PUT YOUR PASSION INTO PRACTICE

STOP BY THE KCU BOOTH (621) TO LEARN ABOUT OUR:

- DOCTOR OF OSTEOPATHIC MEDICINE (DO)
- DOCTOR OF PSYCHOLOGY IN CLINICAL PSYCHOLOGY (PsyD)
- MASTER OF SCIENCE IN BIOMEDICAL SCIENCE (MS)

WWW.KCUMB.EDU
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All program content is current as of October 24, 2018.

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Join the conversation!  
#ABRCMS

Download the official conference mobile app for the most up-to-date and detailed information.

facebook.com/abrcms
instagram.com/abrcms
twitter.com/abrcms
Welcome from Avery August

On behalf of the Annual Biomedical Research Conference for Minority Students (ABRCMS), I would like to welcome you to Indianapolis, Indiana, and the 2018 meeting. This is the 18th year that we have been organizing and hosting this conference, and this year continues to be one of change, adjustment and transformation. We have seen how changes in administration has catalyzed changes in societal engagement of scientists, and continued changes in the meeting itself. I continue to firmly believe that it is even more imperative that ABRCMS exists. I continue to be heartened and extremely proud that ABRCMS continues its tradition of being transformational for our students.

It is therefore fitting that the theme of our meeting this year, “Shaping Tomorrow’s Diverse STEM Leaders Today,” focuses on how we can continue to affirmatively be part of preparing future leaders in STEM. ABRCMS is extremely proud of the role that we play in transforming underrepresented students for a career STEM research. But more than a career, we strive to develop leaders, leaders who can carry the ABRCMS tradition of transformational change. At no other time has biomedical science been at its promising to improve health, and with that improvement, drive social change reduce health disparities, and impacts of environmental and climate change that affect our communities. Tomorrow leaders emerging from ABRCMS will be leading this change.

We are proud to present this incredible program this year! For the students attending, you are here to be transformed. You have done the research, prepared your posters and presentations, and now you join us as colleagues. We encourage you to take in as much as you can in this transformation. For the faculty mentors and advisors, you have worked with your students, supporting their research, and we all join you in ensuring that they fully participate in the program and experience this transformation. For the presenters, we look forward to hearing some of the best science, and to be inspired by your words, and for the exhibitors, we look forward to your full engagement with students. This is ABRCMS! Network, attend the stimulating talks on the most recent work in the biomedical and behavioral sciences, and fully engage in our discussions of the critical issues facing our community of minority scholars, and of our scientific communities.

Each year, the ABRCMS meeting follows hurricane season, and this year, again, our hearts go out to our colleagues, students and their families in areas affected by the devastating hurricanes, many of whose homes and lives are upended, some in Puerto Rico after more than 1 year. The ABRCMS Steering Committee, the ASM staff, the exhibitors (make sure to visit the booths!), and many volunteers have done a remarkable job to make this meeting possible. They have invested their most precious resource, time, in preparing the program, reviewing abstracts, planning and preparing the location to host your visit, preparing materials, setting up booths, and making sure that everything is just right. This, all so that you can allow your inner leader to emerge. I would like to thank them all in advance for their hard work in making this meeting a success. We also are extremely grateful for the continued support of Division of Training, Workforce Development, and Diversity at the National Institute of General Medical Sciences, NIH, whose funding has continued to make ABRCMS what it is.

With my warmest wishes,

Avery August, Ph.D.
Chairperson, ABRCMS
On behalf of the National Institutes of Health’s National Institute of General Medical Sciences, we’d like to welcome you to the 2018 Annual Biomedical Research Conference for Minority Students. We’re very proud to support this meeting, which brings together a community of outstanding students and scientists for stimulating discussions of research, careers, and more. This meeting is one element of our many activities in the areas of training, workforce development, and diversity. Our programs range from the undergraduate level to the doctorate and beyond, and they include the Bridges to the Baccalaureate, Maximizing Access to Research Careers, Research Initiative for Scientific Enhancement, Initiative for Maximizing Student Development, Postbaccalaureate Research Education, Bridges to the Doctorate, and Institutional Research and Academic Career Development Awards. Our programs also include institutional and faculty development through the Native American Research Centers for Health, the Support of Competitive Research Programs, as well as the Building Infrastructure Leading to Diversity. Additionally, the National Institutes of Health supports the National Research Mentoring Network to enhance the training and career development of individuals from diverse backgrounds who are pursuing biomedical research careers.

For those of you who are attending as mentors and sponsors, we truly appreciate your dedication and many contributions to your students and our shared goals.

For those of you still in training, we hope that your involvement in this meeting further inspires and motivates you to pursue research careers and leadership roles in biomedical science. During your time here, you will gain important allies for your future: a community of peers who will become your colleagues and friends as well as a network of scientists and mentors who are deeply committed to your success in pursuit of a research doctorate and a biomedical career.

We encourage you to make the most of the meeting and take every advantage of the resources and opportunities it offers to help you prepare for the next stages of your research career. We look forward to seeing your presentations and talking to you over the course of the next few days.

Sincerely,

Jon R. Lorsch, Ph.D.
Director
National Institute of General Medical Sciences
National Institutes of Health

Alison Gammie, Ph.D.
Director
Division of Training, Workforce Development, and Diversity
National Institute of General Medical Sciences
National Institutes of Health
### Wednesday, November 14

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00 p.m. – 8:00 p.m.</td>
<td>Registration Open</td>
</tr>
<tr>
<td>8:00 a.m. – 6:00 p.m.</td>
<td>Concurrent Workshops</td>
</tr>
<tr>
<td>3:00 p.m. – 4:30 p.m.</td>
<td>Concurrent Professional Development Sessions</td>
</tr>
<tr>
<td>5:00 p.m. – 6:00 p.m.</td>
<td>Concurrent Professional Development Sessions</td>
</tr>
<tr>
<td>6:30 p.m. – 8:30 p.m.</td>
<td>Networking Dinner and Opening Keynote Address</td>
</tr>
<tr>
<td>8:45 p.m. – 9:15 p.m.</td>
<td>ABRCMS Travel Awardee Orientation</td>
</tr>
</tbody>
</table>

### Thursday, November 15

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>7:30 a.m. – 7:00 p.m.</td>
<td>Registration Open</td>
</tr>
<tr>
<td>7:00 a.m. – 7:45 a.m.</td>
<td>Networking Breakfast</td>
</tr>
<tr>
<td>8:00 a.m. – 8:45 a.m.</td>
<td>Mandatory Judges Meeting by Discipline</td>
</tr>
<tr>
<td>8:00 a.m. – 9:00 a.m.</td>
<td>Orientation for Students</td>
</tr>
<tr>
<td>8:00 a.m. – 9:00 a.m.</td>
<td>Concurrent Professional Development Sessions</td>
</tr>
<tr>
<td>9:15 a.m. – 10:00 a.m.</td>
<td>Concurrent Scientific Sessions</td>
</tr>
<tr>
<td>10:15 a.m. – 11:15 a.m.</td>
<td>Concurrent Professional Development Sessions</td>
</tr>
<tr>
<td>11:30 a.m. – 12:15 p.m.</td>
<td>Concurrent Professional Development Sessions</td>
</tr>
<tr>
<td>12:15 p.m. – 1:00 p.m.</td>
<td>Networking Lunch by Discipline</td>
</tr>
<tr>
<td>1:00 p.m. – 1:45 p.m.</td>
<td>Plenary Scientific Session</td>
</tr>
<tr>
<td>1:45 p.m. – 5:30 p.m.</td>
<td>Exhibit and Poster Hall Hours</td>
</tr>
<tr>
<td>2:00 p.m. – 3:15 p.m.</td>
<td>Poster Session 1 (A)</td>
</tr>
<tr>
<td>3:00 p.m. – 5:00 p.m.</td>
<td>Mentoring Coaching</td>
</tr>
<tr>
<td>3:30 p.m. – 4:45 p.m.</td>
<td>Poster Session 2 (B)</td>
</tr>
<tr>
<td>5:30 p.m. – 6:45 p.m.</td>
<td>Oral Presentations</td>
</tr>
<tr>
<td>7:00 p.m. – 7:45 p.m.</td>
<td>Networking Dinner by Discipline</td>
</tr>
<tr>
<td>8:15 p.m. – 9:30 p.m.</td>
<td>Concurrent Professional Development Sessions</td>
</tr>
<tr>
<td>8:00 p.m. – 10:00 p.m.</td>
<td>Master’s Level Poster Session/Grad Student and Postdoc Dessert and Networking Mixer</td>
</tr>
</tbody>
</table>

“This conference provides a warmth and welcoming environment where students receive continuous support, mentorship, and a breadth of resources that empowers them to achieve their dreams and shows them that they matter.”
Friday, November 16

7:30 a.m. – 5:00 p.m.  Registration Open
7:00 a.m. – 7:45 a.m.  Networking Breakfast
8:00 a.m. – 9:00 a.m.  Plenary Session
9:15 a.m. – 10:00 a.m. Concurrent Professional Development Sessions
10:15 a.m. – 12:00 p.m. Exhibit and Poster Hall Hours
10:30 a.m. – 11:30 a.m. Mentoring Coaching
10:30 a.m. – 11:45 a.m. Poster Session 3 (C)
12:15 p.m. – 1:00 p.m. Networking Lunch by Discipline
1:00 p.m. – 1:45 p.m.  Plenary Scientific Session
2:00 p.m. – 3:00 p.m.  Concurrent Professional Development Sessions
3:00 p.m. – 6:00 p.m.  Exhibit and Poster Hall Hours
3:15 p.m. – 4:30 p.m.  Poster Session 4 (D)
3:30 p.m. – 4:15 p.m.  Mentoring Showcase
4:30 p.m. – 5:30 p.m.  Mentoring Coaching
4:45 p.m. – 5:30 p.m.  Poster Session 5 (E)
6:15 p.m. – 7:15 p.m.  Concurrent Professional Development Sessions
6:30 p.m. – 9:00 p.m.  Networking Events

Saturday, November 17

7:30 a.m. – 1:00 p.m.  Registration Open
7:00 a.m. – 7:45 a.m.  Networking Breakfast
8:00 a.m. – 9:15 a.m.  Oral Presentations
9:15 a.m. – 12:00 p.m. Exhibit and Poster Hall Hours
9:30 a.m. – 11:20 a.m. Exhibitor Showcase
9:30 a.m. – 11:30 a.m. Mentoring Coaching
10:00 a.m. – 11:15 a.m. Poster Session 6 (F)
12:15 p.m. – 1:00 p.m. Networking Lunch
1:00 p.m. – 1:45 p.m.  Closing Keynote Address
2:15 p.m. – 3:15 p.m.  Concurrent Professional Development Sessions
3:30 p.m. – 4:30 p.m.  Concurrent Professional Development Sessions
4:30 p.m. – 7:30 p.m.  FREE TIME!
7:30 p.m. – 10:00 p.m. Banquet and Awards Ceremony
10:00 p.m. – 2:00 a.m. Dance and Social (all are invited)

“ABRCMS gives me hope that there will be a diverse scientific workforce in the future.”
Important Conference Information

Orientations for Community College, Undergraduate, and Postbaccalaureate Students
ABRCMS orientation will help maximize your learning and networking opportunities throughout the conference. Orientation will be held on Thursday, November 15, from 8:00 a.m. – 9:00 a.m.

ABRCMS Mobile App
Get the latest conference program, exhibitor information, conference maps and much more at your fingertips with the ABRCMS Mobile App. Search for ABRCMS in your app store.

Judges Needed
Active researchers in all 12 scientific disciplines are needed to serve as judges for the ABRCMS Student Presentation Program. To volunteer as a judge, visit the Judges Lounge (Room: 141).

Dining Plan
The daily dining plan is included in the registration fee. Registration includes the following meals:

- Wednesday: Dinner
- Thursday: Breakfast, Lunch, and Dinner
- Friday: Breakfast and Lunch
- Saturday: Breakfast, Lunch, and Awards Banquet

Awards Banquet and Ceremony
The Awards Banquet and Ceremony is Saturday, November 17, from 7:30 p.m. – 10:00 p.m. The ceremony will begin promptly at 7:30 p.m.

Wifi at ABRCMS
Great news! Free Wi-Fi is available in the exhibit hall, session rooms, and convention center hallways. This service has been brought to you by ABRCMS and the American Society for Microbiology.
Network ID – ABRCMS
Password – ABRCMS2018

Name Badge Policy & Badge Replacement
All ABRCMS attendees are required to wear conference badges onsite at all times. Badges give you access to sessions, the exhibit hall, and workshops. It is your responsibility to ensure that you have your badge at all times. There is a charge of $50 for badge replacement. No exceptions will be made.

Evaluation
This year we are re-implementing real time evaluation during sessions. Please take a few minutes to complete your evaluation in the mobile app at the end of each session you attend. A post conference evaluation will be emailed to all attendees following the conference. We value your feedback, and every completed evaluation helps us improve future conferences.

Cell Phone Usage
Out of consideration for your ABRCMS colleagues, all cell phones must be turned off in session rooms.

Networking within Scientific Disciplines
Networking sessions will be held on Wednesday, November 14, from 5:00 p.m. – 6:00 p.m. These informal sessions offer a forum for small-group discussions focused on the student activities and career pathways offered by societies. All ABRCMS exhibitor and faculty attendees who are within the 12 scientific disciplines are strongly encouraged to attend.

Gateway to the Future: Career Paths in the Biomedical Sciences, STEM Disciplines, and Behavioral Sciences
Thursday, November 15, from 8:15 p.m. – 9:30 p.m. Research scientists and representatives from a variety of career sectors will engage students in small group discussions focused on “a day in the life of a research scientist.” They will discuss their career pathways and educational backgrounds, what they enjoy about their work, and their strategies for professional and personal life balance. Career sectors include pharma/biotechnology/industry, media/communications, research intensive academic/staff scientist, undergraduate liberal arts academic/community college, M.D.–Ph.D. in academic health center, and government/policy/foundation/law.

Photo Policy
By registering for ABRCMS, you agree to allow ASM/ABRCMS to use any photos taken of you during the conference in news media, website, publications, articles, marketing pieces, etc. In order to protect data shared during presentations, no photos may be taken of posters or scientific session slides at ABRCMS.
Dress Code
ABRCMS attendees are expected to dress professionally for all conference activities.

ABRCMS Code of Conduct
The Annual Biomedical Research Conference for Minority Students (ABRCMS), managed by the American Society for Microbiology (ASM), is one of the nation’s largest conferences for underrepresented students in STEM. ABRCMS is committed to providing an environment that encourages the free expression and exchange of scientific ideas and promotes equal opportunities and respectful treatment for all participants. All participants are expected to treat others with respect and consideration, follow venue rules, and alert ASM/ABRCMS staff or security of any dangerous situations or anyone in distress. ABRCMS prohibits and will not tolerate any form of harassment or bullying at its events. This policy applies to all attendees, speakers, exhibitors, contractors, volunteers, and guests at ABRCMS. Violation of this code of conduct may result in the participant being asked to leave the event at which the incident occurred, without warning or refund; being barred from attending ABRCMS in the future.

If a participant experiences or witness harassment, please follow the protocol at abrcms.org/code-of-conduct or contact an ASM/ABRCMS staff (identifiable by staff badge) as soon as possible or contact security.

Rooms
Exam Rooms
Lincoln (Marriott Downtown)
Room 242 (Indiana Convention Center);
Thursday – Saturday
Sign ups available at the Registration desk.

Poster Presentation Practice Room
Room 144 –145 (Indiana Convention Center)

Oral Presentation Practice Room
Room 143 (Indiana Convention Center)

Speaker Ready Room
Room 142

First Aid Room
Convention Center, Registration Area
ABRCMS Year-round Programming
ABRCMS has extended its mission and vision by establishing a year-round program to continue broadening the success of student development, as they pursue higher education in the biomedical sciences. Phase 1 of the program implementation focuses on programming and resources for students in two main categories: pre-ABRCMS and post-ABRCMS. Topics include, but are not limited to:

• How to write and submit an abstract (pre-ABRCMS)
• How to present a poster and get ready for ABRCMS (pre-ABRCMS)
• Connecting students to graduate schools (post-ABRCMS)
• How to prepare and choose a summer research experience (post-ABRCMS)

Phase 2 of implementation (ABRCMS 2019 and beyond) will focus on programming for early career professionals, faculty and advisors.

Visit the ABRCMS “Education & Training” page at http://abrcms.org/ed-training for more information about our year-round programs.

College/University Spirit Day
On Wednesday, November 14, represent your institution by sporting your school jacket, t-shirt, tie, polo, and etc. Don’t forget to show off your school spirit on the ABRCMS Twitter, Instagram, and Facebook pages using #ABRCMS.

Master’s Level Poster Session/Grad Student and Postdoc Dessert and Networking Mixer
(Sponsored by IU College of Arts & Sciences, IU School of Medicine Biomedical Science Gateway Programs, and The University Graduate School at IU and IUPUI)

BACK BY POPULAR DEMAND! Exhibit Passport
Participate in the exhibit hall passport program to win prizes. See page 43 – 44 for details.

BACK BY POPULAR DEMAND! Presentation Practice and Peer Mentoring Sessions
(Sponsored in Partnership with FASEB)
The FASEB MARC Program will sponsor poster/oral presentation practice and peer mentoring sessions for students presenting at ABRCMS 2018. These practice sessions are scheduled for 30-minute periods. Students MUST sign up at the JW Marriott (Room 207) in advance.

FASEB Practice Room Hours/Location
FASEB Poster Practice Room
201-203 (JW Marriott)

FASEB Oral Practice Room
204-205 (JW Marriott)

Wednesday, November 14
9:00 a.m. – 10:00 p.m.

Thursday, November 15
7:00 a.m. – 10:30 p.m.

Friday, November 16
7:00 a.m. – 10:00 p.m.

FASEB Presentation Practice Mentors
• Tyesha Burks, Ph.D.
  Bowie State University
• Laura de Lorenzo, Ph.D.
  University of Kentucky
• Felicia Emery, Ph.D.
  St. Charles Community College
• Kamilah Grant, Ph.D.
  Alcorn State University
• Mario Izaguirre-Sierra, Ph.D.
  Northern New Mexico College
• Oliver Jenkins, Jr., M.S.
  Virginia State University
• L’Aurelle Johnson, Ph.D.
  University of Minnesota
• Michelle Juarez, Ph.D.
  City College of New York
• LeeCole Leggette, Ph.D.
  Pharmavite LLC
• Shaun Logan, Ph.D.
  Texas A&M University College of Dentistry
• Noraida Martinez-Rivera, Ph.D.
  University of Kansas
• Melissa Mason, Ph.D.
  Alcorn State University
• Kimberly Mulligan-Guy, Ph.D.
  Auburn University
• Jayne S. Reuben, Ph.D.

NEW!
Texas A&M University College of Dentistry

• Kennie Shepherd, Ph.D.
  Morehouse School of Medicine
• Tracy Womble, Ph.D.
  Florida A&M University

**Exhibitor Showcase**
Join us in the Exhibit and Poster Hall for the inaugural Exhibitor Showcases, where you can hear directly from the exhibitors. These innovative 20-minute presentations will be held on Saturday, November 17, from 9:30 a.m.–11:20 a.m. in the Exhibit Hall Theater.

**9:30 a.m. – 9:50 a.m.**
American Society for Microbiology Education Department

**10:00 a.m. – 10:20 a.m.**
St. Jude Children’s Research Hospital Graduate School of Biomedical Sciences

**10:30 a.m. – 10:50 a.m.**
Emory University – Laney Graduate School

**11:00 a.m. – 11:20 a.m.**
Purdue University/Weldon School of Biomedical Engineering

**NEW!**

**Mentoring Coaching Sessions**
(Recommended for all students)
Come discuss the ins and outs of mentoring, within and outside the research environment. Several mentors have been identified to host a table and provide one-on-one coaching during exhibit hall hours. First time attendees should be especially mindful that first impressions are critical at the beginning of their careers.

**BACK BY POPULAR DEMAND!**

**Mentoring Showcase**
(Recommended for all students)
Join us in the Exhibit and Poster Hall for the Mentoring Showcase, where you can hear about relevant topics in mentoring. This will be held on Friday, November 16 from 3:30 p.m. – 4:15 p.m. in the Exhibit Hall Theater

**Session Time: 3:30 p.m. – 4:15 p.m.**
Group Coaching Time: 4:30 p.m. – 5:30 p.m.

**2018 ABRCMS Mentors**

• Howard G. Adams, Ph.D.
  H.G. Adams & Associates
• Earnestine Baker, M.A.
  University of Maryland, Baltimore County
• Marcus Huggans, Ph.D.
  GEM Fellowship
• Deborah King, Ph.D.
  Dartmouth College
• Juan Ramirez Lugo, Ph.D.
  University of Puerto Rico, Rio Piedras
• Amy Maki, Ph.D.
  A.O. Maki & Associates
• Camille McKayle, Ph.D.
  University of the Virgin Islands
• Beronda Montgomery, Ph.D.
  Michigan State University
• Ofelia Olivero, Ph.D.
  National Institutes of Health
• Manu Platt, Ph.D.
  Georgia Tech/Emory University
• Yvette Pearson, Ph.D.
  Rice University
• Marquitta Qualls, Ph.D.
  Entropia Consulting
• Cheryl Rowe Rendleman, Ph.D.
  Omar Consulting
• Sylvia Wilson Thomas, Ph.D.
  H.G. Adams & Associates
• Patrice Yarbough, Ph.D.
  NASA
ABRCMS offers many opportunities for networking. Join colleagues with similar interest to share ideas and develop research collaborations. Networking is strongly encouraged throughout the conference; however, attendees are asked to sit in their respective disciplines during lunch and dinner on Thursday, and during lunch on Friday. Disciplines tables are identified by napkin colors. See table below.
ABRCMS would like to recognize the following universities and organizations for their support of ABRCMS 2018.

**Major Conference Sponsors**

**Diamond Sponsors**
- IU Office of the Biocentennial
- IU School of Medicine – Biomedical Science Graduate Programs
- Marian University – College of Osteopathic Medicine & Biomedical Sciences
- The University Graduate School at IU and IUPUI

**Platinum Sponsors**
- NewScientist
- University of Alabama at Birmingham

**Gold Sponsors**
- American Chemical Society
- Biocomputational Evolution in Action (BEACON)@A&T
- Genentech, Inc.
- Novartis Institutes for BioMedical Research
- NYU School of Medicine, Sackler Institute of Graduate Biomedical Sciences
- Society of Toxicology
- University of South Florida

**Silver Sponsors**
- American Heart Association/American Stroke Association
- American Physiological Society
- American Society for Biochemistry and Molecular Biology
- Columbia University Vagelos College of Physicians & Surgeons
- Howard Hughes Medical Institution (HHMI)

**Bronze Sponsors**
- American Association of Immunologists (AAI)
- Biophysical Society
- Boise State University
- Emory University – Laney Graduate School
- Roberts Center for Pediatric Research
- University of Arizona, Department of Immunobiology
- University of Illinois, Bioengineering
- University of New England, College of Osteopathic Medicine
- University of Texas at San Antonio, The Graduate School
**Wednesday, November 14**

7:45 p.m. – 8:30 p.m.

**OPENING KEYNOTE ADDRESS**

Science Focused on Human Development

Wanda Díaz Merced, Ph.D.
South African Astronomical Observatory
Cape Town, South Africa

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**Thursday, November 15**

1:00 p.m. – 1:45 p.m.

**PLENARY SCIENTIFIC SESSION**

Dynamic Control of Metabolic Flux for Pathway Engineering

Kristala L. Jones Prather, Ph.D.
Massachusetts Institute of Technology, Cambridge, MA

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**Friday, November 16**

8:00 a.m. – 9:00 a.m.

**PLENARY SESSION**

State of STEM Research in Hurricane Impacted Areas and Lessons Learned

Juan S. Ramírez Lugo, Ph.D.
University of Puerto Rico, Rio Piedras, PR

---

**Friday, November 16**

1:00 p.m. – 1:45 p.m.

**PLENARY SCIENTIFIC SESSION**

Insights from non-human animals into the neurobiology of language

Erich D. Jarvis, Ph.D.
The Rockefeller University
New York City, NY

---

**Saturday, November 17**

1:00 p.m. – 1:45 p.m.

**CLOSING KEYNOTE ADDRESS**

Translating Science: Obstacles and Opportunities

Kafui Dzirasa, M.D., Ph.D.
Duke University, Durham, NC

---

“Everyone’s voices are heard and valued — ABRCMS helps highlight the human side of science: the fact that every researcher has a story, and that every story is valuable.”
SHAPING TOMORROW’S DIVERSE STEM LEADERS TODAY

ABRCMS 2018 Concurrent Scientific Speakers

Thursday, November 15 | 9:15 a.m. – 10:00 a.m.

Making Sense of Biomedical Research

Vanessa Ezenwa, Ph.D.
University of Georgia
Athens, GA

Brandon Ogbunu, Ph.D.
Brown University
Providence, RI

Luis Zaman, Ph.D.
University of Michigan
Ann Arbor, MI

Making Sense of Biomedical Research

Ofelia Olivero, Ph.D.
National Cancer Institute, NIH
Rockville, MD

Transplacental Genotoxicity of AIDS Therapy

Michelle Jones-London, Ph.D.
National Institute of Neurological Disorders and Stroke
Bethesda, MD

Scientific Discoveries of the BRAIN Initiative

Carlos Lois, M.D., Ph.D.
California Institute of Technology
Pasadena, CA

Scientific Discoveries of the BRAIN Initiative

Dario Ringach, Ph.D.
University of California, Los Angeles
Los Angeles, CA

Making a Face: Visualizing Cellular Behaviors During Normal and Defective Orofacial Development

Oscar Ruiz, Ph.D.
MD Anderson Cancer Center
Houston, TX

Bow to the Microbial Overlords: An Introduction to Microbiome Research

Jacquelyn Meisel, Ph.D.
University of Maryland, UMIACS
College Park, MD

Bow to the Microbial Overlords: An Introduction to Microbiome Research

Mihai Pop, Ph.D.
University of Maryland, UMIACS
College Park, MD

From Clinical Treatments to a Gene Therapy Cure for Sickle Cell Disease

Betty Pace, M.D.
Augusta University
Augusta, GA

NextGen STEM: The Future of Developmental & Regenerative Biology

Caralina Marín de Evsikova, Ph.D.
University of South Florida Health
Tampa, Tampa, FL

NextGen STEM: The Future of Developmental & Regenerative Biology

Nestor Oviedo, Ph.D.
University of California, Merced
Merced, CA

“Cell Biologists Love to take “cellfies” – Strategies to Understand the Cell Biology of Disease

James Olzmann, Ph.D.
University of California, Berkeley
Berkeley, CA

Sunlight, Cancer, and Caffeine: Chemoprevention for Skin Cancer

Masaoki Kawasumi, M.D., Ph.D.
University of Washington
Seattle, WA

All Aboard! How the Monon Trail Initiative Plans to Improve Indiana’s Health Community by Community

Anantha Shekhar, M.D., Ph.D.
Indiana University School of Medicine
CTSI Indianapolis, IN
All sessions take place in the Indiana Convention Center unless otherwise noted.

Repeat Sessions are denoted by ★

Wednesday, November 14

8:00 a.m. – 5:30 p.m.
JW Marriott 103 – 104

Bring Your Research to the Students: Developing CURE’s

In partnership with REIL Biology Network
(Recommended for postdoctoral scientists, faculty, program directors, and exhibitors)

Speakers
• Christopher Beck, Ph.D., Emory University, Atlanta, GA
• Lawrence Blumer, Ph.D., Morehouse College, Atlanta, GA
• Rachelle Spell, Ph.D., Emory University, Atlanta, GA

3:00 p.m. – 6:00 p.m.
Room 242

Do You Play Fair?
(Recommended for postdoctoral scientists, faculty, program directors, and exhibitors)

Speakers
• Percy Brown, MS.Ed., University of Wisconsin Madison, Wisconsin Center for Education Research, Madison, WI
• Donald Dantzler, MS.Ed., University of Wisconsin Madison, Wisconsin Center for Education Research, Madison, WI

3:00 p.m. – 4:30 p.m.

Concurrent Professional Development Sessions
(4 Session Options)

3:00 p.m. – 4:30 p.m.
Session 1 | Rooms 134 – 135

A Case Study: How to Move Student Unrest About Diversity Forward in the Direction of Reconciliation
(Recommended for graduate students, postdoctoral scientists, faculty, program directors, and exhibitors)

Speakers
• Sara Police, Ph.D., University of Kentucky, Lexington, KY
• Renay Scales, Ph.D., University of Kentucky, Lexington, KY

3:00 p.m. – 4:30 p.m.
Session 2 | Rooms 136 – 137

Panel Discussion: So...You Want to Go to Grad School
(Recommended for community college, undergraduate, and postbaccalaureate students)

Panelists
• Simone Douglas, Ph.D. candidate, Georgia Institute of Technology & Emory University, Atlanta, GA
• Rheo-Comfort Addo, Ph.D. student, University of California, San Diego, San Diego, CA
• Alyssa Brunal-Brown, Ph.D. candidate, Virginia Polytechnic Institute, Blacksburg, VA
• Victor Reyes-Umaña, Ph.D. candidate, University of California, Berkeley, Berkeley, CA

3:00 p.m. – 4:30 p.m.
Session 3 | Rooms 132 – 133

Build Your Personal Statement!
(Recommended for all students)

Speakers
• Victoria Freedman, Ph.D., Albert Einstein College of Medicine, New York, NY
• Nancy Schwartz, Ph.D., University of Chicago, Chicago, IL
Program

3:00 p.m. – 4:30 p.m.
Session 4 | Rooms 138 – 139

Presentation Techniques: How to Make Effective Poster and Oral Presentations
(Recommended for first-time presenters and non-presenters)

Moderator
• Florisela Herrejon Chavez, Ph.D. student, Gerstner Sloan Kettering Graduate School of Biomedical Sciences, New York, NY

Speaker
• Shelley Payne, Ph.D., University of Texas at Austin, Austin, TX

Concurrent Professional Development Sessions
(3 Session Options)

5:00 p.m. – 6:00 p.m.
Session 1

Networking in Your Scientific Discipline – All Disciplines –
(Recommended for all students)
Biochemistry and Molecular Biology: Rooms 236 – 237
Cancer Biology: Room 234
Cell Biology: Room 233
Chemistry: Rooms 240 – 241
Computational Biology and Systems Biology: Room 235
Developmental Biology and Genetics: Room 232
Engineering, Physics and Mathematics: Room 231
Immunology: Rooms 130 – 131
Microbiology: Rooms 238 – 239
Neuroscience: Rooms 134 – 135
Physiology: Rooms 132 – 133
Social and Behavioral Sciences and Public Health: Rooms 136 – 137

5:00 p.m. – 6:00 p.m.
Session 2 | Rooms 138 – 139

Understanding Interventions: Changing Practice through Research: Self-Regulation Skills as Predictors of URM Success in Biomedical Research
In partnership with Understanding Interventions
(Recommended for postdoctoral scientists, faculty, program directors, and exhibitors)

Speakers
• Daryl E. Chubin, Ph.D., Understanding Interventions, Brooklyn, NY
• Anthony L. DePass, Ph.D., Long Island University, Brooklyn, NY
• Michelle Williams, Ph.D., University of Connecticut, Mansfield, CT

5:00 p.m. – 6:00 p.m.
Session 3 | Room 140

Job Search Strategies and Negotiating the Job Offer
(Recommended for graduate students, postdoctoral scientists, faculty, program directors, and exhibitors)

Speaker
• Lauren Celano, M.B.A., Propel Careers, Cambridge, MA

6:30 p.m. – 7:15 p.m.
Networking Dinner
Hall F – G

7:15 p.m. – 7:45 p.m.
Conference Overview & Highlights
• John Fitzgerald Gates, Ph.D., University of Virginia, Charlottesville, VA

Chairperson Opening Remarks
• Avery August, Ph.D., Cornell University College of Veterinary Medicine, Ithaca, NY

Welcome Remarks
• Alison Gammie, Ph.D., National Institute of General Medical Sciences, NIH, Bethesda, MD
• Rafael Bahamonde, Ph.D., Indiana University - Purdue University Indianapolis, Indianapolis, IN
• Carl McMillian, Ph.D., Eli Lilly and Company, Indianapolis, IN
7:45 p.m. - 8:30 p.m.  
**Opening Keynote Address**  

**PLENARY SESSION**  
**Science Focused on Human Development**  

**Moderator**  
• John Fitzgerald Gates, Ph.D., University of Virginia, Charlottesville, VA  

**Speaker**  
• Wanda Díaz Merced, Ph.D., South African Astronomical Observatory, Cape Town, South Africa  

8:45 p.m. – 9:15 p.m.  
**ABRCMS Travel Award Orientation**  
Rooms 138 – 139  

8:45 p.m. – 10:00 p.m.  
**PREP Scholars Meet & Greet**  
(By Invitation Only)  
Room 243

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**Thursday, November 15**

7:00 a.m. – 7:45 a.m.  
**Networking Breakfast**  
Hall J  

**CONCURRENT PROFESSIONAL DEVELOPMENT SESSIONS**  
(5 Session Options)  

8:00 a.m. – 8:45 a.m.  
**Session 1**  

**Mandatory Judge Meeting by Discipline**  
(12 sessions)  
Biochemistry and Molecular Biology:  
Rooms 236 – 237  
Cancer Biology: Room 234  
Cell Biology: Room 233  
Chemistry: Rooms 240 – 241  
Computational and Systems Biology: Room 235  
Developmental Biology and Genetics: Room 232  
Engineering, Physics and Mathematics: Room 231  
Immunology: Rooms 130 – 131  
Microbiology: Rooms 238 – 239  
Neuroscience: Rooms 134 – 135  
Physiology: Rooms 132 – 133  
Social and Behavioral Sciences and Public Health: Rooms 136 – 137

8:00 a.m. – 9:00 a.m.  
**Session 2**  
Hall F – G  

**Orientation for Community College, Undergraduate, and Postbaccalaureate Students**  
(Mandatory for community college, undergraduate, and postbaccalaureate students)  

**Networking as a Required Life Skill and Professionalism as a Necessary Attribute for Students**  

**Speaker**  
• Howard G. Adams, Ph.D., H.G. Adams and Associates, Norfolk, VA  

**Program Overview and Making the Most of ABRCMS**  

**Speaker**  
• Sandra Murray, Ph.D., University of Pittsburgh, Pittsburgh, PA
Conference Updates and Announcements

Speaker

• Irene Hulede, American Society for Microbiology, Washington, DC

Session 3 | Rooms 138 –139
8:00 a.m. – 9:00 a.m.
How to Navigate the NIH Peer Review Process and Receive an NIH Fellowship and Research Grant
(Recommended for graduate students, postdoctoral scientists, faculty, program directors, and exhibitors)

Speaker

• Anna Riley, Ph.D., National Institutes of Health, Center for Scientific Review, Bethesda, MD

Session 4 | Room 140
8:00 a.m. – 9:00 a.m.
Postdoc Fundamentals: Selecting a Training Experience to Match Your Career Goal
(Recommended for graduate students and postdoctoral scientists)

Speakers

• Sibby Anderson-Thomkins, Ph.D., University of North Carolina at Chapel Hill, Chapel Hill, NC
• Alberto Roca, Ph.D., DiverseScholar, Orange County, CA

Session 5 | Room 242
8:00 a.m. – 9:00 a.m.
Understanding Interventions: The Influence of Scientific Communication Skills on Science Identity and Research Career Intention
In partnership with Understanding Interventions
(Recommended for postdoctoral scientists, faculty, program directors, and exhibitors)

Moderators

• Daryl E. Chubin, Ph.D., Understanding Interventions, Brooklyn, NY
• Anthony L. DePass, Ph.D., Long Island University, Brooklyn, NY

Speaker

• Carrie Cameron, Ph.D., The University of Texas MD Anderson Cancer Center, Houston, TX

CONCURRENT SCIENTIFIC SESSIONS
(10 Session Options)

9:15 a.m. – 10:00 a.m.

Session 1 | Rooms 130 – 131
Making Sense of Biomedical Research
Sponsored by Biocomputational Evolution in Action (BEACON)@A&T

Speakers

• Vanessa Ezenwa, Ph.D., University of Georgia, Athens, GA
• Brandon Ogbunu, Ph.D., Brown University, Providence, RI
• Luis Zaman, Ph.D., University of Michigan, Ann Arbor, MI

9:15 a.m. – 10:00 a.m.

Session 2 | Rooms 132 – 133
Transplacental Genotoxicity of AIDS Therapy
Sponsored by Society of Toxicology

Speaker

• Ofelia Olivero, Ph.D., National Cancer Institute, NIH, Rockville, MD

9:15 a.m. – 10:00 a.m.

Session 3 | Rooms 134 – 135
Scientific Discoveries of The BRAIN Initiative®

Speakers

• Michelle Jones-London, Ph.D., National Institute of Neurological Disorders and Stroke, Bethesda, MD
• Carlos Lois, M.D., Ph.D., California Institute of Technology, Pasadena, CA
• Dario Ringach, Ph.D., University of California, Los Angeles, Los Angeles, CA

“What is remarkable is bringing together students with such high qualifications and to have them in the same room with recruiters from key academic institutions. From my perspective, I feel the networking with schools and demystifying the application process is invaluable to students.”
9:15 a.m.  – 10:00 a.m.  
Session 4  | Rooms 136 – 137

Making a Face: Visualizing Cellular Behaviors During Normal and Defective Orofacial Development

**Moderator:**
- Arianna Gómez, Ph.D. candidate, University of Washington, Seattle, WA

**Speaker**
- Oscar Ruiz, Ph.D., MD Anderson Cancer Center, Houston, TX

9:15 a.m.  – 10:00 a.m.  
Session 5  | Rooms 138 – 139

Bow to the Microbial Overlords: An Introduction to Microbiome Research

**Speakers**
- Jacquelyn Meisel, Ph.D., University of Maryland, UMIACS, College Park, MD
- Mihai Pop, Ph.D., University of Maryland, UMIACS, College Park, MD

9:15 a.m.  – 10:00 a.m.  
Session 6  | Rooms 240 – 241

From Clinical Treatments to a Gene Therapy Cure for Sickle Cell Disease

**Moderator:**
- Divine Nwafor, M.D.-Ph.D. candidate, West Virginia University, Morgantown, WV

**Speaker**
- Betty Pace, M.D., Augusta University, Augusta, GA

9:15 a.m.  – 10:00 a.m.  
Session 7  | Rooms 238 – 239

NextGen STEM: The Future of Developmental & Regenerative Biology

**Speakers**
- Carolina Marín de Evsikova, Ph.D., University of South Florida Health, Tampa, Tampa, FL
- Nestor Oviedo, Ph.D., University of California, Merced, Merced, CA
9:15 a.m. – 10:00 a.m.
Session 8 | Rooms 236 – 237

Cell Biologists Love to Take “cellfies” — Strategies to Understand the Cell Biology of Disease

Moderator
• Beatriz Ibarra, Ph.D. candidate, Case Western Reserve University, Cleveland, OH

Speaker
• James Olzmann, Ph.D., University of California, Berkeley, Berkeley, CA

9:15 a.m. – 10:00 a.m.
Session 9 | Room 140

Sunlight, Cancer, and Caffeine: Chemoprevention for Skin Cancer

Moderator
• Thaiesha Wright, Ph.D. candidate, Miami University, Oxford, OH

Speaker
• Masaoki Kawasumi, M.D., Ph.D., University of Washington, Seattle, WA

9:15 a.m. – 10:00 a.m.
Session 10 | Room 234

All Aboard! How the Monon Trail Initiative Plans to Improve Indiana’s Health Community by Community

Speaker
• Anantha Shekhar, M.D., Ph.D., Indiana University School of Medicine, CTSI, Indianapolis, IN

10:15 a.m. – 11:15 a.m.
Session 1 | Rooms 232

NIGMS Program Director Discussions (2 tracks)
(Mandatory for TWD program directors)

Room 232
Diversity-focused, primarily undergraduate programs with an emphasis on:
• Student Tracking
• Student Support (while in training programs and beyond)

10:15 a.m. – 11:15 a.m.
Session 2 | Rooms 136 – 137

CAREER PATHWAY: What’s Next?: STEM Career Pathways Across Sectors
(Recommended for all students)

Speakers
• Ruan Cox, Ph.D., Moffitt Cancer Center, Tampa, FL
• Maiysha Jones, Ph.D., Procter & Gamble, Cincinnati, OH
• Dinelia Rivera-Burgos, Ph.D., Battelle, Columbus, OH
• Kevin Villalongo, M.B.A., PMP, American Laboratories, Inc., Omaha, NE

10:15 a.m. – 11:15 a.m.
Session 3 | Rooms 134 – 135

CAREER PATHWAY: Is Pharmaceutical Science for Me? “Degrees of Separation”
(Recommended for all students)

Speakers
• Manoj Chiney, Ph.D., AbbVie, Chicago, IL
• Peter Gannett, Ph.D., Nova Southeastern University, Fort Lauderdale, FL
• L’Aurelle Johnson, M.S., Ph.D., University of Minnesota, Minneapolis, MN
• Chloe N. Poston, Ph.D., The Leadership Alliance, Providence, RI
• Jayne Reuben, Ph.D., Texas A&M College of Dentistry, Dallas, TX
• Mark Simmons, Ph.D., University of Maryland Eastern Shore, Princess Anne, MD
10:15 a.m. – 11:15 a.m.  
Session 4  |  Rooms 132 – 133

CAREER PATHWAY: Exploring Career Pathways in the Biotech Industry

Sponsored by Genentech, Inc.  
(Recommended for all students)

Speakers
• Leslie Dickmann, Ph.D., Genentech, San Francisco, CA
• Alex Gaither, Ph.D., Novartis, Basel, Switzerland
• Marlena Jackson, Genentech, San Francisco, CA
• Geneva Licht, Genentech, San Francisco, CA

10:15 a.m. – 11:15 a.m.  
Session 5  |  Rooms 236 – 237

CAREER PATHWAY: Understanding Translational Science and Developing a Career as a Translational Scientist

(Recommended for all students)

Speakers
• Jessica Faupel-Badger, Ph.D., National Center for Advancing Translational Sciences, NIH, Bethesda, MD
• Brittany Haynes, Ph.D., National Center for Advancing Translational Sciences, NIH, Bethesda, MD
• Alan Palkowitz, Ph.D., Eli Lilly and Company, Indianapolis, IN
• Gurusingham Sittampalam, Ph.D., National Center for Advancing Translational Sciences, NIH, Bethesda, MD

10:15 a.m. – 11:15 a.m.  
Session 6  |  Rooms 130 – 131

Getting Published: Advice for Graduate Students and Postdoctoral Scientists

(Recommended for graduate students, postdoctoral scientists, and early-career scientists)

Moderator
• Marissa Rice, Ph.D. candidate, Cornell University, Ithaca, NY

Speaker
• Victor DiRita, Ph.D., Michigan State University, East Lansing, MI

10:15 a.m. – 11:15 a.m.  
Session 7  |  Rooms 138 – 139

How We Learn…and How We Don’t

(Recommended for postdoctoral scientists, faculty, program directors, and exhibitors)

Moderator
• Aurelia Happs, Ph.D. Candidate, Johns Hopkins University, Baltimore, MD

Speaker
• Robert A. Duke, Ph.D., University of Texas at Austin, Austin, TX

10:15 a.m. – 11:15 a.m.  
Session 8  |  Room 140

Incorporating Authentic Research in Introductory Lab Courses

In partnership with REIL Biology Network

(Recommended for faculty, program directors, and exhibitors)

Speakers
• Christopher Beck, Ph.D., Emory University, Atlanta, GA
• Lawrence Blumer, Ph.D., Morehouse College, Atlanta, GA
• Rachelle Spell, Ph.D., Emory University, Atlanta, GA

10:15 a.m. – 11:15 a.m.  
Session 9  |  Rooms 238 – 239

Crafting an Effective Resume

(Recommended for all attendees)

Speaker
• Lauren Celano, M.B.A., Propel Careers, Cambridge, MA
CONCURRENT PROFESSIONAL DEVELOPMENT SESSIONS
(5 Session Options)

11:30 a.m. – 12:15 p.m.
Session 1 | Rooms 136 – 137

Picking the Perfect Ph.D. Program for You: Why Choose a School with a T32?
(Recommended for students interested in the Ph.D. track)

**Speaker**
- Sharon Milgram, Ph.D., National Institutes of Health, Bethesda, MD

11:30 a.m. – 12:15 p.m.
Session 2 | Rooms 138 – 139

MD-PhD, is it right for me?
(Recommended for students interested in the M.D./Ph.D. track)

**Presenter**
- Juanita Merchant, M.D., Ph.D., University of Arizona-Cancer Center, Tucson, AZ

**Panelists**
- Barbara Kazmierczak, M.D., Ph.D., Yale University, New Haven, CT
- Jared Smith, Indiana University School of Medicine, M.D.-Ph.D. student, Indianapolis, IN
- Kristina Tymes-Wilbekin, University of Alabama-Birmingham, M.D.-Ph.D. student, Birmingham, AL
- Azucena Ramos, Harvard Medical School, M.D.-Ph.D. student, Boston, MA
- Petria Thompson, Vanderbilt University, M.D.-Ph.D. student, Nashville, TN

11:30 a.m. – 12:15 p.m.
Session 3 | Rooms 132 – 133

Success in Training and Beyond: Transcending Disciplines
(Recommended for all attendees)

**Speakers**
- Mary O’Riordan, Ph.D., University of Michigan, Ann Arbor, MI
- Shoba Subramanian, Ph.D., University of Michigan, Ann Arbor, MI

11:30 a.m. – 12:15 p.m.
Session 4 | Rooms 130 – 131

Diverse Minds are Required to Invent the Future – An Inclusive Model Program for Learning from Nature for Societal Benefit
(Recommended for postdoctoral scientists, faculty, program directors, and exhibitors)

**Moderator**
- Lionel Rodriguez, Ph.D. candidate, Johns Hopkins University, Baltimore, MD

**Speaker**
- Robert J. Full, Ph.D., University of California, Berkeley, Berkeley, CA

11:30 a.m. – 12:15 p.m.
Session 5 | Rooms 134 – 135

Time Management 101
(Recommended for all students)

**Moderator**
- Adele Whaley, Ph.D. student, Gerstner Sloan Kettering Graduate School of Biomedical Sciences, New York, NY

**Speaker**
- Sandra Murray, Ph.D., University of Pittsburgh, Pittsburgh, PA

12:15 p.m. – 1:00 p.m.
Networking Lunch by Discipline
Hall F – G

1:00 p.m. – 1:45 p.m.
PLENARY SCIENTIFIC SESSION
Dynamic Control of Metabolic Flux for Pathway Engineering
Hall F – G

**Moderator**
- John Fitzgerald Gates, Ph.D. University of Virginia, Charlottesville, VA

**Speaker**
- Kristala L. Jones Prather, Ph.D., Massachusetts Institute of Technology, Cambridge, MA

1:45 p.m. – 5:30 p.m.
Exhibit and Poster Hall Hours
Hall H – I
2:00 p.m. – 3:15 p.m.
Poster Session 1 (A)
Hall H – I

3:00 p.m. – 5:00 p.m.
Mentoring Coaching
Exhibit Hall Mentoring Tables

3:30 p.m. – 4:45 p.m.
Poster Session 2 (B)
Hall H – I

5:30 p.m. – 6:45 p.m.
Oral Sessions 1 (12 Session Options)
Biochemistry and Molecular Biology: Rooms 236 – 237
Biochemistry and Molecular Biology and Physiology: Rooms 238 – 239
Cancer Biology: Room 132 – 133
Cancer Biology and Immunology: Room 130 – 131
Cell Biology: Room 233
Chemistry: Rooms 134 – 135
Computational and Systems Biology: Room 234
Developmental Biology and Genetics and Engineering, Physics, and Mathematics: Room 232
Engineering, Physics, and Mathematics: Room 140
Microbiology: Rooms 240 – 241
Neuroscience and Physiology: Room 235
Social and Behavioral Sciences and Public Health: Rooms 136 – 137

7:00 p.m. – 7:45 p.m.
Networking Dinner by Discipline
Hall F – G

8:15 p.m. – 9:30 p.m.
PDO Steering Committee Meeting
(By Invitation Only)
Room 243

8:15 p.m. – 9:30 p.m.
Gateway to the Future: Career Paths in the Biomedical Sciences, STEM Disciplines, and Behavioral Sciences
(Recommended for all students)
Marriott Downtown
Indiana Ballroom

Featured Scientists/Representatives:
• Ru‡n R. Cox Jr., Ph.D.
  Moffitt Cancer Center (Non Profit/Research)
• Jessica Faupel-Badger, Ph.D.
  National Center for Advancing Translational Sciences, NIH (Government/Research)
• L. Alex Gaither Ph.D.
  Novartis Institutes for Biomedical Research (Pharmaceutical/Research)
• Peter Gannett, Ph.D.
  Nova Southeastern University, College of Pharmacy (Teaching/Administration)
• Kenneth Gibbs, Ph.D.
  NIH (Government)
• Vanessa Gonzalez-Perez, Ph.D.
  Princeton University (Teaching/Administration)
• Ronald Hunter, Ph.D.
  Mérieux Nutrisciences (Industry)
• Brittany Haynes, Ph.D.
  National Center for Advancing Translational Sciences, NIH (Government/Research)
• Marlena Jackson, B.S.
  Genentech Inc., a Member of the Roche Group (Research)
• L’Aurelle A. Johnson, Ph.D., M.S.
  University of Minnesota, College of Pharmacy (Teaching/Administration)
• Geneva Licht, B.S.
  Genentech Inc., a Member of the Roche Group (Research)
• Fahmy Mamuya, Ph.D., M.B.A.
  VUE Health Insights (Medical Writing)
• Claudio Ortiz, Ph.D.
  Colgate (Industry/Research)
• Deborah Philip, Ph.D.
  NIH (Government/Administration)
• Chloe Poston, Ph.D.
  Brown University (Administration)
• Marquita Qualls, Ph.D.
  Entropia (Consulting)
• Cheryl Rowe Rendleman, Ph.D.
  Omar Consulting (Consulting)
• Dinelia Rivera-Burgos, Ph.D.
  Battelle (Industry/Research)
• Gurusingham Sittampalam, Ph.D.
  National Center for Advancing Translational Sciences, NIH (Government/Research)
• Kevin Villalongo, M.B.A., PMP
  American Laboratories, Inc. (Industry/Research)
• Kristen Walker, M.S.
  USDA (Government/Research)
• Robert Walker, Ph.D.
  NIH (Government/Administration)
• Patrice Yarbrough, Ph.D.
  NASA (Government/Research)
SHAPING TOMORROW’S DIVERSE STEM LEADERS TODAY

Program

Friday, November 16

7:00 a.m. – 10:00 p.m.
Master’s Level Poster Session/Grad Student and Postdoc Dessert and Networking Mixer
Sponsored by IU College of Arts & Sciences, IU School of Medicine Biomedical Science Gateway Programs, and The University Graduate School at IU and IUPUI
(Recommended for graduate students and postdoctoral scientists)
JW Marriott
White River Ballroom A – E

8:00 a.m. – 9:00 a.m.
PLENARY SESSION
State of STEM Research in Hurricane Impacted Areas and Lessons Learned
Hall F – G

Moderator
• Mary Sanchez Lanier, Ph.D., Washington State University, Pullman, WA

Speakers
• Juan S. Ramirez Lugo, Ph.D., University of Puerto Rico, Rio Piedras, San Juan, Puerto Rico
• Camille A. McKayle, Ph.D., University of the Virgin Islands, Charlotte Amalie, U.S. Virgin Islands

9:00 a.m. – 10:00 a.m.
★ Session 2 | Rooms 138 – 139
MD-PhD, is it right for me?
(Recommended for students interested in the M.D./Ph.D. track)

Presenter
• Juanita Merchant, M.D., Ph.D., University of Arizona-Cancer Center, Tucson, AZ

Panelists
• Sandra Lemmon, Ph.D., University of Miami, Miami-Dade County, FL
• Ellis Tibbs, University of Maryland, M.D.-Ph.D. student, College Park, MD
• Carlos Perez Kerkvliet, University of Minnesota, M.D.-Ph.D. student, Minneapolis, MN
• Anthony Angueira, University of Pennsylvania, M.D.-Ph.D. student, Philadelphia, PA
• Briaunna Minor, University of Rochester, M.D.-Ph.D. student, Rochester, NY

9:15 a.m. – 10:00 a.m.
★ Session 3 | Rooms 134 – 135
Diverse Minds are Required to Invent the Future – An Inclusive Model Program for Learning from Nature for Societal Benefit
(Recommended for postdoctoral scientists, faculty, program directors, and exhibitors)

Moderator
• Shawn Williams, Ph.D. candidate, Brown University

Speaker
• Robert Full, Ph.D., University of California, Berkeley, Berkeley, CA

9:15 a.m. – 10:00 a.m.
★ Session 4 | Rooms 130 – 131
Building Institutional Partnerships to Enhance Diversity and Inclusion in the Research Workforce
(Recommended for postdoctoral scientists, faculty, program directors, and exhibitors)

Speakers
• Don C. Brunson, Ph.D., Vanderbilt University, Nashville, TN
• Ja’Wanda S. Grant, Ph.D., Xavier University of Louisiana, New Orleans, LA
• Chloe N. Poston, Ph.D., The Leadership Alliance, Brown University, Providence, RI

CONCURRENT PROFESSIONAL DEVELOPMENT SESSIONS
(5 Session Options)

9:15 a.m. – 10:00 a.m.
★ Session 1 | Rooms 136 – 137
Picking the Perfect Ph.D. Program for You: Why Choose a School with a T32?
(Recommended for students interested in the Ph.D. track)

Speaker
• Sharon Milgram, Ph.D., National Institutes of Health, Bethesda, MD
•
9:15 a.m. – 10:00 a.m.
Session 5  |  Rooms 240 – 241
Creating A Diverse & Inclusive Campus: Strategies For Helping Nontraditional Students Succeed 2.0
(Recommended for all attendees)

Speakers
• L’Aurelle Johnson, M.S., Ph.D., University of Minnesota, Minneapolis, MN
• Janice Reuben, University of Michigan, Ann Arbor, Ann Arbor, MI
• Jayne Reuben, Ph.D., Texas A&M College of Dentistry, Dallas, TX

10:15 a.m.  – 12:00 p.m.
Exhibit and Poster Hall Hours
Hall H – I

10:30 a.m. – 11:30 a.m.
Mentoring Coaching
Exhibit Hall Mentoring Tables

10:30 a.m. – 11:45 a.m.
Poster Session 3 (C)
Hall H – I

12:15 p.m.  – 1:00 p.m.
Networking Lunch by Discipline
Hall F – G

1:00 p.m.  – 1:45 p.m.
PLENARY SCIENTIFIC SESSION
Insights from non-human animals into the neurobiology of language
Hall F – G

Moderator
• John Fitzgerald Gates, Ph.D., University of Virginia, Charlottesville, VA

Speaker
• Erich D. Jarvis, Ph.D., The Rockefeller University, New York City, NY

2:00 p.m. – 3:00 p.m.
Session 1  |  Rooms 138 – 139
Evidence-based Strategies to Improve Student Performance in STEM
(Recommended for postdoctoral scientists, faculty, program directors, and exhibitors)

Speakers
• L’Aurelle Johnson, M.S., Ph.D., University of Minnesota, Minneapolis, MN
• Jayne Reuben, Ph.D., Texas A&M College of Dentistry, Dallas, TX

2:00 p.m. – 3:00 p.m.
Session 2  |  Rooms 136 – 137
Have You Earned Authorship? Using Case Studies to Develop Practical and Ethical Guidelines for Authorship
(Recommended for senior–level graduate students, postdoctoral scientists, and faculty)

Speaker
• Laurel Southard, Cornell University, Ithaca, NY

2:00 p.m. – 3:00 p.m.
Session 3  |  Rooms 134 – 135
Implicit Bias and Microaggressions: How Our Brains Take Short Cuts
(Recommended for all attendees)

Speakers
• Stephen Allsop, Ph.D., Harvard Medical School, Boston, MA
• Bruce Birren, Ph.D., Genomic Center for Infectious Diseases, The Broad Institute, Cambridge, MA

“ABRCMS allows students the opportunity to solely develop themselves as better informed and oriented professionals in the fields they wish to pursue. It is the best meeting at giving the students the importance in all aspects of the meeting.”
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<th>Time</th>
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<th>Rooms</th>
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<th>Speaker</th>
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<td>2:00 p.m.</td>
<td>Session 4</td>
<td>132 – 133</td>
<td>FACTUALITY: Cultural Competence &amp; Empathy via Board Game</td>
<td>Natalie Gillard, FACTUALITY the Game, Baltimore, MD</td>
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<td>(Recommended for all attendees)</td>
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<tr>
<td>2:00 p.m.</td>
<td>Session 5</td>
<td>130 – 131</td>
<td>Setbacks and Comebacks – Navigating Your Path to Success after Hitting the Roadblock</td>
<td>John Williams, Ph.D., Albany State University, Albany, GA</td>
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<td>(Recommended for all attendees)</td>
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<tr>
<td>2:00 p.m.</td>
<td>Session 6</td>
<td>236 – 237</td>
<td>Overcoming Imposter Syndrome and Stereotype Threat</td>
<td>Alan Landry, M.D., M.P.H., Harvard Medical School, Boston, MA</td>
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<td>(Recommended for all attendees)</td>
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<tr>
<td>2:00 p.m.</td>
<td>Session 7</td>
<td>238 – 239</td>
<td>Job Search Strategies and Negotiating the Job Offer</td>
<td>Lauren Celano, M.B.A., Propel Careers, Cambridge, MA</td>
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<td>(Recommended for graduate students, postdoctoral scientists, and early -career faculty)</td>
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<tr>
<td>2:00 p.m.</td>
<td>Session 8</td>
<td>240 – 241</td>
<td>TWD–PDO Meeting (Organized by the NIGMS Program Directors Association)</td>
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<td>(Recommended for NIGMS Program Directors)</td>
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<td>Exhibit and Poster Hall Hours</td>
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<td>Poster Session 4 (D)</td>
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<td>3:00 p.m.</td>
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<td>Setbacks and Comebacks – Navigating Your Path to Success after Hitting the Roadblock</td>
<td>John Williams, Ph.D., Albany State University, Albany, GA</td>
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<td>3:30 p.m.</td>
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<td>Mentoring Showcase</td>
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<td>Mentoring Coaching</td>
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<td>Poster Session 5 (E)</td>
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<td>6:15 p.m.</td>
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<td>Preparing for Graduate School: Doctoral Student-Run Multidisciplinary Information Session</td>
<td>Carolina M. Herrera, Rutgers University, Newark, NJ</td>
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<td>(Recommended for community college, undergraduate, and postbaccalaureate students)</td>
<td>Clairot Kote, Rutgers University, Newark, NJ</td>
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6:15 p.m. – 7:15 p.m.
Session 2  |  Rooms 136 – 137
The First Year of Graduate School: How to Survive and Thrive
(Recommended for community college, undergraduate, and postbaccalaureate students)

Speakers
• Kortany Baker, B.S., Purdue University, West Lafayette, IN
• Joseph Ogas, Ph.D., Purdue University, West Lafayette, IN
• Elizabeth Tran, Ph.D., Purdue University, West Lafayette, IN

6:15 p.m. – 7:15 p.m.
Session 3  |  Rooms 134 – 135
Pitch Perfect: A Storytelling Session Helps Build Confidence in Communication and Networking
(Recommended for all students and postdoctoral scientists)

Speaker
• Shuai Li, Ph.D., Mayo Clinic, Rochester, MN

6:15 p.m. – 7:15 p.m.
Session 4  |  Rooms 132 – 133
Confessions of Admission Officials: What We Look at, and for, in Graduate School Application
(Recommended for community college, undergraduate, and postbaccalaureate students)

Speakers
• Gustavo Arrizabalaga, Ph.D., IU School of Medicine, Indianapolis, IN
• Colleen Gabauer, Ph.D., Purdue University, West Lafayette, IN
• Tara Hobson, M.A., IU School of Medicine, Indianapolis, IN

6:15 p.m. – 7:15 p.m.
Session 5  |  Rooms 240 – 241
Strategies for Taking Standardized Admissions Tests: Preparing for the GRE Exams
(Recommended for undergraduate and postbaccalaureate students)

Speaker
• Laurie Connor, Ph.D., Baylor School of Medicine, Houston, TX

6:15 p.m. – 7:15 p.m.
Session 6  |  Rooms 238 – 239
Strategies for Taking Standardized Admissions Tests: Preparing for the MCAT Exams
(Recommended for undergraduate and postbaccalaureate students)

Speaker
• Saundra Oyewole, Ph.D., Trinity University, Washington, DC

6:15 p.m. – 7:15 p.m.
Session 7  |  Rooms 236 – 237
Postbaccalaureate Programs and Tips for Submitting a Successful Application
(Recommended for students considering postbaccalaureate training)

Speaker
• Sharon L. Milgram, Ph.D., National Institutes of Health, Bethesda, MD

6:15 p.m. – 7:15 p.m.
Session 8  |  Rooms 130 – 131
Interviewing for M.D.-Ph.D. Programs
(Recommended for undergraduate students)

Speakers
• Joseph Barbieri, Ph.D., Medical College of Wisconsin, Milwaukee, WI
• Sandra Lemmon, Ph.D., University of Miami Miller School of Medicine, Miami, FL

6:15 p.m. – 7:15 p.m.
Session 9  |  Room 235
Solutions for Success: A Guide for Survival in College Chemistry Courses
(Recommended for community college, undergraduate, and postbaccalaureate students)

Speakers
• Daniel LaMaster, Graduate Student, Louisiana State University, Baton Rouge, LA
• Gretchen Schneider, Ph.D., Louisiana State University, Baton Rouge, LA
• Graca Vicente, Ph.D., Louisiana State University, Baton Rouge, LA
6:15 p.m. – 7:15 p.m.
Session 10 | Room 140

Acing the Interview
(Recommended for all attendees)

Speaker
• Lauren Celano, M.B.A., Propel Careers, Cambridge, MA

6:15 p.m. – 8:00 p.m.
JW Marriott
White River Ballroom C – D

Diversifying the Biomedical Scientific “Thinkforce” through Training and Partnerships
Hosted by the Diversity Program Consortium Coordination and Evaluation Center at UCLA
In partnership with National Research Mentoring Network
Note: This session will continue its 3rd component at the NRMN Meet and Greet
(Recommended for students, postdoctoral scientists, faculty, and administration)

Speaker
• Alison Gammie, Ph.D., National Institutes of Health (NIH), National Institute of General Medical Sciences (NIGMS), Bethesda, MD

6:30 p.m. – 8:00 p.m.
JW Marriott
JW Grand Ballroom 1 – 5

Speakers, Exhibitors, Judges, and Program Directors Networking Social

8:00 p.m. – 9:00 p.m.
JW Marriott
Rooms 103 – 104

LGBTQ Networking Social & Tips on Succeeding as a Scientist

8:00 p.m. – 9:00 p.m.
JW Marriott
White River Ballroom A – B

National Research Mentoring Network Meet & Greet
In partnership with the Diversity Program Consortium’s Coordination and Evaluation Center at UCLA
This session is preceded by the Diversifying the Biomedical Scientific “Thinkforce” through Training and Partnerships

8:00 p.m. – 9:00 p.m.
JW Marriott
JW Grand Ballroom 7

Chemistry Career Building/Networking Event

Speaker
• Ann Kimble-Hill, Ph.D., Indiana University School of Medicine, Indianapolis, IN

8:00 p.m. – 9:00 p.m.
JW Marriott
Rooms 305 – 306

PREP Program Director Meeting
(By Invitation Only)

9:00 p.m. – 10:00 p.m.
JW Marriott
Room 304

MAPRS Program Director Meeting
(By Invitation Only)
Saturday, November 17

7:00 a.m. – 7:45 a.m.
Networking Breakfast
Hall J

8:00 a.m. – 9:15 a.m.
Oral Sessions 2 (12 Session Options)

Biochemistry and Molecular Biology: Rooms 236 – 237
Biochemistry and Molecular Biology: Rooms 238 – 239
Cancer Biology: Rooms 130 – 131
Cancer Biology: Rooms 132 – 133
Chemistry: Rooms 240 – 241
Computational Biology and Developmental Biology and Genetics: Room 234
Developmental Biology and Genetics: Room 232
Engineering, Physics and Math: Room 140
Microbiology: Rooms 134 – 135
Microbiology and Physiology: Rooms 136 – 137
Neuroscience: Room 233
Neuroscience: Room 235

9:15 a.m. – 12:00 p.m.
Exhibit and Poster Hall Hours
Hall H – I

9:30 a.m. – 9:50 a.m.
Exhibitor Showcase
American Society for Microbiology, Education Department
Exhibit Hall Theater, Hall H – I

9:30 a.m. – 11:30 a.m.
Mentoring Coaching
Exhibit Hall Mentoring Tables

10:00 a.m. – 10:20 a.m.
Exhibitor Showcase
St. Jude Children’s Research Hospital Graduate School of Biomedical Sciences
Exhibit Hall Theater, Hall H – I

10:00 a.m. – 11:15 a.m.
Poster Session 6 (F)
Hall H – I

10:30 a.m. – 10:50 a.m.
Exhibitor Showcase
Emory University – Laney Graduate School of Biomedical Engineering
Exhibit Hall Theater, Hall H – I

11:00 a.m. – 11:20 a.m.
Exhibitor Showcase
Purdue University/Weldon School of Biomedical Engineering
Exhibit Hall Theater, Hall H – I

12:15 p.m. – 1:00 p.m.
Networking Lunch
Hall F – G

1:00 p.m. – 1:45 p.m.
Closing Keynote Address
PLENARY SESSION
Translating Science: Obstacles and Opportunities
Hall F – G

Moderator
John Fitzgerald Gates, Ph.D., University of Virginia, Charlottesville, VA

Speaker
• Kafui Dzirasa, M.D., Ph.D., Duke University, Durham, NC
CONCURRENT PROFESSIONAL DEVELOPMENT SESSIONS
(4 Session Options)

2:15 p.m. – 3:15 p.m.  
Session 1  |  Rooms 138 – 139

Essential Mentoring Skills for Early-Career Scientists and Faculty Mentors
(Recommended for graduate students, postdoctoral scientists, faculty, program directors, and exhibitors)

Speakers:
• Kelly Diggs-Andrews, Ph.D., National Research Mentoring Network, Chestnut Hill, MA
• Alvin Holder, Ph.D., Old Dominion University, Norfolk, VA
• Harlan Jones, Ph.D., National Research Mentoring Network, University of North Texas Health Science Center, Fort Worth, TX
• Cassandra McCullum, Ph.D., Alcorn State University, Lorman, MS
• Rasha Morsi, Ph.D., Norfolk State University, Norfolk, VA
• Desh Ranjan, Ph.D., Old Dominion University, Norfolk, VA
• Roland Thorpe, Ph.D., The Johns Hopkins University, Baltimore, MD

2:15 p.m. – 3:15 p.m.  
Session 2  |  Rooms 136 – 137

Mentoring Diverse Students on the Way to STEM Research Careers
(Recommended for postdoctoral scientist, faculty, program directors, and exhibitors)

Speakers:
• Marcus Lambert, Ph.D., Weill Cornell Graduate School of Medical Sciences, New York City, NY
• Raquel Catellano, Ph.D., Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA
• William Wittels, Ph.D., The Leadership Alliance, Providence, RI

2:15 p.m. – 3:15 p.m.  
Session 3  |  Rooms 134 – 135

Developing Your Scientific Swag
Sponsored by Indiana University Purdue University Indianapolis
(Recommended for all students)

Speakers:
• Patrice L. Capers, Ph.D., M.S.C.R., The Citadel, Charleston, SC
• Tabitha M. Hardy, Ph.D., Indiana University Purdue University Indianapolis, Indianapolis, IN

2:15 p.m. – 3:15 p.m.  
Session 4  |  Rooms 130 – 131

(Recommended for undergraduate and postbaccalaureate students)

Panelists:
• Brittnie Bloom, Ph.D. candidate, San Diego University/University of California, San Diego, San Diego, CA
• Liz J. Hernández Borrero, Ph.D. candidate, The Pennsylvania State University, University Park, PA
• Victor Hugo Canela, Ph.D. student, Indiana University School of Medicine, Indianapolis, IN
• Imade Imasuen-Williams, Ph.D. candidate, Indiana University School of Medicine, Indianapolis, IN
• Keila Miles, Ph.D. candidate, University of Cincinnati, Cincinnati, OH
• Mirelis Santos-Cancel, Ph.D. candidate, University of Cincinnati, Cincinnati, OH

“This meeting has a long-standing history and reputation for bringing the best and the brightest diverse scholars together to share their work and build their professional networks.”
CONCURRENT PROFESSIONAL DEVELOPMENT SESSIONS
(5 Session Options)

3:30 p.m. – 4:30 p.m.
★★ Session 1 | Rooms 138 – 139
Build Your Personal Statement!
(Recommended all students)

Speakers:
• Victoria Freedman, Ph.D., Albert Einstein College of Medicine, New York, NY
• Nancy Schwartz, Ph.D., University of Chicago, Chicago, IL

3:30 p.m. – 4:30 p.m.
Session 2 | Rooms 130 – 131
Navigating Your Mentoring Relationships as a Mentee: What undergraduate Mentees Need to Know
(Recommended for community college, undergraduate, and postbaccalaureate students)

Speakers:
• Kelly Diggs-Andrews, Ph.D., National Research Mentoring Network, Chestnut Hill, MA
• Harlan Jones, Ph.D., National Research Mentoring Network, University of North Texas Health Science Center, Fort Worth, TX
• Roland Thorpe, Ph.D., The Johns Hopkins University, Baltimore, MD

3:30 p.m. – 4:30 p.m.
Session 3 | Rooms 132 – 133
Blogging, Tweeting, & Writing to Promote Your Career and Diversify Science
(Recommended for all students)

Speaker
• Michael Johnson, Ph.D., University of Arizona, Tucson, AZ

3:30 p.m. – 4:30 p.m.
Session 4 | Rooms 136 – 137
Overcoming Imposter Syndrome and Stereotype Threat
(Recommended for all attendees)

Speaker
• Alan Landry, M.D., M.P.H., Harvard Medical School, Boston, MA

3:30 p.m. – 4:30 p.m.
Session 5 | Rooms 134 – 135
#STEMatSLAC: What’s Special About STEM at Small Liberal Arts Colleges?
(Recommended for graduate students, postdoctoral scientists, and faculty)

Speaker
• Michelle Tong, Ph.D., Earlham College, Richmond, IN

4:30 p.m. – 7:30 p.m.
FREE TIME! FREE TIME! FREE TIME!

7:30 p.m. – 10:00 p.m.
Awards Banquet and Ceremony
Hall F – G

Greetings from ASM Chief Executive Officer
• Stefano Bertuzzi, Ph.D., M.P.H., American Society for Microbiology, Washington, DC

Conference Wrap-up and Student Presentation Awards Ceremony
• John Fitzgerald Gates, Ph.D., University of Virginia, Charlottesville, VA

Concluding Remarks from Chairperson
• Avery August, Ph.D., Cornell University College of Veterinary Medicine, Ithaca, NY

10:00 p.m. – 2:00 a.m.
Closing Social and Dance (All are invited)
JW Marriott
White River Ballroom
Fellowships
Undergraduate Research Fellowship
Application deadline: February 15, 2019
Up to $6,000 awards to undergraduate, community college, and post-baccalaureate students to perform 10-12 weeks of summer research
asm.org/urf

Research Capstone Fellowship
Application deadline: March 15, 2019
Up to $2,000 travel subsidy for underrepresented minority students at the following educational levels: community college, undergraduate, post-baccalaureate, master’s, early doctoral and senior doctoral students to attend and present at the ASM Microbe.
asm.org/rcf

Courses
Visit asm.org/build-your-skills
Best Practices in Curriculum Design & Assessment Online Course
January – April 2019
Built upon the elements of ASM’s Science Teaching Fellows Program, participants in this course develop the skills needed to succeed in positions that have a significant teaching component.

Scientific Writing and Publishing Online Course
January – April 2019
Participants develop scientific writing skills needed to prepare a manuscript for publication.

The Microbe Academy for Professional Development (MAPD)
June 19 – 20, 2019, San Francisco, CA
In-person meeting held prior to ASM Microbe 2019, this one and a half day professional development workshop provides students skillset training in presentations techniques, networking and gives the science answers they have been looking for.

ASM Grant Writing Online Course
September – December 2019
Overview for finding opportunities and writing grant applications. Speakers come from varied backgrounds and will lend unique perspectives.

Improving Undergraduate Biology Education Based on Research in Science Learning
September – December 2019
Building on the most notable elements from the ASM-NSF Biology Scholars Program, participants will dissect discipline-based education research (DBER) literature.

Conferences
ASM Conference for Undergraduate Educators
August 1 – 4, 2019 | Tysons, VA
Teaching, learning, and assessment conference with workshops, education sessions, posters, and exhibitors for microbiology and biology educators. www.asmcue.org

Annual Biomedical Research Conference for Minority Students
November 13 – 16, 2019
Undergraduate student conference with poster presentations and networking, scientific and professional development, and recruiters for summer programs and graduate training. www.abrcms.org

Consider these opportunities from ASM. Dates may change without notice. Please consult program websites for timely information.
ABRCMS 2018 FINAL PROGRAM

Poster Presentations by Scientific Listing

Community College, Undergraduates, and Posbaccalaureate Poster Presentations
Sessions A –F

Biochemistry and Molecular Biology: 001 –045
Cancer Biology: 046 –076
Cell Biology: 077 –99
Chemistry: 100 –129
Computational and Systems Biology: 130 –143
Developmental Biology and Genetics: 144 –168
Engineering, Physics, and Mathematics: 169 –197
Immunology: 198 –215
Microbiology: 216 –252
Neuroscience: 253 –291
Physiology: 292 –307
Social and Behavioral Sciences and Public Health: 308 –341

Master’s Student Poster Presentations
Session M

Biochemistry and Molecular Biology: 01 –12
Cancer Biology: 13 –15
Cell Biology: 16 –19
Chemistry: 20 –26
Computational and Systems Biology: 27 –28
Developmental Biology and Genetics: 29 –30
Engineering, Physics, and Mathematics: 31 –36
Microbiology: 37 –40
Neuroscience: 41
Physiology: 42
Social and Behavioral Sciences and Public Health: 43 –48

“The conference being for minority students provided a unique perspective on science and careers that is rarely discussed in our universities or professional environment. The plenary sessions discussing racial bias regarding the portrayal of environment or economic programs were enlightening. The atmosphere is very open to discussing these issues and encouraging the attendees to look further into it.”
Oral Session 1: Biochemistry and Molecular Biology
Thursday, November 15
5:30 p.m. – 6:45 p.m.
Rooms 236 – 237

O –001
Profiling Global Chromatin Proteome and Histone Post-translational Modifications Upon Knockdown of SMARCC2 via Mass Spectrometry
Nia Harmon, University of Pennsylvania
Biochemistry and Molecular Biology: Proteomics

O –002
Whether In or Out NO Knows Which Path to Take in Type 2 Diabetes
Zakiyah Henry, Winston-Salem State University
Biochemistry and Molecular Biology: Biochemistry

O –003
Development of a High Throughput IgG Peptide Digestion Protocol to Facilitate the Implementation of a Robust Peptide Map Assay
Tanu Priya, Boehringer Ingelheim
Biochemistry and Molecular Biology: Proteomics

O –004
The Mechanism of FOXO1 Nuclear Translocation During Embryo Implantation
Kaitlan Smith, University of North Carolina at Pembroke
Biochemistry and Molecular Biology: Biochemistry

O –005
Unraveling the Mysteries of the GAL1 –10 Bidirectional Promoter
Hugh Yeh, Harvard Medical School
Biochemistry and Molecular Biology: Genomics

Oral Session 1: Biochemistry and Molecular Biology and Physiology
Thursday, November 15
5:30 p.m. – 6:45 p.m.
Rooms 238 – 239

O –006
Experimental Colitis-Induced Depression of Behavior of Nesting in Mice
Stanley Cheatham, Virginia Commonwealth University
Physiology: Pharmacology

O –007
The Impact of Elevated BCAAs on Hepatic Insulin Signaling and Mitochondrial Function
Azuri Hughes, Saint Peter’s University
Physiology: Endocrinology

O –008
The Study of Protein Aggregation in Caenorhabditis elegans Neurons as a Function of Age
Elizabeth Soto, City College of New York
Biochemistry and Molecular Biology: Structural Biology

O –009
Structural Investigation of the Impact of Three Disease –Causing Mutations on the Catalytic Cycle of the Neuronal Motor Protein, Kif5A
Lauren Thornton, Xavier University of Louisiana
Biochemistry and Molecular Biology: Structural Biology

O –010
Intermolecular Interactions of the HIV –1 Spacer Peptide 1 – Nucleocapsid and the Core Encapsidation Signal
Claudia Walker, University of Maryland, Baltimore County
Biochemistry and Molecular Biology: Structural Biology

Oral Session 1: Cancer Biology
Thursday, November 15
5:30 p.m. – 6:45 p.m.
Rooms 132 – 133

O –011
Characterization of Metastatic Progression
Torhera Durand, Purdue University
Cancer Biology: Cancer Biology

O –012
Enhancement of Immunotherapy on PD –1 by Auranofin in Ovarian Cancer
Yoonji Eum, Georgia State University
Cancer Biology: Cancer Biology

O –013
Characterizing Survival Mechanisms Following Oncogenic Kras Ablation in Pancreatic Cancer Cells
Mauricio Flores, University of California, San Francisco
Cancer Biology: Cancer Biology
O –014  
Interleukin 24 Production is Regulated by p38 MAPK via TTP –Dependent Pathway in Cancer  
Justina Kasteri, City University of New York  
Cancer Biology: Cancer Biology

O –015  
The Role of Dopamine Signaling in Biological Disparity of Prostate Cancer  
Isaiah Pickett, Clark Atlanta University  
Cancer Biology: Cancer Biology

Oral Session 1: Cancer Biology and Immunology  
Thursday, November 15  
5:30 p.m. – 6:45 p.m.  
Rooms 130 – 131

O –016  
Immunophenotypic and Functional Analysis of Hematopoiesis in G0S2 Null Mice  
Faith Adams, Baylor College of Medicine  
Immunology: Basic Immunology

O –017  
CD103+Dendritic Cell-Based Vaccine: A Powerful Cancer Immunotherapy  
Oleksandr (Sasha) Kyrysyuk, University of Texas MD Anderson Cancer Center  
Immunology: Basic Immunology

O –018  
Methamphetamine Alters the Expression of Toll –like Receptor 4 on Microglia  
Dormarie Rivera-Rodriguez, University of Puerto Rico in Ponce  
Immunology: Basic Immunology

O –019  
Repurposing an Anti-Malarial Drug to Treat the Deadliest Cancer in Children  
Daniel Ssozi, Dana-Farber Cancer Institute  
Cancer Biology: Cancer Biology

O –020  
Phenotyping of the Airway Epithelium in Search for Subpopulation of Cells Conferring Long Term Risk for Developing Lung Cancer  
Alexander Weingart, Vanderbilt University School of Medicine  
Cancer Biology: Cancer Biology

Oral Session 1: Cell Biology  
Thursday, November 15  
5:30 p.m. – 6:45 p.m.  
Room 233

O –021  
Optoacoustic Imaging of Breast Cancer Using Dark Quencher QC1 pHLIP  
Crystal Choi, Memorial Sloan Kettering Cancer Center  
Cell Biology: Molecular Imaging

O –022  
Non-Canonical Activation of the Unfolded Protein Response Pathway by Legionella pneumophila  
Tanya Kumar, University of California, San Francisco  
Cell Biology: Molecular Imaging

O –023  
OPA –1 Deficient Skeletal Muscle ER –Stress Increases Mitochondria Associated Membranes Through a MFN –1 –MFN –2 –GRP78 Tethering Mechanism  
Margaret Mungai, University of Iowa  
Cell Biology: Cell Biology

O –024  
Texture Analysis to Predict Survival in Patients with Glioblastomas Receiving Immunotherapy  
Elise Wang, Memorial Sloan Kettering Cancer Center  
Cell Biology: Molecular Imaging

O –025  
High Resolution Melting Analysis of STR Loci to Discriminate Repeated Donor Blood Samples  
Ava Wong, Chaminade University of Honolulu  
Cell Biology: Cell Biology

Oral Session 1: Chemistry  
Thursday, November 15  
5:30 p.m. – 6:45 p.m.  
Rooms 134 – 135

O –026  
Volatile Organic Compound Profiling from Postmortem Microbes Using GC –MS to Assist in Forensic Search and Recovery  
Terezie Cernosek, Chaminade University of Honolulu  
Chemistry: Analytical Chemistry
O –027
Electrochemical Impedance Spectroscopy for the Detection of Neuropeptide Y Using Aptamer-Modified Platinum Microelectrodes
Nerika Hernandez, Universidad del Turabo
Chemistry: Analytical Chemistry

O –028
Synthesis, Characterization, and Catalytic Studies of Cobalt-Containing Complexes for Hydrogen Generation
Halie Maass, Old Dominion University
Chemistry: Inorganic Chemistry

O –029
Synthesis, Characterization, and Catalytic Studies of Lignin Model Compounds with Cobalt III Cubane Complexes
Jennifer Mejia, Old Dominion University
Chemistry: Inorganic Chemistry

O –030
High-Field NMR Spectroscopy and Mass Spectrometry for the Quality Control of Epimedium grandiflorum Dietary Supplements
Ifunanya Okeke, Scripps College
Chemistry: Analytical Chemistry

Oral Session 1: Computational and Systems Biology
Thursday, November 15
5:30 p.m. – 6:45 p.m.
Room 234

O –031
Association of Psychological Phenotypes with Inflammation in Alpha –1 Antitrypsin Deficiency
Titilope Akinwe, Georgia State University
Computational and Systems Biology: Bioinformatics

O –032
Gene Expression Biomarker Discovery in Endometriosis
Valerie Maisonave-Collazo, University of Puerto Rico at Mayagüez
Computational and Systems Biology: Bioinformatics

O –033
Improved Epitope Prediction on the Lyme Disease Antigen Outer Surface Protein C (OspC)
Muhammad Nazim, Hunter College of the City University of New York
Computational and Systems Biology: Bioinformatics

O –034
Annotating Genes within Differentially Methylated Regions of Bovine Fetuses with Large Offspring Syndrome
Oluwateniayo Ogunsan, University of Missouri, Columbia
Computational and Systems Biology: Bioinformatics
O –035
Characterizing Kidney Disease Gene Variants: A Programmatic Approach
Kate Sanders, The Broad Institute of MIT and Harvard
Computational and Systems Biology: Bioinformatics

Oral Session 1: Developmental Biology and Genetics and Engineering, Physics and Mathematics
Thursday, November 15
5:30 p.m. – 6:45 p.m.
Room 232

O –036
Alcohol –Related Behaviors in Strains of Mice Selected for High and Low Open –Field Activity
Eliza Elliotte, University of Colorado Boulder
Developmental Biology and Genetics: Genetics

O –037
Segregation of Phenotypes in Families with Cerebral Cavernous Malformation Type 1 – Common Hispanic Mutation
Hyeyeon Hwang, University of California, San Francisco
Developmental Biology and Genetics: Genetics

O –038
Bio-Inspired Degradable Tough Adhesives for Diverse Wet Surfaces
Nadja Maldonado-Luna, Harvard University
Engineering, Physics and Mathematics: Biomedical Engineering

O –039
Improvements to Single-Cell Messenger Ribonucleic Acid Sequencing Technology
Yash Nagpal, University of California, Santa Barbara
Engineering, Physics and Mathematics: Bioengineering

O –040
Rapid Desktop Inkjet Printing of an Inexpensive and High-Resolution Electrode Array Electrode Array
Alana Tillery, University of Maryland
Engineering, Physics and Mathematics: Bioengineering

Oral Session 1: Engineering, Physics and Mathematics
Thursday, November 15
5:30 p.m. – 6:45 p.m.
Room 140

O –042
Understanding the Phagocytic Behavior of Asymmetrical Nanoparticles
Amy Leslie, University of Queensland
Engineering, Physics and Mathematics: Nanotechnology

O –043
Assessment of the Toxicity of Zn-based Nanoparticles
Josian Luciano-Velazquez, University of Puerto Rico in Ponce
Engineering, Physics and Mathematics: Nanotechnology

O –044
Maximizing Flux Along Microtubules via Cooperation Among Molecular Motors
Keshav Patel, University of North Carolina at Chapel Hill
Engineering, Physics and Mathematics: Mathematics

O –045
Biophysical Modeling of Nanoparticles for Localized Drug Delivery using Focused Ultrasound
Brenda Yu, Stanford University
Engineering, Physics and Mathematics: Biophysics

Oral Session 1: Microbiology
Thursday, November 15
5:30 p.m. – 6:45 p.m.
Rooms 240 – 241

O –046
DMSO Reduction Influences Salmonella Typhimurium Intestinal Colonization and Environmental Persistence
Eddy Cruz, North Carolina State University
Microbiology: Microbial Physiology

O –047
Identification of Genes Involved in Contact Dependent Signaling in Burkholderia thailandensis
E64
Nicolas Lopez, California State University, Northridge
Microbiology: Bacteriology

O –048
Phenotypic Assessment of Mutants from Novel Virulence-Associated Accessory Genomic Elements in Pseudomonas aeruginosa
Tatiana Ortiz-Serrano, University of Puerto Rico, San Juan
Microbiology: Bacteriology

O –049
Defining the Role Master Regulators of Virulence Factors Play in Mycobacterium abscessus
George Walters-Marrah, University of Central Florida
Microbiology: Bacteriology

O –050
Revealing an Unexpected CRISPR –Cas9 Antagonist
Elias Wisdom, Fred Hutchinson Cancer Research Center
Microbiology: Bacteriology

Oral Session 1: Neuroscience and Physiology
Thursday, November 15
5:30 p.m. – 6:45 p.m.
Room 235

O –051
The Effect of Thymic Nurse Cell Transplantation on Cardiovascular Remodeling in a Model of Systemic Lupus Erythematosus
Rilda Duron, Talladega College
Physiology: Physiology

O –052
Electrochemical Method for In Vitro Detection of Neuropeptide Y
John Gonzalez-Amoretti, Universidad del Turabo
Neuroscience: Neurobiology

O –053
Reduction of IGF –1 Receptor in the Adult Hippocampus Impairs Learning and Memory
Cellas Hayes, University of Mississippi
Neuroscience: Neurobiology

O –054
The Effect of Prenatal Exposure to an Environmentally Relevant Phthalate Mixture on Testosterone Levels in Adult Male Mice
Talia Seymore, Pennsylvania State University
Physiology: Toxicology

O –055
Glutamate Increases the Sensitivity of Individual Muscle Spindle Receptor Endings to Muscle Stretch in Adult Mice
Natanya Villegas, San Jose State University
Neuroscience: Neurobiology

Oral Session 1: Social and Behavioral Sciences and Public Health
Thursday, November 15
5:30 p.m. – 6:45 p.m.
Rooms 136 – 137

O –056
Differences in Depressive Symptoms by Sociodemographic Characteristics in Cancer Survivors Residing in Central Pennsylvania
Kellie Cooper, Winthrop University
Social and Behavioral Sciences and Public Health: Public Health and Epidemiology/Biostatistics

O –057
Finding Community: Can Extracurricular Activities be a Positive Influence for the Mental Health of Students of Color at a Predominantly White Institution
Frances Ikeokwu, University of Virginia
Social and Behavioral Sciences and Public Health: Psychology

O –058
Examining How the San Diego County Hepatitis A Outbreak Affected Homeless Young Adults via Community Engagement, Resource Mapping, and Photovoice
Talia Kieu, San Diego State University
Social and Behavioral Sciences and Public Health: Public Health and Epidemiology/Biostatistics

O –059
Sexual Harassment During Medical Internship: A Closer Look at Gender Representation and Depression
Fatima Obeid, University of Michigan
Social and Behavioral Sciences and Public Health: Psychology
O –060
The Development of Response to Social Directives in Infants Later Diagnosed with ASD
Christina Toval, University of Pittsburgh
Social and Behavioral Sciences and Public Health: Psychology

Oral Session 2: Biochemistry and Molecular Biology
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Rooms 236 – 237

O –061
The Investigation of the Effect of Cpeb4 Expression on Fat Distribution in Mice
Ngozi Akingbesote, University of Virginia
Biochemistry and Molecular Biology: Genomics

O –062
Evaluation of the HIV Genome to Promote Gag Hexamerization
Nahum Arefeayne, University of Maryland, Baltimore County
Biochemistry and Molecular Biology: Structural Biology

O –063
Molecular Determinants of Melanopsin Function, Localization, and Activation
Robin Bailey, University of Maryland, Baltimore County
Biochemistry and Molecular Biology: Biochemistry

O –064
Elucidating Cross-Species Transmission of a Protein Based Mechanism of Drug Resistance
Arielle Buckley, Stanford University
Biochemistry and Molecular Biology: Proteomics

O –065
The Function of Female Sex Hormones in Glucose Metabolism Following Traumatic Brain Injury
Jade Dodge, University of California, Los Angeles
Biochemistry and Molecular Biology: Biochemistry

O –066
Characterizing the Dynamic Properties of the Capsid –SP1 Junction Helix of the HIV –1 Gag Polyprotein and the Mechanism of Maturation Inhibitors
Emily Cannistraci, University of Maryland, Baltimore County
Biochemistry and Molecular Biology: Structural Biology

O –067
Characterization of the Allosteric Regulation of BAM2 in Arabidopsis thaliana
Nithesh Chandrasekharan, James Madison University
Biochemistry and Molecular Biology: Structural Biology

O –068
Biophysically Characterizing a Redox Deficient Mutant in Human Primase and Its Potential Implications in Replication
Andrew Dorfeuille, Morehouse College
Biochemistry and Molecular Biology: Structural Biology

O –069
Interaction of Two Influenza A Matrix Proteins Critical to Viral Budding
Reham Mahgoub, Swarthmore College
Biochemistry and Molecular Biology: Structural Biology

O –070
Validating MRAS as a Candidate Gene in the Pathogenesis of Cardiomyopathy
Prashit Parikh, Vassar College
Biochemistry and Molecular Biology: Structural Biology
Oral Session 2: Cancer Biology
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Rooms 130 – 131

O –071
Stag2 Mutations and Their Influence on Activating Histone Marks
Besmira Alija, Memorial Sloan Kettering Cancer Center
Cancer Biology: Cancer Biology

O –072
Effect of Small Molecule Agonist of Relaxin Receptor on ERBB2-Induced Breast Cancer
Elizabeth Ferrer, Florida International University
Cancer Biology: Cancer Biology

O –073
Optimizing the Use of and Understanding the Resistance Mechanisms to Anti-HER2 Therapy Containing the Irreversible Pan-HER Inhibitor Neratinib
Javier Granados, Baylor College of Medicine
Cancer Biology: Cancer Biology

O –074
Quantifying Minimal Residual Disease in Breast Cancer Dormancy
Cuyler Luck, University of Pennsylvania
Cancer Biology: Cancer Biology

O –075
Understanding Crosstalk Between Melanoma Cells and the Microenvironment Using a Chemical Screening Approach
Stephanie Melendez, Memorial Sloan Kettering Cancer Center
Cancer Biology: Cancer Biology

Oral Session 2: Chemistry
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Rooms 240 – 241

O –081
Regulation of Hydrogen Peroxide-Induced Cataractogenesis in Cultured Bovine Lenses by L–Cysteine
Anthony Baker, Nebraska Wesleyan University
Chemistry: Pharmaceutical Chemistry

O –082
Surface Modification of Iron-Based Metal-Organic Framework for Drug Delivery
Angela Bui, California University, Long Beach
Chemistry: Analytical Chemistry

Oral Session 2: Cancer Biology
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Rooms 132 – 133

O –076
Identification of Biomarkers of Sensitivity to Aurora Kinase Inhibitors in Head and Neck Squamous Cell Carcinoma
Diana Odhiambo, MD Anderson Cancer Center
Cancer Biology: Cancer Biology

O –077
Pharmacokinetics of an Ultrasmall Silica Nanoparticle Drug Conjugate (NDC)
Syed Rizvi, Sloan Kettering Institute for Cancer Research
Cancer Biology: Cancer Biology

O –078
Mycn Drives Fatty Acid Metabolism in Neuroblastoma
Kevin Rodriguez, Baylor College of Medicine
Cancer Biology: Cancer Biology

O –079
The Role of Mir –510 in Breast Cancer Disparities
Arabia Satterwhite, South Carolina State University
Cancer Biology: Cancer Biology

O –080
Radiation Therapy Potentiation via Ferroptosis Induction for the Treatment of Pancreatic Ductal Adenocarcinoma
Alexandra Seas, University of Nebraska Medical Center
Cancer Biology: Cancer Biology

Oral Session 2: Chemistry
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Rooms 240 – 241

O –081
Regulation of Hydrogen Peroxide-Induced Cataractogenesis in Cultured Bovine Lenses by L–Cysteine
Anthony Baker, Nebraska Wesleyan University
Chemistry: Pharmaceutical Chemistry

O –082
Surface Modification of Iron-Based Metal-Organic Framework for Drug Delivery
Angela Bui, California University, Long Beach
Chemistry: Analytical Chemistry

O –083
Photo-Degradation of Ciprofloxacin Using Different Titanium Oxide Catalyst
Kenneth Fontánez, Universidad del Turabo
Chemistry: Environmental Chemistry

O –084
Thermoelectric Effect with a Series of Ionic Liquids
Marcus Jackson, Queens College of the City University of New York
Chemistry: Organic Chemistry
O –085
Development of a One-Step Methodology for the Synthesis Allylic Alcohols Based on the Hydrometalation and Carbometalation of Propargylic Alcohols Followed by the Epoxide Cleavage to Obtain Polyketide Fragments Precursors
Jose Martinez Matias, Pontifical Catholic University of Puerto Rico
Chemistry: Organic Chemistry

Oral Session 2: Computational and Systems Biology and Developmental Biology and Genetics
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Room 234

O –086
Effect of Lisinopril on Senescence and Survivorship in Drosophila melanogaster
Chetana Jadhav, University of Maryland, Baltimore County
Developmental Biology and Genetics: Evolution and Developmental Biology

O –087
Identification and Annotation of Pathogenic Gene Variants with Possible Implementation in High Functioning Autism Spectrum Disorder
Erin Jean, Hampton University
Developmental Biology and Genetics: Genetics

O –088
Distinct and Overlapping Functions of Scl, Lmo2, and Ldb1 in Regulating the Divergence of Hematopoietic and Cardiac Fates
Hamilton Oh, University of California, Los Angeles
Developmental Biology and Genetics: Developmental Biology

O –089
The Role of Macrophages in Skin Regeneration in African Spiny Mouse (Acomys spp.)
Jamarcus Robertson, University of Florida
Developmental Biology and Genetics: Developmental Biology

O –090
Developing an Amplicon Sequencing Protocol for Lassa Virus
Erick Salvador Rocha, Broad Institute of MIT and Harvard
Computational and Systems Biology: Bioinformatics

Oral Session 2: Developmental Biology and Genetics
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Room 232

O –091
A Drosophila Model for Human Intellectual Disability: Functional Links between a Conserved Poly(A) RNA Binding Protein and m6A Methylation Machinery
Brianna Brown, Emory University
Developmental Biology and Genetics: Genetics

O –092
The Promising Role of a Mitochondrial Cocktail in the Management of Rett Syndrome
Kira Griffith, University of Toronto
Developmental Biology and Genetics: Genetics

O –093
A Budding Yeast Model to Explore the Functional Consequences of Amino Acids Substitutions that Cause a Novel Syndrome in Humans: The RNA Exosome and Disease
Samika Joshi, Emory University
Developmental Biology and Genetics: Genetics

O –094
Behavioral Characterization of Dual Lrrk2/Rab29 Knockout Mice: A Novel Model for Parkinson’s Disease
Victoria Nguyen, National Institute on Aging
Developmental Biology and Genetics: Genetics

O –095
Transcriptionally-Regulated Genes Direct Gap Junction Specificity in the Motor Circuit of C. Elegans
Isaiah Swann, Vanderbilt University
Developmental Biology and Genetics: Genetics

Oral Session 2: Engineering, Physics and Mathematics
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Room 140

O –096
Developing a Sensor to Detect Formaldehyde in Ambient
Makayla Headley, University of Maryland, Baltimore County
Engineering, Physics and Mathematics: Material Sciences
Student Oral Presenters Listing

O –097
Simulation and Analysis of Self-Assembled Silver Nanowires Networks
Roshell Lamug, California State University, Long Beach
Engineering, Physics and Mathematics: Nanotechnology

O –098
Lights, Camera, Hemodynamics: A Novel Technique to Monitor Blood Using Spectroscopy
Wesley Matingou, Morehouse College
Engineering, Physics and Mathematics: Biomedical Engineering

O –099
Surface Functionalization of Quantum Dots and Nanotoxicity
Jousen Merced, University of Puerto Rico
Engineering, Physics and Mathematics: Nanotechnology

O –100
Sensing of Cells and Biomolecules with Semiconductor Nanowires
Sesegma Rygzydimaeva, University of the District of Columbia
Engineering, Physics and Mathematics: Nanotechnology

Oral Session 2: Microbiology
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Rooms 134 – 135

O –101
Using Hyperspectral Imaging and Artificial Neural Networks to Detect E. coli on Romaine Lettuce and Spinach
Paul Dyduch, University of Northern Iowa
Microbiology: Environmental Microbiology

O –102
A Preliminary Study Towards Systematic Measurement of Antibiotic Tolerance in Mycobacterium abscessus
Kaydine Edwards, Brooklyn College of the City University of New York
Microbiology: Bacteriology

O –103
Investigating Intracellular Action of Antimicrobial Peptides Using a Tunable Internal Gene Expression System
Federico Prokopczuk, California State University, Northridge
Microbiology: Bacteriology

O –105
Investigating the Relationship Between a Social Trait, Bacteriocin Production, and Virulence in Pathogenic Bacteria
Valeria Toro, Indiana University
Microbiology: Bacteriology

Oral Session: Microbiology and Physiology
Saturday, November 17
8:00 a.m. – 9:15 a.m.
Rooms 136 – 137

O –106
Colonization of Healthy Adults with Community-Associated Methicillin-Resistant Staphylococcus aureus: Hidden Beyond the Nares and Standard Detection
Bouchra Benghomari, Suffolk University
Microbiology: Bacteriology

O –107
Multidrug Resistance-Associated Protein 4 (Mrp4) Play a Crucial Role in the Pathogenesis of Fatty Liver Disease
Maria De La Rosa, University of Connecticut
Physiology: Physiology

O –108
Assessing the Impact of Media on Antibiotic Production
Maria Ford, North Carolina Agricultural and Technical State University
Microbiology: Bacteriology

O –109
Examining the Role of Exopolysaccharide in Myxococcus xanthus Surface Social Motility
Kimberley Kissoon, McGovern Medical School, University of Texas Health Science Center
Microbiology: Bacteriology

O –110
Analyzing the Spatial Ecology of Chelonia mydas through the Use of Camera Technology
Kyle Oliveira, University of North Carolina at Chapel Hill
Physiology: Physiology
Oral Session 2: Neuroscience  
Saturday, November 17  
8:00 a.m. – 9:15 a.m.  
Room 233

O –111  
Assessing Behavioral Preference for Mouse Pup Calls as a Function of Maternal Experience and Oxytocin Signaling  
**Katherine Furman**, New York University  
Neuroscience: Neurobiology

O –112  
The Role of Innate Immune Cells Within the Spinal Subarachnoid Space in the Development of Chronic Neuropathic Pain  
**Taylor Phillips-Jones**, Howard University  
Neuroscience: Neurobiology

O –113  
ALS-Related NEK1 Haploinsufficiency Disrupts Nucleocytoplasmic Transport in iPSC-Derived Motor Neurons  
**Liana Tellez**, Northwestern University  
Neuroscience: Neurobiology

O –114  
The Role of ApoE Genetic Polymorphisms on Outcomes in a Mouse Model of Repeated Mild Traumatic Brain Injury  
**Christina Washington**, Rutgers University  
Neuroscience: Neurobiology

O –115  
A Framework to Model the Consequences of Early Life Environmental Exposures and Genetic Risk Underlying Complex Features of Mental and Behavioral Disorders in Mice  
**Mingxiao Yang**, Baylor College of Medicine  
Neuroscience: Neurobiology

O –116  
Single-Arm Torque Perception in Individuals with Chronic Hemiparetic Stroke  
**Angelica Alberto**, California State University, Northridge  
Neuroscience: Neurobiology

O –117  
Does Value-Based Decision-Making Require Emotional or Cognitive Intelligence? A Neuropsychological Approach  
**Yerika Germosen**, University of Iowa  
Neuroscience: Neurobiology

O –118  
Optical Recording of Neuronal Activity in a Parkinsonian Mouse Model of Deep Brain Stimulation  
**Isabelle Gonzalez Montalvo**, University of Puerto Rico, San Juan  
Neuroscience: Neurobiology

O –119  
Neural Correlate of Mating Drive Examined in Drosophila Melanogaster  
**Kenny Igarza**, Columbia University  
Neuroscience: Neurobiology

O –120  
Identifying Memory Retrieval Strategies Following a Mild Traumatic Brain Injury Using the CVLT –II  
**Corinne Meinhausen**, University of Arizona  
Neuroscience: Neurobiology

“ABRCMS has been a life changing experience for me and for my students and colleagues. As a white male scientist, I spent most of my career having limited interactions with colleagues and students from underrepresented grounds. Attending ABRCMS has given me the opportunity to meet, interact, network, and only discuss issues of equity and inclusion that were unavailable at other professional meetings.”
The Exhibit Hall Passport offers you the chance to win prizes while exploring the programs and opportunities within the ABRCMS exhibit hall. Instructions for participating in the Exhibit Hall Passport can be found on the back of this card.

You could win one of the following prizes:
- Bose Bluetooth Speaker
- Amazon Echo Dot
- $50 Amazon Gift Card
- $25 iTunes Gift Card

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<th>Institution</th>
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<td>American Society for Microbiology (ASM)</td>
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<td>Van Andel Institute Graduate School</td>
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Drop off completed form at the Exhibit Hall Theater by 10:00 a.m., Saturday, November 17.

Here’s How the Exhibit Hall Passport Works

- Visit the booths of each participating exhibitor and have them stamp their section of the passport grid.
- After the grid is complete, enter your contact information and submit your card at the Exhibit Hall Theater.
- Drop off completed card by 10:00 a.m. on Saturday, November 17 to be eligible for the drawing.
- Winners will be posted on Saturday, November 17 at 11:00 a.m. at the Exhibit Hall Theater.
- You do not need to be present to win.

Your Contact Information

Name ________________________________________________________________

University __________________________________________________________

Phone ______________________________________________________________

Email ________________________________________________________________

Registration Type (Circle one)    Student    Non Student    Exhibitor

Exhibit Hours

Thursday, November 15
1:45 p.m. – 5:30 p.m.

Friday, November 16
10:15 a.m. – 12:00 p.m.
3:00 p.m. – 6:00 p.m.

Saturday, November 17
9:15 a.m. – 12:00 p.m.
### Exhibitor Listing

(as of October 24, 2018)

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Virginia Tech University Multicultural Academic Opportunities Program 1040
VT PREP and IMSD 1112
Wake Forest School of Biomedical Engineering 1230
Wake Forest University Graduate School of Biomedical Sciences 811
Washington University in St. Louis 533
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<th>Institution</th>
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<td>Division of Biology and Biomedical Sciences</td>
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“ABRCMS promotion of diversity in STEM can be seen through its attendees and speakers. It was an inspirational setting, especially as a minority student. Seeing speakers who came from similar backgrounds as myself further motivated me to pursue a STEM degree.”
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