8217*

**Computer Sciences & Information Mgt. (Graduate Students)**  
*Park Tower Room 8219*

**Ecology, Environmental, & Earth Sciences (Undergraduate Students)**  
*Park Tower Room 8206*

**Mathematics & Statistics (Graduate Students)**  
*Park Tower Room 8211*

**Physics (Graduate Students)**  
*Park Tower Room 8216*

**Social, Behavioral, & Economic Sciences/Science & Math Education (Undergraduate Students)**  
*Park Tower Room 8212*

**Technology & Engineering (Graduate Students)**  
*Virginia B*

**Technology & Engineering (Undergraduate Students)**  
*Virginia C*

10:00am - 12:15pm

## **Concurrent Workshops - Session 1**

**A. NSF Graduate Research Fellowship**  
*Maryland C*

**Tyrone Mitchell**, *Program Director, NSF, EHR*

**B. Funding Your STEM Education: For Undergraduate & Graduate Students**  
*Marriott Balcony B*

**Bernard Batson**, *Director, Diversity Programs, University of South Florida*

**Sara Hernandez**, *Associate Dean for Inclusion & Student Engagement, Cornell University*

**Yolanda Trevino**, *Assistant Vice President for Diversity, Equity, & Multicultural Affairs, Indiana University*

**C. Physics or Not Physics: Some Answers to the Question**  
*Park Tower Room 8228*

**National Society of Black Physicists (NSBP)**

**Paul Gueye**, *NSBP Past President, Professor, Dept. of Physics, Morgan State University*

**Angelina Gallego**, *Senior Physics Major, Hampton University*

**Elaine Lalanne**, *NSBP*

**Stephen Roberson**, *NSBP*

**D. Biomedical Scientists (PhD) & Physician Scientists (MD-PhD) Training Programs: Preparing and Applying**

*Park Tower Room 8229*

**Association of American Medical Colleges (AAMC)**

**Victoria H. Freedman**, *Associate Dean for Graduate Programs in Biomedical Sciences, Albert Einstein College of Medicine*

**Nancy Schwartz**, *Dean and Director of Postgraduate Studies, University of Chicago*

**Nancy Street**, *Associate Dean and Diversity Inclusion Officer, UT Southwestern Medical Center*

**Michael S. Donnenberg**, *Professor of Internal Medicine and Microbiology and Immunology, Virginia Commonwealth University*

**E. Roadmap to Becoming a Doctor**  
*Park Tower Room 8223*

**Association of American Medical Colleges (AAMC)**

**Rebecca Rice**, *Director, Business Operations, AAMC*

**F. Drop-In Presentation Clinic #1**  
*Congressional*

**Irene Hulede**, *Manager Student Programs, American Society for Microbiology (ASM)*

**Maiysha Jones**, *Senior Scientist, Proctor and Gamble Company*

**G. Transferring Student Innovation Mindsets to Industry Success - Faculty & Students ONLY**  
*Washington Room 1*

12:15pm - 1:30pm

**Plenary Session 3 and Lunch**  
*Marriott Ballroom*

**AAAS Welcome:**

**Maureen Kearney**, *Chief Program Officer, AAAS*

**Moderator: Claudia Rankins**, *Program Director, NSF, EHR*

**Speaker: Ashanti Johnson**, *Co-Founder, Sportin' the Grades Nonprofit Organization, President and CEO, Minorities Striving and Pursuing Higher Degrees of Success Professional Development Institute, and Chief Executive Officer, Cirrus Academy*

**Announcements**

1:30pm - 3:30pm

**HBCU Making & Innovation Showcase Faculty and Students ONLY**

**A. The Ins and Outs of Technology Transfer (Open to all ERN and Maker Faculty)**  
*Wilson A&B*

**B. Understanding the Business of Entrepreneurship (Open to all ERN and Maker Students)**  
*Washington Room 1*

4:00pm - 6:00pm

**HBCU Making & Innovation Showcase Faculty & Students ONLY**

**C. Protecting Your Intellectual Property (Maker Students Only)**  
*Washington Room 1*

1:30pm - 4:00pm

**Exhibit Hall Opens - Session 2**  
*Exhibit Hall A*

1:45pm - 4:00pm

**Poster Presentations Session 2 (Setup)**  
*Exhibit Hall A*

**Oral Presentations Session 2 (Setup)**  
*(See handout for room assignments.)*

4:00pm - 6:30pm

**Poster Presentations Session 2**  
*Exhibit Hall A*

**Oral Presentations Session 2**  
*(See handout for room assignments.)*

**These Include:**  
**Biological Sciences (Graduate Students)**  
*Virginia A*

# Agenda

	<p><b>Biological Sciences (Undergraduate Students)</b> <i>Marriott Balcony A</i></p> <p><b>Chemistry &amp; Chemical Sciences (Graduate Students)</b> <i>Park Tower Room 8209</i></p> <p><b>Computer Sciences &amp; Information Mgt. (Undergraduate Students)</b> <i>Park Tower Room 8219</i></p> <p><b>Ecology, Environmental, &amp; Earth Sciences (Graduate Students)</b> <i>Park Tower Room 8206</i></p> <p><b>Nanoscience (Graduate Students)</b> <i>Park Tower Room 8216</i></p> <p><b>Social, Behavioral, &amp; Economic Sciences (Graduate Students)</b> <i>Park Tower Room 8212</i></p> <p><b>Technology &amp; Engineering (Graduate Students)</b> <i>Virginia B</i></p> <p><b>Technology &amp; Engineering Undergraduate Students)</b> <i>Virginia C</i></p>	
4:00pm - 6:30pm	<p><b>Concurrent Workshops Session 2</b></p> <p><b>A. Funding Your STEM Education: For Undergraduate &amp; Graduate Students</b> <i>Park Tower Room 8228</i></p> <p><b>Bernard Batson</b>, <i>Director, Diversity Programs, University of South Florida</i></p> <p><b>Sara Hernandez</b>, <i>Associate Dean for Inclusion &amp; Student Engagement, Cornell University</i></p> <p><b>Yolanda Trevino</b>, <i>Assistant Vice President for Diversity, Equity, &amp; Multicultural Affairs, Indiana University</i></p> <p><b>B. Job Strategies: Writing an Interview-Winning CV/Resume</b> <i>Washington Room 3</i></p> <p><b>Irene Hulede</b>, <i>Manager, Student Programs, American Society for Microbiology (ASM)</i></p>	<p><b>Maiysha Jones</b>, <i>Senior Scientist, Proctor and Gamble Company</i></p> <p>4:00pm - 4:15pm</p> <p><b>E. EFRI-REM Networking Session 1 (Invitation Only)</b> <i>Washington Room 4</i></p> <p><b>Welcome: Sohi Rastegar</b>, <i>Senior Advisor &amp; Office Head, Office Of Emerging Frontiers &amp; Multidisciplinary Activities (EFMA), Directorate for Engineering (ENG)</i></p> <p>4:15pm - 5:15pm</p> <p><b>EFRI-REM Mentees Session</b> <i>Washington Room 4</i></p> <p><b>1st Seminar Talk</b></p> <p><b>Moderator: Brian Gray</b>, <i>AAAS Science &amp; Technology Policy Fellow</i></p> <p><b>Speaker: Kolby Keo</b>, <i>Special Assistant to the Executive Director, University of California Washington Center</i></p> <p>5:15pm - 6:15pm</p> <p><b>STEM Career Panel</b> <i>Washington Room 4</i></p> <p><b>Moderator: Brian Gray</b>, <i>AAAS Science &amp; Technology Policy Fellow</i></p> <p><b>Panelists: Keshia Ashe</b>, <i>AAAS Science &amp; Technology Policy Fellow</i></p> <p><b>Priscilla Wang</b>, <i>Software Engineering Analyst, JP Morgan Chase &amp; Co.</i></p> <p><b>Rocio Chavela</b>, <i>Director, Education and Career Development, ASEE</i></p> <p><b>William Redmond</b>, <i>Systems Engineer, U.S. Navy Naval Air Systems Command (NAVAIR)</i></p> <p><b>Deidra Walls</b>, <i>Engineer, Northrop Grumman</i></p> <p>4:15pm - 6:15pm</p> <p><b>F. EFRI-REM Mentor Session 2 (Invitation Only)</b> <i>Wilson A&amp;B</i></p> <p><b>Tuere Bowles</b>, <i>Associate Professor in the Department of Leadership, Policy, Adult &amp; Higher Education, North Carolina State University</i></p> <p><b>Christine Grant</b>, <i>Associate Dean of Faculty Advancement, College of Engineering, North Carolina State University</i></p>

	<b>Andrew Greenberg</b> , <i>Distinguished Faculty Associate in the College of Engineering, University of Wisconsin-Madison</i>
6:15pm - 7:00pm	<b>EFRI-REM Mentees Session</b> <i>Washington Room 4</i>
	<b>2<sup>nd</sup> Seminar Talk</b>
	<b>Moderators:</b> <i>Garie Fordyce and Brian Gray, NSF</i>
6:30pm	<b>Dinner on Your Own</b>
7:00pm - 9:00pm	<b>Invitation-Only Networking Sessions</b>
	<b>EFRI-REM Dinner Networking Session</b> <i>Marriott Salon 1</i>
	<b>Welcome and Moderator:</b> <b>Sohi Rastegar</b> , <i>NSF ENG EFMA/EFRI</i>
	<b>Speaker:</b> <b>Ayanna Howard</b> , <i>Linda J. and Mark C. Smith Professor and Chair of the School of Interactive Computing, Georgia Tech</i>
7:00pm - 9:00pm	<b>Students with Disabilities Networking Dinner</b> <i>Virginia A</i>
7:00pm - 9:00pm	<b>National Society of Black Physicists Networking Dinner</b> <i>Marriott Salon 3</i>

## Saturday, February 23, 2019

7:00 am	<b>Breakfast on Your Own</b>
7:00am - 2:00pm	<b>Registration</b> <i>Convention Registration and Lobby</i>
7:30am - 5:30pm	<b>Judges' Room Opens</b> <i>Maryland A&amp;B</i>
7:30am - 8:00am	<b>Poster Presentations Sessions 3 and 4 (Setup)</b> <i>Exhibit Hall A</i>
	<b>Oral Presentations Sessions 3 and 4 (Setup)</b> <i>(See handout for room assignments.)</i>

9:00am - 11:00am	<b>ADA Resource Room Opens</b> <i>Maryland A&amp;B</i>
8:00am - 10:30am	<b>Poster Presentations Session 3</b> <i>Exhibit Hall A</i>
	<b>Oral Presentations Session 3</b> <i>(See handout for room assignments.)</i>
	<b>These include:</b>
	<b>Biological Sciences (Graduate Students)</b> <i>Marriott Balcony B</i>
	<b>Biological Sciences (Undergraduate Students)</b> <i>Marriott Balcony A</i>
	<b>Computer Sciences &amp; Information Mgt. (Undergraduate Students)</b> <i>Park Tower Room 8219</i>
	<b>Nanoscience (Undergraduate Students)</b> <i>Park Tower Room 8216</i>
	<b>Technology &amp; Engineering (Graduate Students)</b> <i>Virginia A</i>
	<b>Technology &amp; Engineering (Undergraduate Students)</b> <i>Park Tower Room 8223</i>
8:30am - 10:30am	<b>Concurrent Workshop - Session 3</b>
	<b>A. Drop-In Presentation Clinic #2</b> <i>Park Tower Room 8228</i>
	<b>Irene Hulede</b> , <i>Manager Student Programs, American Society for Microbiology (ASM)</i>
	<b>Maiysha Jones</b> , <i>Senior Scientist, Proctor and Gamble Company</i>
9:00am - 10:30am	<b>B. Biomedical Scientists (PhD) &amp; Physician Scientists (MD-PhD) Training Programs: Personal Statement and the Interview</b> <i>Park Tower Room 8206</i>
	<b>Association of American Medical Colleges (AAMC)</b>
	<b>Victoria H. Freedman</b> , <i>Associate Dean for Graduate Programs in Biomedical Sciences, Albert Einstein College of Medicine</i>

# Agenda

	<p><b>Nancy Schwartz</b>, <i>Dean and Director of Postgraduate Studies, University of Chicago</i></p> <p><b>Nancy Street</b>, <i>Associate Dean and Diversity Inclusion Officer, UT Southwestern Medical Center</i></p> <p><b>Mary-Claire Roghmann</b>, <i>Director Medical Scientist Training Program, University of Maryland School of Medicine</i></p>		
8:00am - 9:30am	<p><b>HBCU Making &amp; Innovation Showcase Session (Invitation Only)</b> <i>Washington Room 1</i></p> <p><b>Showcase Setup (Invitation Only)</b> <i>Washington Room 1</i></p>		
9:30am - 10:30am	<p><b>HBCU Making &amp; Innovation Showcase</b> <i>Washington Room 1</i></p>		
9:00am - 12:30pm	<p><b>Exhibit Hall Opens - Session 3</b> <i>Exhibit Hall A</i></p>		
11:00am - 12:30pm	<p><b>Poster Presentations Session 4</b> <i>Exhibit Hall A</i></p> <p><b>Oral Presentations Session 4</b> <i>(See handout for room assignments.)</i></p> <p><b>These include:</b></p> <p><b>Biological Sciences (Graduate Students)</b> <i>Marriott Balcony B</i></p> <p><b>Biological Sciences (Undergraduate Students)</b> <i>Marriott Balcony A</i></p> <p><b>Chemistry &amp; Chemical Sciences (Undergraduate Students)</b> <i>Park Tower Room 8217</i></p> <p><b>Ecology, Environmental, &amp; Earth Sciences (Undergraduate Students)</b> <i>Park Tower Room 8206</i></p> <p><b>Mathematics &amp; Statistics (Undergraduate Students)</b> <i>Park Tower Room 8211</i></p> <p><b>Physics (Undergraduate Students)</b> <i>Park Tower Room 8216</i></p>	11:00am - 12:30pm	<p><b>Science &amp; Math Education (Graduate Students)</b> <i>Park Tower Room 8212</i></p> <p><b>Concurrent Workshop - Session 4</b></p> <p><b>A. Beyond the Lab: Effective Science Communication Strategies for the Public</b> <i>Park Tower Room 8229</i></p> <p><b>Chloe Poston</b>, <i>Associate Director, The Leadership Alliance</i></p> <p><b>B. Opportunities in Science Policy: AAAS Science and Technology Policy Fellowships</b> <i>Park Tower Room 8219</i></p> <p><b>Jessica Soule</b>, <i>Project Director, Recruitment, Marketing &amp; Alumni Engagement, AAAS Science &amp; Technology Policy Fellowships</i></p> <p><b>C. Leveraging Student Research Experiences to Bridge the Gap for Underrepresented Minorities in STEM Careers</b> <i>Park Tower Room 8223</i></p> <p><b>Irene Aninye</b>, <i>Senior Program Associate, Research Competitiveness Program, AAAS</i></p>
		11:00am - 1:00pm	<p><b>D. The National GEM Consortium Info Session</b> <i>Maryland C</i></p> <p><b>Howard Adams</b>, <i>Founder, H.G. Adams and Associates, Inc.</i></p> <p><b>Marcus Huggans</b>, <i>Executive Director of Client Relations, GEM</i></p> <p><b>Renetta Tull</b>, <i>Assoc. Vice Provost for Strategic Initiatives at the University of Maryland, Baltimore County (UMBC), and Professor of the Practice in UMBC's College of Engineering &amp; Information Technology (Humanitarian Engineering)</i></p>
		11:00am - 11:30am	<p><b>E. EFRI-REM Poster Session</b> <i>Washington Rooms 4 &amp; 5</i></p> <p><b>EFRI-REM Poster Room Setup</b> <i>Washington Rooms 4 &amp; 5</i></p>

11:30am - 1:00pm	<b>EFRI-REM Poster Judging</b> <i>Washington Rooms 4 &amp; 5</i>
	<b>Moderator: Brian Gray, NSF ENG EFMA/EFRI</b>
12:30pm	<b>Exhibits Close</b> <i>Exhibit Hall A</i>
12:30pm	<b>Lunch On Your Own</b>
12:30pm - 2:30pm	<b>EFRI-REM Lunch (Invitation Only)</b> <i>Washington Rooms 4 &amp; 5</i>
1:00pm - 1:45pm	<b>SWOT Session for EFRI-REM Mentees (Invitation Only)</b> <i>Virginia C</i>
	<b>Sohi Rastegar, NSF ENG EMFA/EFRI</b> <b>Brian Gray, NSF ENG EFMA/EFRI</b>
1:00pm - 1:45pm	<b>SWOT Session for EFRI-REM Mentors (Invitation Only)</b> <i>Virginia B</i>
	<b>Moderators: Sohi Rastegar, NSF ENG EFMA/EFRI</b>
	<b>Dana Denick, Associate Program Director, EEC, NSF</b>
	<b>Garie Fordyce, Program Manager, EFMA</b>
1:45pm - 3:00pm	<b>EFRI-REM Mentee Interviews</b> <i>Virginia C</i>
	<b>EFRI-REM Mentor Interviews</b> <i>Virginia B</i>
12:30pm - 3:30pm	<b>Judges Meeting and Lunch (Determining Awardees)</b> <i>Maryland A&amp;B</i>
2:00pm - 2:30pm	<b>ERN Advisory Board Meeting</b> <i>Maryland A&amp;B</i>
2:00pm - 6:00pm	<b>Free Time for Tours or Special Meetings</b>
6:00pm - 9:00pm	<b>Plenary Session 4 and Awards Banquet</b> <i>Marriott Ballroom</i> <b>(Doors open at 5:45pm)</b>

9:30pm

**Moderator: Shirley M. Malcom, Senior Advisor, and Director of SEA Change, AAAS**

**Speaker and Q&A:**

**Richard Tapia, Mathematician and Professor, Department of Computational and Applied Mathematics, Rice University**

**Recognition of David and Lucile Packard HBCU Scholars:**

**James Stith, Vice President Emeritus, American Institute of Physics (AIP)**

**Recognition of the AAAS Policy Fellows, SACNAS Leadership Institute Alumni, and the L'Oreal USA for Women in Science (FWIS) Fellows:**

**Shirley M. Malcom, Senior Advisor, and Director of SEA Change, AAAS**

**Presentation of EFRI-REM Poster Awards:**

**Sohi Rastegar, Director of EFMA/EFRI, NSF**

**Presentation of the HBCU Making & Innovation Showcase Awards:**

**Quincy Brown, Program Director, AAAS**

**Presentation of the ERN Video Competition Awards:**

**Tarrick Clayton, Program Associate, AAAS**

**Presentation of Oral and Poster Awards:**

**Jonathan Lambright, Professor, Dean of College of Sciences and Technology, Savannah State University**

**Shirley M. Malcom, Senior Advisor, and Director of SEA Change, AAAS**

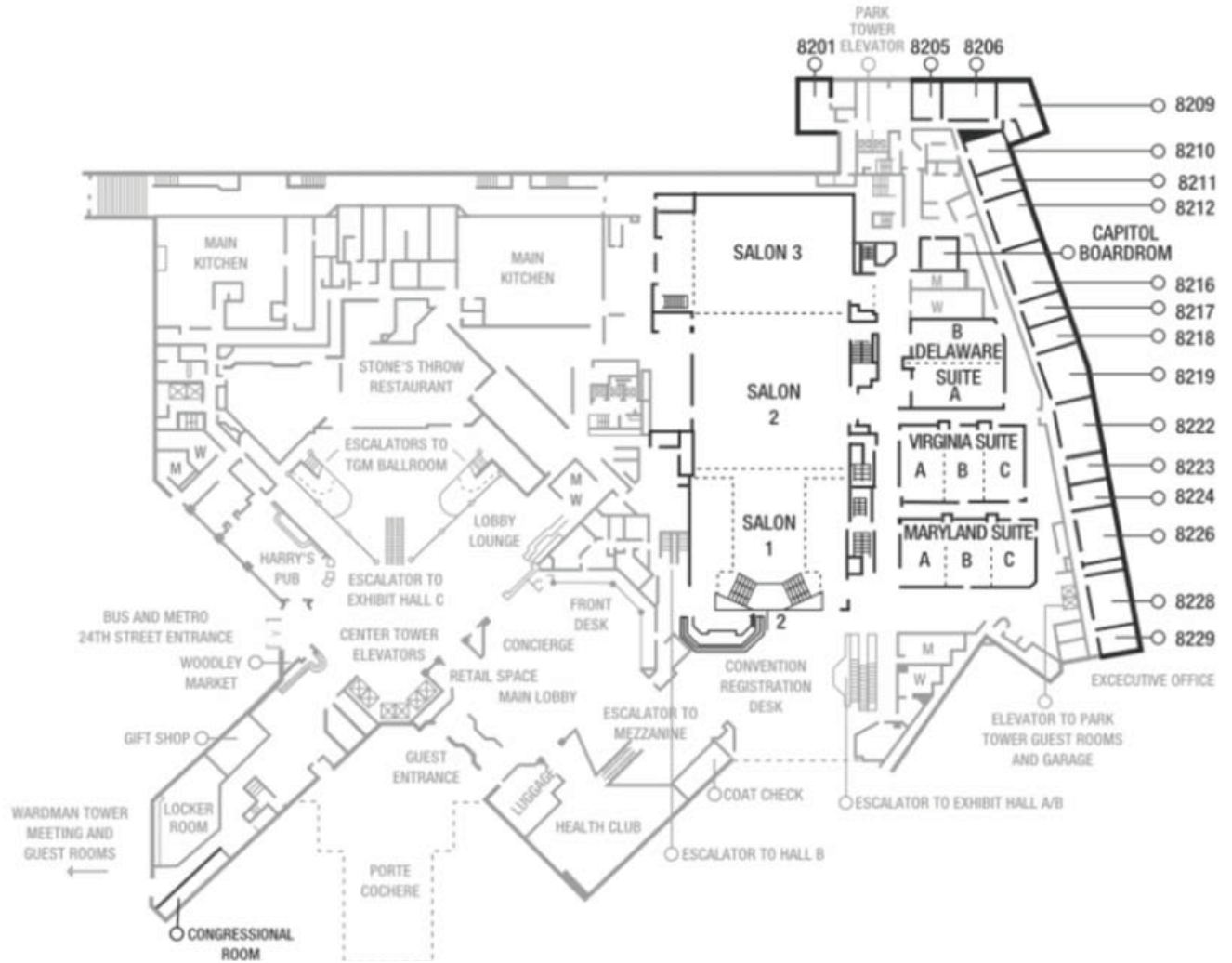
**Claudia Rankins, Program Director, HRD, NSF**

**Presentation of Conference Incentives: AAAS ERN Conference Staff**

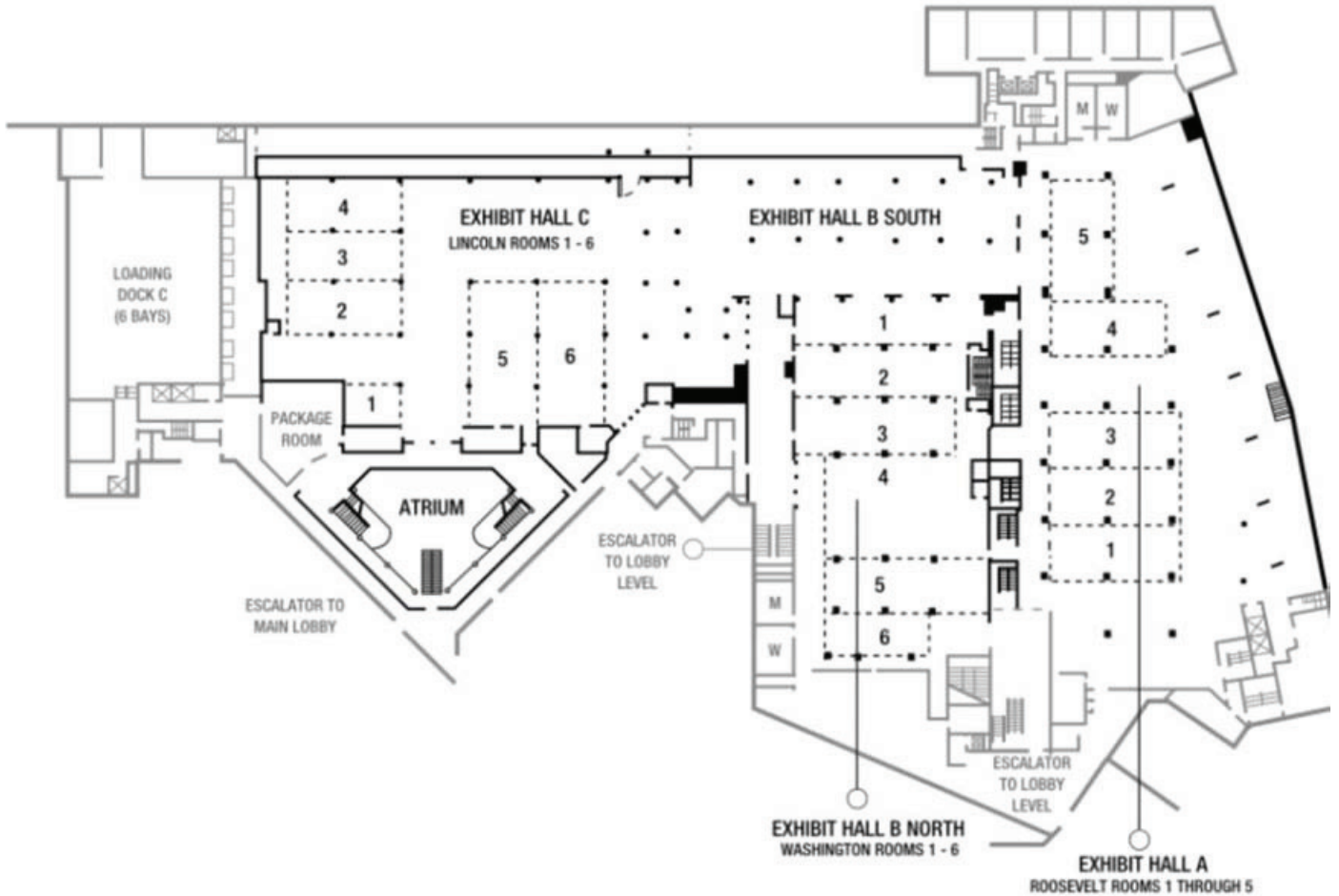
**Adjourn**

# Hotel Floor Plans

## LOBBY LEVEL



## EXHIBITION LEVEL



# Washington, DC Metro System Map



wmata.com  
 Customer Information Service: 202 637-7000  
 TTY Phone: 202 638-3780  
 Metro Transit Police: 202 962-2121

## Legend

- RD** Red Line • Glenmont / Shady Grove
- OR** Orange Line • New Carrollton / Vienna
- BL** Blue Line • Franconia-Springfield / Largo Town Center
- GR** Green Line • Branch Ave / Greenbelt
- YL** Yellow Line • Huntington / Fort Totten
- SV** Silver Line • Wiehle-Reston East / Largo Town Center

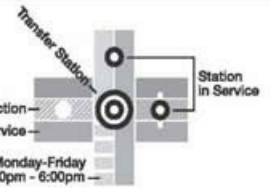
## Station Features

- Bus to Airport
- Parking
- Hospital
- Airport

## Connecting Rail Systems

- VRE
- AMT

**Under Construction** — —  
**Full-Time Service** — —  
**Rush-Only Service: Monday-Friday**  
 6:30am - 9:00am 3:30pm - 6:00pm



**MetroRail Operating Times**  
 Mon-Thu  
 5am-midnight  
 Fri  
 5am-3am  
 Sat  
 7am-3am  
 Sun  
 7am-midnight  
 Times are approximate

Metro is accessible.  
www.wmata.com/accessible





**Linda G. Blevins, Deputy Assistant Director, Engineering Directorate, NSF**

Linda G. Blevins joined the National Science Foundation (NSF) as the Deputy Assistant Director of the Engineering Directorate in December 2017. For the decade prior to joining NSF, she was a

Senior Technical Advisor in the Office of the Deputy Director for Science Programs in the Department of Energy's Office of Science, where she provided technical and policy advice on all aspects of science funding program management. Blevins previously served as an NSF program director; as a Senior Member of the Technical Staff at Sandia National Labs; and as a National Institutes of Standards and Technology research staff member. Her research expertise is in combustion. She received a Ph.D. from Purdue, an M.S. from Virginia Tech, and a B.S. from Alabama, all in mechanical engineering.



**Quincy Brown, AAAS Program Director, EHR and Lead for HBCU Making & Innovation Showcase**

Quincy Brown is a Program Director for STEM Education Research at the American Association for the Advancement of Science (AAAS). Her project portfolio includes the Robert Noyce Teacher

Scholarship Program and investigating innovations in Preservice STEM teacher education, investigating STEM mentoring practices, supporting the AAAS Emerging Researchers National Conference, and investigating making and innovation on HBCU campuses.

She was previously a Senior Policy Advisor in the White House Office of Science and Technology Policy. There, her portfolio included Agricultural Entrepreneurship, STEM Education, and the My Brother's Keeper STEM+Entrepreneurship initiatives. She is a co-founder of NationOfMakers.org and blackcomputeHER.org. She spent two years as AAAS Science & Technology Policy Fellow at the National Science Foundation in the CISE Directorate. She earned her Ph.D. in Computer Science from Drexel University. She was a recipient of the Computing Community Consortium (CCC) CI Fellows Postdoctoral Research Fellowship award and was a National Science Foundation GK-12 and Bridge to the Doctorate Fellow.

Brown was also a Professor of Computer Science at Bowie State University. Her research interests included Mobile HCI, CS Education, and Broadening Participation in Computing. In 2011, she founded Girls Who Will, a summer program for middle and high school girls. Through her research she sought to identify methods of facilitating human interaction with advanced technologies to support learning. Her projects included

exploring the ways in which young children use touch and gesture interactions with mobile devices, first responders' use of mobile devices during emergency evacuations, and modeling inquiry behaviors on mobile devices.



**Livia Schiavinato Eberlin, Assistant Professor of Chemistry, University of Texas at Austin**

Livia Schiavinato Eberlin was born and raised in Campinas, São Paulo, Brazil. Her passion for mass spectrometry started as an undergraduate student. During her sophomore year at the State University of

Campinas (UNICAMP) in São Paulo, she started research in mass spectrometry in the Thomson Laboratory. That same year, she visited the Aston Laboratory at Purdue University and continued on as an undergraduate research assistant during subsequent summers. In 2007, she received her B.S. in Chemistry from UNICAMP. In 2008, she entered the PhD program in Analytical Chemistry at Purdue University under the mentorship of Professor R. Graham Cooks. During her PhD, Eberlin developed and applied ambient ionization mass spectrometry imaging to human cancer diagnosis and surgical margin evaluation. In recognition of her innovative PhD work, Eberlin received several awards including the Nobel Laureate Signature Award from the American Chemical Society. In 2012, she started her postdoctoral work at Stanford University under the guidance of Professor Richard N. Zare, where she continued to develop mass spectrometry technology for biomedical research. During that period, she received the L'Oréal for Women in Science Fellowship, a K99 pathway to independence award from the NIH/NCI, and was part of the Forbes 30 under 30 list in Science and Healthcare.

In 2016, Eberlin officially started her independent career as an Assistant Professor in the Chemistry Department at the University of Texas at Austin. She has since formed a group with 11 graduate students, several undergraduate research assistant, and a research associate. Her research group is focused on developing innovative mass spectrometry technologies to address critical problems in health-related research. Within the last 3 years, her group has published 12 articles and received several research grants. As a professor, Eberlin has received the 2017 Marion Milligan Mason Award for Women in the Chemical Sciences, and was recently named a 2018 Sloan Research Fellow, 2018 MacArthur Fellow, and a 2018 Moore Inventor Fellow.

# Biographies



**Sanna Gaspard, Founder and CEO, Rubitection Inc.**

Sanna Gaspard earned her bachelor's degree in biomedical engineering (BME) at the University of Miami in 2004. Sanna went on to complete her Master's a year later and PhD in BME at Carnegie Mellon University by 2011. While earning her graduate degree she received separate patents for her invention of two medical technologies: an infant therapy device to support preterm infants' health and an optical device for early bed sore detection. To support the commercialization of these two technologies she founded the medical device companies of TLneoCare, LLC and Rubitection Inc. As CEO and founder of both startups she developed the vision, business strategy and IP strategy, business plans, and raised initial financing for her companies. Gaspard has received recognition and awards for her accomplishments in engineering and entrepreneurship, including: the Digital Health MedMo competition 2019, finalist for Merck Displaying Futures Award, AAAS-Lemelson Invention Ambassador, the UpPrize Competition, Medical Capital Innovation Competition, winner for the regional Alpha Lab Gear Hardware Cup, National Association of Corporate Directors Shark Tank, 2nd place winner at the HitLab Healthcare Challenge, 3 Rivers Investment Venture Fair's Technology showcase, and IEEE New Face of Engineering. She has a passion for science, technology, inventing, medical devices, entrepreneurship, and encouraging students to get into STEM fields. She looks forward to applying her knowledge as a scientist and entrepreneur on a corporate board to support long term vision, strategy implementation, and company growth or as a project consultant.



**Yolanda S. George, Deputy Director and Program Director, AAAS EHR**

Yolanda Scott George is Deputy Director and Program Director, Education and Human Resources Programs, American Association for the Advancement of Science (AAAS). She has served as Director of Development, Association of Science-Technology Centers (ASTC), Washington, DC; Director, Professional Development Program, University of California, Berkeley; and as a research biologist at Lawrence Livermore Laboratory involved in cancer research and cell cycle studies using flow cytometer and cell sorters.

George has conducted evaluations, workshops and reviews for the National Institutes of Health and National Science Foundation (NSF), as well as for private foundation and public agencies, including the European Commission. She works with UNIFEM, UNESCO, L'Oreal USA and Paris and non-governmental organizations on gender, science, and technology initiatives

related to college and university recruitment and retention and women leadership in STEM.

She serves or has served as principal investigator (PI) or co-PI on several NSF grants, including Vision and Change in Undergraduate Biology Education; National Science Education Digital Library Biological Sciences Pathways; Historically Black Colleges and Universities-Undergraduate Programs; Robert Noyce Teacher Scholarship Program; Transforming Undergraduate Education in STEM (TUES) and Virtual Faculty Workshop; and Women's International Research Collaborations at Minority Serving Institutions. In addition, George is the lead AAAS staff person for the L'Oreal USA Fellowships for Women in Science Program (postdoctoral fellowships) and the David and Lucile Packard Foundation HBCU Graduate Scholars Program (graduate school fellowships).



**Johnathan Holifield, Executive Director, White House Initiative on Historically Black Colleges and Universities**

Appointed Executive Director in October 2017, Holifield is a recognized expert in economic and education inclusion and competitiveness, focusing on public-private partnerships and community system-building. Prior to his appointment, he co-founded ScaleUp Partners and authored *The Future Economy and Inclusive Competitiveness: How Demographic Trends and Innovation Can Create Economic Prosperity for All Americans*. Holifield's interdisciplinary career includes serving as founding Vice President of Inclusive Competitiveness at NorTech, a leading regional innovation cluster and competitiveness organization, where he authored the Ohio Department of Higher Education statewide report, *Inclusive Competitiveness: Empowering Underrepresented Ohioans to Compete in the Innovation Economy*, and serving on the Northeast Ohio Council of Regional Economic Policy Advisors. He was founding Vice President of New Economy Enterprise at the Cincinnati USA Chamber of Commerce and founding Executive Director of CincyTech, a market-leading venture development organization. He has also held chief executive positions with the Buffalo Olmsted Parks Conservancy and Cleveland Urban League.

Holifield earned his B.A. from West Virginia University where he captained the football team and later played for the Cincinnati Bengals. He went on to receive his J.D. and M.Ed. from the University of Cincinnati and a professional certificate from University of Oklahoma Economic Development Institute.



**Rush Holt, CEO AAAS and Executive Publisher, Science**

Rush D. Holt, Ph.D., became the 18th chief executive officer of the American Association for the Advancement of Science (AAAS) and executive publisher of the Science family of journals in February 2015. In this role, Holt leads the world's largest multi-disciplinary scientific and engineering society. Over his career, Holt has held positions as a teacher, scientist, administrator, and policymaker. From 1987 to 1998, Holt was assistant director of the Princeton Plasma Physics Laboratory (PPPL), a Department of Energy national lab, which is the largest research facility of Princeton University and one of the largest alternative energy research facilities in the country. Holt then served for 16 years as a member of the U.S. House of Representatives, representing New Jersey's 12th Congressional District. Holt is a Phi Beta Kappa graduate of Carleton College and holds M.A. and Ph.D. degrees in physics from New York University.



**Ayanna Howard, Linda J. and Mark C. Smith Professor and Chair of the School of Interactive Computing, Georgia Tech**

Ayanna Howard, Ph.D. is the Linda J. and Mark C. Smith Professor and Chair of the School of Interactive Computing in the College of Computing at the Georgia Institute of Technology. She also holds a faculty appointment in the School of Electrical and Computer Engineering. Howard's career focus is on intelligent technologies that must adapt to and function within a human-centered world. Her work, which encompasses advancements in artificial intelligence (AI), assistive technologies, and robotics, has resulted in over 250 peer-reviewed publications in several projects - from healthcare robots in the home to AI-powered STEM apps for children with diverse learning needs. Howard received her B.S. in Engineering from Brown University, and her M.S. and Ph.D. in Electrical Engineering from the University of Southern California. To date, her unique accomplishments have been highlighted through a number of awards and articles, including highlights in *USA Today*, *Upscale*, and *TIME Magazine*, as well as being recognized as one of the 23 most powerful women engineers in the world by *Business Insider*. In 2013, she also founded Zyrobotics, which is currently licensing technology derived from her research and has released their first suite of STEM educational products to engage children of all abilities. Prior to Georgia Tech, Howard was a senior robotics researcher at NASA's Jet Propulsion Laboratory. She has also served as the Associate Director of Research for the Institute for Robotics and Intelligent Machines, Chair of the Robotics Ph.D. program, and the Associate Chair for Faculty Development in the School of Electrical and Computer Engineering at Georgia Tech.



**Barrington Irving, Founder, Experience Aviation**

Captain Barrington Irving has traveled to 50 countries, conducted more than 30 STEM expeditions, and successfully challenged middle school students to build a car faster than a Ferrari 430 and high schoolers to build a plane he then flew on its test flight. In 2007, he set two world records—at age 23—as the youngest person and first Black pilot to fly solo around the world. He has a passion to explore, inspire, and educate others. Now at 35, Barrington is still an explorer that investigates real world STEM problems across the globe. Established by Captain Irving in 2014, the Flying Classroom is a K-8 STEM+ digital curriculum that challenges students to design innovative solutions to problems he investigates. Before founding the Flying Classroom, Barrington created a nonprofit, Experience Aviation, which offers hands-on, STEM-based programs and career guidance to middle and high school students in Florida, Texas, Georgia, Michigan, Ohio and counting.

Born in Kingston, Jamaica and brought up in inner-city Miami, Barrington was inspired to pursue aviation at age 15, when a Jamaican airline pilot offered to mentor him. Rejecting college football scholarships, he pursued a career in STEM and never looked back. A magna cum laude graduate of Florida Memorial University, Barrington was the recipient of a Congressional Resolution acknowledging his pioneering work in aviation education. He received the Guinness World Record as the youngest person to fly solo around the world and was named a National Geographic Emerging Explorer in 2012.



**Ashanti Johnson, Co-Founder, Sportin' the Grades Nonprofit Organization, President and CEO, Minorities Striving and Pursuing Higher Degrees of Success Professional Development Institute, and Chief Executive Officer, Cirrus Academy**

Ashanti Johnson is an internationally recognized expert and speaker on STEM professional development, diversity and women in STEM topics. In her interview "Women Exploring Oceans", Johnson reveals how she initially became interested in the oceans by watching Jacques Cousteau and how that interest was strengthened after interacting with a female marine biology graduate student who spent a day with Ashanti, then a fifth grader, discussing the oceans. Johnson, received her Ph.D. in 1999 in Oceanography from Texas A&M University and throughout her college and professional career has frequently shared her interest in the oceans with children, teachers, community leaders, college students and federal government officials. In addition to serving as an aquatic scientist and

# Biographies

conducting research as a university faculty member in Georgia, Florida and Texas, Johnson has gained over 15 years of senior leadership experience in universities, non-profit and K-12 organizations, including: serving as an Assistant Vice Provost at the University of Texas at Arlington, Executive Director of the Institute for Broadening Participation, CEO of STEM Human Resource Development Inc, Executive Director of the Minorities Striving and Pursuing Higher Degrees of Success (MS PHDs) Professional Development and Mentoring Institute and the CEO/Superintendent of Cirrus Academy, a state-wide STEAM (Science, Technology, Engineering, Arts and Mathematics) charter school system in Georgia. Her honors include a US Presidential Award for Excellence in Science Mathematics and Engineering Mentoring by President Obama at the White House and the prestigious American Geophysical Union Excellence in Geophysical Education and Ambassador Awards.

Johnson has been profiled in Wikipedia, several STEM textbooks and various other publications and has served as a speaker in Cambodia, Brazil, Spain, China, Mexico, and several US government agencies, universities, international conferences and K-12 organizations. In 2016, Black Enterprise Magazine described her as one of “10 Black Women Changing the World via Science and Technology” and Fox News Channel’s international Fox & Friends show featured her during its 2016 Black History Month series. In the February 2018 Black History Month issue of Essence Magazine, Johnson is recognized as being one of “STEM’s New Guard” in an article highlighting “15 Women who are Paving the Way and Paying it Forward.”



**Shaun Kane, Professor of Computer Science, University of Colorado at Boulder**

Shaun Kane is an Associate Professor in the Department of Computer Science at the University of Colorado, Boulder, CO. He directs the CU Superhuman Computing Lab, which investigates how to design computing technology that empowers people of all abilities. Kane's prior projects include developing new interaction techniques to make touch screen devices more accessible to blind and visually impaired people, new programming tools for creating accessible audio games, intelligent communication assistants for people with aphasia, and new touch screen devices optimized for people who use power wheelchairs. He is the co-developer of Ability-Based Design, a design framework that supports designers in developing intelligent systems that can adapt to the abilities of their users, rather than requiring users to adapt to the system.

Receiving his Ph.D. from The Information School at the University of Washington in 2011, he served as faculty at the University of Maryland Baltimore County from 2011 to 2014. Kane is, by courtesy, faculty in the ATLAS Institute and the

Department of Information Science at the University of Colorado, Boulder. His research has been supported by an Alfred P. Sloan Fellowship, a National Science Foundation CAREER Award, and a DO-IT Trailblazer Award.



**Maureen Kearney, Chief Program Officer, AAAS**

Maureen Kearney, AAAS Chief Program Officer, joined AAAS in February 2018. Kearney brings an extensive mix of academic, management and public engagement experience to AAAS. Prior to joining AAAS, she served as Associate Director for Science at the Smithsonian Institution’s National Museum of Natural History. Before that, she served as Program Director and Acting Division Director in the Division of Environmental Biology at the National Science Foundation. Previously, she worked as a research curator at the Field Museum of Natural History and a member of the Committee of Evolutionary Biology at the University of Chicago. She received her PhD in Biological Sciences, with a research focus on phylogenetics, evolution and biodiversity science from George Washington University. As the Chief Program Officer at AAAS, Kearney oversees programs such as Science and Technology Fellowships; Scientific Responsibility, Human Rights & Law; Science Diplomacy; STEM Education; and Dialogue on Science, Ethics and Religion.



**Jonathan Lambright, Professor, former Dean of Colleges of Sciences and Technology, Savannah State University**

Jonathan Lambright is Full Professor and former Dean of the Colleges of Sciences and Technology at Savannah State University. He has also served as interim Assistant Vice President of Academic Affairs and Chair of the Engineering Technology and Mathematics Department at Savannah State.

Lambright received his B.S. in Mechanical Engineering from North Carolina A&T in 1985. After working for 3 years as a mechanical engineer at the Department of Defense, he returned to graduate school at North Carolina A&T and received his M.S. in Mechanical Engineering in 1990 with a focus in Computer Aided Design and Manufacturing. He then attended Georgia Tech’s George W. Woodruff School of Mechanical Engineering and received his Ph.D. in 1996. While at Georgia Tech his studies focused on design methodology and manufacturing automation. During the period between 1992 and 1996, Jonathan worked for the Lockheed Martin Aeronautical Systems Co. in Marietta, GA. At Lockheed, he worked on various research and development projects within the Advanced Design

Department. The research projects at Lockheed consisted of Computer-Assisted Manufacturing Tools, Design Tools using Knowledge-Based Systems and Advance Database applications. Between 1996 and 2002, he consulted with Fortune 500 and other companies in areas of Enterprise Applications including Manufacturing Execution Systems and Customer Relation Management Systems.

In 2006, he received the Savannah State University NROTC teacher of the year award and the NSF HBCU-UP Mentor Award. In 2008, he was selected as a Summer Faculty Fellow at NASA Stennis Space Center. During the 2010-11 academic year, Lambright participated in and became a graduate of the University System of Georgia's Executive Leadership Institute. He has taught courses for the Georgia Tech Regional Engineering Program at Savannah State and has been involved in engineering education research targeted at increasing the numbers of minority students majoring and graduating from engineering disciplines.



**Kelly Mack, VP, Undergraduate STEM Education, Association of American Colleges and Universities and Executive Director, Project Kaleidoscope**

Kelly Mack is the Vice President for Undergraduate STEM Education and Executive Director of Project Kaleidoscope

at the Association of American Colleges and Universities (AAC&U). Prior to joining AAC&U, Mack was the Senior Program Director for the National Science Foundation (NSF) ADVANCE Program while on loan from the University of Maryland Eastern Shore (UMES) where, as a Professor of Biology, she taught courses in Physiology and Endocrinology for 17 years.

Mack earned the BS degree in Biology from UMES and, later, the PhD degree from Howard University in Physiology. She has had extensive training and experience in the area of cancer research with her research efforts focusing primarily on the use of novel antitumor agents in breast tumor cells. Most recently, her research focus has involved the use of bioflavonoids in the regulation of estrogen receptor positive (ER+) and estrogen receptor negative (ER-) breast tumor cell proliferation. She has served as a member of the Board of Governors for the National Council on Undergraduate Research and is a current member of the National Institutes of Health Review Subcommittee for Training, Workforce Development and Diversity. She also recently completed a brief stint as Executive Secretary for the NSF Committee on Equal Opportunities in Science and Engineering, which is the Congressionally mandated advisory body that focuses on efforts to broaden the participation of underrepresented groups in the STEM disciplines.



**Shirley M. Malcom, Senior Advisor, and Director of SEA Change, AAAS**

Shirley M. Malcom, Senior Advisor, and Director of SEA Change at AAAS, has served as a program officer in the NSF Science Education Directorate; an assistant professor of biology, University of North Carolina, Wilmington; and a high school science teacher. Malcom received her PhD in Ecology from the Pennsylvania State University; Master's in Zoology from the University of California, Los Angeles; and Bachelor's with distinction in Zoology from the University of Washington. In addition, she holds 17 honorary degrees.

Malcom serves on several boards, including the Heinz Endowments, Public Agenda, Digital Promise, and the National Mathematics and Science Initiative. She serves as a trustee of Caltech and as a Regent of Morgan State University. In 2003, Malcom received the Public Welfare Medal of the National Academy of Sciences, the highest award given by the Academy. She was a member of the National Science Board, the policy-making body of NSF, from 1994 to 1998, and of the President's Committee of Advisors on Science and Technology from 1994 to 2001.



**Karen Marrongelle, Assistant Director, NSF EHR**

Karen Marrongelle is the Assistant Director of the National Science Foundation (NSF) for Education and Human Resources (EHR). She leads the EHR directorate in supporting research that enhances learning and teaching to achieve excellence in U.S. science, technology, engineering and mathematics (STEM) education. Prior to joining NSF, Marrongelle was dean of the College of Liberal Arts and Sciences at Portland State University and Professor of Mathematics and Statistics, where she oversaw 24 departments and programs across the humanities, social sciences and natural sciences.

In addition to her work as dean, Marrongelle has served as a faculty member in the Department of Mathematics and Statistics at Portland State University since 2001. Prior to her appointment as dean, she held positions as the Vice Chancellor for Academic Strategies and Assistant Vice Chancellor for Academic Standards and Collaboration with the Oregon University System. From 2007-2009, Marrongelle served on a rotation as a program officer at NSF and led numerous grants, collaborating with researchers nationally and internationally to improve undergraduate mathematics education and K-12 mathematics professional development.

# Biographies

Marrongelle has a bachelor's degree in mathematics and philosophy from Albright College, a master's degree in mathematics from Lehigh University and a doctorate in mathematics education from the University of New Hampshire.



**Omar Alberto Movil-Cabrera, Associate Professor, Chemical Engineering, Polytechnic University of Puerto Rico**

Omar Alberto Movil-Cabrera is an Associate Professor in Chemical Engineering at the Polytechnic University of Puerto Rico (PUPR). He received his

doctorate in Chemical Engineering from the University of Puerto Rico-Mayaguez, and his bachelor's in Chemical Engineering from Universidad del Atlántico in Colombia.

Prior to joining PUPR as an Assistant Professor in 2016, Movil was a postdoctoral researcher and lecturer at Ohio University. Prior to graduate school, Movil worked as a quality auditor and technical support engineer in the food industry for 6 years. Movil's main research interests include the fabrication and characterization of nanostructured electrodes and polymer electrolyte membranes for applications in fuel cells, supercapacitors and biosensors. In addition, his teaching interests include engineering materials, thermodynamics and mass transfer operations. Movil serves as a mentor for the PUPR-AICHE student chapter and PUPR chem-E-car team. As a PhD student, Movil attended the Emerging Researcher National (ERN) conference in 2011 where he won first place in the category of technology and engineering. Movil is also an alumnus of the CREST-UPRM program supported by the National Science Foundation (NSF).



**Deonna N. Pompey, PhD Candidate, University of Alabama at Birmingham**

Deonna N. Pompey is a second-year master's student in the Biostatistics program at the University of Alabama at Birmingham (UAB) with the intention of pursuing a PhD. Pompey obtained her

associate, bachelor, and master's degree in mathematics, beginning at Lawson State Community College and completing at UAB. Upon the completion of her master's degree she became an adjunct Mathematics instructor at Samford University, Birmingham Southern College, Jefferson State Community College, and Lawson State Community College. After teaching for three years, she yearned to find a way to use math to better her community and the world around her. This led her to the School of Public Health. Desiring a higher education degree that could merge her passion for mathematics and helping others, the Biostatistics program was the perfect fit.

Through Pompey's passion for nutrition and fitness she hopes to one day be a part of studies that use food and holistic wellness strategies to treat chronic illness as well as instructing and mentoring students as a professor.



**Claudia Rankins, Program Director, HRD, NSF**

Claudia Rankins is a Program Officer in the Directorate for Education and Human Resources at the National Science Foundation, where she manages the Historically Black Colleges and Universities Undergraduate Program and the

Centers for Research Excellence in Science and Technology. Prior to this post, Rankins served at Hampton University for 22 years in a number of capacities, including Chair of the Department of Physics, Assistant Dean for Research, and dean of the School of Science. Rankins holds a PhD in Physics from Hampton University. She is the co-founder of the Society of STEM Women of Color, Inc.



**Sohi Rastegar, Head, Office of Emerging Frontiers and Multidisciplinary Activities (EFMA), Directorate for Engineering, National Science Foundation**

Sohi Rastegar is Senior Advisor and the Head of the Office of Emerging Frontiers and Multidisciplinary Activities (EFMA) at

the National Science Foundation (NSF), Directorate for Engineering. He joined NSF in November 2003 following fifteen years of academic and administrative service at Texas A&M University, Virginia Commonwealth University, and the Johns Hopkins University. He has been an Invited Professor at the Swiss Institute of Technology in Lausanne (EPFL), Switzerland. He earned his B.S. (Highest Honors) and M.S. in Aerospace Engineering, and his Ph.D. in Biomedical Engineering at the University of Texas at Austin. Rastegar has over 150 scientific publications and presentations and has trained 8 Ph.D. and 14 M.S. students. He is a co-founder of BioTex, Inc., a medical device company in Houston, Texas. He is a Fellow of the American Institute for Medical and Biological Engineering (AIMBE), a Fellow of the American Society for Lasers in Medicine and Surgery (ASLMS), has served as the Chair of Bioengineering Division of ASME, Associate Editor of Annals of Biomedical Engineering, a member of the Editorial Boards of the Journals of Biomedical Optics and Journal of Diabetes Science and Technology. Rastegar is the recipient of awards and honors including the Select Young Faculty Award from the Texas Engineering Experiment Station, and the Director's Superior Accomplishment Award from the National Science Foundation.



**Willie Rockward, NSBP President-Elect, Chair and Associate Professor, Department of Physics and Dual-Degree Engineering, Morehouse College**

Willie Rockward is the President-Elect of the National Society of Black Physicists.

He received a B.S. degree in Physics, cum laude, from Grambling State University. While completing a M.S. degree in Physics from State University of New York at Albany, he transferred into the doctoral program in the School of Physics at Georgia Tech. After completing his doctoral studies, he served as a civilian Research Physicist for the Advanced Guidance Division of the U.S. Air Force Research Laboratory located at Eglin Air Force Base, FL.

Currently, Rockward is an Associate Professor of Physics and the Research Director of the Micro/Nano Optics Research and Engineering (MORE) Laboratory at Morehouse College. His current research interests include crossed phase optics, micro/nano optics fabrication, optical quadrature microscopy, extreme ultraviolet lithography, terahertz imaging, nanostructure characterization, and termite behavior.

He is a member of the American Association of Physics Teachers, the Society of Physics Students (national officer), the National Technical Association, the Optical Society of America and the Omega Psi Phi Fraternity. He also volunteers as the Director of Science and the Coordinator of Special Projects for the Miller's Preparatory Academy for Boys.

## **Keith Shoates, VP, Office of CEO, Vista Equity Partners**

Keith Shoates joined Vista Equity Partners in 2018. Shoates is responsible for integrating strategic planning, operations, corporate communications, and corporate initiatives in support of the firm's Chairman and Chief Executive Officer, Robert F. Smith.

Prior to joining Vista, Shoates worked as a Director at Integrity Applications Incorporated (IAI), where he built the firm's portfolio in Northern Virginia. His primary focus was delivery of enterprise information technology solutions for federal agencies of the United States government, with an emphasis on the Department of Defense and the Intelligence Community. Before joining IAI, Shoates served 24 years in the United States Air Force as an acquisition and project management specialist for information technology, satellite, communications, and command and control systems before retiring in 2011 at the rank of colonel. Shoates is a member of the Information Technology (IT) Advisory Committee for the Northern Virginia Community College (NVCC). Composed of senior representatives of IT companies, this committee collaborates

with NVCC to define curriculum and programs to develop an enduring pipeline of qualified IT professionals to meet the needs of IT companies within the greater Washington, DC metropolitan area. He is the founding director and President of A View From Grace Foundation, which is dedicated to improving financial literacy, with an emphasis on continuous education, personal financial planning, debt reduction, and 529 College Savings Plans for individuals and families.



**James Stith, Vice President Emeritus, American Institute of Physics (AIP)**

James H. Stith is Vice President Emeritus for the American Institute of Physics (AIP). An officer of the Institute, he has oversight responsibilities for AIP's Magazine Division, the Media and

Government Relations Division, the Education Division, the Center for the History of Physics, the Statistical Research Center and the Careers Division. Throughout his career, James has been an advocate for programs that ensure ethnic and gender diversity in the sciences. Earning his doctorate in Physics from Pennsylvania State University, he received his master's and bachelor's degrees in physics from Virginia State University. An internationally known physics education researcher, his primary interests are in Program Evaluation and Teacher Preparation and Enhancement. He was a Professor of Physics at The Ohio State University and Professor of Physics at the United States Military Academy. A retired Colonel, Stith was the first African American to earn tenure at West Point.

Stith is a past President of the American Association of Physics Teachers (first African American), past President of the National Society of Black Physicists, a Fellow of the American Association for the Advancement of Science, a Fellow of the American Physical Society, A Fellow of the American Association of Physics Teachers, and a Chartered Fellow of the National Society of Black Physicists. Stith was named a Distinguished Alumni of The Pennsylvania State University, an Honorary Member of Sigma Pi Sigma, the physics honor society (its highest award) and a National Academies Education Mentor in the Life Sciences. He was recognized by Science Spectrum Magazine as one of the 50 Most Important Blacks in Research Science and was named a ScienceMaker, a MilitaryMaker and an EducationMaker by HistoryMakers. In 2018, Stith was presented with the Albert Nelson Marquis Lifetime Achievement Award by Marquis "Who's Who". Additionally, he serves on several national and international advisory boards and has been awarded a Doctor of Humane Letters by his alma mater, Virginia State University. His military awards include the Legion of Merit Medal, Meritorious Service Medal, Army Commendation Medal W/Oak Leaf Cluster and the Air Force Commendation Medal.

# Biographies



**Richard Tapia, *Mathematician and Professor, Department of Computational and Applied Mathematics, Rice University***

Richard Tapia was born in Los Angeles, California to parents who emigrated from Mexico. In 2011 he was awarded the National Medal of Science, the highest honor bestowed by the United States government on scientists and engineers. This award spotlighted the distinguished contributions he has made to the mathematical frontiers of optimization theory and numerical analysis, but it also brought attention to another achievement: his long-time work in inspiring underrepresented minority and female students in science and math. He is a mathematician in Rice University's Department of Computational and Applied Mathematics and holds the rank of University Professor, the university's highest academic title awarded to only seven individuals in the university's history. Among his numerous other honors are the National Science Board's Vannevar Bush Award and election to the National Academy of Engineering, the first Hispanic to receive these honors. He holds seven honorary doctorates and has given commencement addresses at six major universities. Two professional conferences have been named in his honor: the Richard Tapia Celebration of Diversity in Computing Conference and the Blackwell-Tapia Mathematics Conference. Tapia served on the National Science Board from 1996-2002. Because of his leadership, Rice University is recognized as a national leader in the preparation of women and underrepresented minority doctoral degree recipients in science, engineering, and mathematics.



**Iris R. Wagstaff, *AAAS Program Director, EHR, AAAS***

Iris R. Wagstaff is a STEM Program Director in Education and Human Resources Programs at the American Association for the Advancement of Science (AAAS). She is a former 2015-2017 AAAS Science and Technology Policy

Fellow at the National Institute of Justice Office of Investigative and Forensic Sciences where she led an agency-wide strategic diversity and inclusion initiative. She is a native of Goldsboro, NC and has a BS and MS in Chemistry from UNC-Greensboro and NC A&T State Universities respectively.

She has over 20 years of STEM outreach and advocacy developing informal science programs, mentoring, resourcing parents, and working with K-12 science teachers to develop culturally relevant and engaging lessons with real-world applications. She has advocated for students at the K-20 levels and built strategic partnerships between industry, educators, and researchers. She worked as a research chemist at the Rohm

and Haas Company (now Dow Chemical) for 15 years where she led project teams.

She obtained a PhD in STEM education research and policy analysis from NC State University in 2014 where she examined factors that predict science self-efficacy, science identity, and STEM career intent in a nationally representative sample of high school students. She is the founder of the SMART Scholars initiative for middle school girls that provide hands-on STEM outreach, role models, and parent resources in NC and the metropolitan Washington, DC area. She is a long-time member of the National Organization of Black Chemists and Chemical Engineers and serves on the National Executive Board.

She is also a long-time member of the American Chemical Society where she serves as Manager and STEM Education Chair of the Chemical Society of Washington. She has received several acknowledgements for her STEM outreach that include a 2016 nomination for the Presidential Award for Excellence in Science, Math, and Engineering Mentoring (PAESMEM), and the 2017 Women of Color in STEM Promotion of Education Award.



**Isa Watson, *CEO & Founder, Invested***

Isa Watson is the Founder and CEO of Squad by Invested, a data-driven software company revolutionizing how people create meaningful connections across their work-life experience. Named in Inc Magazine's "30 under 30" list in

2017, Squad by Invested has also been featured in Forbes, Bloomberg, Fast Company, Inc and Entrepreneur.com. The company receives backing by notable Silicon Valley VC firms, like Harrison Metal and Precursor VC with enterprise customers companies like Walmart.com, Jet and WeWork.

Isa earned an MBA from the Massachusetts Institute of Technology, a M.S. in Pharmacology from Cornell University and a B.S. in Chemistry from Hampton University, where she was an American Chemical Society and National Science Foundation Scholar. Before founding Squad, Isa was a Vice President of Digital Strategy at JPMorgan Chase (JPMC) in New York and Hong Kong, where she worked closely with senior management to build and execute various strategic initiatives across product development, analytics, marketing and client services across various JPMC businesses. Prior to this, Isa worked at Pfizer both as a research chemist and as a clinical trial strategy analyst. In the research group, she developed drug candidates for diabetes treatment, with her work on glucokinase activators published in Tetrahedron Letters. In the clinical group, she designed and executed statistical analyses to inform and support the global clinical strategies for Lyrica® in over 15 countries.



*Kaaba White, Engineer, Naval Sea Systems Command*

Kaaba White received his Bachelor of Science in Computer Engineering from Virginia State University in 2015, going on to complete his Master of Science in Electrical Engineering concentration in System Engineering from Tuskegee

University in the following year. Currently working as a Reliability Data Analyst and Computer Programmer at Naval Sea Systems Command (NAVSEA) in Corona, California, his professional interests focus on RAM (Reliability, Availability, and Maintainability), Cybersecurity, and Data Science. Kaaba's current projects include reliability analysis for Standard Missile, and creation of a cyber-range at NSWC Corona with connectivity to other warfare centers to develop cyber metrics and promote collaboration. He led a multidisciplinary team spanning a Capture the Flag event against other warfare centers in the NAVSEA community. In addition, he serves as a member and mentor for Blacks in Government (B.I.G), to help high school students who are interested in STEM with robotics, programming, and oratory. He is also a member of the Institute of Electrical and Electronics Engineers (IEEE) and National Society of Black Engineers (NSBE).

# Judges

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**Daniel Akins**, *The City College of New York*

**Linda Akli**, *SURA*

**Angela Allen**, *Shaw University*

**Cheryl Alston**, *Retired Chemistry Teacher*

**David Beam**, *Connecticut Pre-Engineering Program*

**Kenneth Boutte**, *Xavier University of LA*

**Candice Bridge**, *University of Central Florida*

**Sukari Brown**, *Deloit & Touche*

**Reeshemah Burrell**, *Consultant*

**Eugene Butler, III**, *Myo Bio, LLC*

**Alvin Collins**, *American Chemical Society*

**Ted Conway**, *Florida Institute of Technology*

**Agnes Day**, *Howard University*

**Cytrica Eaton**, *STC*

**Melanie Eddins-Spencer**, *Prairie State College*

**Omnia El-Hakim**, *Colorado State University*

**Lisa Elliot**, *Rochester Institute of Technology*

**Anissa Evans Buckner**, *University of Arkansas at Pine Bluff*

**Yayin Fang**, *Howard University*

**Chantel Fuquay**, *AAMC*

**Gigi Galiana**, *Yale University*

**Stephanie Gloster**, *Accenture*

**Patrice Gregory**, *Sandia National Laboratories*

**Angela Grimes**, *Covance*

**Paul Gueye**, *NSCL*

**Michelle Guinn**, *Belmont University*

**Mary Harris**, *BioTechnical Communications, Inc.*

**D. Ahmasi Harris**, *BAE Systems*

**Racquel Jemison**, *ACS*

**Kayenda Johnson**, *United States Digital Service at the Centers for Medicare and Medicaid Services*

**Emmitt Jolly**, *Case Western Reserve University*

**Tina King**, *King Education Consultants*

**Bob King**, *King Education Consultants*

**Elaine Lalanne**, *NSBP*

**Mary Ann Leung**, *Sustainable Horizons Institute*

**Nicholas Luke**, *North Carolina A&T State University*

**Arlene Maclin**, *Howard University*

**Marisa Madison**, *Miami Dade College*

**Joyce Matthews**, *Fairfax County Schools*

**Larry Mattix**, *Norfolk State University*

**Melissa McCartney**, *Florida International University*

**James McGee**, *Lone Star College*

**Tanisha McGlothen**, *Spelman College*

**Camille McKayle**, *University of the Virgin Islands*

**Knashawn Morales**, *University of Pennsylvania*

**Tagbo Niepa**, *University of Pennsylvania*

**Shantisa Norman**, *Sandia National Laboratories*

**Joseph Nunez**, *Schoolcraft College*

**Michael Page**, *Cal Poly Pomona University*

**Lance Pérez**, *University of Nebraska-Lincoln*

**Manu Platt**, *Georgia Institute of Technology*

**Nadeene Riddick**, *American University*

**Stephen Roberson**, *NSBP*

**Willie Rockward**, *Morgan State*

**Dione Rossiter**, *Carnegie Institution for Science*

**Carmen Sidbury**, *The Sidbury Group, LLC*

**Christopher Sims**, *UMD*

**Aubrey Smith**, *Montgomery College*

**Michael Smith**, *Intel*

**Tokiwa Smith**, *SEM link*

**James Stith**, *Vice President Emeritus, American Institute of Physics*

**Andrea Stith**, *UC Santa Barbara*

**Alexei Stortchevoi**, *Massachusetts Institute of Technology*

**Fedora Sutton**, *Science Visions Inc.*

**Gregory Triplett**, *Virginia Commonwealth University*

**Delia J. Valles-Rosales**, *New Mexico State University*

**Kedra Wallace**, *University of Mississippi Medical Center*

**Edward Walton**, *California State Polytechnic University, Pomona*

**Nikki Washington**, *Winthrop University*

**Luisa Whittaker**, *Brooks University of Utah*

**Joycelyn Wilson**, *Spelman College*

**Danyelle Winchester**, *Johns Hopkins*

**Victor Wyatt-Prater**, *USDA*

# Exhibitor Listing

Table	Institution	Table	Institution
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21	Colgate-Palmolive Company	20	Texas A&M University OGAPS
22	Colorado School of Mines	38	UChicago Biosciences
3	Columbia University School of Engineering	37	UCLA Graduate Programs in Bioscience
13	Emory University, Laney Graduate School	31	University of Albany, SUNY
4	FAMU-FSU Engineering	15	University of Alabama at Birmingham
8	GlaxoSmithKline	35	University of California San Diego
39	Graduate Studies UC Davis	27	University of California, Riverside
7	Indiana University	34	University of California, Santa Cruz
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41	MD Anderson UTHealth GSBS	11	University of Michigan - Pharmacy & SEAS
36	Michigan State University Graduate School	30	University of Michigan Medical School - OGPS
26	Michigan Technological University	25	University of Missouri
16	National Institute of Standards & Technology	50	University of Nebraska Medical Center
1	National Research Mentoring Network	14	University of North Texas College of Science
9	National Science Foundation	32	University of South Florida
29	NOAA Education	43	University of Southern California
40	North Carolina Central University	42	University of Southern California - PIBBS
33	North Carolina State University	6	UT Health San Antonio, Graduate School
5	Northwestern University	48	UW Molecular Engineering & Sciences Institute
17	NYU Tandon School of Engineering	24	Wayne State University Graduate School
2	Penn State Applied Research Laboratory	12	Worcester Polytechnic Institute
47	Penn State University College of Engineering	44	XSEDE
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28	Purdue University		

# Exhibitor Descriptions

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## Table 23

### Association of American Medical Colleges

655 K Street, N.W.  
Washington, DC 20001

**Contacts:** Rebecca Rice, [amazzarisi@aamc.org](mailto:amazzarisi@aamc.org)

Julie Gilbert, [jgilbert@aamc.org](mailto:jgilbert@aamc.org)

Founded in 1876 and based in Washington, D.C., the AAMC (Association of American Medical Colleges) is a not-for-profit association dedicated to transforming health care through innovative medical education, cutting-edge patient care, and groundbreaking medical research. Its members are all 151 accredited U.S. and 17 accredited Canadian medical schools; nearly 400 major teaching hospitals and health systems, including 51 Department of Veterans Affairs medical centers; and more than 80 academic societies. Through these institutions and organizations, the AAMC serves the leaders of America's medical schools and teaching hospitals and their more than 173,000 full-time faculty members, 89,000 medical students, 129,000 resident physicians, and more than 60,000 graduate students and postdoctoral researchers in the biomedical sciences.

## Table 19

### Binghamton University, State University of NY

PO Box 6000  
Binghamton, NY 13902-6000

**Contact:** Margaret Wolford, [mcude@binghamton.edu](mailto:mcude@binghamton.edu)

Binghamton University, a nationally distinguished State University of New York (SUNY) Center of Excellence, combines the atmosphere of a mid-sized public institution with the resources of a large research university. Whether you are a full-time student looking to immerse yourself in a master's or doctoral program or a professional working to earn an advanced degree or certificate, you can find your fit here: the University offers more than 60 master's programs, 30 doctoral degrees, and 15 certificates. Binghamton University is proud to be ranked among the elite public universities in the nation for challenging our students academically, not financially.

## Table 21

### Colgate-Palmolive Company

909 River Road  
Piscataway, NJ 08855

**Contacts:** Andre Morgan, [andre\\_morgan@colpal.com](mailto:andre_morgan@colpal.com)

Nadine Dewdney, [nadine\\_dewdney@colpal.com](mailto:nadine_dewdney@colpal.com)

Colgate-Palmolive (CL) is a leading global consumer products company, tightly focused on Oral Care, Personal Care, Home

Care and Pet Nutrition. Colgate-Palmolive sells its products in over 200 countries and territories around the world under such internationally recognized brand names as Colgate, Palmolive, Mennen, Softsoap, Irish Spring, Protex, Sorriso, Kolynos, Elmex, Tom's of Maine, Ajax, Axion, Soupline, and Suavitel, as well as Hill's Science Diet and Hill's Prescription Diet. For more information about Colgate-Palmolive's global business, visit the Company's web site at [www.Colgate.com](http://www.Colgate.com). To learn more about Colgate's global oral health education program, Bright Smiles, Bright Futures™, please visit <http://www.colgatebsbf.com>.

## Table 22

### Colorado School of Mines

1500 Illinois St  
Golden, CO 80401

**Contact:** Molly McAndrew, [mmcandrew@mines.edu](mailto:mmcandrew@mines.edu)

Colorado School of Mines is a research university long known for its excellent academic programs in engineering and applied science, and its specialized and focused mission to enhance understanding of the earth, energy and the environment — Mines is helping find answers to some of the major problems of our time. Mines offers nearly 70 options — plus minors — in a full range of science, engineering and related disciplines, including North America's only graduate degree in Underground Construction and Tunnel Engineering.

## Table 3

### Columbia University School of Engineering

500 West 120 Street, MC 4708  
New York, NY 10027

**Contact:** Tiffany Simon, [tms26@columbia.edu](mailto:tms26@columbia.edu)

Columbia University's Fu Foundation School of Engineering and Applied Science offers graduate degrees in applied physics, applied mathematics, biomedical engineering, business analytics, chemical engineering, civil engineering, engineering management systems, engineering mechanics, computer engineering, computer science, earth and environmental engineering, electrical engineering, financial engineering, industrial engineering, operations research, materials science, and mechanical engineering. Our academic programs allow students to advance knowledge in classical engineering or applied science disciplines or delve into new, exciting interdisciplinary fields. Degrees can be pursued on a full-or part-time basis. Distance education and MS/MBA programs are also available.

## Table 13

### Emory University, Laney Graduate School

201 Dowman Drive  
Atlanta, GA 30322

**Contact: Amanda Marie James,**  
[amandamariejames@emory.edu](mailto:amandamariejames@emory.edu)

Emory's Graduate School was organized as a distinct division of the University in 1919 and awarded its first PhD to a student in chemistry in 1948. In the years since, graduate education at Emory has made tremendous advances, and in 2009, we were named after Dr. James T. Laney, President of Emory. Today, the Laney Graduate School offers the PhD and Master's degrees in more than 40 programs across the humanities, social sciences, biomedical and natural science, public health, nursing and business. Our graduate students are present in nearly every area of research at Emory, working with esteemed faculty and researchers to solve the complex problems of our time and advance the global good.

## Table 4

### FAMU-FSU Engineering

2525 Pottsdamer Street  
Tallahassee, FL 32310

**Contact: Subramanian Ramakrishnan,**  
[srama@eng.famu.fsu.edu](mailto:srama@eng.famu.fsu.edu)

The most diverse college of engineering and the only joint college in the nation! We bring innovative solutions to real-world challenges with world-class researchers and a vibrant student community. The FAMU-FSU College of Engineering offers graduate programs in biomedical, chemical, civil, electrical, industrial and mechanical engineering. Programs are offered at the master's non-thesis, master's thesis and doctoral level in each discipline. We recently added a M.S. non-thesis in systems engineering.

## Table 8

### GlaxoSmithKline

1250 S. Collegeville Road  
Collegeville, PA 19426

**Contacts: Lamont Terrell, [lamont.r.terrell@gsk.com](mailto:lamont.r.terrell@gsk.com)**  
**Giovan Lane, [giovan.n.lane@gsk.com](mailto:giovan.n.lane@gsk.com)**

GSK is a science-led global healthcare company with a special purpose: to help people do more, feel better, live longer. We have three global businesses that research, develop and manufacture innovative pharmaceutical medicines, vaccines and consumer healthcare products. Our goal is to be one of the world's most innovative, best performing and trusted healthcare companies. Our strategy is to bring differentiated,

high-quality and needed healthcare products to as many people as possible, with our three global businesses, scientific and technical know-how and talented people. Our values and expectations are at the heart of everything we do and form an important part of our culture. Our values are Patient focus, Transparency, Respect, Integrity. Our expectations are Courage, Accountability, Development, Teamwork.

## Table 39

### Graduate Studies UC Davis

250 Mrak Hall  
One Shields Ave  
Davis, CA 95616

**Contact: Lynne Arcangel, [laarcangel@ucdavis.edu](mailto:laarcangel@ucdavis.edu)**

Study at one of the world's premier public research universities and gain the knowledge and experience that make UC Davis graduates leaders in their fields. While here, you'll enjoy the beautiful California environment and life in a traditional college town. UC Davis graduate programs engage students in cutting-edge technology and ideas—winning national recognition for continued innovation and contributing to the economic and social well-being of California, the nation and the world. Our master's and doctoral graduates go on to become leaders in their fields—researchers, teachers, public policymakers, mentors and entrepreneurs. With 100 different graduate programs, UC Davis has something for everyone. Come see what we have to offer you!

## Table 7

### Indiana University

Wells Library  
1320 E 10th St  
Bloomington, IN 47405

**Contacts: Bianca Evans, [biaevans@iu.edu](mailto:biaevans@iu.edu)**

The University Graduate School is a recognized leader in developing new concepts and best practices for graduate education, which makes Indiana University Bloomington a premier location to earn your graduate degree. At Bloomington there are master's programs in the College of Arts and Sciences and Ph.D. programs and/or Ph.D. minors in the College of Arts and Sciences, the Jacobs School of Music, the Kelley School of Business, the School of Education, the School of Informatics, the Maurer School of Law, the School of Library and Information Science, the School of Optometry, and the School of Public and Environmental Affairs. Visit <http://graduate.indiana.edu/admissions/apply.shtml> for additional information on applying to Indiana University. Visit <http://graduate.indiana.edu/admissions/programs.shtml> to browse our master's, doctoral and professional degrees, or graduate certificates.

# Exhibitor Descriptions

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## Table 46

### Jetstream - Indiana University

2709 E 10th Street  
Cyberinfrastructure Building  
Bloomington, IN 47408

**Contact:** Sanjana Sudarshan, [ssudarsh@iu.edu](mailto:ssudarsh@iu.edu)  
Winona Snapp-Childs, [wsnappch@iu.edu](mailto:wsnappch@iu.edu)

Jetstream, led by the Indiana University Pervasive Technology Institute (PTI) with the Texas Advanced Computing Center (TACC) as a major partner, adds cloud-based, on-demand computing and data analysis resources to the national cyberinfrastructure. With a focus on ease of use and broad accessibility, Jetstream is designed for those who have not previously used high performance computing and software resources. The system is particularly geared toward 21st-century workforce development at small colleges and universities.

## Table 41

### MD Anderson UTHealth GSBS

6767 Bertner Avenue  
S3.8328a  
Houston, TX 77030

**Contacts:** Gregory Garcia, [gregory.e.garcia@uth.tmc.edu](mailto:gregory.e.garcia@uth.tmc.edu)  
Eric Swindell, [eric.c.swindell@uth.tmc.edu](mailto:eric.c.swindell@uth.tmc.edu)

The University of Texas MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences is a unique partnership between the University of Texas MD Anderson Cancer Center and the University of Texas Health Science Center at Houston (UTHealth), institutions that are leading the fight against cancer and other major diseases that impact human health and quality of life. The curriculum is designed to provide students with a rigorous exposure to critical thinking strategies, area-specific scientific skills and career development initiatives. The curriculum, together with an emphasis on research training and scientific productivity, is designed to position our students for an outstanding and successful career in the biomedical sciences.

## Table 36

### Michigan State University Graduate School

466 W. Circle Drive  
130 Chittenden Hall  
East Lansing, MI 48824

**Contact:** Steven Thomas, [deshawn@msu.edu](mailto:deshawn@msu.edu)

We are accepting applications for undergraduate admission, graduate school and summer internships from students interested in the Science, Technology, Engineering and Mathematics fields as well as the Social Behavioral Sciences

(Sociology, Psychology, Linguistics, Community Sustainability, Communication, Anthropology, etc). Post-doctoral and Post-baccalaureate opportunities are also available in various departments.

## Table 26

### Michigan Technological University

1400 Townsend Drive  
Houghton, MI 49931

**Contact:** Ashli Wells, [aesniego@mtu.edu](mailto:aesniego@mtu.edu)

Michigan Technological University is committed to delivering a distinctive and rigorous discovery-based learning experience to all students. Its graduate programs span engineering, science, business, and communication disciplines. Graduates from these programs are actively recruited because of their intellectual abilities and practical skills. Students in all graduate programs gain experience using technological innovation to address issues related to social, environmental, and economic sustainability. The University places a premium on matching the professional and personal interests of prospective graduate students with those of faculty mentors who are experts in their fields. Michigan Tech is large enough to be rich in resources, but small enough to provide a highly personalized graduate education experience.

## Table 16

### National Institute of Standards & Technology

100 Bureau Drive  
Stop 0109  
Gaithersburg, MD 20899

**Contacts:** Jeanita Pritchett, [jeanita.pritchett@nist.gov](mailto:jeanita.pritchett@nist.gov)  
Kara Arnold, [kara.arnold@nist.gov](mailto:kara.arnold@nist.gov)

The National Institute of Standards and Technology (NIST) was founded in 1901 and is now part of the U.S. Department of Commerce. NIST is one of the nation's oldest physical science laboratories. Congress established the agency to remove a major challenge to U.S. industrial competitiveness at the time—a second-rate measurement infrastructure that lagged behind the capabilities of the United Kingdom, Germany, and other economic rivals. From the smart electric power grid and electronic health records to atomic clocks, advanced nanomaterials, and computer chips, innumerable products and services rely in some way on technology, measurement, and standards provided by the National Institute of Standards and Technology.

## Table 1

### National Research Mentoring Network

3500 Camp Bowie Blvd.  
Fort Worth, TX 76107

**Contact: Jamboor Vishwanatha,**  
[jamboor.vishwanatha@unthsc.edu](mailto:jamboor.vishwanatha@unthsc.edu)

The National Research Mentoring Network (NRMN) is a nationwide consortium of biomedical professionals and institutions collaborating to provide enhanced networking and mentorship to individuals from diverse backgrounds who are pursuing biomedical, behavioral, clinical, and social science research careers (biomedical research careers). NRMN is intended to enable mentees across career stages to find effective mentors who will engage in productive, supportive and culturally responsive mentoring relationships.

## Table 9

### National Science Foundation (NSF)

2415 Eisenhower Ave.  
Alexandria, VA 22314

**Contact: NSF Representative**

Please visit table #9 to learn more about the National Science Foundation.

## Table 29

### NOAA Education

1315 East West Hwy  
Silver Spring, MD 20910

**Contact: Marlene Kaplan, [marlene.kaplan@noaa.gov](mailto:marlene.kaplan@noaa.gov)**

National Oceanic and Atmospheric Administration (NOAA) includes the National Weather Service, National Marine Fisheries Service and National Ocean Service, as well as research and satellite operations. NOAA employs staff across many disciplines of Earth sciences.

## Table 40

### North Carolina Central University

1801 Fayetteville Street  
Taylor Education Building  
Room 123  
Durham, NC 27707

**Contact: Sabrina Butler, [sbutler8@nccu.edu](mailto:sbutler8@nccu.edu)**

NCCU has over 30 master's and professional degree programs and a Ph.D. in Integrated Biosciences.

## Table 33

### North Carolina State University

The Graduate School, Campus Box 7102  
Raleigh, NC 27695

**Contact: David Shafer, [dmschafer@ncsu.edu](mailto:dmschafer@ncsu.edu)**

North Carolina State University offers master's and doctoral programs in a full range of traditional disciplines, as well as interdisciplinary programs that anticipate market trends and respond to national needs. Science, technology, engineering, and mathematics are our core strengths. We also offer strong programs in design, education, management, the humanities, and the social sciences. Our location in North Carolina's Research Triangle means the best of industry-government-university partnerships. Our quarter century old Centennial Campus reflects the university model of the future, where young investigators collaborate with faculty mentors, private companies, and public agencies to solve real-world problems. NC State boasts a talented graduate student body of over 8900 master's and doctoral students who reflect a richness and diversity that energize this community of scholars. They come from all 50 states and from over 100 countries. On average, we confer about 3000 graduate degrees each year.

## Table 5

### Northwestern University

633 Clark Street  
Evanston, IL 60626

**Contact: Damon Williams,**  
[damon.williams1@northwestern.edu](mailto:damon.williams1@northwestern.edu)

Northwestern University's (NU) U.S. campuses are located along the southwestern shores of Lake Michigan in Evanston and Chicago, Illinois. In 2008, a third campus opened in Doha, Qatar's Education City. Whether you are a prospective student, a parent, faculty or staff, we welcome you to come visit our campus and learn more about NU and The Graduate School. Visit our webpage "About Evanston and Chicago" (<https://www.tgs.northwestern.edu/about/our-campuses/about-evanston-and-chicago.html>) to learn more about our campuses and our world-class libraries and research facilities.

## Table 17

### NYU Tandon School of Engineering

Wunsch Bldg, 6 MetroTech Ctr  
Brooklyn, NY 11201

**Contact: Leanna Kowallis, [leanna.kowallis@nyu.edu](mailto:leanna.kowallis@nyu.edu)**

New York University (NYU), the largest private, non-profit academic institution in the U.S., encompasses a vast network of 18 schools, which gives students unlimited global access to

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three NYU portal campuses and 11 global academic centers. Located in New York City's Brooklyn Tech Triangle, NYU Tandon School of Engineering is a major player in New York's ongoing tech renaissance, where students can connect to thousands of creative and leading organizations in this epicenter of business and technology. Graduate programs are in the fields of mechanical, civil, urban, industrial, electrical, computer, chemical, biomedical and financial engineering alongside programs in computer science, management of technology, cybersecurity, and integrated digital media. Our primary focus remains to produce highly prepared and desirable graduates, which has led us to be one of the top ranked schools in the nation with regards to graduate employability, salary potential, and return on investment.

## Table 2

### **Penn State Applied Research Laboratory**

225 Science Park Road  
Dock 224 ARL, Mailstop 1000A  
State College, PA 16803

**Contacts:** Wayne Gersie, [wmg109@arl.psu.edu](mailto:wmg109@arl.psu.edu)  
Alfree Conklin, [adc17@arl.psu.edu](mailto:adc17@arl.psu.edu)

The Applied Research Laboratory (ARL) at The Pennsylvania State University is an integral part of one of the leading research universities in the nation and serves as a university center of excellence in defense science and technologies, with a focus in naval missions and related areas. As a DoD-designated, U.S. Navy UARC (University Affiliated Research Center), ARL maintains a long-term strategic relationship with the U.S. Navy and provides support for the other services. ARL provides science, systems, and technology for national security, economic competitiveness, and quality of life through education, scientific discovery, technology demonstration, and transition to application.

The Electro-Optics Center (EOC), a proud part of The Pennsylvania State University, is a hybrid between the best components of a university and those of private industry. This relationship allows us access to the university's researchers and scientists, its state-of-the-art facilities and leading-edge research. Our staff, comprised primarily of former industry and DoD personnel, brings experience in exceeding sponsor and corporate expectations. Through the application of this hybrid model, the EOC is able to provide its sponsors with solutions that combine leading-edge research with on-time and on-budget deliveries. US Citizenship is required for employment at ARL.

## Table 47

### **Penn State University College of Engineering**

211 Hammond Building  
University Park, PA 16802

**Contact:** Erin Hostetler, [cem183@psu.edu](mailto:cem183@psu.edu)

The Pennsylvania State University is a state-related, land-grant, doctoral university with campuses and facilities throughout Pennsylvania. Founded in 1855 as the Farmers High School of Pennsylvania, the university has a stated threefold mission of teaching, research, and public service. Its instructional mission includes undergraduate, graduate, professional and continuing education offered through resident instruction and online delivery. The College of Engineering is driven to support research that impacts the lives of people around the world — including disease-fighting technologies, the development of sustainable infrastructures, and impacting energy, environmental, and transportation systems. We are committed to impacting society and embracing the challenges ahead with a passion for a bright future for humankind.

## Table 49

### **Pennsylvania State University**

111D Kern Graduate Building  
University Park, PA 16802

**Contacts:** Stephanie Danette Preston, [sdp163@psu.edu](mailto:sdp163@psu.edu)  
Tierra Caldwell, [tac5241@psu.edu](mailto:tac5241@psu.edu)  
James Guyton, [jrg6@psu.edu](mailto:jrg6@psu.edu)

The development of critical thought is one of the cornerstones of the University. Such critical thought is dependent upon demographic and cultural diversity. The units of the Vice Provost for Graduate Education and Dean of the Graduate School define diversity as “a climate which encourages representation of faculty, staff, and students from typically underrepresented entities, including those from racial/ethnic minority groups, various countries and cultures, genders, persons with disabilities, and those from a mixture of religions and sexual orientations.” The Office of Graduate Educational Equity Programs leads the Graduate School's efforts to foster diversity and to provide a welcoming climate for both prospective and current graduate students from underrepresented groups. The office designs and implements mentoring programs; recruitment programs; professional development and retention programs; and conferences, seminars, workshops, and lectures. The office also leads the Summer Research Opportunities Program at Penn State and the Ronald E. McNair Post-Baccalaureate Achievement Program.

## Table 28

### **Purdue University**

155 South Grant Street  
Young Hall, Room B68  
West Lafayette, IN 47907

**Contact: Kathy Dixon, [kgdixon@purdue.edu](mailto:kgdixon@purdue.edu)**

The Purdue University Graduate School is committed to enhancing the experience of all students from diverse backgrounds. Our unique programs and initiatives ensure Purdue is a welcoming campus where our graduate students can excel — both academically and personally. The Graduate School oversees graduate education that includes more than 80 graduate programs at the West Lafayette campus and nearly 40 programs at four additional campuses across the State of Indiana.

## Table 18

### **Rensselaer Polytechnic Institute**

Graduate Admissions  
110 8th Street  
Troy, NY 12180

**Contact: Kishmar Best, [bestk3@rpi.edu](mailto:bestk3@rpi.edu)**

Founded in 1824, Rensselaer Polytechnic Institute is the oldest technological research university in the United States. Sitting on a hill overlooking Troy NY, a revitalized city only 2.5 hours from Manhattan, the lush campus offers a welcoming and collaborative academic environment to support the learning and research of over 1,000 graduate students. Rensselaer offers a wide range of graduate programs across 5 schools: Architecture, Engineering, Science, Lally School of Management, and Humanities, Arts and Social Sciences. The interdisciplinary research culture at Rensselaer provides students an experience across multiple disciplines and sectors while exposing them to multiple perspectives as they are trained to tackle the global problems facing humanity in the 21st century.

## Table 45

### **Tennessee State University, Engineering**

3500 John A. Merritt Blvd.  
Torrence Hall  
Nashville, TN 37209

**Contact: Frances Williams, [frwilliams@tnstate.edu](mailto:frwilliams@tnstate.edu)**

Tennessee State University (TSU) is a comprehensive, urban, land-grant university, founded in 1912. The 450-acre campus is located in Nashville, the capitol of Tennessee. The TSU College of Engineering offers B.S. degrees in Architectural, Civil, Electrical, and Mechanical Engineering, with several concentrations such as manufacturing, environmental, and

computer engineering. The College also awards B.S. degrees in Computer Science and Aeronautical and Industrial Technology. On the graduate level, the College provides the Master of Engineering degree with concentrations in Civil, Electrical, Manufacturing and Mechanical Engineering, the M.S. degree in Computer Science, and M.S. and Ph.D. degrees in Computer and Information Systems Engineering. Recognizing the need for developing graduates with an appreciation for global awareness, solid engineering fundamentals, and professionalism, the TSU College of Engineering develops and promotes an educational experience that produces the 'global engineer' through life or language learning, a FE-based (Fundamentals of Engineering) curriculum for outcome assessment, and critical skills in research, design, problem solving, and communication. The College provides pre-college engineering camps, undergraduate research experiences, as well as scholarships/fellowships for eligible undergraduate and graduate students.

## Table 20

### **Texas A&M University OGAPS**

112 Jack K Williams Admin Bldg  
College Station, TX 77843

**Contact: Tasmin McDonald, [mcdonaldtl@tamu.edu](mailto:mcdonaldtl@tamu.edu)**

The Office of Graduate and Professional Studies (OGAPS) is a global leader in graduate education, committed to the pursuit of knowledge and the power of intellect. Through exceptional service and commitment to the highest standards, OGAPS advocates for graduate education at Texas A&M and throughout Texas. OGAPS is committed to a diverse campus climate, enhancement of the graduate experience and the development of all students as global citizens.

## Table 38

### **UChicago Biosciences**

924 E 57th Street  
Chicago, IL 60637

**Contact: Nancy Schwartz, [nbs0@uchicago.edu](mailto:nbs0@uchicago.edu)**

UChicago Biosciences offers 18 programs designed to lead to the PhD; the program in Public Health Sciences offers a master's degree for clinical professionals in addition to the PhD. We also offer combined MD/PhD degrees. University of Chicago graduate students and postdoctoral trainees in the biosciences break new ground every day. We have a long history of research excellence and notable achievements among our alumni and faculty. At UChicago, you benefit from immersion in one of the world's preeminent research universities, and our community of scholars benefits from you - emerging scientists with bright minds, unbridled enthusiasm, and plenty of fresh ideas. As an international intellectual destination, the University of Chicago draws students, researchers, and faculty to exchange ideas

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freely, challenging the status quo and one another to push the boundaries of their fields, leading to world-changing discoveries and insights. The University's hallmark emphasis on interdisciplinary research and collaboration, coupled with access to the latest technology and to three major affiliated laboratories, offers a graduate experience in the biosciences unavailable anywhere else.

## Table 37

### UCLA Graduate Programs in Bioscience

Box 951570, 2305 Life Sciences  
621 Charles E. Young Drive South  
Los Angeles, CA 90095

**Contact: Diana Azurdia, [dazurdia@mednet.ucla.edu](mailto:dazurdia@mednet.ucla.edu)**

Graduate Programs in Bioscience is a consortium of 10 home areas and their affiliated Ph.D. programs, organized to provide the best possible research training and professional development for graduate students pursuing Ph.Ds in the life and biomedical sciences. These Home Areas include: Biochemistry; Biophysics & Structural Biology; Bioinformatics; Cell & Developmental Biology; Gene Regulation; Genetics & Genomics; Immunity; Microbes & Molecular Pathogenesis; Molecular Pharmacology; Molecular, Cellular & Integrative Physiology; Neuroscience; and Physics & Biology in Medicine. These academic "homes" are designed by faculty to promote and support individualized training and career-building opportunities for students in the home area. This framework provides specialized, in-depth educational programs while maintaining flexibility for students to explore frontiers beyond any single home area. Likewise, faculty are able to contribute in multiple home areas according to their research interests. Providing students with a combination of deep immersion in a field and the opportunity to explore new horizons creates limitless and unique educational possibilities. Each home area is affiliated with a degree-granting Ph.D. program, a union that sets the specific courses, advising opportunities, and research, scholarship, and examination requirements.

## Table 31

### University at Albany, SUNY

1400 Washington Avenue  
Albany, NY 12222

**Contact: Shanise Kent, [snkent@albany.edu](mailto:snkent@albany.edu)**

The University at Albany, State University of New York, is the premier public research university in New York's Capital Region. UAlbany offers over 150 doctoral, master's and graduate certificate programs, renowned faculty, state-of-the-art facilities, affordable education, and a diverse student body. The Capital Region is home to bustling industries like government,

technology, business, healthcare and education and provides limitless opportunities for internships and public service.

## Table 15

### University of Alabama at Birmingham

1825 University Blvd.  
SHEL 121  
Birmingham, AL 35294-2182

**Contact: Randy Seay, [rseay@uab.edu](mailto:rseay@uab.edu)**

The University of Alabama at Birmingham (UAB) is a research university and academic medical center that encompasses 112 city blocks and has a student enrollment of more than 24,000. UAB is home to a large graduate school, a world-renowned health care complex, and more than 100 different research centers focusing on such diverse issues as cancer prevention, personalized medicine, biodefense, and emerging infectious diseases. UAB includes the School of Medicine (MD, MD-PHD, MD-MPH, MD-MBA), School of Public Health (Dual Degree MPH Programs, MPH, MSPH, DrPH, PhD), School of Optometry (Vision Sciences PhD, OD) School of Arts and Sciences (MA, MS, PHD), and Graduate Biomedical Sciences (PHD). We invite you to join more than 4,400 graduate students who are enrolled in UAB's 40 doctoral programs and 51 master's programs. Many of these programs unite different disciplines and cross departmental and school lines, illustrating the strong interdisciplinary character of the university. Become part of our unique and select group of students training to become tomorrow's leaders in science and medicine. Visit us at [www.uab.edu/graduate](http://www.uab.edu/graduate) and [www.uab.edu/medicine](http://www.uab.edu/medicine)

## Table 35

### University of California San Diego

9500 Gilman Drive #0003  
San Diego, CA 92093-0003

**Contacts: Angeline Yang, [avyang@ucsd.edu](mailto:avyang@ucsd.edu)  
Chandler Puritty, [cpuritty@ucsd.edu](mailto:cpuritty@ucsd.edu)**

The University of California San Diego is recognized as one of the top 15 research universities worldwide. We have a culture of collaboration which sparks discoveries that advance society and drives economic impact. Everything we do is dedicated to ensuring our students have the opportunity to become changemakers, equipped with the multidisciplinary tools needed to accelerate answers to our world's most pressing issues. At the University of California San Diego, diversity is a core component of excellence that further enhances our quality and achievement. We seek a diverse graduate student body to ensure that all of our students gain the educational benefits that result from being exposed to a broad spectrum of ideas and perspectives.

These include the variety of personal experiences, values, and worldviews that arise from differences of culture and circumstance. Such differences include race, ethnicity, gender, age, religion, language, abilities/disabilities, sexual orientation, socioeconomic status, geographic region and more. We wish to broaden and deepen both the educational experience and the scholarly environment, as students and faculty learn to interact effectively with each other, preparing them to participate in an increasingly complex and pluralistic society. We also want all of our students to contribute to the campus community in a manner that enhances campus diversity and inclusiveness, consistent with the University of California Principles of Community. Learn more about the University of California San Diego's academic and professional graduate degree programs at <https://grad.ucsd.edu/>

## Table 27

### University of California, Riverside

900 University Ave  
Bourns Hall A220  
Riverside, CA 92521

**Contacts:** Adrienne Thomas, [adrienne@engr.ucr.edu](mailto:adrienne@engr.ucr.edu)  
Kathy Redd, [kathy.redd@ucr.edu](mailto:kathy.redd@ucr.edu)

Burns College of Engineering (BCOE) is home to cutting-edge, high-risk, profoundly creative research. We're invested in internationally recognized engineering research in hundreds of emerging areas focused on solving the world's greatest challenges. Faculty and their research teams collaborate in multidisciplinary research with colleagues at other colleges, campuses and industry leaders. Our accomplished faculty are leaders in their areas of study and include more than 90 fellows of professional societies and more than 50 National Institutes of Health, NSF CAREER, Bridge to Doctorate, and Young Investigator recipients. Their dynamic research programs address real-world problems and even define entirely new and novel research areas. UCR's College of Natural and Agricultural Sciences seeks to expand fundamental scientific knowledge in the biological, physical, mathematical, and agricultural sciences and to find innovative ways to apply that knowledge through teaching and public service. An atmosphere of intimacy and excellence, diversity and distinction, and prestige and preeminence attracts the top faculty and students in the country.

## Table 34

### University of California, Santa Cruz

1156 High Street  
m/s: SOEGRAD  
Santa Cruz, CA 95064

**Contacts:** Tracie Tucker, [traciemt@ucsc.edu](mailto:traciemt@ucsc.edu)  
Carmen Robinson, [crobins3@ucsc.edu](mailto:crobins3@ucsc.edu)

At the University of California, Santa Cruz (UCSC), doctoral and master's students study and participate in research in areas that define 21st century technology and human advancement and address the most significant challenges and opportunities of our time, including life and health, data science, energy, and accessibility. Our students learn and work in an environment of stunning natural beauty, nestled among the redwoods and overlooking the Monterey Bay, with access in under an hour to the heart of Silicon Valley. They are mentored by world-renowned faculty, many with strong ties to industry, and have opportunities to engage in interdisciplinary research and interact with entrepreneurs and technology leaders through internships and corporate-sponsored research. Graduate students are part of an active community of scholars across UCSC's five academic divisions that is committed to the creative and ethical pursuit of academic excellence built on social and environmental responsibility.

## Table 10

### University of Illinois at Urbana-Champaign

110 Coble Hall  
801 S. Wright Street  
Champaign, IL 61820

**Contacts:** Ave Maria Alvarado, [amalvara@illinois.edu](mailto:amalvara@illinois.edu)  
Ellen Althaus, [ealthaus@illinois.edu](mailto:ealthaus@illinois.edu)

The University of Illinois at Urbana-Champaign is located in the micro-urban cities of Champaign, Urbana, and Savoy within driving distance from Chicago, Indianapolis, and St. Louis. With an enrollment of more than 45,000 students, the University of Illinois "pioneers innovative research that tackles global problems and expands the human experience. Our transformative learning experiences, in and out of the classroom, are designed to produce alumni who desire to make a significant, societal impact." The Graduate College enrolls over 14,000 students and offers more than 130 master's programs and over 90 doctoral programs in a wide range of disciplinary fields. Twenty-six of our advance degree programs are offered in part or entirely online. Graduate School application fee waivers, fellowships, tuition waivers, and many other academic opportunities are available to eligible current and prospective graduate students in all fields of study.

To learn about the Illinois Aspire Program, the Summer Research Opportunities Program (SROP), the Community of Scholars (COS) Program, the Summer Predoctoral Institute (SPI), the Sloan University Center for Exemplary Mentoring (UCEM), the Illinois Professional Science Master's (PSM) program, and numerous other opportunities, please visit our website at <http://www.grad.illinois.edu>.

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## Table 11

### University of Michigan - Pharmacy & SEAS

428 Church Street

Ann Arbor, MI 48109

**Contacts:** Cherie Dotson, [crdotson@umich.edu](mailto:crdotson@umich.edu)

Jung Koral, [jkoral@umich.edu](mailto:jkoral@umich.edu)

The University of Michigan - College of Pharmacy offers Ph.D. degrees in Medicinal Chemistry, Pharmaceutical Sciences and Clinical Pharmacy. Graduate students in Medicinal Chemistry are trained in research pertaining to drug discovery and drug design while those in Pharmaceutical Sciences are focused on the study of drug transport and drug delivery systems. The Clinical Pharmacy program features tracks in Health Services Research and Precision Pharmacotherapy. Students with interests in obtaining clinical training with regard to the practice of pharmacy are encouraged to consider the PharmD program. Summer opportunities are available through the Pharmacy Scholars Program and the Interdisciplinary REU Program. Visit <https://pharmacy.umich.edu>. The University of Michigan - School for Environment & Sustainability offers MS, MLA, and PhD programs. MS students can track within Behavior, Education & Communication; Environmental Informatics; Environmental Policy & Planning; Conservation Ecology; Environmental Justice and Sustainable Systems. The MLA program is ASLA accredited and features sustainable and ecological design. The PhD program is fully funded. Dual programs with Business, Law, Engineering, and other units are also available. Summer opportunities are offered through the Doris Duke Conservation Scholars Program. Visit [seas.umich.edu](http://seas.umich.edu).

## Table 30

### University of Michigan Medical School - OGPS

1135 Catherine Street

2960 Taubman Health Sciences Library

Ann Arbor, MI 48109

**Contact:** Jim Musgrave, [jdmusg@umich.edu](mailto:jdmusg@umich.edu)

The Office of Graduate & Postdoctoral Studies is home to the graduate umbrella Program in Biomedical Sciences (PIBS) and the Postbac Research Education Program (PREP). We also connect students to summer research opportunities in the biomedical sciences.

## Table 25

### University of Missouri

1201 Rollins St.

440D Bond Life Sciences Center

Columbia, MO 65211

**Contact:** Debbie Allen, [allendebr@missouri.edu](mailto:allendebr@missouri.edu)

Experience the Joy of Discovery and Innovation: Graduate Study in the Life Sciences at the University of Missouri.

- The joy of discovery has propelled the University of Missouri to one of the top-ranked research institutions in the 21st Century.
- Our Ph.D. programs emphasize interdisciplinary collaboration and innovation. University of Missouri faculty from diverse disciplines come together to develop cures for human diseases, to improve our nation's food supply, to develop new sources of biofuels, and to preserve and protect our environment, among many other research areas.
- Our Ph.D. students use cutting-edge technologies to solve problems. Our facilities include state-of-the-art Research Cores in Animal Modeling, Cell and Immunobiology, DNA, Electron Microscopy, Informatics, Metabolomics, Molecular Cytology, Molecular Interactions, Nuclear Magnetic Resonance, and Proteomics.
- We are committed to the success of our graduate students, with strong mentorship programs and career-directed resources. We offer a comprehensive support package including stipend, paid tuition, professional development resources, and travel funding. Columbia, Missouri is an excellent, diverse and affordable city with impressive amenities.

Learn More: <http://gradstudies.missouri.edu/> | Email: [gradlifesci@missouri.edu](mailto:gradlifesci@missouri.edu)

## Table 50

### University of Nebraska Medical Center

985840 Nebraska Medical Center

Omaha, NE 68198-5840

**Contacts:** Kimberly Rothgeb, [krothgeb@unmc.edu](mailto:krothgeb@unmc.edu)

Jen Brady, [jen.brady@unmc.edu](mailto:jen.brady@unmc.edu)

At the University of Nebraska Medical Center, we have programs designed to prepare students for careers in academic medicine and/or research. The MD/PhD Scholars Program is designed to prepare a select group of outstanding students for careers in academic medicine and research. Applicants admitted into this highly competitive program pursue original research and participate in the medical school curriculum. By continually reinforcing the interaction between biomedical research and clinical medicine, this integration prepares the student for a unique role as a physician-scientist. The Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS) contains six interdisciplinary research-based doctoral programs that provide students with a solid, broad-based training in multidisciplinary biomedical research. This program provides research students with greater flexibility and wider opportunities for choosing a laboratory in which to pursue their PhD research. Students can

pursue research in areas such as Biochemistry & Molecular Biology; Cancer Research; Immunology, Pathology & Infectious Disease; Integrative Physiology & Molecular Medicine; Molecular Genetics & Cell Biology; and Neuroscience. Additionally, we also offer Summer Undergraduate Research opportunities and a Neuroscience Internship program.

## Table 14

### University of North Texas College of Science

1155 Union Circle  
Denton, TX 76203

**Contact: Heather Miller, [heather.miller@unt.edu](mailto:heather.miller@unt.edu)**

Located in Denton, Texas, named as one of the nation's Best College Towns, the University of North Texas (UNT) is a Carnegie Tier One research university. Established in 1890, UNT is one of the nation's largest public research universities with 38,000 students. UNT is a minority serving institution committed to the advancement of the sciences and arts. The university offers fourteen advanced degrees in the sciences and offers attractive funding and tuition benefits to graduate students.

## Table 32

### University of South Florida

College of Engineering  
4202 East Fowler Avenue, ENB 118  
Tampa, FL 33620

**Contact: Bernard Batson, [bbatson@usf.edu](mailto:bbatson@usf.edu)**

The University of South Florida (USF) is a high-impact global research university dedicated to student success with an annual budget of \$1.6 billion and over \$450 million in research funding. USF ranked fifth in the nation among public universities for the number of new U.S. patents and 12th globally among universities worldwide for U.S. patents granted in 2017, according to a report released by the National Academy of Inventors (NAI) and Intellectual Property Owners Association in 2018. Signature research initiatives are in the areas of Water, Brain & Spinal Cord, Heart, Data Science, Human Security, and Research Translation. Fellowships, assistantships, and professional development opportunities are available for students sponsored by the Alfred P. Sloan Foundation University Center of Exemplary Mentoring (UCEM), NSF Florida-Georgia Louis Stokes Alliance for Minority Participation (FGLSAMP) Bridge to the Doctorate Project, McKnight Doctoral Fellowship Program, Office of Graduate Studies, and USF departments. Summer undergraduate research opportunities are available in Computer Science and Engineering, Biomaterials and Drug Delivery Systems, Biomedical Sciences, Advanced Materials and Alternative Energy Systems.

## Table 43

### University of Southern California

1985 Zonal Avenue  
Room 713  
Los Angeles, CA 90089

**Contact: Rosie Soltero, [rsoltero@usc.edu](mailto:rsoltero@usc.edu)**

The USC School of Pharmacy (SOP) is a leading research and teaching institution and a top ranked private pharmacy school. In the most recent US News & World Report ranking of graduate programs in pharmacy, the SOP placed 9th in the nation. The School's graduate programs encompass a diverse community spanning the USC University Park and Health Sciences campuses. As part of one of the world's largest research universities, the School's programs benefit from diverse course offerings, cutting-edge research and innovative thinking aiming to improve people's lives. Students are part of this vibrant enterprise and their educational experience is punctuated by cross-discipline conversations and projects. Our intersecting areas of expertise allow for research and doctoral-level training in every aspect of therapeutic development from drug discovery, delivery and mechanism to translation and clinical testing, regulatory science, outcomes analysis and policy development.

The USC School of Pharmacy offers these MS and PhD degrees:

- Programs in Pharmaceutical and Translational Sciences: (1) MS and PhD in Molecular Pharmacology and Toxicology; (2) MS and PhD in Pharmaceutical Sciences; and (3) MS and PhD in Clinical and Experimental Therapeutics.
- Programs in Health Economics: (1) MS in BioPharmaceutical Marketing, (2) MS in Pharmaceutical Economics and Policy, (3) PhD in Health Economics, (4) MS in Healthcare Decision Analysis.
- Programs in Regulatory Sciences: (1) MS and Professional Doctorate (DRSc) in Regulatory Science, (2) MS in the Management of Drug Development, (3) MS in Medical Product Quality, (4) MS in Regulatory Management.

These programs enrolled a total of 181 students, including 100 PhD students, 26 DRSc students and 55 MS students, for the 2017-2018 academic year.

## Table 42

### University of Southern California - PIBBS

1975 Zonal Avenue, KAM 409  
Los Angeles, CA 90089-9031

**Contact: Joyce Perez, [jpperez@med.usc.edu](mailto:jpperez@med.usc.edu)**

Programs in Biomedical and Biological Sciences (PIBBS) is the gateway into interdisciplinary Ph.D. programs at the Keck Medicine of USC. Our Ph.D. programs are interdepartmental and

# Exhibitor Descriptions

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are focused on broad approaches to modern biomedical research. PIBBS is an umbrella program with distinguished faculty focused on health-related research. The PIBBS program offers students the breadth and flexibility to best pursue their interests across the wide range of biomedical Ph.D. programs. Interdisciplinary Ph.D. Programs include: Cancer Biology & Genomics; Development, Stem Cell & Regenerative Medicine; Infectious Diseases, Immunology & Pathogenesis; Medical Biophysics.

## Table 6

### UT Health San Antonio, Graduate School

**Contact:** Yvonne Valdez, ValdezY3@uthscsa.edu

UT Health San Antonio, formally known as the University of Texas Health Science Center at San Antonio, is the leading research institution in South Texas and one of the major health sciences universities in the world. With an operating budget of \$536 million, the Health Science Center is the chief catalyst for the \$14.3 billion biosciences and health care industry, the leading sector in San Antonio's economy. UT Health San Antonio has had an estimated \$35 billion impact on the region since inception and has expanded to six campuses in San Antonio, Laredo, Harlingen and Edinburg. More than 22,000 graduates (physicians, dentists, nurses, scientists and allied health professionals) serve in their fields, including many in Texas. UT Health San Antonio faculty are international leaders in cancer, cardiovascular disease, diabetes, aging, stroke prevention, kidney disease, orthopaedics, research imaging, transplant surgery, psychiatry and clinical neurosciences, pain management, genetics, nursing, allied health, dentistry and many other fields. Graduate programs are on: Aging, Biochemistry, Cancer, Cell and Molecular Medicine, Microbiology and Immunology, Neuroscience, Pharmacology, Physiology, Radiological Science and Translational Science. Tuition and fees as well as student insurance is paid by the graduate school for most PhD students. There is a low faculty: student ratio that provides the ideal environment for personalized and strategic mentoring.

## Table 48

### UW Molecular Engineering & Sciences Institute

3946 W Stevens Way NE  
Seattle, WA 98195-1653

**Contact:** Paul Neubert, pneubert@uw.edu

The interdisciplinary Ph.D. program in Molecular Engineering (MoIE) offers students the opportunity to work with over 115 faculty members from 14 different departments on BioTech and/or CleanTech projects. It provides access to the state-of-the-art Molecular Analysis Facility, and also provides paid tuition combined with a highly competitive salary. The MoIE PhD

provides students the opportunity to customize an engineering degree program relevant to your research interests in clean technology or biotechnology while developing a systemic, rational approach to engineering molecular systems that can be applied in fields as diverse as energy, healthcare, or technology. Students meet nationally and internationally recognized experts in the developing field of molecular engineering, access state-of-the-art facilities and instrumentation for molecular-scale analysis, and distinguish themselves as experts in an interdisciplinary and cutting-edge research area, prepared for a leading career in molecular engineering and sciences. The University of Washington is ranked 13th globally, and 3rd among U.S. public universities by the Academic Ranking of World Universities. The UW receives more federal research dollars than any other public university in the nation, receiving over \$1.3 billion in average total research awards over recent years.

## Table 24

### Wayne State University Graduate School

5057 Woodward  
Suite 6307.4  
Detroit, MI 48202

**Contact:** Farron McIntee, farron@wayne.edu

Wayne State University Graduate School provides leadership in advancing academic excellence in graduate and postdoctoral education and cultivates a supportive environment for research, scholarly activities and other creative endeavors that are integral to the success of a diverse body of master's and doctoral students, postdoctoral scholars, and graduate faculty across programs.

## Table 12

### Worcester Polytechnic Institute

100 Institute Road  
Worcester, MA 01609

**Contact:** Michael McGrade, grad@wpi.edu

Worcester Polytechnic Institute, one of the nation's premier science- and engineering-focused universities, was founded in 1865 with the mission of providing an education that balances theory and practice. A dynamic and welcoming graduate community, world-renowned faculty mentors, a culture of collaboration, spectacular research facilities, and close relationships with industry make WPI an outstanding environment for aspiring scientists, engineers, innovators, and entrepreneurs. Here, you will pursue cutting-edge, multidisciplinary research and contribute to breakthroughs that deepen our understanding of the world, engender new lines of inquiry, and meet the technological challenges facing the world today.

**Table 44****XSEDE**

SURA

Washington, DC 20005

**Contact: John Holly, [jholly@sura.org](mailto:jholly@sura.org)****Marques Bland, [mbland@tacc.utexas.edu](mailto:mbland@tacc.utexas.edu)**

XSEDE (Extreme Science and Engineering Discovery Environment) is an NSF-funded virtual organization that integrates and coordinates the sharing of advanced digital services - including supercomputers and high-end visualization and data analysis resources - with researchers nationally to support science. Digital services provide users with seamless integration to NSF's high-performance computing and data resources. XSEDE's integrated, comprehensive suite of advanced digital services combined with other high-end facilities and campus-based resources, serve as the foundation for a national cyberinfrastructure ecosystem. Scientists, engineers, social scientists, and humanists around the world – many of them at colleges and universities – use advanced digital resources and services every day. Things like supercomputers, collections of data, and new tools are critical to the success of those researchers, who use them to make our lives healthier, safer, and better.

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Christie Canaria, Ph.D., Chemistry  
Executive Branch Fellow at the National Institutes of Health  
Current: Program Staff, National Cancer Institute,  
National Institutes of Health

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