

Annual Biomedical Research Conference for Minority Students

ABRCMS

2016 *Program*

*Diverse Voices, Diverse Science:
A Future of Excellence in STEM Research*

Managed by



AMERICAN
SOCIETY FOR
MICROBIOLOGY

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instagram.com/abrcms



twitter.com/abrcms

Networking Meals

Network with your discipline during lunch on Thursday and Friday.
Discipline tables identified by colors. See table below:

Chemistry, Biochemistry,
Engineering , Physics &
Mathematics
(Black)

Microbiology &
Immunology
(Red)

Neuroscience, Physiology,
Developmental Biology
(White)

Cell Biology, Molecular
Biology & Computational
Biology, Cancer Biology
(Blue)

Social and Behavioral
Sciences and
Public Health
(Green)



Welcome

from Avery August



On behalf of the Annual Biomedical Research Conference for Minority Students (ABRCMS), I would like to extend a hearty welcome to Tampa, Florida, and the 2016 meeting. This our 16th year organizing and hosting this conference, and this year has been one of transitions - transitions to new leadership, and to a new funding model. However, I am excited for the future of ABRCMS and extremely proud that ABRCMS continues to set major records.

The theme of our meeting this year, "Diverse Voices, Diverse Science: A Future of Excellence in STEM Research", represents our vision of a future that prominently features all of you as fully engaged participants in a career in STEM research.

ABRCMS is extremely proud of the role that we play in preparing underrepresented students for a career in STEM research. We know that this may be the first scientific meeting for most of the students attending, and we want it to be one of many in the future. We strive to inspire students at this meeting, because they will continue to diversify the biomedical research workforce in ways that represent our society. Only with a diverse scientific workforce can we hope to make strides and advances in issues such as health disparities and personalized medicine that have huge impacts in our communities. Addressing these and other challenges will continue to require breakthroughs and new ways of thinking and approaching problems that facilitate these breakthroughs. And a more diverse workforce, with our current students playing prominent roles, will accomplish this.

With this in mind, we have assembled an outstanding program that will inspire, challenge, and educate. For the students attending, this is an opportunity to show your preparation and training. Step up to the plate, it's your turn! Take advantage of the feast we have prepared for you. For the faculty mentors and advisors, your students are here to shine, and we all encourage and support you in ensuring they make the best of the meeting. For the presenters, we look forward to your exciting science and inspiring words, and for the exhibitors, we look forward to your hearty conversations with students. I encourage you all to network with peers; hear the most cutting edge advances in the biomedical and behavioral sciences, and participate in discussions of some of the most important issues facing minority students as well as professionals in our community.

All that you see during your time here is the result of hard work of planning and preparation by the ABRCMS Steering Committee, the ASM staff, the exhibitors (make sure to visit the booths!), and many volunteers. They have invested their time and efforts planning the scientific program, reading and reviewing abstracts, planning and preparing the location to host your visit, preparing materials, setting up booths, and making sure that everything is just right, so that you can experience what I am sure will be one of the most rewarding meetings of your careers. I would like to thank them all in advance for their hard work in making this meeting a success. Last but certainly not least, we are particularly 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 possible.

With my warmest wishes,

Avery August, Ph.D.

Chairperson, ABRCMS



Greetings

from NIH



On behalf of the National Institutes of Health's National Institute of General Medical Sciences, we'd like to welcome you to the 2016 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 Maximizing Access to Research Careers, Research Initiative for Scientific Enhancement, Initiative for Maximizing Student Development, and Postbaccalaureate Research Education programs. Many of you at this meeting are current or former program participants. 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 initiative. 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



ABRCMS 2016 Plenary Speakers

Wednesday, November 9, 2016



8:00 p.m. – 8:30 p.m.

Innovations in Research and Discovery While Increasing Diversity

Juan E. Gilbert, Ph.D.
Professor, University of Florida

Thursday, November 10, 2016



10:45 a.m. – 11:45 a.m.

Where Will a Ph.D Take You?

Stefano Bertuzzi, Ph.D., M.P.H.
CEO, American Society for Microbiology



12:45 p.m. – 1:45 p.m.

Regenerative Engineering: the Future of Tissue Regeneration

Cato T. Laurencin, M.D., Ph.D.
Professor, University of Connecticut

Friday, November 11, 2016



8:00 a.m. – 9:00 a.m.

An Update on the NIH- Lacks Family Panel

Jeri-Lacks- Whye,
Granddaughter of Henrietta Lacks

David Lacks, Jr., grandson of Henrietta Lacks

Dina Paltoo, Ph.D, M.P.H.,
Office of Science Policy, NIH



12:45 p.m. – 1:45 p.m.

Small World Health Protections: Risks and Resilience

(Presented by the American Society for Microbiology)

Julie Gerberding, M.D., M.P.H.
Executive Vice President, Merck

Saturday, November 12, 2016



1:15 p.m. – 2:15 p.m.

The Other Wes Moore

Wes Moore
New York Times Best-Selling Author and CEO of BridgeEdU



Friday, November 11 • 9:15 a.m. – 10:15 a.m.



Using Natural Materials to Address Challenges in Biomedical Research
Norma A. Alcantar, Ph.D.
 Professor, University of South Florida



The Future of Interdisciplinary Neuroscience Research: New Directions and Challenges
(Sponsored by MIT Center for Brains, Minds and Machines)
Carmen Varela, Ph.D.
 Research Scientist, Massachusetts Institute of Technology



How Cells Use Chemistry and Physics to Break the Bones that Power Their Movement
Enrique M. De La Cruz, Ph.D.
 Professor, Yale University



Julian Jara-Ettinger, Ph.D.
 Postdoctoral fellow, Massachusetts Institute of Technology



Second Messenger-Dependent Processes in Cyanobacteria: Implications for Biotechnology and Optogenetics
Beronda Montgomery, Ph.D.
 Professor, Michigan State University



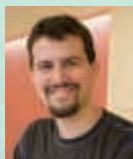
The “Real” Martians: STEMid in HERA
Patrice O. Yarbough, Ph.D.
 Senior Scientist, KBRwyle



If Electronic Cigarettes (E-Cigs) are Your Pleasure, Beware of Adverse Neurobiological Changes: A Case Study in Mice
(Sponsored by the Society of Toxicology)
Judith Zelikoff, Ph.D.
 Professor, NYU School of Medicine



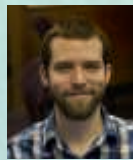
LaShelle Spencer, MS
 Scientist, Craig Technologies



HeLa Cells and the Future of Biomedical Science
(Sponsored by the American Association for the Advancement of Science)
Erez Aiden, Ph.D.
 Assistant Professor, Baylor College of Medicine



Takiyah Simons, Ph.D.
 Research Scientist, Leidos



Andrew Adey, Ph.D.
 Assistant Professor, Oregon Health & Science University



Superbugs in Sewage: Anti Microbial Resistance in the Environment
(Presented by the American Society for Microbiology)
Valerie Harwood, Ph.D.
 Professor, University of South Florida



Epidemiologic Studies of Alzheimer's Disease in African Americans
Lisa Barnes, Ph.D.
 Rush University Medical Center



Building a Successful Program of Cancer Health Disparities Research: It takes a Village
(Sponsored by Moffitt Cancer Center and Research Institute)
Clement K. Gwede, Ph.D., M.P.H., R.N.
 Associate Member, Moffitt Cancer Center & Research Institute





Wednesday, November 9, 2016

12:00 p.m. – 8:00 p.m.

Registration Open

Professional Development Session

2:00 p.m. – 2:45 p.m.

Graduate Student Life: Perspectives of Graduate Students

(Recommended for undergraduate, community college, postbac, masters students)

Moderator

Nicquet Blake, Ph.D., University of Texas Health Science Center, San Antonio

Location: Conv. Ctr Rm 24 & 25

2:00 p.m. – 6:00 p.m.

Professional Development Session

Do You Play Fair? A Workshop about Bias in Academia

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

Speakers

Christine Pribbenow, Ph.D., University of Wisconsin–Madison, Madison, WI

Percy Brown, Ph.D., University of Wisconsin–Madison, Madison, WI

Location: Conv. Ctr Rm 10

2:00 p.m. – 4:30 p.m.

**Concurrent Professional Development Session
(2 session options)**

Session 1

Entering Mentoring: Research Mentor Training for Faculty Working with Undergraduates

(Recommended for faculty)

Speakers

Kelly Diggs-Andrews, Ph.D., American Society for Microbiology, Washington, DC

Harlan Jones, Ph.D., University of North Texas Health Science Center, Fort Worth, TX

Sonia Zarate, Ph.D., University of San Diego, San Diego CA

Location: Conv. Ctr Rm 5 & 6

Session 2

Imagining and Defining the Grant that will fund your Postdoc

(Recommended for graduate students and postdoctoral scientists)

Speaker

Victoria McGovern, Ph.D., Burroughs Wellcome Fund, Research Triangle Park, NC

Location: Conv. Ctr Rm 11



3:00 p.m. – 8:00 p.m.

Exhibit Setup

3:00 p.m. – 4:00 p.m.

Concurrent Professional Development Sessions
(2 session options)

Session 1

Presentation Techniques: How to Make Effective Poster and Oral Presentations

Speaker

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

Location: Conv. Ctr Ballroom A

Session 2

Building Your Brand Starts NOW

(Recommended for all attendees)

Speaker

Marquita M. Qualls, Ph.D., Entropia Consulting, Nashville, TN

Location: Conv. Ctr Rm 20 & 21

4:15 p.m. – 4:45 p.m.

Professional Development Session

Session 1

Wrap It Up! How To Present Your Work in 5 Minutes or Less

(Recommended for all presenters)

Speaker

Sherrri-Gae Scott, Ph.D., FASEB, Bethesda, MD

Location: Conv. Ctr Ballroom A

5:00 p.m. – 6:00 p.m.

Concurrent Professional Development Sessions
(3 session options)

Session 1

Networking in Your Scientific Discipline (Specific Disciplines below)

(Recommended for all attendees)

- Microbiology
Location: Conv. Ctr Rm 24 & 25
- Cell Biology
Location: Conv. Ctr Rm 16
- Social & Behavioral Sciences
Location: Conv. Ctr Rm 5 & 6

- Immunology
Location: Conv. Ctr Rm 11
- Biochemistry & Chemistry
Location: Conv. Ctr Rm 15
- Neuroscience **Location: Conv. Ctr Rm 18**
- Developmental Biology & Genetics
Location: Conv. Ctr Rm 19
- Physiology **Location: Conv. Ctr Rm 23**
- Engineering, Physics & Mathematics
Location: Conv. Ctr Rm 22
- Plant Biology **Location: Conv. Ctr Rm 12**
- Molecular & Computational
Location: Conv. Ctr Rm 13
- Public Health **Location: Conv. Ctr Rm 7 & 8**

Session Leaders

To Be Determined

Session 2

State of the ASM-NSF Leaders Inspiring Networks and Knowledge (LINK) Program

(Recommended for faculty and program administrators)

Speakers

Lubna Abu-Niaaj, Ph.D., Central State University Wilberforce, OH

Kelly Diggs-Andrews, Ph.D., American Society for Microbiology

Olga Steinberg-Neifach, Ph.D., Hostos Community College, CUNY, Bronx, NY

Location: Embassy Suites- Skyway 2

Session 3

Bringing Mentees and Mentors Together in a National Mentoring Network

(Recommended for all attendees)

Speaker

Jamboor Vishwanatha, Ph.D., University of North Texas Health Science Center, Fort Worth, TX

Location: Embassy Suites- Skyway 1

6:30 p.m. – 7:30 p.m.

Dinner

Location: Conv. Ctr West Hall

7:30 p.m. – 8:00 p.m.

Conference Overview

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



Opening Remarks

Avery August, Ph.D., Cornell University College of Veterinary Medicine, Ithaca, NY

Conference Welcome

Stefano Bertuzzi, Ph.D., M.P.H., American Society for Microbiology, Washington, DC

Alison Gammie, Ph.D., National Institute of General Medical Sciences, NIH, Bethesda, MD

8:00 p.m. – 8:30 p.m.

Opening Keynote Address

Innovations in Research and Discovery While Increasing Diversity

Speaker

Juan E. Gilbert, Ph.D., University of Florida, Gainesville, FL

Location: Conv. Ctr West Hall

8:30 p.m. – 9:30 p.m.

PREP Scholars Meeting (By Invitation Only)

Location: Embassy Suites- Skyway 2

Thursday, November 10, 2016

7:30 a.m. – 7:00 p.m.

Registration Open

7:00 a.m. – 7:45 a.m.

Microbial Sciences Student and Postdoc Meet and Greet Breakfast with ASM Leadership (By Invitation)

(Sponsored by the American Society for Microbiology)

Location: Embassy Suites- Bayside Ballroom 1 & 2

8:00 a.m. – 12:00 p.m.

Exhibit Setup

8:00 a.m. – 9:00 a.m.

Concurrent Professional Development Sessions
(3 session options)

Session 1

Orientation for Community College, Undergraduates, and Postbaccalaureate Students

(Mandatory for community college, undergraduates, and postbaccalaureate students)

Location: Conv. Ctr. Ballroom B&C

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 Announcements

Speaker

Irene Hulede, American Society for Microbiology, Washington, DC

Session 2

Judges Meeting (Specific Disciplines below)

(Mandatory for all student presentation judges)

- Biochemistry & Chemistry
Location: Conv. Ctr 18 & 19
- Cell & Developmental Biology
Location: Conv. Ctr Rm 15 & 16
- Social and Behavioral Sciences, Public Health & Physiology **Location:** Conv. Ctr Rm 20 & 21
- Engineering, Physics & Mathematics, Cancer Biology **Location:** Conv. Ctr Rm 24 & 25
- Immunology & Microbiology
Location: Conv. Ctr. Rm 13 & 14
- Molecular & Computational Biology, Neuroscience **Location:** Conv. Ctr Rm 22 & 23



Session 3

Enhancing Professional Skills for Scientists: Beyond the Bench

(Recommended for graduate students, postdoctoral scientists, and junior faculty)

Speaker

Emily Harms, Ph.D., Rockefeller University, New York, NY

9:15 a.m. – 10:30 a.m.

Concurrent Professional Development Sessions

(6 session options)

Session 1

Picking the Perfect Ph.D. Program for You/Why Choose a School with a T32

(Recommended for undergraduates interested in the Ph.D. track)

Speakers

Sharon Milgram, Ph.D., Office of Intramural Training & Education, NIH, Bethesda, MD

Additional Speakers To Be Determined

Location: Conv. Ctr Rm 22 & 23

Session 2

M.D.-Ph.D. – Is It Right for Me?

(Recommended for undergraduates interested in the M.D.-Ph.D. track)

Speakers

Juanita Merchant, M.D., Ph.D., University of Michigan, Ann Arbor, MI

Robin Lorenz, M.D., Ph.D., University of Alabama at Birmingham, Birmingham, AL

Location: Conv. Ctr Rm 24 & 25

Session 3

Graduate Opportunities in Public and Global Health Research

(Recommended for undergraduate juniors and seniors)

Speaker

Prasad Kuduvali, Ph.D., American Society for Microbiology

Location: Conv. Ctr Rm 15 & 16

Session 4

Community College Students: Tips for Transitioning to a Four-Year Institution

(Mandatory for community college students)

Speaker

Nidhi Gadura, Ph.D., Queensborough Community College, CUNY, Bayside, NY

Location: Conv. Ctr Rm 20 & 21

Session 5

NIH Grants Management Workshop

(Recommended for program directors and faculty)

Speakers

Lori Burge, B.S., National Institute of General Medical Sciences, Bethesda, MD

Justin Rosenzweig, M.P.A., National Institute of General Medical Sciences, Bethesda, MD

Susan South, M.P.A., MSW, National Institute of General Medical Sciences, Bethesda, MD

Location: Conv. Ctr Rm 13 & 14

Session 6

Getting Published: Advice for Graduate Students and Postdoctoral Scientists

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

Speaker

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

Location: Conv. Ctr Rm 18 & 19

10:45 a.m. – 11:45 a.m.

PLENARY SESSION

Where Will a Ph.D. Take You?

(Recommended for all students)

Speaker

Stefano Bertuzzi, Ph.D., M.P.H., American Society for Microbiology, Washington, DC

Location: Conv. Ctr Ballroom B & C



How We Learn ... and How We Don't

(Recommended for all non students)

Speaker

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

Location: Conv. Ctr Ballroom A

12:00 p.m. – 12:45 p.m.

Networking Lunch

Location: Conv. Ctr West Hall

12:45 p.m. – 1:45 p.m.

PLENARY SESSION

Regenerative Engineering: The Future of Tissue Regeneration

Speaker

Cato T. Laurencin, M.D., Ph.D., UConn Health, Farmington, CT

Location: Conv. Ctr West Hall

1:45 p.m. – 5:30 p.m.

Exhibits Open

2:00 p.m. – 3:15 p.m.

POSTER SESSION 1 (A)

3:30 p.m. – 4:45 p.m.

POSTER SESSION 2 (B)

5:30 p.m. – 6:45 p.m.

Oral Presentation Sessions (Specific Disciplines below)

- Biochemistry Location: Conv. Ctr Rm 13
- Biochemistry & Chemistry Location: Conv. Ctr Rm 14
- Chemistry Location: Conv. Ctr Rm 15
- Neuroscience Location: Conv. Ctr Rm 16
- Physiology Location: Conv. Ctr Rm 18
- Social/Behavioral Sciences & Public Health Location: Conv. Ctr Rm 19 & 20
- Cell Biology Location: Conv. Ctr Rm 21
- Engineering, Physics & Mathematics Location: Conv. Ctr Rm 22 & 23
- Microbiology Location: Conv. Ctr Rm 24 & 25

(See presenter listing on page 19-26)

7:00 p.m. – 7:45 p.m.

Dinner

Location: Conv. Ctr West Hall

8:00 p.m. – 9:30 p.m.

Concurrent Professional Development Sessions
(4 session options)

Session 1

Gateway to the Future: Career Paths in the Biomedical Sciences, STEM Disciplines, and Behavioral Sciences – Conversations with Scientists

(Recommended for undergraduate, postbaccalaureate, and graduate students)

Moderator

Maisha Jones, Ph.D., Procter & Gamble

Location: Embassy Suites – Bayside Ballroom 1 & 2

Session 2

NIGMS Program Director Discussions

- PREP Programs Location: Conv. Ctr Rm 15
- IMSD Programs Location: Conv. Ctr Rm 21
- T32 Programs Location: Conv. Ctr Rm 16
- RISE Programs Location: Conv. Ctr Rm 18
- Bridges Programs Location: Conv. Ctr Rm 25
- IRACDA Programs Location: Conv. Ctr Rm 24
- MARC Programs Location: Conv. Ctr Rm 19
- F30/F31 Programs Location: Conv. Ctr Rm 20
- BUILD/NRMN/CEC Programs Location: Conv. Ctr Rm 22

Session 3

Job Search Strategies: Effective Interviewing Skills, and Negotiating the Job Offer

(Recommended for senior graduate students, postdoctoral scientists, and junior faculty)

Speaker

Andrew Green Ph.D., University of California, Berkeley, CA

Location: Embassy Suites – Skyway 1

Session 4

High-Caliber Research at Non Research Institutions: Models of Effective Undergraduate Research Programs

(Recommended for faculty and program administrators)

Speakers

Alvin Holder, Ph.D., Old Dominion University, Norfolk VA

Patrick Martin, Ph.D., North Carolina A&T State University, Greensboro, NC.

Location: Embassy Suites – Skyway 2

Friday, November 11, 2016

7:00 a.m. – 8:00 a.m.

TWD-PDO Steering Committee Meeting (By Invitation Only)

*Breakfast will not be provided

Location: Conv. Ctr Rm 11

7:00 a.m. – 7:45 a.m.

Microbial Sciences Faculty Meet and Greet Breakfast with ASM Leadership (By Invitation)

(Sponsored by the American Society for Microbiology)

Location: Embassy Suites – Skyway 1

7:30 a.m. – 5:00 p.m.

Registration Open

8:00 a.m. – 9:00 a.m.

PLENARY SESSION

An Update on the NIH-Lacks Family Partnership

Speakers

Jeri Lacks-Whyte, granddaughter of Henrietta Lacks

David Lacks, Jr., grandson of Henrietta Lacks

Dina Paltoo, Ph.D., M.P.H., Office of Science Policy, NIH, Bethesda, MD

Location: Conv. Ctr Ballroom B & C

9:15 a.m. – 10:15 a.m.

Concurrent Scientific Sessions (10 session options)

Session 1

HeLa Cells and the Future of Biomedical Science

(Sponsored by the American Association for the Advancement of Science)

Speakers

Erez Aiden, Ph.D., Baylor College of Medicine, Houston, TX

Andrew Adey, Ph.D., Oregon Health & Science University, Portland, OR

Location: Conv. Ctr Ballroom A

Session 2

If Electronic Cigarettes (E-Cigs) are Your Pleasure, Beware of Adverse Neurobiological Changes: A Case Study in Mice

(Sponsored by the Society for Toxicology)

Speaker

Judith Zelikoff, Ph.D., New York University School of Medicine, New York, NY

Location: Conv. Ctr Rm 13 & 14

Session 3

The Future of Interdisciplinary Neuroscience Research: New Directions and Challenges

(Sponsored by the Center for Brains, Minds and Machines - McGovern Institute for Brain Research at MIT)

Speakers

Carmen Varela, Ph.D., Massachusetts Institute of Technology, Cambridge, MA

Julian Jara-Ettinger, Ph.D., Massachusetts Institute of Technology, Cambridge, MA

Location: Conv. Ctr Rm 22 & 23

Session 4

How Cells Use Chemistry and Physics to Break the Bones That Power Their Movement

Speaker

Enrique M. De La Cruz, Ph.D., Yale University, New Haven, CT

Location: Conv. Ctr Rm 20 & 21



Session 5

Second Messenger-Dependent Processes in Cyanobacteria: Implications for Biotechnology and Optogenetics

Speaker

Beronda Montgomery, Ph.D., Michigan State University, East Lansing, MI

Location: Conv. Ctr Rm 18 & 19

Session 6

Using Natural Materials to Address Challenges in Biomedical Research

Speaker

Norma A. Alcantar, Ph.D., University of South Florida, Tampa, FL

Location: Conv. Ctr Rm 15 & 16

Session 7

The “Real” Martians: STEMid in HERA

Speakers

Patrice Yarbough, Ph.D., Universities Space Research Association, Houston, TX

Takiyah Sirmons, Ph.D., Johnson Space Center, Houston, TX

LaShelle Spencer, M.S., Kennedy Space Center, Merritt Island, FL

Location: Conv. Ctr Rm 5 & 6

Session 8

Superbugs in Sewage: Antimicrobial Resistance in the Environment

(Sponsored by the American Society for Microbiology)

Speaker

Valerie Harwood, Ph.D., University of South Florida, Tampa, FL

Location: Conv. Ctr Ballroom D

Session 9

Building a Successful Program of Cancer Health Disparities Research: It takes a Village

(Sponsored by the Moffitt Cancer Center and Research Institute)

Speaker

Clement K. Gwede, Ph.D., M.P.H., R.N., Moffitt Cancer Center and Research Institute, Tampa, FL

Location: Conv. Ctr Rm 24 & 25

Session 10

Epidemiologic Studies of Alzheimer’s Disease in African Americans

Speaker

Lisa Barnes, Ph.D., Rush University Medical Center, Chicago, IL

10:15 a.m. – 12:00 p.m.

Exhibits Open

Location: Conv. Ctr East & Central Hall

10:30 a.m. – 11:45 a.m.

POSTER SESSION 3 (C)

Location: Conv. Ctr East & Central Hall

12:00 p.m. – 12:45 p.m.

Networking Lunch

Location: Conv. Ctr West Exhibit Hall

12:45 p.m. – 1:45 p.m.

PLENARY SESSION

Small World Health Protection: Risks and Resilience

(Presented by the American Society for Microbiology)

Speaker

Julie Gerberding, M.D., M.P.H., Merck, Kenilworth, NJ

Location: Conv. Ctr West Hall

2:00 p.m. – 3:00 p.m.

Concurrent Professional Development Sessions (7 session options)

Session 1

Effective Personal Statement for Getting into Highly Competitive Graduate Schools and Summer Programs

(Recommended for undergraduate, postbaccalaureate, and master’s students)

Speakers

Joel Oppenheim, Ph.D., New York University, New York, NY

Victoria Freedman, Ph.D., Albert Einstein University, New York, NY

Location: Conv. Ctr Ballroom A



Session 2

Tell Your Science as a Story

(Recommended for all attendees)

Speakers

Geoff Hunt, Ph.D., American Society for Biochemistry and Molecular Biology, Rockville, MD

Rajendrani Mukhopadhyay, Ph.D., American Society for Biochemistry and Molecular Biology, Rockville, MD

Location: Conv. Ctr Rm 20 & 21

Session 3

Navigating Mentoring Relationships: Discovering Essential Skills for Mentees

(Recommended for undergraduates, postbaccalaureates, graduates, and postdoctoral scientists)

Speakers

Steve Lee, Ph.D., University of California-Davis, Davis, CA

Sherilynn Black, Ph.D., Duke University, Durham, NC

Terrance Mayes, Ed.D., Stanford University School of Medicine, Stanford, CA

Michael L. Penn, Jr., M.D., Ph.D., Gladstone Institutes, San Francisco, CA

Location: Conv. Ctr 22 & 23

Session 4

Goal Setting and Time Management

(Recommended for all attendees)

Speaker

Sandra Murray, Ph.D., University of Pittsburgh, Pittsburgh, PA

Location: Conv. Ctr Rm 24 & 25

Session 5

Small World Initiative™: Building Scientists One Class at a Time

(Recommended for faculty)

Speaker

Mary Miller, Ed.D., M.S., Baton Rouge Community College, Baton Rouge, LA

Location: Conv. Ctr Rm 18 & 19

Session 6

TWD-PDO Meeting (organized by NIGMS Program Director Association)

Moderator

Barry Komisaruk, Ph.D., Rutgers University, Newark, NJ

Location: Conv. Ctr Ballroom D

Session 7

Leveraging Wikipedia to Improve Science Communication Skills

(Recommended for graduate students, postdoctoral scientists, and faculty)

Speakers

Katherine Lontok, Ph.D., American Society for Microbiology, Washington, DC

Julie Wolf, Ph.D., American Society for Microbiology, Washington, DC

Location: Conv. Ctr Rm 15 & 16

3:00 p.m. – 6:00 p.m.

Exhibits Open

Location: Conv. Ctr East & Central Hall

3:15 p.m. – 4:30 p.m.

POSTER SESSION 4 (D)

4:45 p.m. – 6:00 p.m.

POSTER SESSION 5 (E)

6:15 p.m. – 7:15 p.m.

Concurrent Professional Development Sessions (5 session options)

Session 1

Confessions of Admission Officials: What We Look at, and for, in Graduate School Applications

(Recommended for undergraduate and master's-level students)

Speakers

Gustavo Arrizabalaga, Ph.D., Indiana University, Indianapolis, IN

Robert Binder, Ph.D., University of Pittsburgh, Pittsburgh, PA

Colleen Gabauer, Ph.D., Purdue University, West Lafayette, IN

Tara Hobson-Prater, M.A., Indiana University, Indianapolis, IN

Location: Conv. Ctr Rm 20 & 21

Session 2

Financing Your Graduate Education

(Recommended for undergraduate and master's-level students)

Speakers

Keisha John, Ph.D., University of Virginia, Charlottesville, VA

Location: Conv. Ctr Rm 22 & 23

Session 3

Strategies for Taking Standardized Admissions Tests: Preparing for the GRE and MCAT Exams

(Recommended for undergraduate and postbaccalaureate students)

Speakers

Gayle Slaughter, Ph.D., Baylor School of Medicine, Houston, TX

Sandra Oyewole, Ph.D., Trinity University, Washington, DC

Location: Conv. Ctr Rm 24 & 25

Session 4

Tips for Applying to a Postbaccalaureate Program

(Recommended for students considering postbaccalaureate training)

Speakers

Sharon L. Milgram, Ph.D., Office of Intramural Training & Education, NIH, Bethesda, MD
Additional Speaker To Be Determined

Location: Conv. Ctr Rm 18 & 19

Session 5

Being a Proactive Mentee: Taking Control of Your Research Experience

(Recommended for undergraduate, postbaccalaureate, and graduate students)

Speakers

Giovanna Guerrero-Medina, Ph.D., Yale University, New Haven, CT

Marco Bonnette-Matiz, M.Sc., Yale University, New Haven, CT

Location: Conv. Ctr Rm 15 & 16

Session 6

Postdoc Fundamentals: Selecting a Training Experience to Match Your Career Goals

(Recommended for graduate students and postdoctoral scientists)

Speakers

Sibby Anderson-Thompkins, Ph.D., University of North Carolina at Chapel Hill, Chapel Hill, NC

Edward Krug, Ph.D., Medical University of South Carolina, Charleston, SC

Location: Conv. Ctr Rm 13 & 14

6:30 p.m. – 8:30 p.m.

Reception for Speakers, Exhibitors, Judges and Program Directors

Location: Tampa Marriott Waterside, Florida Ballroom

7:30 p.m. – 8:30 p.m.

GlaxoSmithKline Mixer

(Sponsored by GlaxoSmithKline)

Location: Embassy Suites – Bayside Ballroom 1

7:30 p.m. – 8:30 p.m.

Graduate Students and Postdoctoral Scientist Networking Mixer

Location: Embassy Suites – Skyway Ballroom 1 & 2

7:30 p.m. – 8:30 p.m.

LGBTQ Mixer

Location: Embassy Suites – Bayside Ballroom 2



Saturday, November 12, 2016

7:30 a.m. – 1:00 p.m.

Registration Open

8:00 a.m. – 9:15 a.m.

Oral Presentation Sessions

(See disciplines below)

Neuroscience **Location: Conv. Ctr Rm 13 & 14**

Social/Behavioral Sciences & Public Health

Location: Conv. Ctr 15 & 16

Developmental & Biology Genetics

Location: Conv. Ctr 18

Cell & Developmental Biology

Location: Conv. Ctr Rm 19

Molecular & Cancer Biology

Location: Conv. Ctr Rm 20

Microbiology & Immunology

Location Conv. Ctr Rm 21 & 24

Chemistry

Location: Conv. Ctr Rm 22

Engineering, Physics & Mathematics

Location: Conv. Ctr Rm 23

Microbiology

Location: Conv. Ctr Rm 25

(See presenter listing on page 19-26)

9:15 a.m. – 12:15 p.m.

Exhibit Hall Open

Location: Conv. Ctr East & Central Hall

9:30 a.m. – 10:45 a.m.

Poster Session 6 (F)

11:00 a.m. – 12:15 p.m.

Poster Session 7 (G)

12:30 p.m. – 1:15 p.m.

Lunch

Location: Conv. Ctr. West Exhibit Hall

1:00 p.m. – 4:00 p.m.

Exhibit Takedown

1:15 p.m. – 2:15 p.m.

Closing Keynote Address

The Other Wes Moore

Speaker

Wes Moore, M.S., New York Times Best Selling Author

Location: Conv. Ctr. West Exhibit Hall

2:30 p.m. – 4:00 p.m.

Concurrent Professional Development Sessions

(3 session options)

Session 1

ABRCMS Professional Skills Cafe

(Recommended for undergraduate students, graduate students, and postdoctoral scientists)

Topics include:

- Community College Student Resources
- Finishing Your Dissertation
- How to be Successful in a Summer Internship Program
- Your Individual Development Plan
- LinkedIn for Networking
- Networking
- Picking Your Thesis Lab
- Resume or CV
- Studying Tips for Tests (MCAT & GRE)
- Balancing Our Academic and Personal Lives
- Writing Teaching Statements
- Interviewing for M.D./Ph.D Programs
- Finding Mentors and Being Mentored Effectively

Session Moderator

Beronda Montgomery, Ph.D., Michigan State University, East Lansing, MI

Location: Embassy Suites – Bayside Ballroom 1 & 2

Session 2

Implementing Do You Play Fair? A Workshop About Bias in Academia

(Recommended for faculty, program directors, and exhibitors)

Speakers

Christine Pribbenow, Ph.D., University of Wisconsin–Madison, Madison, WI

Molly Carnes, M.D., M.S., University of Wisconsin School of Medicine and Public Health, Madison, WI

Location: Conv. Ctr Rm 10



Session 3

ABRCMS Wikipedia Year of Science Edit-a-thon

(Recommended for all attendees)

Speakers

Katherine Lontok, Ph.D., American Society for Microbiology, Washington, DC

Julie Wolf, Ph.D., American Society for Microbiology, Washington, DC

Location: Conv. Ctr Rm 19

3:00 p.m. – 4:30 p.m.

ASM-LINK Debriefing

4:30 p.m. – 5:30 p.m.

Concurrent Professional Development Sessions

(2 session options)

Session 1

Surviving, Striving, and Thriving, in Your Postdoc and Beyond!

(Recommended for graduate students and postdoctoral scientists)

Speakers

Claudia Aguado Loi, Ph.D., University of South Florida, Tampa, FL

Olukemi Akintewe, Ph.D., Boston University Medical Center, Boston, MA

Location: Conv. Ctr Rm 20

Session 2

Blogging, Tweeting, & Writing to Promote Your Career and Diversify Science

(Recommended for all attendees)

Speakers

Danielle Lee, Ph.D.

Stephani Page, Ph.D., University of North Carolina at Chapel Hill, Chapel Hill, NC

Location: Conv. Ctr Rm 21

5:30 p.m. – 7:30 p.m.

FREE TIME! FREE TIME! FREE TIME!

7:30 p.m. – 10:00 p.m.

Banquet and Awards Ceremony

Conference Wrap-up

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

Student Presentation Awards Ceremony

Concluding Remarks

Avery August, Ph.D., Cornell University College of Veterinary Medicine, Ithaca, NY

Location: Conv. Ctr. West Exhibit Hall

10:00 p.m. – 2:00 a.m.

Closing Social Invite and Dance (All Are Invited)

Location: Tampa Marriott Waterside Hotel & Marina





Poster Presentations by Scientific Discipline

(Sessions A-F)

Biochemistry	001 – 028
Cancer Biology	029 – 059
Cell Biology	060 – 076
Chemistry	077 – 102
Developmental Biology and Genetics	103 – 125
Engineering, Physics and Mathematics	126 – 150
Immunology	151 – 162
Microbiology	163 – 195
Molecular and Computational Biology	196 – 211
Neuroscience	212 – 242
Physiology	243 – 257
Social and Behavioral Sciences & Public Health	258 – 288



Student Oral Presenters Listing

Oral Session 1: Biochemistry **RM 13** **Thursday, November 10, 5:30 p.m. - 6:45 p.m.**

O-001

Investigating the Secondary Structure of Non-canonical DNA Implicated in Cancer
Deondre Jordan, Swarthmore College
Discipline: Biochemistry: Biochemistry

O-002

Mechanism of Bacterial Toxin's Entry to Mammalian Cells
María T. Morales, University of Puerto Rico at Cayey
Discipline: Biochemistry: Biomolecules

O-004

Exploring the Metabolome of a Yeast Model for Parkinson's Disease
Keitaris J. Goldston, Claflin University
Discipline: Biochemistry: Metabolism

O-005

Probing Intramolecular Interactions in the HIV-1 5'-Leader Dimeric Conformation
Hannah Carter, University of Maryland: Baltimore County
Discipline: Biochemistry: Structural Biology

Oral Session 1: Biochemistry and Chemistry **RM 14** **Thursday, November 10, 5:30 p.m. - 6:45 p.m.**

O-006

The Role of Specific tRNAs in Regulating Matrix and Plasma Membrane Binding for Initiation of HIV-1 Virion Assembly
Amalia Rivera Oven, University of Maryland Baltimore County
Discipline: Biochemistry: Structural Biology

O-007

The m⁶A RNA Methylation Reader YTHDF2 is Regulated by m⁶A Methylation of Its Own Transcript
Cary Mundell, University of North Carolina at Pembroke
Discipline: Biochemistry: Structural Biology

O-008

Explosively Sweet
Robert C. Neblett, II, Howard University
Discipline: Chemistry: Analytical Chemistry

O-009

Active-State CB1 Receptor Model Used as a Synthetic Cannabinoid Probe
Maria Muhammad, Tougaloo College
Discipline: Chemistry: Analytical Chemistry

O-010

Ultrasensitive Protein Detection in Single Breast Cancer Cells
Michelle C. Pérez-Ayala, University of Puerto Rico at Cayey
Discipline: Chemistry: Analytical Chemistry

Oral Session 1: Chemistry **RM 15** **Thursday, November 10, 5:30 p.m. - 6:45 p.m.**

O-011

5-Aroyl-1,5-dihydro-4H-pyrazol-4-ones as Mild and Highly Selective Acyl Transfer Reagents for Polyamines and Aminoalcohols
Ranad Humeidi, University of Texas at San Antonio
Discipline: Chemistry: Organic Chemistry

O-012

Atmospheric Chemical Reactions of Aerosols with Biogenic Derived Epoxides
Diego Cortes, Oberlin College
Discipline: Chemistry: Environmental Chemistry

O-013

Synthesis of Engineered Nanoparticles with Tailored Density of Antigenic Proteins
Amir A. Hobson, Morehouse College
Discipline: Chemistry: Pharmaceutical Chemistry

O-014

Synthesis of N-n-pentyl-3-pyridyl Pyrrolidine Ether
Zachary Davenport, Gallaudet University
Discipline: Chemistry: Pharmaceutical Chemistry

O-015

The Development and Characterization of Polyelectrolyte Polymer-Peptide Nanoplexes for Antimicrobial Applications
Jamal J. Keyes, Jackson State University
Discipline: Chemistry: Pharmaceutical Chemistry

Oral Session 1: Neuroscience **RM 16** **Thursday, November 10, 5:30 p.m. - 6:45 p.m.**

O-016

Cell Types Within Layer Six Corticothalamic Neurons



Zulikayida Maimaiti, *Massachusetts Institute of Technology*

Discipline: Neuroscience: Neurobiology

O-017

Sox-17 Transgenic Mice Reveal Functional Suppression of Beta-Catenin in Neuroprotection
Kimberly Cruz, Trinity Washington University

Discipline: Neuroscience: Neurobiology

O-018

Characterization of Cre-recombinase Enzyme Expression in Transgenic Mouse Lines used to Target the Major Neuromodulatory Systems of the Brain
Daniel F. Cardozo Pinto, University of California

Discipline: Neuroscience: Neurobiology

O-019

Hedonic Valence Pathways between the Extended Amygdala and Lateral Hypothalamus
Natalia Rodriguez-Sosa, University of Puerto Rico, San Juan

Discipline: Neuroscience: Neurobiology

O-020

Morphological Impact of *Pten* on Mature Neurons
Janai R. Williams, CUNY University of New York: Brooklyn College

Discipline: Neuroscience: Neurobiology

Oral Session 1: Physiology RM 18
Thursday, November 10, 5:30 p.m. - 6:45 p.m.

O-021

Pro-Inflammatory Stress Leads to Down-Regulation of Stromal Interaction Molecule 1 and Altered Store Operated Ca^{2+} Entry in the Pancreatic β cell
Daenique Jengolley, Tuskegee University

Discipline: Physiology:Endocrinology

O-022

A Comparative Analysis of Iodinated Contrast Media in a Rabbit Model of Contrast-induced Acute Kidney Injury

Yvette Kayirangwa, Spelman College
Discipline: Physiology: Pharmacology

O-023

Cathepsin S Inhibition and Myelin Proteins in Nerve of Diabetic mice

Karen Montoya, University of California, San Diego
Discipline: Physiology: Pharmacology

O-024

In Vivo Approach to Uncover Determinants of Volume Displacement of Respiratory Muscles in Dogs

Mary Adeyeye, University at Albany
Discipline: Physiology: Physiology

O-025

Thermodynamic Regulation of Cardiovascular Stability in Type 2 Diabetes

Lanazha Belfield, Winston-Salem State University
Discipline: Physiology: Systems Biology

Oral Session 1: Social and Behavioral Sciences and Public Health RM 19
Thursday, November 10, 5:30 p.m. - 6:45 p.m.

O-026

Assessing the Impact of Maternal Smoking During Pregnancy on Child Development

Karen Go, City University of New York at Queens College

Discipline: Social and Behavioral Sciences and Public Health: Psychology

O-027

Effects of Aspect and Telicity on Sentence Comprehension in Young Adults

Michelle N. Indarjit, Montclair State University
Discipline: Social and Behavioral Sciences and Public Health: Psychology

O-028

Assessment and Properties of the Trauma Suicide Probability Index - 5 (TSPI-5)

Saifa Pirani, University of Texas at San Antonio
Discipline: Social and Behavioral Sciences and Public Health: Psychology

O-029

The Prediction of Posttraumatic Stress Symptoms and Quality of Life among Veterans who Served in Iraq and Afghanistan

Kha Lor, University of Saint Thomas
Discipline: Social and Behavioral Sciences and Public Health: Psychology

O-030

Many (but Not All) DTI Findings for ASD Disappear With Stringent Motion Matching

Seraphina K. Solders, San Diego State University
Discipline: Social and Behavioral Sciences and Public Health: Psychology



Student Oral Presenters Listing

Oral Session 1: Social and Behavioral Sciences and Public Health RM 20
Thursday, November 10, 5:30 p.m. - 6:45 p.m.

O-031

Investigating the Marketing Practices of Medical and Recreational Marijuana Dispensary Websites

Erin Ferguson, Spelman College

Discipline: Social and Behavioral Sciences and Public Health: Public Health and Epidemiology

O-032

Perinatal Stress, Diet and Risk of Wheezing/
Asthma in Offspring of Mexican American Women,
Feasibility and Preliminary Results

Alondra Rivera, University of Illinois in Chicago

Discipline: Social and Behavioral Sciences and Public Health: Public Health and Epidemiology

O-033

Screening of Upper Gastrointestinal Cancers in Patients with Lynch Syndrome

Laura N. Palma, Memorial Sloan Kettering Cancer Center

Discipline: Social and Behavioral Sciences and Public Health: Public Health and Epidemiology

O-034

Impact of Health Coaching on Contextualization of Care for Underserved Patients with Type 2 Diabetes

George Heredia, Jr., University of California, Irvine

Discipline: Social and Behavioral Sciences and Public Health: Public Health and Epidemiology

O-035

Hostility Attitude Affects Prevalent and Incident Diabetes Among Black Adults: The Jackson Heart Study

Tsikata Y. Apenyo, University of Portland

Discipline: Social and Behavioral Sciences and Public Health: Public Health and Epidemiology

Oral Session 1: Cell Biology RM 21
Thursday, November 10, 5:30 p.m. - 6:45 p.m.

O-037

Screening for Regulators of Quiescence in the *Drosophila* Testis Niche

Linh K. Pham, Humboldt State University

Discipline: 3. Cell Biology: Cell Biology

O-038

SIRT3 Suppresses Glutaminolysis in Breast Cancer Glutaminolysis in Breast Cancer

Stacy Mulei, University of Massachusetts Boston

Discipline: 3. Cell Biology: Molecular Imaging

O-039

Using Diffusion Weighted Imaging (DWI) Magnetic Resonance (MR) to Predict the Presence of Breast Cancer at Margins

Anan Kazi, City College of New York

Discipline: 3. Cell Biology: Molecular Imaging

O-040

Histological Confirmation of B-cell Lymphoma Infiltration in Multiple Tissues in A Mouse Model

Crystal Choi, CUNY Hunter College

Discipline: 3. Cell Biology: Molecular Imaging

Oral Session 1: Engineering, Physics and Mathematics RM 22
Thursday, November 10, 5:30 p.m. - 6:45 p.m.

O-041

Using Eye Movement Measurement and Analysis During a Reading Task to Assess the Effect of mTBI on the Saccadic System

Zoe Villamar, Virginia Commonwealth University

Discipline: Engineering, Physics and Mathematics: Bioengineering

O-042

Conjugation of Heparin to Decellularized Bone to Enhance PDGF-BB Delivery for Bone Tissue Engineering

Athenia Jones, University of Maryland, College Park

Discipline: Engineering, Physics and Mathematics: Bioengineering

O-043

Characterization and Tuning of *Xenopus laevis* Nucleolar Dynamics using the Cryptochrome 2 (Cry2-olig) Optogenetic System

Tiffany Richardson, Princeton University

Discipline: Engineering, Physics and Mathematics: Biophysics

O-044

4DMRI and Respiratory Motion Assessment for Radiotherapy Planning

Svetlana Markova, The City College of New York

Discipline: Engineering, Physics and Mathematics: Biophysics





O-045

Modeling the Effect of Smart Appliances in Energy Reduction in Residential Homes Using GridLab-D
Alicia Marshall, University Of The District Of Columbia
Discipline: Engineering, Physics and Mathematics: Mathematics

Oral Session 1: Engineering, Physics and Mathematics RM 23
Thursday, November 10, 5:30 p.m. - 6:45 p.m.

O-046

Investigation of Bonding Mechanisms between Glassy Carbon and Polyimide through Fourier Transform Infrared Spectroscopy
Kyle D. Logan, San Diego State University
Discipline: Engineering, Physics and Mathematics: Material Sciences

O-047

Formulation of pH Responsive Nanoparticles via Flash Nanoprecipitation
Raven Smith, Virginia Commonwealth University
Discipline: Engineering, Physics and Mathematics: Nanotechnology

O-048

Surface Functionalization of Cellulose Nanocrystals: Synthesis and Cytotoxicity Studies
Ambar S. Jimenez, SUNY Plattsburgh
Discipline: Engineering, Physics and Mathematics: Nanotechnology

O-049

Polyaniline Nanostructures: New Candidates for Electroresponsive Drug Delivery Systems
Nasim Eshragh Nia, University of California San Diego
Discipline: Engineering, Physics and Mathematics: Nanotechnology

O-050

Encasing Pancreatic Islets in Polycaprolactone Scaffold to Preserve Cell Function for Islet Transplantation
Gauree Chendke, University of California Santa Barbara
Discipline: Engineering, Physics and Mathematics: Nanotechnology

Oral Session 1: Microbiology RM 24
Thursday, November 10, 5:30 p.m. - 6:45 p.m.

O-051

Microbial Communities in Ashe Juniper-Dominated Soils
Amy T. Ontai, St. Edward's University
Discipline: Microbiology: Environmental Microbiology

O-052

Network and Community Analyses of Fungal Microbiomes at Wild Basin
Jacquelyn Turcinovic, St. Edward's University
Discipline: Microbiology: Environmental Microbiology

O-053

How do Humans Impact the Microbiome of a Building?
Natalie A. Vegas, Mercy College
Discipline: Microbiology: Environmental Microbiology

O-054

Investigating the Host-independent and Host-dependent Role of Estradiol on the Female Mouse Gut Microbiota
Manjot K. Nagyal, Wellesley College
Discipline: Microbiology: Environmental Microbiology

Oral Session 1: Microbiology RM 25
Thursday, November 10, 5:30 p.m. - 6:45 p.m.

O-055

Identification of Genes Involved in the Mucoicid to Nonmucoicid Conversion of a Clinical *Pseudomonas aeruginosa* 2192 Isolate
Brett Colbert, Florida International University
Discipline: Microbiology: Microbial Physiology

O-056

Interactions Between Two Human Gut Symbionts
Megan D. Smith, University of Nebraska Lincoln
Discipline: Microbiology: Microbial Physiology

O-057

Generation of a Novel Strain of *Mycobacterium Smegmatis* for the Production of The *Mycobacterium Tuberculosis* Siderophore Mycobactin T
Jing Chen, New York University
Discipline: Microbiology: Microbial Physiology



Student Oral Presenters Listing

O-058

Peptidoglycan Transmits the Surface Sensing Signal to Induce Swarming in Bacteria

Mahliyah L. Adkins-Threats, Truman State University
Discipline: Microbiology: Microbial Physiology

O-059

Internalization and Proliferation of *Staphylococcus Aureus* in Osteoblasts

Emily Goering, Washington University in St. Louis
Discipline: Microbiology: Microbial Physiology

Oral Session 2: Neuroscience **RM 13**
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-061

Elucidating the Role of *hlh-3* in the Differentiation of Sexually Dimorphic Neurons in the Nematode *C. elegans*

Carolina I. Castro, University of Puerto Rico at Mayaguez

Discipline: Neuroscience: Neurobiology

O-062

The Role of Blood-Brain Barrier Disruption and TGF- β R Mediated Albumin Uptake in Age-Related Seizure Vulnerability

Eszter Mihaly, University of California, Berkeley
Discipline: Neuroscience: Neuroscience

O-063

Correlations of Brain Metabolites with Childhood Depressive Symptoms

Adrienne Y. Jo, Claremont McKenna College

Discipline: Neuroscience: Neuroscience

O-064

The Effect of Chlorpyrifos on Mitochondrial Health in a Striatal Cell Model of Huntington's Disease

Sallaymatu Kallon, Oberlin College

Discipline: Neuroscience: Neuroscience

O-065

Caveolin-1 Mediated Signaling Highlights Sex Differences in Cocaine Drug Addiction

Jessica M. Phan, Pomona College

Discipline: Neuroscience: Neuroscience

Oral Session 2: Neuroscience **RM 14**
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-066

PPAR δ Agonists Dramatically Improve Preclinical Trial Outcomes In Huntington's Disease: Motor Behavior and Neurodegeneration

Martin Arreola, UCSD

Discipline: Neuroscience: Neuroscience

O-067

Electric Field Sensors Detect Physiological Changes in Adult Mice with Nerve Injury-Induced Neuropathic Pain

Alejandro J. Lopez, San Jose State University

Discipline: Neuroscience: Neuroscience

O-068

Examining Sleep and Core Body Temperature Parameters Before and After Stress in Male Rodents

Pamela Del Valle, University of Texas at Austin

Discipline: Neuroscience: Neuroscience

O-069

Examination of Estrous Cycle Identification Tools in Female C57BL6/J Mice

Jenny Vernet, Regis College

Discipline: Neuroscience: Neuroscience

O-070

Assessment of Behavioral Response of Bottlenose Dolphin to Unmanned Aerial Systems (UAS) of Behavioral Response of Bottlenose Dolphin to Unmanned Aerial Systems (UAS)

Brigid Maloney, Hunter College

Discipline: Neuroscience: Psychobiology

Oral Session 2: Social and Behavioral Sciences and Public Health **RM 15**
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-071

Traumatic Stress Exposure During Adolescence Increases Resilience To Fear-based Behaviors During Adulthood

Tatiana Gore, Wayne State University

Discipline: Social and Behavioral Sciences and Public Health: Psychology





O-072

The Effects of High Definition Transcranial Direct Current Stimulation (HD-tDCS) on Memory and Metamemory by Task Difficulty
Sandry M. Garcia, Brooklyn College
Discipline: Social and Behavioral Sciences and Public Health: Psychology

O-073

Romantic Attachment and Perception of Partner Motivation for Health Behavior Regulation
Natasha Villalobos, University of Texas at San Antonio
Discipline: Social and Behavioral Sciences and Public Health: Psychology

O-074

Sexual Assault among College Students Attending a Historically Black College and University
Deshawn Collington, Morgan State University
Discipline: Social and Behavioral Sciences and Public Health: Psychology

Oral Session 2: Social and Behavioral Sciences and Public Health RM 16
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-075

Investigating the Long-Term Memory Benefits of Cued Recall vs. Recognition Tests
Joshua P. Lozano, California State University, Dominguez Hills
Discipline: Social and Behavioral Sciences and Public Health: Psychology

O-076

Cumulative Exposure to Interpersonal Violence is Associated with Adolescent Girls' Expectations about Heterosexual Interactions
Lia Lewis, Wayne State University
Discipline: Social and Behavioral Sciences and Public Health: Psychology

O-078

Assessing Readability Levels of Web-Based Patient Education Material on Hereditary Breast Cancer Syndrome
Athalia L. Lopez, University of Massachusetts Boston
Discipline: Social and Behavioral Sciences and Public Health: Public Health and Epidemiology

O-079

The Role of Race in the Association between Positive Behavioral Interventions and Supports (PBIS) and Student Engagement
Christine M. Egan, University of Minnesota--Twin Cities
Discipline: Social and Behavioral Sciences and Public Health: Public Health and Epidemiology

O-080

The Association of Discrimination and Alcohol Abuse among African American Men
Jakini A. Kauba, North Carolina State University
Discipline: Social and Behavioral Sciences and Public Health: Public Health and Epidemiology

Oral Session 2: Developmental Biology and Genetics RM 18
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-081

Granulocyte Colony-Stimulating Factor (G-CSF) Promotes Spermatogenic Regeneration after High-Dose Alkylating Chemotherapy
Travis M. Kotzur, University of Texas at San Antonio
Discipline: Developmental Biology and Genetics: Developmental Biology

O-082

Role of Histone Acetyltransferases CBP and p300 in Adipogenesis
Leeza M. Santiago Millán, University of Puerto Rico, Humacao
Discipline: Developmental Biology and Genetics: Developmental Biology

O-083

Expression Profile of Novel Candidates in Neural Crest Development
Jacqueline Cely, University of California Riverside
Discipline: Developmental Biology and Genetics: Developmental Biology

O-084

Characterizing the Roles of Ezrin and Drebrin-like in Microridge Morphogenesis
Eric F. Medina, California State University, Dominguez Hills
Discipline: Developmental Biology and Genetics: Developmental Biology



Student Oral Presenters Listing

O-085

Van-Gogh-Like 2, Frizzled, and Knypek Control Distinct Aspects of Polarized Cellular Migration During Neural Convergence
Karndeeep Singh, University of Maryland, Baltimore County (UMBC)

Discipline: Developmental Biology and Genetics:
Developmental Biology

**Oral Session 2: Cell and
Developmental Biology** **RM 19**
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-036

Protein Microarray Analysis of Lysosome Positioning Machinery: Focus on BORC (BLOC-One Related Complex)

Heley M. Ong, Cornell University
Discipline: Cell Biology: Cell Biology

O-086

Quantitative Protein Analysis to Map Inner Kinetochore Assembly
Alex Chan, University of California, Los Angeles
Discipline: Developmental Biology and Genetics:
Genetics

O-087

Endothelin 3 Compensates for Lack of *alpha*-Melanocyte-Stimulating Hormone Signaling in Melanogenesis
Alexander Durango, Florida International University
Discipline: Developmental Biology and Genetics:
Genetics

O-090

Methamphetamine Mediated Mitochondrial Dysfunction and Microglial Apoptosis
Elizabeth H. Quayle, University at Buffalo
Discipline: Cell Biology: Cell Biology

**Oral Session 2: Molecular and
Cancer Biology** **RM 20**
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-088

Establishment of the Timing of Metastatic Cell Intravasation in a Mouse Model of Melanoma
Raul Torres, Jr., Florida International University
Discipline: Cancer Biology: Cancer Biology

O-089

Substrate Stiffness and Cancer-derived Soluble Mediators Contribute to the Activation and Myodifferentiation of Breast Adipose Stem Cells
Pascal Sukuru, Virginia Tech
Discipline: Cancer Biology: Cancer Biology

O-091

Validating Amyloid-Beta (A β) Large-Scale Mutational Data
Floriane Ngako Kameni, Harvard College
Discipline: Molecular and Computational Biology:
Genomics

O-092

Noninvasive Imaging Markers for Predicting Malignancy in Pancreatic Cysts
Shiana Mainarich, Hunter College
Discipline: Molecular and Computational Biology:
Bioinformatics

**Oral Session 2: Microbiology
and Immunology** **RM 21**
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-093

Studying Human T Cell Behavior In Lymphopenic Environments In Humanized Mice
Aditya Misra, Cornell University
Discipline: Immunology: Immunology

O-094

Role of Fractalkine Receptor on Retinal Pathology During Experimental Autoimmune Encephalomyelitis
Alyssa L. Arriaga, The University of Texas at San Antonio
Discipline: Immunology: Immunology

O-095

Role of OX40L-JAG1 Co-signaling in TCR Independent Treg Expansion
Patricia N. Rodriguez-Morales, University of Puerto Rico at Cayey
Discipline: Immunology: Immunology

O-112

Chemical and Stress Resistances of *Clostridium difficile*
Lina M. Jowhar, Emory University
Discipline: Microbiology: Bacteriology

O-113

Antimicrobial Activity of Tropical Spice Extracts Against *Issatchenkia orientalis* and *Escherichia coli*





O157:H7

Esther Olosoji, University of Florida

Discipline: Microbiology: Bacteriology

Oral Session 2: Chemistry RM 22
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-100

Synthesis and Characterization of Titanium(IV) Schiff Base Salen Complexes: The Importance of ⁴⁹Ti NMR Spectroscopy for Identifying Titanium(IV) Species in Solution

Tiffany J. Alfred, Norfolk State University

Discipline: Chemistry: Inorganic Chemistry

O-101

Redirecting Resins: Developing a Green Alternative to Today's Most Practical Resin

Jadah S. Clarke, James Madison University

Discipline: Chemistry: Organic Chemistry

O-102

Synthesis and Testing of ELQ 300 Prodrugs as Novel Single Dose Cure for Malaria

Romarc Mukuna, Boise State University

Discipline: Chemistry: Organic Chemistry

O-103

Fluorescence Sensing of Duplex DNA Formation by a Chemically Modified Cytidine Analogue

Kristine Claudine Teppang, San Diego State University

Discipline: Chemistry: Organic Chemistry

O-104

Synthesis of Stimuli-Response Nanomaterials as Potential Drug-Delivery Agents

Jeremy N. Shropshire, Xavier University of Louisiana

Discipline: Chemistry: Organic Chemistry

Oral Session 2: Engineering,

Physics and Mathematics RM 23

Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-105

Powering Probes in Deep Space: Validation of Electrochemical Impedance Spectra for Li-CF_x, Li-MnO₂, and Li-CF_x/MnO₂ Cell Chemistries Using Kramers-Kronig Transforms

Fernando Villafuerte, Hunter College, City University of New York

Discipline: Engineering, Physics and Mathematics: Material Sciences

O-106

A Novel Solution for Powering Our Planet: A Comparative Study of a Novel Titania Sol and a Titania Powder for the Improved Efficiency of Dye-sensitized Solar Cells

Lorne S. Joseph, University of the Virgin Islands

Discipline: Engineering, Physics and Mathematics: Material Sciences

O-107

2D Doping of Nanomaterials: Investigation of Chemical Environment and Electronic Structure Effects

Nakeshma Cassel, University of the Virgin Islands

Discipline: Engineering, Physics and Mathematics: Material Sciences

O-108

3D Aqueous Bioprinting for Scalable, Personalized Tissue Engineering

Anthony Tabet, University of Minnesota

Discipline: Engineering, Physics and Mathematics: Material Sciences

O-109

Advancements in Hydrogen Storage: A Study of ZIF-8

Daniel Mukasa, Oberlin College

Discipline: Engineering, Physics and Mathematics: Material Sciences

Oral Session 2: Microbiology and

Immunology RM 24

Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-096

Evaluating the Immunogenicity of Embryonic Stem Cell Derived Hepatoblasts (SC-Hep) and Adult Hepatocytes (AD-Hep) in a murine Transplant Model

Danielle W. Dillard, San Jose State University

Discipline: Immunology: Immunology

O-097

Type 1 Interferon and Pro-inflammatory Cytokines Reduce Heme Oxygenase-1/HO-1 Expression in Human Monocyte Derived Macrophages: Potential Role in HIV-neuropathogenesis

Rolando Garza, Jr., University of Texas at San Antonio

Discipline: Immunology: Immunology



Student Oral Presenters Listing

O-098

Development of an Anti-Oxidized Phospholipid Neutralizing Antibody as an Atheroprotective Therapeutic Agent
Valeria Flores Malavet, University of Puerto Rico at Ponce
Discipline: Immunology: Immunology

O-110

Identifying Hindgut Microbes in *Ctenochaetus striatus* and *Calotomus spinidens*: Comparing Community Composition, Function, and Identifying Genomes Through Metagenomics
Cassandra R. Harris, Savannah State University
Discipline: Microbiology: Bacteriology

O-111

The Nematode *Caenorhabditis elegans* Displays a Chemotaxis Behavior to Tuberculosis-Specific Odorants
Joseph Marsili, Northeastern Illinois University
Discipline: Microbiology: Bacteriology

Oral Session 2: Microbiology **RM 25**
Saturday, November 12, 8:00 a.m. - 9:15 a.m.

O-115

Regulation of the Cell Death by Zika Virus by Means of the BCL-2 Family Member BOK
Joselyn Landazuri Vinueza, Queens College, City University of New York
Discipline: Microbiology: Virology

O-116

Humoral Immune Response to HIV-1 gp120; Serum IgG Isotype Analysis and Avidity
Edward K. Sarfo, City College of New York, New York
Discipline: Microbiology: Virology

O-117

Were Childhood Leukemias Once Infected with Adenovirus? Comparative Examination of Cellular Gene Expression
Martine Policard, Georgia State University
Discipline: Microbiology: Virology

O-118

The Characterization of Zika Virus 5' Untranslated Region as a Regulatory Component for Translation
Sofia Romero, University of California Santa Cruz
Discipline: Microbiology: Virology

O-119

Efficient Screening of HIV-1 Mutants Resistant to Integrase Inhibitors in a Random Mutant Library
Cristian A. Ovies, DePaul University
Discipline: Microbiology: Virology



Program Highlights by Track

Community College, Undergraduates and Postbaccalaureates

Wednesday, November 9, 2016

2:00 p.m. – 2:45 p.m.

- Graduate Student Life: Perspectives of Graduate Students

3:00 p.m. – 4:00 p.m.

- Presentation Techniques: How to Make Effective Poster and Oral Presentations
- Building Your Brand Starts Now

4:15 p.m. – 4:45 p.m.

- Wrap It Up! How To Present Your Work in 5 Minutes or Less

5:00 p.m. – 6:00 p.m.

- Networking in Your Scientific Discipline (All Disciplines)
- Bringing Mentees and Mentors Together in a National Mentoring Network

Thursday, November 10, 2016

8:00 a.m. – 9:00 a.m.

- Orientation for Community College, Undergraduates, and Postbaccalaureate Students

9:15 a.m. – 10:30 a.m.

- Picking the Perfect Ph.D. Program for You/Why Choose a School with a T32
- M.D.-Ph.D. – Is It Right for Me?
- Graduate Opportunities in Public and Global Health Research
- Community College Students: Tips for Transitioning to a Four-Year Institution

8:00 p.m. – 9:30 p.m.

- Gateway to the Future: Career Paths in the Biomedical Sciences, STEM Disciplines, and Behavioral Sciences – Conversations with Scientists

Friday, November 11, 2016

2:00 p.m. – 3:00 p.m.

- Effective Personal Statement for Getting into Highly Competitive Graduate Schools and Summer Programs
- Navigating Mentoring Relationships: Discovering Essential Skills for Mentees
- Tell Your Science as a Story
- Goal Setting and Time Management

6:15 p.m. – 7:15 p.m.

- Confessions of Admission Officials: What We Look at, and for, in Graduate School Applications
- Financing Your Graduate Education
- Strategies for Taking Standardized Admissions Tests: Preparing for the GRE and MCAT Exams
- Tips for Applying to a Postbaccalaureate Program
- Being a Proactive Mentee: Taking Control of Your Research Experience

7:30 p.m. – 8:30 p.m.

- LGBTQ Mixer
- GlaxoSmithKline Mixer

Saturday, November 12, 2016

2:30 p.m. – 4:00 p.m.

- ABRCMS Professional Skills Café
- ABRCMS Wikipedia Year of Science Edit-a-thon

4:30 p.m. – 5:30 p.m.

- Blogging, Tweeting, & Writing to Promote Your Career and Diversify Science



Program Highlights by Track (continued)

Graduate Students and Postdoctoral Scientists

Wednesday, November 9, 2016

2:00 p.m. – 6:00 p.m.

- Do You Play Fair? A Workshop about Bias in Academia

2:00 p.m. – 4:30 p.m.

- Imagining and Defining the Grant that will fund your Postdoc

3:00 p.m. – 4:00 p.m.

- Building Your Brand Starts Now

5:00 p.m. – 6:00 p.m.

- Networking in Your Scientific Discipline (All Disciplines)
- Bringing Mentees and Mentors Together in a National Mentoring Network

Thursday, November 10, 2016

8:00 a.m. – 9:00 a.m.

- Enhancing Professional Skills for Scientists: Beyond the Bench

9:15 a.m. – 10:30 a.m.

- Getting Published: Advice for Graduate Students and Postdoctoral Scientists

8:00 p.m. – 9:30 p.m.

- Job Search Strategies: Effective Interviewing Skills and Job Offer Negotiation
- Gateway to the Future: Career Paths in the Biomedical Sciences, STEM Disciplines, and Behavioral Sciences – Conversations with Scientists

10:45 a.m. – 11:45 a.m.

- How We Learn ... and How We Don't

Friday, November 11, 2016

2:00 p.m. – 3:00 p.m.

- Navigating Mentoring Relationships: Discovering Essential Skills for Mentees

- Leveraging Wikipedia to Improve Science Communication Skills
- Tell Your Science as a Story

6:15 p.m. – 7:15 p.m.

- Being a Proactive Mentee: Taking Control of Your Research Experience
- Postdoc Fundamentals: Selecting a Training Experience to Match Your Career Goals

7:30 p.m. – 8:30 p.m.

- Graduate Students and Postdoctoral Scientists Networking Mixer
- LGBTQ Mixer
- GlaxoSmithKline Mixer

Saturday, November 12, 2016

2:30 p.m. – 4:00 p.m.

- ABRCMS Professional Skills Café
- ABRCMS Wikipedia Year of Science Edit-a-thon

4:30 p.m. – 5:30 p.m.

- Surviving, Striving, and Thriving, in Your Postdoc and Beyond!
- Blogging, Tweeting, & Writing to Promote Your Career and Diversify Science

Faculty, Program Directors, and Exhibitors

Wednesday, November 9, 2016

2:00 p.m. – 6:00 p.m.

- Do You Play Fair? A Workshop about Bias in Academia

2:00 p.m. – 4:30 p.m.

- Entering Mentoring: Research Mentor Training for Faculty Working with Undergraduates

5:00 p.m. – 6:00 p.m.

- State of the ASM-NSF Leaders Inspiring Networks and Knowledge (LINK) Program
- Networking in Your Scientific Discipline (All Disciplines)

Program Highlights by Track (continued)

- Bringing Mentees and Mentors Together in a National Mentoring Network

Thursday, November 10, 2016

8:00 a.m. – 9:00 a.m.

- Orientation for Judges (All 12 Disciplines)
- Enhancing Professional Skills for Scientists: Beyond the Bench

9:15 a.m. – 10:30 a.m.

- NIH Grants Management Workshop
- How We Learn ... and How We Don't

8:00 p.m. – 9:30 p.m.

- High-Caliber Research at Nonresearch Institutions: Models of Effective Undergraduate Research Programs
- Job Search Strategies: Effective Interviewing Skills and Job Offer Negotiation
- NIGMS Program Director Discussions

10:45 a.m. – 11:45 a.m.

- How We Learn ... and How We Don't

Friday, November 11, 2016

2:00 p.m. – 3:00 p.m.

- Small World Initiative™: Building Scientists One Class at a Time

- Leveraging Wikipedia to Improve Science Communication Skills
- Tell Your Science as a Story

6:15 p.m. – 7:15 p.m.

- Postdoc Fundamentals: Selecting a Training Experience to Match Your Career Goals

6:30 p.m. – 8:30 p.m.

- Reception for Speakers, Exhibitors, Judges, and Program Directors

7:30 p.m. – 8:30 p.m.

- LGBTQ Mixer
- GlaxoSmithKline Mixer
- Speaker, Program Director, Judges and Exhibitor reception

Saturday, November 12, 2016

2:30 p.m. – 4:00 p.m.

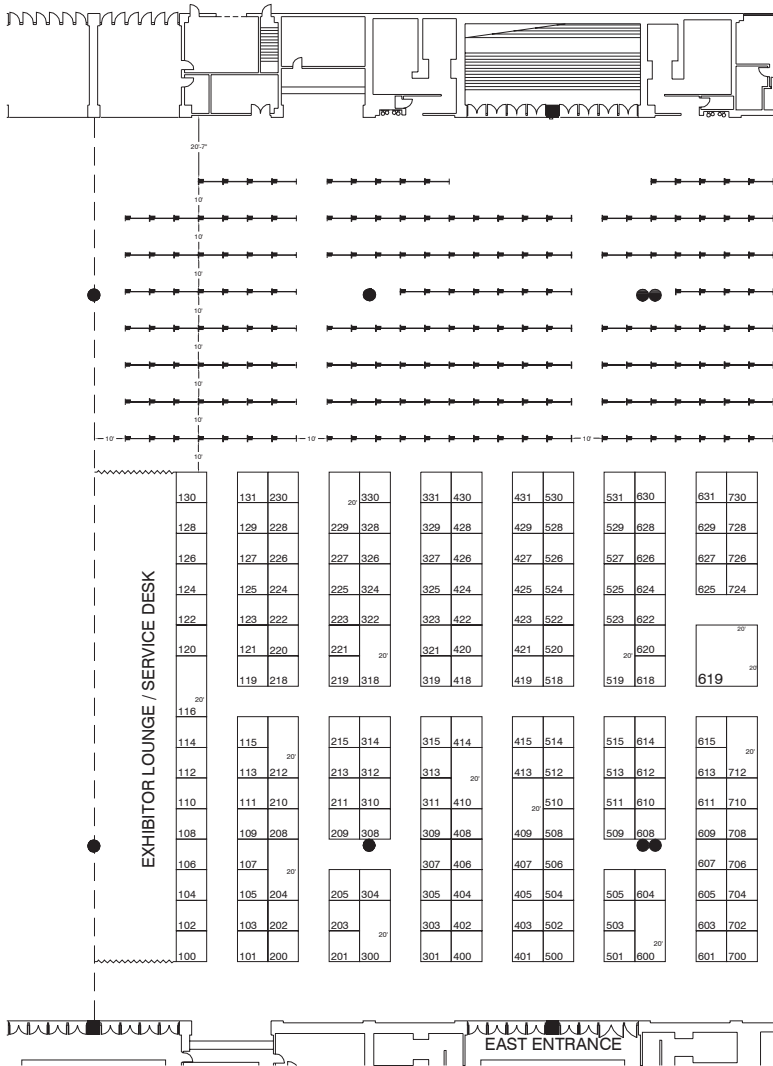
- Implementing Do You Play Fair? A Workshop About Bias in Academia
- ABCRMS Wikipedia Year of Science Edit-a-thon

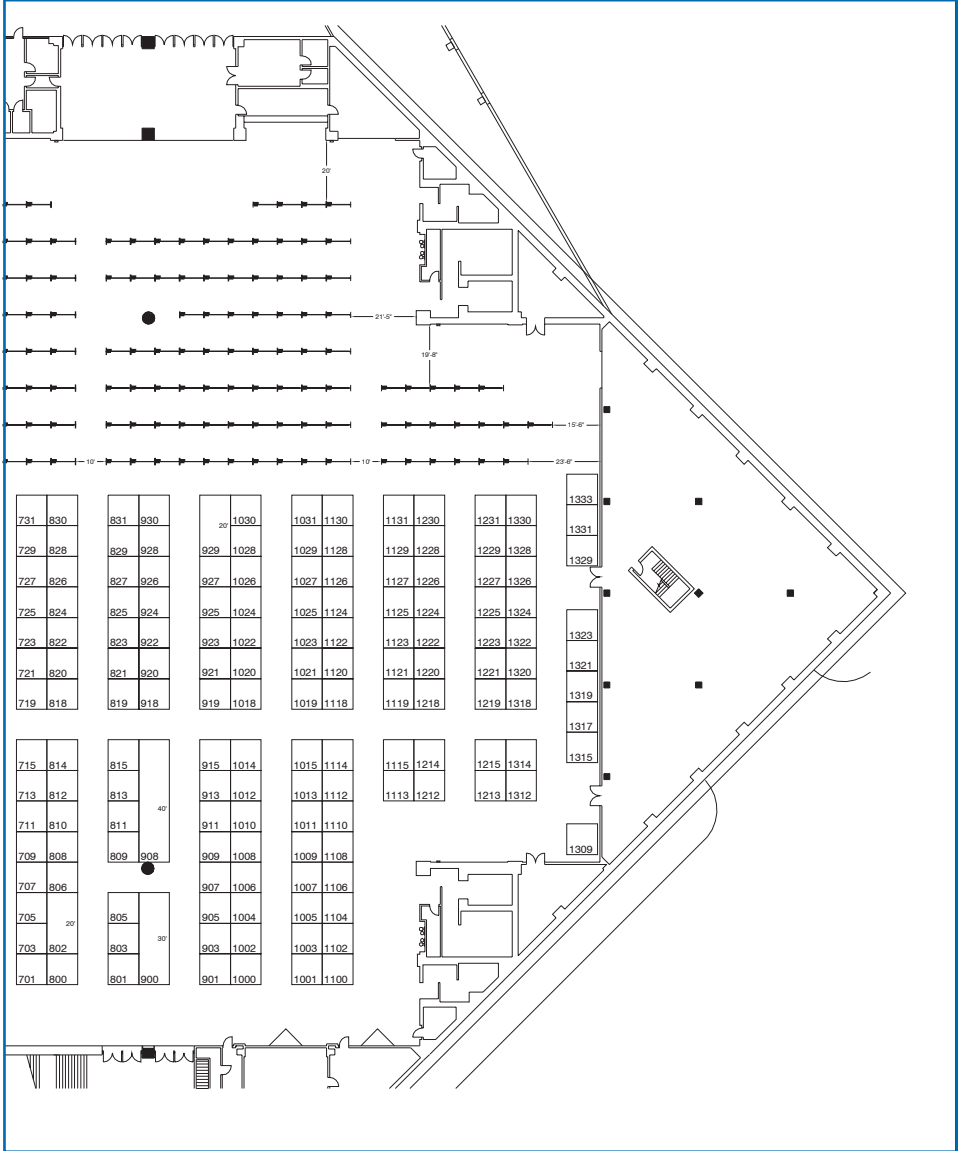
4:30 p.m. – 5:30 p.m.

- Blogging, Tweeting, & Writing to Promote Your Career and Diversify Science



Exhibit Floor Plan





Exhibitor Listing & Booth Numbers

A.T. Still University	1 220	Augusta University, The Graduate School	813
AAVMC - Association of American Veterinary Medical Colleges	1003	Baylor College of Medicine, Graduate School of Biomedical Sciences	715
Alabama College of Osteopathic Medicine	1 221	Binghamton University	1024
Albany College of Pharmacy and Health Sciences, Office of Graduate Studies	523	Biomedical Engineering Society (BMES)	911
Albert Einstein College of Medicine - Graduate Division of Biomedical Sciences	519	Biophysical Society, Committee for Inclusion and Diversity	401
American Association for Cancer Research (AACR)	1 119	Boston University Neuroscience & Boston University Bioinformatics	823
American Association for the Advancement of Science (AAAS), Education and Human Resources	328	Boston University School of Medicine, Graduate Medical Sciences	825
American Association of Anatomists	920	Broad Institute of MIT and Harvard	304
American Association of Colleges of Osteopathic Medicine (AACOM)	1 218	Brown School at Washington University in St. Louis	522
American Association of Immunologists, The	915	Brown University Graduate School/ The Leadership Alliance	1019
American Chemical Society, Department of Diversity Programs	515	Brown University Molecular Pharmacology & Physiology Graduate Program	1 330
American Heart Association/American Stroke Association, Health Equity	502	Burrell College of Osteopathic Medicine	1 222
American Physiological Society (APS)	901	Caltech - Amgen Scholars and WAVE Fellows	329
American Society for Biochemistry & Molecular Biology	701	Caltech	327
American Society for Cell Biology, The	1008	Campbell University College of Pharmacy & Health Sciences	1 115
American Society for Investigative Pathology (ASIP)	909	Case Western Reserve University	704, 706
American Society for Microbiology, Education Department	501	Case Western Reserve University, Office of Graduate Education	702
American Society for Microbiology, Membership	505	Center for Brains, Minds and Machines	308
American Society for Microbiology, Outreach	503	Chicago State University College of Pharmacy	1 329
American Society for Pharmacology & Experimental Therapeutics (ASPET)	922	Children's Hospital of Philadelphia Research Institute	826
American University of the Caribbean School of Medicine	1 21	Cincinnati Children's Research Foundation & University of Cincinnati College of Medicine	421
American Veterinary Medical Association	1 23	City College of New York, The	104
Arizona State University	1031	City of Hope, Irell and Manella Graduate School of Biological Sciences	604
Association of American Medical Colleges	1 22	City University of New York, The Graduate Center	102
Association of Biomolecular Resource Facilities	903	Cleveland Clinic Lerner College of Medicine	708
		Cold Spring Harbor Laboratory, Watson School of Biological Sciences	315



College of Medicine Medical Scientist Training Program/SUCCESS Program/Biomedical Sciences Graduate Program/Discovery PREP	222	Florida A&M University College of Pharmacy & Pharmaceutical Sciences Graduate Programs	1127
Columbia University in the City of New York	1126	Florida Consortium of Metropolitan Research Universities	130
Columbia University Medical Center, Coordinated Doctoral Program in Biomedical Sciences	400	Florida International University, University Graduate School and College of Medicine	129
Cornell Tech	506	Fred Hutchinson Cancer Research Center	1108
Cornell University, Graduate School	508	Georgetown University, Biomedical Graduate Education	525
Cornell/Rockefeller/Sloan-Kettering Tri-Institutional PhD Programs Chemical Biology; Computational Biology & Medicine	514	Georgia Institute of Technology and Emory University, Biomedical Engineering	311
D. E. Shaw Research	107	Global Health Fellows Program II, Public Health Institute	1020
Dartmouth College, Graduate Programs	705	Graduate School of Biomedical Sciences at Mount Sinai	611
Dartmouth MPH - Geisel School of Medicine	822	Gulf Coast Consortia	713
Des Moines University, Colleges of Osteopathic Medicine, Podiatric Medicine & Surgery, and Health Sciences	1224	H. Lee Moffitt Cancer Center and Research Institute	700
Drexel University	326	Harvard GSAS, Integrated Life Sciences (HILS), and T.H. Chan School of Public Health	319
Duke University, Graduate School	426	Harvard University, Biophysics, Chemical Biology & Systems Biology Programs	323
Duke University, Pratt School of Engineering	424	Harvard University, Division of Medical Sciences & MD-PhD Program	325
Duke University, School of Medicine, Doctor of Physical Therapy Program	422	Harvard University; Molecules, Cells and Organisms (MCO) PhD Training Program and John A. Paulson School of Engineering & Applied Sciences	321
Duke University, School of Medicine, Office of Biomedical Graduate Diversity	420	Higher Education Recruitment Consortium	1009
Edward Via College of Osteopathic Medicine	1225	Howard Hughes Medical Institute	500
Emory University School of Medicine/ Postdoc Ofc./FIRST Pgrm	309	Howard University, Graduate School, Office of the Dean	827
Emory University, Chemistry Program & Juris MS Program	307	Hunter College, Center for Translational and Basic Research	100
Emory University, Graduate Division of Biological and Biomedical Sciences	303	Indiana University	225
Emory University, Laney Graduate School	305	Indiana University Graduate School/ Indiana University Purdue University Indianapolis	1114
Endocrine Society	907		
Environmental Mutagenesis and Genomics Society	927		
FASEB Ink	900		
FASEB MARC Career Corner	908		
FASEB MARC Peer Mentor Pod	921		
FASEB MARC Program	905		



Exhibitor Listing & Booth Numbers

Indiana University School of Medicine Biomedical Science Graduate Programs	615	Massachusetts Institute of Technology, Biology Department	310
Indiana University-Bloomington, Department of Biology,	1112	Mayo Clinic, College of Medicine Office for Diversity	106
Institute of International Education: Fulbright U.S. Student Program & Gilman International Program	1027	Medical College of Wisconsin: Graduate School, Medical School & MD/PhD Program	405
Jackson Laboratory, The	710	Medical University of South Carolina, College of Graduate Studies	613
Johns Hopkins Bloomberg School of Public Health	612	Meharry Medical College, School of Graduate Studies and Research	726
Johns Hopkins School of Medicine MSTP /MD-PhD Program	614	Michigan State University College of Osteopathic Medicine	120
Johns Hopkins School of Nursing	612	Michigan State University, Graduate School	209
Johns Hopkins University Institute for Nanobiotechnology	1125	Midwestern University	1319
Johns Hopkins University School of Arts and Sciences	610	Morehouse College, Public Health Sciences Institute, "Project Imhotep" Summer Internship	924
Kansas City University of Medicine & Biosciences, Office of Admissions	1318	Morehouse School of Medicine	929
Kaplan Test Prep	1013	National Cancer Institute - Cancer Prevention Fellowship Program	619
Keck Graduate Institute	1331	National Cancer Institute - Center for Cancer Training	619
Keystone Symposia on Molecular and Cellular Biology, Diversity in Life Science Programs	806	National Cancer Institute - Center to Reduce Cancer Health Disparities	619
La Jolla Institute for Allergy and Immunology	1022	National Cancer Institute - Division of Cancer Epidemiology & Genetics	619
Larkin Health Sciences Institute	125	National Heart, Lung and Blood Institute, National Institutes of Health	619
Lawrence Berkeley National Laboratory	1215	National Institute of Allergy and Infectious Diseases (NIAID)	725
Lincoln Memorial University - DeBusk College of Osteopathic Medicine	1226	National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)	723
Louis V. Gerstner, Jr. Graduate School of Biomedical Sciences, Memorial Sloan Kettering Cancer Center	518	National Institute of Biomedical Imaging and Bioengineering, NIH, Division of Interdisciplinary Training	724
Loyola University Chicago, Health Sciences Division	1005	National Institute of Dental and Craniofacial Research, National Institutes of Health	114
Marian University College of Osteopathic Medicine	1219	National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)	829
Marshall University School of Medicine, Biomedical Sciences, PhD, MS, MD/PhD, Clinical & Translational Science, MS	1118	National Institute of Mental Health	619
Massachusetts Institute of Technology	312		



National Institute of Mental Health, Office of Fellowship Training	619	Penn State College of Medicine, Graduate Programs in the Biomedical Sciences	608
National Institute of Neurological Disorders and Stroke	625	Penn State University, Graduate School	212
National Institute on Alcohol Abuse and Alcoholism (NIAAA)	112	Philadelphia College of Osteopathic Medicine	1223
National Institutes of Health "One NIH"	619	Plant Science Research Network (PSRN)	925
National Institutes of Health, National Institutes of General Medical Sciences	719	Ponce Health Sciences University	1213
National Institutes of Health, Office of Intramural Training & Education	721	PreMed StAR	1007
National Research Mentoring Network	620	Princeton University	930
National Science Foundation, Graduate Research Fellowship Program (ASEE)	1326	Procter & Gamble	1015
Naval Research Enterprise Internship Program	1212	Protein Society, The	919
New York University Department of Chemistry	126	Purdue University, Graduate School	201
New York University School of Medicine, Sackler Institute	600	Rensselaer Polytechnic Institute, Office of Graduate Admissions	109
New York University Tandon School of Engineering	1029	Rice University, Graduate Studies	711
NIH - Division of Loan Repayment	619	Rockefeller University, Graduate Program in Biomedical Sciences, The	510
NIH/NIEHS, Office of Science Education & Diversity	619	Rosalind Franklin University of Medicine and Science/School of Graduate and Postdoctoral Studies	430
North Carolina Central University	218	Rosetta Commons	1129
North Carolina Central University	1309	Ross University School of Medicine & Ross University School of Veterinary Medicine	1128
North Carolina State University, The Graduate School	504	Roswell Park Cancer Institute	821
Northeastern University	1122	Rowan University School of Osteopathic Medicine	1227
Northwestern University, The Graduate School	204	Rush University	1030
Novartis Institutes for BioMedical Research, Diversity & Inclusion	300	Rutgers University, Graduate School- New Brunswick and Graduate School of Biomedical Sciences	219, 221
Ohio State University, College of Arts & Sciences, The	220	Rutgers University-Newark	1124
Ohio State University, College of Medicine, Office for Diversity and Inclusion, The	224	Saint Louis University	923
Ohio University Heritage College of Osteopathic Medicine	1321	Scripps Research Institute, Doctoral Program in Chemical and Biological Sciences, The	1102
Old Dominion University	110	SMART Scholarship for Service Program	1317
Oregon Health & Science University	1012	Society for Developmental Biology (SDB)	918
		Society of Toxicology	1021



Exhibitor Listing & Booth Numbers

St. Jude Children's Research Hospital	618	University at Buffalo (SUNY), Ph.D. Program in Biomedical Sciences (PPBS)	819
Stanford University, Office of Graduate Education, Programs and Diversity	801	University at Buffalo, State University of New York	818
STEP-UP, Children's Hospital Los Angeles	831	University of Alabama at Birmingham	712
Stony Brook University, Center for Inclusive Education	1100	University of Alabama, College of Arts and Sciences, The	1328
SUNY Downstate Medical Center, School of Graduate Studies	1110	University of Arizona, Graduate College	729
Teratology Society	913	University of Arkansas for Medical Sciences, Graduate School	404
Texas A&M Health Science Center	228	University of California, Berkeley, Division of Biological Sciences	414
Texas A&M University -Office of Graduate and Professional Studies	226	University of California, Davis, Graduate Studies	419
Texas A&M University, Chemistry	230	University of California Genomics Institute	105
Texas Chiropractic College	131	University of California, Irvine, Graduate Division	415
Texas Tech University Health Sciences Center, Graduate School of Biomedical Sciences	513	University of California, Merced, Graduate Division	103
Thomas Jefferson University, Jefferson College of Biomedical Sciences	703	University of California, Riverside, Graduate Division	101
Touro University Nevada	1320	University of California, San Diego - Graduate Division/Biological Sciences/Bioinformatics	409
Tufts University - Friedman School of Nutrition Science and Policy	1312	University of California, San Francisco	410
Tufts University, Sackler School of Graduate Biomedical Sciences	428	University of California, Santa Barbara	402
Tulane University Brain Institute	1120	University of Chicago Biological Sciences Division, The	202
Tuskegee University, Integrative Biosciences	119	University of Chicago, Pritzker School of Medicine Medical Scientist Training Program	200
UCLA David Geffen School of Medicine	407	University of Cincinnati	1231
UCLA Graduate Division	423	University of Colorado at Boulder, Colorado Diversity Initiative	728
UCLA Graduate Programs in Bioscience	403	University of Colorado Denver Anschutz Medical Campus	730
UMass Amherst, STEM Diversity Institute, Initiative for Maximizing Student Development (IMSD)	1130	University of Connecticut Health Center, Graduate Office - Farmington	1228
UNC-CH Gillings School of Global Public Health	313	University of Delaware, Biological Sciences	622
Uniformed Services University of the Health Sciences	127	University of Florida - College of Medicine- Graduate Programs	1230
Universidad Autonoma de Guadalajara, School of Medicine	800		
University at Buffalo (SUNY) School of Engineering	820		



University of Florida - Online Master's Degree in Microbiology	1314	University of Michigan Program in Biomedical Sciences (PhD)	530
University of Georgia, Graduate School	812	University of Minnesota, Biomedical Science Graduate & Undergraduate Programs	511
University of Georgia - PREP@UGA	814	University of Minnesota, Medical Scientist Training Program (MD/PhD)	509
University of Georgia - Integrated Life Sciences	815	University of Missouri – Div. of Biological Sciences & PREP Scholars Program	626
University of Health Sciences Antigua	1113	University of Missouri, Graduate Life Sciences Programs	624
University of Illinois at Chicago College of 229 Medicine GEMS-Graduate Diversity Programs		University of Nebraska Medical Center, MD/PhD Scholars Program	210
University of Illinois at Chicago, Graduate College	111	University of Nebraska-Lincoln	208
University of Illinois Bioengineering	113	University of New England College of Osteopathic Medicine	1323
University of Illinois, Graduate College	203	University of North Carolina - Charlotte, Graduate School	1026
University of Iowa, Graduate College, Biomedical Sciences, MSTP	205	University of North Carolina at Chapel Hill – Biological and Biomedical Sciences, PhD in Pharmaceutical Sciences, & MD-PhD Programs	314
University of Kansas	115	University of North Texas Health Science Center	1028
University of Kentucky, College of Medicine- MD/PhD Program/Integrated Biomedical Sciences/ Health Colleges Student Diversity Services	824	University of Notre Dame	1214
University of Louisville Integrated Programs in Biomedical Sciences	227	University of Oregon, Biology	1011
University of Maryland School of Medicine, Medical Scientist Training Program (MSTP) & Graduate Program in Life Sciences (GPILS)	1023	University of Pennsylvania School of Medicine, Biomedical Graduate Studies	830
University of Maryland, Baltimore County, Meyerhoff Graduate Fellows Program	1025	University of Pennsylvania, Chemistry	828
University of Maryland, Graduate School	223	University of Pikeville-Kentucky College of Osteopathic Medicine	1324
University of Massachusetts Medical School, Graduate School of Biomedical Sciences	1014	University of Pittsburgh and Carnegie Mellon University, MSTP	529
University of Medicine and Health Sciences (UMHS)	1106	University of Pittsburgh, Biomedical Graduate Programs	531
University of Miami, Biomedical Education	1131	University of Pittsburgh, Health Sciences Diversity	527
University of Michigan - MSTP / Pharmacy	524	University of Pittsburgh, Kenneth P. Dietrich Graduate School of Arts and Sciences	330
University of Michigan Graduate & Postdoctoral Studies	528	University of Rhode Island	128
University of Michigan PREP	526		



Exhibitor Listing & Booth Numbers

University of Rochester, MD/PhD Program & Graduate Education and Postdoctoral Affairs	727	University of Texas School of Biomedical Informatics at Houston, The	707
University of South Carolina, Biological Sciences	1121	University of Texas Southwestern Medical Center, Graduate School of Biomedical Sciences & Medical Scientist Training Program	731
University of South Florida Alfred P. Sloan Foundation Center of Exemplary Mentoring (UCEM), College of Engineering and College of Marine Science	601, 603	University of Toledo	1123
University of South Florida Departments of Cell, Microbiology, Microbiology, Molecular Biology, Integrative Biology, Chemistry, and Physics	607	University of Utah	1229
University of South Florida Ph.D. Program in Integrated Biomedical Sciences	605	University of Virginia, Biomedical Sciences	418
University of Southern California	406	University of Washington - PREP & Bioengineering	810
University of Southern California - Neuroscience Graduate Program	331	University of Washington, Department of Biology, Department of Biochemistry, Biological Physics, Structure and Design	808
University of Southern California, Keck School of Medicine	408	University of Washington, Medical Scientist Training Program (MD/PhD) and Genome Sciences	811
University of Tennessee/Graduate Division of Science, Biological and Biomedical Sciences/"Program for Excellence & Equity in Research" Graduate Scholars IMSD Program	928	University of Washington, Molecular & Cellular Biology	1108
University of Texas at Arlington, The	116	University of Washington, School of Public Health	809
University of Texas at Austin, Cellular and Molecular Biology	1315	University of Wisconsin - Madison, Bioscience Graduate Programs	215
University of Texas at San Antonio, The Graduate School	1001	University of Wisconsin - Madison, Cellular & Molecular Biology Graduate Program	213
University of Texas Graduate School of Biomedical Sciences at Houston, Admissions, The	1018	University of Wisconsin - Madison, STEM	211
UT Health Science Center at San Antonio, Office of Postdoctoral Affairs	425	UW Medicine: Molecular Medicine and Mechanisms of Disease (M3D) PhD Program & School of Public Health	809
UT Health Science Center, School of Medicine	427	Van Andel Institute Graduate School	609
UT Health Science Center at San Antonio, MD/PhD Program	429	Vanderbilt University Graduate Program in Chemistry	803
UT Health Science Center at San Antonio, Graduate School of Biomedical Sciences	431	Vanderbilt University Medical Scientist Training Program, Office of Biomedical Research Education and Training, School of Medicine Office for Diversity Affairs	802
University of Texas Medical Branch, Graduate School of Biomedical Sciences	709	Vanderbilt University School of Engineering	805
		Vermont Genetics Network and Vermont EPSCoR	1010
		Virginia Commonwealth University, School of Medicine/Graduate Education Program	1104



Virginia Tech Genetics, Bioinformatics, Computational Biology, and Biochemistry	627	Weill Cornell Graduate School of Medical Sciences	301
Virginia Tech PREP & IMSD Program- Ball State University Department of Psychology	629	Weill Cornell Medicine Healthcare Policy and Research	1333
Virginia Tech TBMH PhD Program/ Virginia Tech Carilion School of Medicine	630	Weill Cornell/Rockefeller/Sloan Kettering, Tri-Institutional MD-PhD Program	512
Virginia Tech, Multicultural Academic Opportunities Program	631	West Virginia University Health Sciences Center	926
Virginia Tech-Wake Forest School of Biomedical Engineering and Sciences	628	Western Michigan University Homer Stryker M.D. School of Medicine	124
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ABRCMS Feedback Survey

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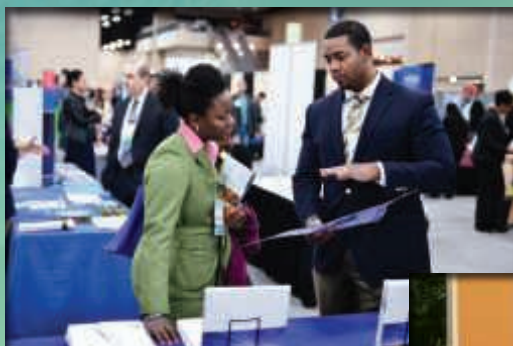
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"ABRCMS has been an amazing opportunity for me to connect with and advise undergraduate students in the sciences. My goal was to inspire students to continue to pursue their endeavors in science and to have the confidence and tact to position themselves as excellent graduate school and medical school applicants and once accepted to take advantage of opportunities and excel at the graduate level."



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Funded by a grant from the
National Institute of General
Medical Sciences of the National
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