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The Experimental Biology Management
Office is located at 9650 Rockville Pike,
Bethesda, MD 20814-3998
Tel: 301-634-7010; Fax: 301-634-7014
Email: management@experimentalbiology.org

www.experimentalbiology.org
Experimental Biology is the annual meeting of six societies comprising of more than 14,000 scientists and 50 guest societies. Primary focus areas include anatomy, biochemistry and molecular biology, investigative pathology, nutrition, pharmacology, and physiology. EB 2017 is open to everyone with interest in the latest research impacting life sciences. Attendees represent scientists from academic institutions, government agencies, non-profit organizations and industry.

This multidisciplinary, scientific meeting features plenary and award lectures, workshops, oral and posters presentations, on-site career services and exhibits spotlighting equipment, supplies and publications required for research labs and experimental study.

EXPERIMENTAL BIOLOGY 2017 OFFERS:

- Access to 6 collective society meetings in one location with one registration fee
- More than 50 concurrent scientific sessions open to all attendees featuring the latest in life sciences disciplines
- Opportunity to meet representatives from over 300 companies on the exhibit floor
- Over 5,000 poster presentations in 4 days of poster sessions
- More than 90 award programs and travel funding opportunities, plus poster competitions (awards vary by society)
- On average, sixty-five countries represented annually creating a diverse audience
- New! EB Welcome Reception!
## Schedule at a Glance

### Saturday April 22
- **9am** Individual Society Programming
- **9am** Career Center Satellite Sessions
- **7pm** Tang Prize Award Lecture

### Sunday April 23
- **7am** Individual Society Programming
- **1pm** Career Center Sessions
- **3pm** Poster Viewing *(presentation times vary)*
- **4pm** Exhibits Open
- **3pm** Young Experimental Scientist (Y.E.S.) Mixer
- **7pm** EB Welcome Reception *(all societies)*

### Monday April 24
- **7am** Individual Society Programming
- **8am** Career Center Sessions
- **4pm** Poster Viewing *(presentation times vary)*
- **4pm** Exhibits Open

### Tuesday April 25
- **7am** Individual Society Programming
- **8am** Career Center Sessions
- **4pm** Poster Viewing *(presentation times vary)*
- **4pm** Exhibits Open

### Wednesday April 26
- **8am** APS, ASIP and ASPET Programming
- **6pm** Career Center Satellite Sessions
- **1pm** Poster Viewing and late breaking abstracts *(presentation times vary)*

*Check individual society websites*

### Check Out the Tang Prize Award Lecture
**Speaker:** Emmanuelle Marie Charpentier  
**Talk:** The bacterial CRISPR-Cas9 system: a game changer in genome engineering

www.experimentalbiology.org
Affixed by stunning Lake Michigan and decorated with inspiring architecture, Chicago is more than just a big city. Besides its striking downtown area, which includes some of the tallest buildings in the world, Chicago has a distinctive coastline, hundreds of vibrant parks and 77 unique neighborhoods. It is this truly distinctive mix of incredible attractions and cultural allure that make Chicago one of the friendliest, most livable cities in America.

Chicago has developed a reputation as a must-visit destination for diners. In fact, Chicago is one of only three cities in the country to have its culinary chops rated by the prestigious Michelin Guide. With incredible shopping on The Magnificent Mile, world premiere performances in its famed Theater District and one of the country’s most active nightlife scenes, this city is always buzzing. Chicago also vaunts more than 60 museums, five regional Tony Award-winning theaters and, no matter the season, there's always a professional sports team to cheer to victory.

Situated squarely in the center of the country and equipped with two major, international airports, getting to Chicago is easy. Once you arrive, you’ll be able to choose from more than 38,000 hotel rooms in the downtown area alone. From sleek downtown properties to luxury boutiques, you will discover outstanding accommodations for every style and budget.

Millennium Park, deep dish pizza and Wrigley Field are all compelling enough reasons to visit Chicago, but the city’s most endearing quality is its people. Chicago’s neighborhoods represent more than 100 countries and it is through this diversity and profound city culture that we are able to develop the country’s best restaurants, theaters and museums. Enjoy your visit to Chicago. We hope to see you again soon.

Visit ChooseChicago.com for more information.
AWARDS AND TRAVEL FUNDING

Deadlines vary by society. Details and award application forms are available on the websites noted below.

**ANATOMY:**

**PHYSIOLOGY:**
Visit [www.the-aps.org](http://www.the-aps.org)

**BIOCHEMISTRY:**
Visit [www.asbmb.org/meeting2017/travelawards](http://www.asbmb.org/meeting2017/travelawards)

**PATHOLOGY:**
Visit [www.asip.org/awards](http://www.asip.org/awards)

**NUTRITION:**
Visit [www.nutrition.org/awards](http://www.nutrition.org/awards)

**PHARMACOLOGY:**
Visit [www.aspet.org/awards](http://www.aspet.org/awards)

**FASEB-MARC PROGRAM:**
Visit [www.faseb.org/travelawards](http://www.faseb.org/travelawards)

Almost 1 million dollars in travel awards are provided each year to attend EB.

Award deadlines and eligibility vary. Please visit each society’s website for details.

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<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tr>
<td>Undergraduates</td>
<td>11%</td>
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<tr>
<td>Trainees (Graduate Students &amp; Postdocs)</td>
<td>68%</td>
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<tr>
<td>Faculty</td>
<td>15%</td>
</tr>
<tr>
<td>Others</td>
<td>6%</td>
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</table>

Additional prizes are available through society poster and oral presentation competitions. Apply separately to each society.

Submit your abstract to EB by November 17th to be eligible for many of these awards!
**REGISTRATION/HOUSING**

**Registration**

Register by February 23, 2017 to receive the discounted registration fee. Complete instructions are on the website at [www.experimentalbiology.org](http://www.experimentalbiology.org).

The registration fee includes entrance to scientific sessions, exhibits, an online PDF of the program and mobile app. The abstracts will be published online as part of The FASEB Journal. Paper copies will not be available. Registration fees do not include abstract submission fees or membership dues.

You can register as follows:
- Online at [www.experimentalbiology.org](http://www.experimentalbiology.org)
- Mailed and faxed registration forms will only be accepted until February 23, 2017. Several societies have planned special activities that require a fee in addition to the Experimental Biology 2017 registration fee. Details on the activities and how to register for these activities are included on pages 6-7.

*Graduate Student Registration:* You must have a department head or research advisor certify your student eligibility. If registering online, enter the name and email address of your department head. If registering at the meeting, bring your ID card or a letter signed by your department head. "Student" will be indicated on your badge. Postdoctoral fellows, hospital residents, interns and laboratory technicians do not qualify as students.

**Undergraduate Students:** Registration will be accepted in advance. To receive your badge on-site, bring a student ID card or a letter signed by your department head, research advisor or teacher.

**Postdoctoral Trainee:** Trainees have obtained their doctoral degree within the last five years and are currently enrolled in a postdoctoral trainee program.

**High School Teachers and High School Students:** You must be a certified High School Teacher currently teaching High School students. You do not qualify for this category if you are currently teaching at a University or a Hospital. Credentials or a letter from the school principal will need to be provided on-site to receive your badge. High School Students should bring a student ID card or a letter signed by your teacher to receive your badge.

**ALL REGISTRANTS – PLEASE NOTE:** NO MATERIALS WILL BE MAILED IN ADVANCE. NO PRINTED PROGRAM WILL BE DISTRIBUTED.

<table>
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<th>EB Registration Fees</th>
<th>On or Before February 23, 2017</th>
<th>After February 23, 2017</th>
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<tr>
<td>Host/Guest Society Member</td>
<td>$420</td>
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<tr>
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<td>1-Day Nonmember</td>
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<tr>
<td>****High School Teachers and High School Students</td>
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<td>Free</td>
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</table>

You will not receive your badge prior to the meeting. There will be on-site kiosks set up to print your badge upon your arrival at the meeting. **NEW IN 2017!** Printed programs WILL NOT be distributed. Program information will be available online prior to the meeting for individual downloading. You should also plan to download the meeting app prior to arriving.

**On-site Registration:** On-site registration will be available at McCormick Place beginning Friday, April 21, continuing through Wednesday, April 26.

**Cancellation and Refunds:** The registration receipt and a letter requesting a refund of the registration fee must be received by March 23, 2017. A $50 non-refundable processing fee will be deducted from the refund. After March 23, 2017 no refunds will be issued. Mail to: Experimental Biology 2017 Registration Office, 9650 Rockville Pike, Bethesda, MD 20814-3998.

**Press Registration**

Complimentary registration is available for qualified press to cover EB2017. Pre-registration for members of the media and freelance writers is encouraged. Please visit [www.experimentalbiology.org/2017/About-EB/Press.aspx](http://www.experimentalbiology.org/2017/About-EB/Press.aspx) to view our full press credentials policy and learn about the registration process.

**Hotel Information**  
Deadline for hotel reservations: March 31, 2017

A list of participating hotels with locations, shuttle information, discounted rates, amenities and instructions for making a reservation are online at [www.experimentalbiology.org](http://www.experimentalbiology.org). Be sure to read the information on the importance of staying at an EB official hotel. Experient Inc. is the only official housing provider for the Experimental Biology meeting.
TICKETED EVENTS

New in 2017! EB Welcome Reception
Saturday, April 22, 7:00 pm – 8:30 pm
Join fellow attendees for our first-ever, inter-disciplinary meet and mingle. Appreciate the power and energy of the EB Meeting as all career levels come together for fun and networking. Light refreshments will be served. Member-attendees receive one complimentary drink ticket when they sign up for the event during EB Meeting registration. Cash bar also available.

The following special Society activities have been planned and require a fee in addition to the Experimental Biology 2017 registration fee. If you plan to attend any of these activities, please note where and how to register.

AAA Closing Awards Ceremony & Reception – Tuesday, April 25
Join the American Association of Anatomists at the Closing Awards Ceremony on Tuesday, April 25, 2017. The Awards Ceremony is from 7:00 p.m. to 10:00 p.m. at the Hilton Chicago and will feature a cocktail reception, dinner, & presentation of AAA awards. Tickets are $70 and will be available for purchase online via the AAA Website (www.anatomy.org). Limited amount of tickets will be available on-site.

APS Closing Party
Wednesday, April 26, 2017, 7:00 p.m. to 10:00 p.m. in the Hyatt Regency McCormick Place. Tickets are $30 in advance and $40 onsite. The closing party will include live bands GI Distress and the winner of the battle of the band. ADMISSION IS BY TICKET ONLY

Please sign up for this event when registering for the meeting by checking the boxes on the registration form.

ASBMB Presents a Day of Development for Graduate Students and Postdoctoral Fellows
Saturday, April 22nd, 8:30 a.m. – 4:30 p.m.
Details at www.asbmb.org/meeting2017
Sign up during EB meeting registration (limited space). $25, ASBMB Members, $35, all other EB registrants
Events include career panel, workshops, speakers luncheon and networking.

XVIIth Annual Workshop on Graduate Education in Pathology: PhD Workforce
Saturday, April 22, 2017 at 11:45 AM
$10 for ASIP Members
$20 for Non-Members

Committee for Career Development & Diversity Workshop and Breakfast: Developing Your Personal Brand for Career Success
Sunday, April 23, 2017, at 7:00 AM
$10 for ASIP Members
$20 for Non-Members
XVIth Annual ASIP/AAA Career Development and Mentoring Program and Lunch: Developing Your Core Message: An Interactive Session on Crafting an Effective Elevator Speech
Sunday, April 23, 2017 at 11:45 AM
*ASIP Trainee members and AAA Student Members will receive a complimentary ticket*
$10 for ASIP Members
$20 for Non-Members

Scientific Interest Group Networking Sessions and Poster Discussions
Tuesday, April 25, 2017 at 5:30 PM
FREE FOR ALL ATTENDEES
Please sign up for these events when registering for Experimental Biology by checking the boxes on the registration form.

ASN on Demand
Purchase access to the ASN at Experimental Biology 2017 sessions via ASN on Demand. Slide-synced audio or podcasts can be accessed at your convenience on your computer or mobile device 24/7. Sessions offered are subject to permission by the presenter.
Advance Purchase: $100 • Post-Meeting: $350

ASN Emerging Leaders Poster Competition
Saturday, April 22
Poster viewing is free of charge. Advance registration is advised.

ASN Opening Session
Sunday, April 23 at McCormick Place Ballroom S100.
Session is free of charge. Advance registration is advised.

ASN Presidential Symposium
Sunday, April 23 at McCormick Place Ballroom S100.
Chair: Marian L. Neuhouser, PhD, President, American Society for Nutrition
Session is free of charge. Advance registration is advised.

ASN Awards Ceremony
Sunday, April 23 at McCormick Place Ballroom S100.
Ceremony is free of charge. Advance registration is advised.

Fellows, 50-Year Members, and Past Presidents Luncheon
Monday, April 24 at the Hilton Chicago
Join ASN in celebrating the accomplishments and achievements of our past and present Fellows, 50-Year members, and former society presidents over lunch at the annual meeting. This luncheon will include a presentation honoring the newly inducted class of 2017 ASN Fellows. All members are invited to attend; guests are permitted.
* All newly inducted Fellows will receive two complimentary tickets.
$25 for ASN Members • $50 for NonMembers

ASN Sunrise Boot Camp
Sunday, Monday & Tuesday Mornings
Join your fellow EB attendees for an early morning workout with ASN. You’ll feel better all day!

Please sign up for these activities when registering for Experimental Biology by checking the boxes on the registration screen.
ABSTRACT INFORMATION & USING THE TOPIC CATEGORIES

Abstract Deadline: Thursday, November 17, 2016
Abstracts not received by November 17, 2016 are considered late breaking.

Abstract Processing Fee: $65
Before you submit your abstract, please read the Rules and Guidelines for Abstract Submission at www.experimentalbiology.org

The topic that you select from the topic category list determines which society receives and programs your abstract. Therefore, it is important that you review the society topic categories on pages 10-31 or at www.experimentalbiology.org before submitting your abstract. Please follow the guidelines below.

Help us program your abstract correctly
Each society has its own list of topics. You may choose a topic from any society listing. Please begin by searching for all related topic categories on pages 10-31 or at www.experimentalbiology.org.

Remember which society is programming your abstract
Your abstract will be received and programmed by the society that lists your topic choice.

Each society uses a different programming method – your abstract may go to a program committee or to a session chair.
Knowing which society is programming your abstract makes follow-up easier.

Indicate your preference for oral or poster presentation
While the programming society makes the final decision about whether you will make an oral or poster presentation, it is important to indicate your preference on the submission form.
For all societies, abstracts not selected for oral presentation will be programmed as posters. For APS, ASBMB, and ASPET all abstracts selected for oral presentation must also be presented as posters.
Submitting to a minisymposium or featured topic is not necessarily an automatic request for oral presentation. You may request a poster presentation when submitting to a minisymposium or featured topic.
AAA hybrid symposia and platform sessions (formerly called minisymposia) are only oral presentations. Abstracts not selected will be programmed as posters.

Important Procedural Information

The abstract fee is NOT your registration fee and NOT your society membership fee.
In addition to submitting your abstract, you must register for the meeting.
After submitting your abstract, you must submit a separate application if you wish to apply for any of the Society awards and follow the process required by the society.
The complete Call for Abstracts and general information is available at www.experimentalbiology.org
Read the Scientific Integrity Policy on page 9.
SCIENTIFIC INTEGRITY POLICY
for Submission of Abstracts to the Experimental Biology (EB) Meeting

The EB Scientific Integrity Policy for Submission of Abstracts is based on recommendations from the Uniform Requirements for Manuscripts Submitted to Biomedical Journals, the Council of Science Editors White Paper on Promoting Integrity in Scientific Journal Publications, and the US Department of Health and Human Services’ Office of Research Integrity.

EB host societies expect all authors to comply with generally accepted standards to avoid scientific misconduct. For more information, please see Scientific Misconduct at www.experimentalbiology.org/2017/Abstracts.aspx.

Abstract Peer Review
All abstracts submitted to EB for possible publication and presentation at the conference will undergo a review process by the host societies prior to publication in The FASEB Journal. (Please note: The FASEB Journal’s editors and editorial board play no role in the review of EB abstracts, and the review of EB abstracts is the responsibility of the host societies.) The goal of abstract review is to be inclusive of quality science without compromising scientific integrity. Each host society has developed a procedure for reviewing abstracts and has the general authority to reject an abstract as part of the review process. Both authors and reviewers are expected to take their roles seriously, as detailed below. For information about the abstract review process, please see Reviewer Conduct at www.experimentalbiology.org/2017/Abstracts.aspx.

Author Conduct

General Authorship Guidelines. Authorship is defined as 1) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; 2) drafting the abstract or revising it critically for important intellectual content; and 3) final approval of the version to be published. Authors should meet conditions 1, 2, and 3. Submission of an abstract to EB constitutes a commitment by the author(s) to scientifically defend their work in the format (poster, oral presentation, or both) assigned by the host society. Failure to do so, if not justified, may result in a notice of retraction in The FASEB Journal or may jeopardize future acceptance of abstracts.

NEW!
The following abstract withdrawal policy applies to all volunteered abstracts successfully submitted to the Experimental Biology Meeting.

- For the complete EB Abstract Withdrawal Policy, including schedule of withdrawal deadlines and applicable fees, visit: www.experimentalbiology.org.
- Programmed work will be defended in person by the first/presenting author at the officially programmed date/time.
- In the case of illness, family emergency, change of employment or inability to obtain a travel visa, it is appropriate to identify a co-author or colleague to present in your stead.
- Revisions to a submitted abstract are allowed up to the submission deadline, November 17, 2016.
- Under rare circumstances, a request for abstract withdrawal may be required. In such a case, the withdrawal request must be made using the online request form, accessed by logging into the EB abstract submission system. Do NOT email the programming society directly.
- Abstracts withdrawn prior to publication cannot be presented nor will the abstract be published.
Abstract Topics – Anatomy

Oral presentations will be selected from the submitted abstracts. Abstracts not selected for oral presentations, will be programmed as poster presentations.

AAA travel award applicants must submit an abstract as first author to an AAA topic category by the November abstract deadline. Complete travel award information is found at [http://www.anatomy.org/travel-awards.html](http://www.anatomy.org/travel-awards.html)

### Poster Topics

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<th>ANATOMY</th>
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<tbody>
<tr>
<td>7001-AAA</td>
<td>Anatomy: Animal Models</td>
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<tr>
<td>7002-AAA</td>
<td>Anatomy: Gastrointestinal</td>
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<tr>
<td>7003-AAA</td>
<td>Anatomy: Cardiovascular</td>
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<tr>
<td>7004-AAA</td>
<td>Anatomy: Form &amp; Variation</td>
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<td>7005-AAA</td>
<td>Anatomy: Functional Anatomy &amp; Biomechanics</td>
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<td>7006-AAA</td>
<td>Anatomy: Respiratory</td>
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<td>Anatomy: Neural</td>
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<td>Anatomy Education: Clinical Based Approaches</td>
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<td>Anatomy Education: Technology-Assisted Learning</td>
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<td>7017-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Anatomy &amp; Morphology</td>
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<tr>
<td>7018-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Craniofacial</td>
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<tr>
<td>7019-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Development</td>
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<tr>
<td>7020-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Evolution &amp; Anthropology</td>
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<tr>
<td>7021-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Exercise, Biomechanics; Bioengineering</td>
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<tr>
<td>7022-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Molecular Mechanisms</td>
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<td>7025-AAA</td>
<td>Cardiovascular Biology: Anatomy &amp; Morphology</td>
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<tr>
<td>7026-AAA</td>
<td>Cardiovascular Biology: Angiogenesis; Lymphangiogenesis; Vasculogenesis</td>
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<tr>
<td>7027-AAA</td>
<td>Cardiovascular Biology: Bioengineering, Repair &amp; Regeneration</td>
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<td>7028-AAA</td>
<td>Cardiovascular Biology: Dysfunction; Disease; Genetic Disorders</td>
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<td>7029-AAA</td>
<td>Cardiovascular Biology: Development &amp; Growth</td>
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<td>7030-AAA</td>
<td>Cardiovascular Biology: Imaging, Computer Modeling, 3D Reconstruction</td>
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<td>7031-AAA</td>
<td>Cardiovascular Biology: Sex &amp; Gender Related Differences</td>
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<td>Cell Biology: Signaling &amp; Molecular Biology</td>
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<td>Imaging: Computational Biology</td>
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| 7056-AAA | Muscle: Stem Cells & Regeneration      |

<table>
<thead>
<tr>
<th>7057-AAA</th>
<th>NEUROBIOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>7058-AAA</td>
<td>Neurobiology: Behavior; Neuropsychiatric Disorders; Disease; Aging</td>
</tr>
<tr>
<td>7059-AAA</td>
<td>Neurobiology: Brain</td>
</tr>
<tr>
<td>7060-AAA</td>
<td>Neurobiology: Development</td>
</tr>
<tr>
<td>7061-AAA</td>
<td>Neurobiology: Neural Cell Biology</td>
</tr>
<tr>
<td>7062-AAA</td>
<td>Neurobiology: Neuronal &amp; Spinal Cord</td>
</tr>
<tr>
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<td>Degeneration, Repair &amp; Regeneration</td>
</tr>
<tr>
<td>7063-AAA</td>
<td>Neurobiology: Neuroprotection &amp; Neuroimmunology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7064-AAA</th>
<th>STEM CELLS, TISSUE ENGINEERING &amp; REGENERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>7065-AAA</td>
<td>BUILDING THE BRIDGE: CONNECTING PRIOR KNOWLEDGE TO NEW KNOWLEDGE</td>
</tr>
</tbody>
</table>

Platform & Hybrid Symposium Topic Sessions (oral presentations)

Abstracts submitted to the following topics will be considered for an oral presentation in either a hybrid or platform session. Submitting to one of these categories does not guarantee an oral presentation. A hybrid symposium includes an invited talk and up to (4) four 15-minute oral presentations selected from abstracts; a platform session includes (6) six 15-minute oral presentations selected from abstracts.

Anatomy Education (7010 – 7014)
Building the Bridge: Connecting Prior Knowledge to New Knowledge (7065)
Cardiovascular Biology (7003, 7023 – 7032)
Cell Biology (7033 – 7036)
Developmental Biology (7037 – 7045)
Evolution and Comparative Anatomy (7046)
Morphological Sciences
Neurobiology (7007, 7057 – 7063)
Stem Cells, Tissue Engineering & Regeneration (7064)
Cardiovascular Section

FEATURED TOPICS:
(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

1001-APS Novel Insights in Vascular Pathophysiology (Isakson/Bagher)
1002-APS Sex Differences in Obesity and Cardiovascular Disease (Belin de Chantemele/Loria)
1003-APS Carl J. Wiggers Award Featured Topic (Heusch)
1004-APS Inflammation and Immunity and Heart Disease (Halade/Thorp)
1005-APS Vascular-Mediated Mechanisms of Cognition and the Role of Exercise (Baynard)
1006-APS Immune Cells Involved in Cardiovascular Disease (Mitchell/Madhur)
1007-APS Kaley Lecture Featured Topic: The Complications of Diabetes and the Role of Inflammation: Mechanisms and Therapeutic Opportunities (Schmidt)
1008-APS Cardiovascular Control after Spinal Cord Injury (Phillips/West)
1009-APS Mitochondrial Physiology in Cardiovascular Disease (Calvert/Elrod)

POSTERS:

1015-APS Angiogenesis and vascular growth
1016-APS Blood pressure regulation
1017-APS Cardiac electrophysiology
1018-APS Cardiac function and dynamics
1019-APS Control of cerebral circulation
1020-APS Control of coronary circulation
1021-APS Diabetes, insulin resistance and obesity
1022-APS Endothelial cell biology
1023-APS Endothelial derived factors
1024-APS Extracellular matrix and cardiac remodeling
1025-APS Genetics of cardiovascular disease
1026-APS Heart failure
1027-APS Hypertension
1028-APS Microcirculation
1029-APS Myocardial ischemia
1030-APS Myocardial metabolism
1031-APS Peripheral Circulation
1032-APS Reactive oxygen species and cardiovascular injury
1033-APS Shock
1034-APS Vascular ion channels
1035-APS Vascular smooth muscle in health and disease

The Microcirculatory Society

POSTERS:

1040-APS Angiogenesis/microvascular remodeling/injury & repair
1041-APS Atherosclerosis/thrombosis/platelets
1042-APS Inflammation/leukocyte-endothelium interactions
1043-APS Instrumentation, methodology, and experimental models
1044-APS Ischemia-reperfusion/free radical biology
1045-APS Lymphatic and venular function
1046-APS Microvascular cell signaling pathways
1047-APS Microvascular development and aging
1048-APS Microvascular flow regulation/oxygen delivery/ networks
1049-APS Microvascular mechanics/hemodynamics/theology
1050-APS Microvascular pathophysiology-pharmacology, therapeutics and translational aspects
1051-APS Pericytes and Stem Cells
1052-APS Permeability/fluid & solute exchange/glycocalyx
1053-APS Tissue-microvessel interactions/extracellular matrix
1054-APS Vasomotor control: endothelium/smooth muscle/nerves

Biomedical Engineering Society

POSTERS:

1055-APS Mathematical models of organ systems, tissues or cells
1056-APS Mechatronics
1057-APS Regenerative medicine
1058-APS Tissue engineering
### Cell & Molecular Physiology Section

**FEATURED TOPICS:**  
(Note: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

<table>
<thead>
<tr>
<th>Topic ID</th>
<th>Topic Title</th>
<th>Abstract ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1065-APS</td>
<td>Cellular Mechanisms of Stress and Inflammation (Bomberger/White)</td>
<td>1075-APS</td>
<td>Cellular responses to inflammation</td>
</tr>
<tr>
<td>1066-APS</td>
<td>Ion Channels and Transporters in Health and Disease (Hamilton/Rodrigues)</td>
<td>1076-APS</td>
<td>Physiology and pathophysiology of barriers in endothelia, epithelia, and the blood brain barrier</td>
</tr>
<tr>
<td>1067-APS</td>
<td>Mechanisms and Influences on Cell Signaling (Worrell)</td>
<td>1077-APS</td>
<td>Cell migration, contractility, cytoskeleton, and adhesion</td>
</tr>
<tr>
<td>1068-APS</td>
<td></td>
<td>1078-APS</td>
<td>Prokaryotic transport, metabolism, and cell signaling in nutrition, health, and disease</td>
</tr>
<tr>
<td>1069-APS</td>
<td></td>
<td>1079-APS</td>
<td>Transporters for transmitters, nutrients, metabolites, and drugs</td>
</tr>
<tr>
<td>1070-APS</td>
<td>Ion channels, transporters and pumps in health and disease</td>
<td>1080-APS</td>
<td>pH homeostasis and acid-base transport</td>
</tr>
<tr>
<td>1071-APS</td>
<td>Signal transduction physiology: proteins, pathways and cells</td>
<td>1081-APS</td>
<td>Trafficking, membrane domains, polarity, and protein targeting</td>
</tr>
<tr>
<td>1072-APS</td>
<td>Oxidative stress, mitochondrial metabolism and redox changes in health and disease</td>
<td>1082-APS</td>
<td>Extracellular matrix, cell interactions, and tissue organization</td>
</tr>
<tr>
<td>1073-APS</td>
<td>Apoptosis, cell stress and cell death</td>
<td>1083-APS</td>
<td>Cell volume, osmoregulation, and water transport</td>
</tr>
<tr>
<td>1074-APS</td>
<td>Stem cells, cell growth, development, differentiation, and autophagy</td>
<td>1084-APS</td>
<td>Cell and molecular processes in cancer metastasis</td>
</tr>
<tr>
<td>1075-APS</td>
<td></td>
<td>1085-APS</td>
<td>Cellular response to hypoxia</td>
</tr>
<tr>
<td>1076-APS</td>
<td></td>
<td>1086-APS</td>
<td>Omic and systems biology approaches in neurodegenerative diseases</td>
</tr>
<tr>
<td>1077-APS</td>
<td></td>
<td></td>
<td>Orai and STIM proteins in calcium signaling</td>
</tr>
<tr>
<td>1078-APS</td>
<td></td>
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<td>microRNAs in health and disease</td>
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**POSTERS:**

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<thead>
<tr>
<th>Topic ID</th>
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<th>Abstract ID</th>
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</thead>
<tbody>
<tr>
<td>1070-APS</td>
<td>Ion channels, transporters and pumps in health and disease</td>
<td>1082-APS</td>
<td>Extracellular matrix, cell interactions, and tissue organization</td>
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<tr>
<td>1071-APS</td>
<td>Signal transduction physiology: proteins, pathways and cells</td>
<td>1083-APS</td>
<td>Cell volume, osmoregulation, and water transport</td>
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<td>1076-APS</td>
<td></td>
<td></td>
<td>microRNAs in health and disease</td>
</tr>
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</table>

### Central Nervous System Section

**FEATURED TOPICS:**  
(Note: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

<table>
<thead>
<tr>
<th>Topic ID</th>
<th>Topic Title</th>
<th>Abstract ID</th>
<th>Description</th>
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<tbody>
<tr>
<td>1090-APS</td>
<td>New Insights into the Role of Hypothalamic Peptides in the Control of Appetite and Energy Balance (Blevins)</td>
<td>1096-APS</td>
<td>Blood-brain barrier, brain blood flow and metabolism</td>
</tr>
<tr>
<td>1091-APS</td>
<td>Neuroglial Interactions in Health and Disease (Gulbransen)</td>
<td>1097-APS</td>
<td>Brain development and aging</td>
</tr>
<tr>
<td>1092-APS</td>
<td></td>
<td>1098-APS</td>
<td>Central nervous system: other</td>
</tr>
<tr>
<td>1093-APS</td>
<td></td>
<td>1099-APS</td>
<td>Central regulation of body fluid homeostasis</td>
</tr>
<tr>
<td>1094-APS</td>
<td></td>
<td>1100-APS</td>
<td>Central regulation of food intake and body weight</td>
</tr>
<tr>
<td>1095-APS</td>
<td>Astrocyte and neuroglial interactions</td>
<td>1101-APS</td>
<td>Cognition and behavior</td>
</tr>
<tr>
<td>1096-APS</td>
<td></td>
<td>1102-APS</td>
<td>Neuroendocrinology/neuroimmunology</td>
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<tr>
<td>1097-APS</td>
<td></td>
<td>1103-APS</td>
<td>Neuroexcitability, neurotransmission and neuroplasticity</td>
</tr>
<tr>
<td>1098-APS</td>
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<td>Neuroinflammation/neuroprotection/ischemia</td>
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<tr>
<td>1099-APS</td>
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<td>Neurotransmission and signaling molecules</td>
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</thead>
<tbody>
<tr>
<td>1095-APS</td>
<td>Astrocyte and neuroglial interactions</td>
<td>1104-APS</td>
<td>Neuroinflammation/neuroprotection/ischemia</td>
</tr>
<tr>
<td>1096-APS</td>
<td></td>
<td>1105-APS</td>
<td>Neurotransmission and signaling molecules</td>
</tr>
</tbody>
</table>

### Comparative & Evolutionary Physiology Section

**FEATURED TOPICS:**  
(Note: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

<table>
<thead>
<tr>
<th>Topic ID</th>
<th>Topic Title</th>
<th>Abstract ID</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1100-APS</td>
<td>Comparative Perspectives on Hypoxia Signaling and Tolerance (Scott)</td>
<td>1116-APS</td>
<td>Comparative metabolic physiology, biochemistry and endocrinology</td>
</tr>
<tr>
<td>1101-APS</td>
<td></td>
<td>1117-APS</td>
<td>Comparative muscle physiology, locomotion and behavior</td>
</tr>
<tr>
<td>1102-APS</td>
<td></td>
<td>1118-APS</td>
<td>Comparative osmotic, ionic, and acid-base regulation</td>
</tr>
<tr>
<td>1103-APS</td>
<td></td>
<td>1119-APS</td>
<td>Comparative neurobiology</td>
</tr>
<tr>
<td>1104-APS</td>
<td></td>
<td>1120-APS</td>
<td>Comparative nutritional physiology</td>
</tr>
<tr>
<td>1105-APS</td>
<td></td>
<td>1121-APS</td>
<td>Other comparative and evolutionary physiology</td>
</tr>
<tr>
<td>1106-APS</td>
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<td>1122-APS</td>
<td>Scholander Award Competition</td>
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<tbody>
<tr>
<td>1115-APS</td>
<td>Comparative cardiovascular and respiratory physiology</td>
<td></td>
<td>Comparative metabolic physiology, biochemistry and endocrinology</td>
</tr>
<tr>
<td>1116-APS</td>
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<td>Comparative muscle physiology, locomotion and behavior</td>
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<tr>
<td>1117-APS</td>
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<td>Comparative osmotic, ionic, and acid-base regulation</td>
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<tr>
<td>1120-APS</td>
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<td>Other comparative and evolutionary physiology</td>
</tr>
<tr>
<td>1121-APS</td>
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<td></td>
<td>Scholander Award Competition</td>
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<tr>
<td>1122-APS</td>
<td></td>
<td></td>
<td>APS Topic Categories</td>
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</table>

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Endocrinology & Metabolism Section

FEATURED TOPICS:
(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

1125-APS Central and Peripheral Mechanisms Regulating Body Weight and Glucose Homeostasis (Zsombok)
1126-APS Brown Fat vs Skeletal Muscle as Metabolic Targets: Activation of Thermogenesis or Glucose Oxidation (Symonds)

POSTERS:
1130-APS Cardiovascular endocrinology, including renin-angiotensin-aldosterone
1131-APS Gestation, fetal, and neonatal biology, including mammary gland and lactation

Environmental & Exercise Physiology Section

FEATURED TOPICS:
(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

1145-APS The Integrated Physiological Response to Heat Stress in Vulnerable Populations. (Sawka)
1146-APS Exploiting Environmental Stressors to Improve Health and Performance (Minson/Romero)
1147-APS Impact of Dairy Based Nutritional Interventions on Cardiometabolic Health (Alexander/Miller)

POSTERS:
1150-APS Acute exercise responses
1151-APS Altitude and hypoxia
1152-APS Cardiac responses to exercise
1153-APS Exercise training responses
1154-APS Exercise, health and disease

Epithelial Transport Group

(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

1170-APS Steve Hebert Lecture Featured Topic (Moeller)
1171-APS Hans Ussing Lecture Featured Topic (Klein)

POSTERS:
1175-APS Epithelial physiology and transport: CFTR
1176-APS Epithelial physiology and transport: channels
1177-APS Epithelial physiology and transport: ENaC
1178-APS Epithelial physiology and transport: exosomes

1132-APS Mitochondrial function
1133-APS Neuroendocrinology, hypothalamus and pituitary
1134-APS Obesity and satiety
1135-APS Adipocyte function and metabolism
1136-APS Pancreatic hormones and diabetes
1137-APS Reproduction and sex hormones
1138-APS Stress and trauma including adrenal gland
1139-APS Exercise, muscle protein synthesis, and bone metabolism
1140-APS Nutrition and Nutrient Metabolism, including lipids, amino acids, and carbohydrates
1141-APS Translational Endocrinology and Metabolism
1155-APS Fluid balance, blood volume regulation and trauma
1156-APS Metabolism and energetics of muscle and related tissues
1157-APS Muscle atrophy and hypertrophy
1158-APS Muscle plasticity and gene regulation/expression
1159-APS Neural control of the circulation during exercise
1160-APS Ergogenics and Detection
1161-APS Reduced gravity and hyperbaric environments
1162-APS Respiratory responses to exercise
1163-APS Responses of bone and connective tissue to exercise and inactivity
1164-APS Signaling with muscle among cells, tissues and organs
1165-APS Temperature regulation and biological timekeeping
1166-APS Vascular responses to exercise and environmental stress
1167-APS Exercise and nutrition

1179-APS Epithelial physiology and transport: ion and electrolyte transport
1180-APS Epithelial physiology and transport: microbiome
1181-APS Epithelial physiology and transport: miscellaneous transporters and channels
1182-APS Epithelial physiology and transport: Paracellular transport
1183-APS Epithelial physiology and transport: solute transport
1184-APS Epithelial physiology and transport: Tight junctions
1185-APS Epithelial physiology and transport: water transport
**Gastrointestinal & Liver Physiology Section**

**FEATURED TOPICS:**
*(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)*

- 1190-APS Autophagy: Driver of Microbiome Composition and Intestinal Homeostasis (Theiss)
- 1191-APS Cytoskeletal Proteins in GI and Liver Diseases (Snider/Toivola)

**POSTERS:**
- 1195-APS Alcoholic and nonalcoholic fatty liver diseases
- 1196-APS Barrier function and repair
- 1197-APS Effects of diet and metabolites on mucosal immunity
- 1198-APS Effects of diet on GI and liver physiology
- 1199-APS Gastric physiology and pathophysiology
- 1200-APS Gastrointestinal cancer and metastasis
- 1201-APS Gastrointestinal development
- 1202-APS Gastrointestinal motility
- 1203-APS Gastrointestinal nutrient sensors
- 1204-APS GI hormones, peptides and receptors
- 1205-APS GI and liver epithelial junctions
- 1206-APS GI and liver stem cells
- 1207-APS Growth factors, proliferation, differentiation and apoptosis
- 1208-APS Immunology and microbiology of the gut
- 1209-APS Intestinal inflammation and pathophysiology
- 1210-APS Liver physiology and pathophysiology
- 1211-APS Metal ion transport
- 1212-APS Metabolic disease: GI and liver function
- 1213-APS Microbes and nutrition
- 1214-APS Microbiome of the GI tract
- 1215-APS Nuclear receptors in the liver and GI tract
- 1216-APS Nutrient metabolism in the gut
- 1217-APS Pancreatic physiology and pathophysiology
- 1218-APS Prebiotics, probiotics and gut function

**History of Physiology Group**

**POSTERS:**
- 1220-APS History of Physiology

**Hypoxia Group**

**FEATURED TOPICS:**
*(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)*

- 1225-APS Physiological Adaptation to Hypoxia and High Altitudes (Iturriaga)

**POSTERS:**
- 1230-APS Carotid body structure and function
- 1231-APS Gene transcription and translation in hypoxia
- 1232-APS Hypoxia and ion channels, transmitters, and second messengers
- 1233-APS Intermittent hypoxia/oxidative stress
- 1234-APS Pathophysiology of hypoxia
- 1235-APS Responses to acute or chronic hypoxia exposure and altitude
- 1236-APS Integrated physiology and hypoxia

**Muscle Biology Group**

**FEATURED TOPICS:**
*(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)*

- 1240-APS Satellite Cells: External and Systemic Influences (Brooks/Dupont-Versteegden)
- 1241-APS The Hot Zone: Skeletal Muscle Changes Caused by Hyperthermia and Heat Stress (Selsby)

**POSTERS:**
- 1245-APS Aging and muscle function
- 1246-APS Calcium and muscle contractility
- 1247-APS Calcium homeostasis
- 1248-APS Cardiac muscle, physiology
- 1249-APS Contractile and regulatory proteins
- 1250-APS Excitation-contraction coupling mechanisms
- 1251-APS Heat shock proteins and muscle function
- 1252-APS Muscle chemistry and metabolism
- 1253-APS Skeletal muscle, physiology
- 1254-APS Smooth muscle, physiology/pharmacology
## Neural Control & Autonomic Regulation Section

### FEATURED TOPICS:

*(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)*

<table>
<thead>
<tr>
<th>Symposium Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1260-APS</td>
<td>Ion Channel Modulation: Contributions to Autonomic Dysfunction in Cardiovascular and Metabolic Diseases (Chen/Toney)</td>
</tr>
<tr>
<td>1261-APS</td>
<td>Neural Control of the Heart: New Tools, New Mechanisms (Chapleau)</td>
</tr>
<tr>
<td>1262-APS</td>
<td>Circumventricular Organs: A Blood-Brain Interface for Modulation of Cardiovascular and Immune Function and Fluid and Electrolyte Balance (Yao)</td>
</tr>
<tr>
<td>1263-APS</td>
<td>Epigenetic Modifications and Autonomic Regulation (Sriramula)</td>
</tr>
<tr>
<td>1264-APS</td>
<td>NCAR Young Investigator Awards (Young/Sabharwal)</td>
</tr>
</tbody>
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### POSTERS:

<table>
<thead>
<tr>
<th>Symposium Code</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>1270-APS</td>
<td>Sympathetic regulation in heart failure</td>
</tr>
<tr>
<td>1271-APS</td>
<td>Sympathetic regulation in hypertension</td>
</tr>
<tr>
<td>1272-APS</td>
<td>Sympathetic regulation in diabetes and obesity</td>
</tr>
<tr>
<td>1273-APS</td>
<td>Differences in autonomic regulation in aging or sex</td>
</tr>
<tr>
<td>1274-APS</td>
<td>Autonomic circuitry in thermoregulation or metabolism</td>
</tr>
</tbody>
</table>

## Physiological Genomics Group

### FEATURED TOPICS:

*(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)*

<table>
<thead>
<tr>
<th>Symposium Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1295-APS</td>
<td>Novel Genetic Risk Factors and Early-Pregnancy Mechanisms Contributing to Preeclampsia (Grobe/Young)</td>
</tr>
</tbody>
</table>

### POSTERS:

<table>
<thead>
<tr>
<th>Symposium Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1300-APS</td>
<td>Systems biology, computational modeling, and bioinformatics</td>
</tr>
<tr>
<td>1301-APS</td>
<td>Genetically-engineered model organisms</td>
</tr>
<tr>
<td>1302-APS</td>
<td>Genetics, genomics, gene expression, and epigenetics</td>
</tr>
<tr>
<td>1303-APS</td>
<td>Ion transport: genes and function</td>
</tr>
<tr>
<td>1304-APS</td>
<td>Non-coding RNA: miRNA, siRNA, and long ncRNA</td>
</tr>
<tr>
<td>1305-APS</td>
<td>Genetics/genomics of exercise, obesity, and diabetes</td>
</tr>
<tr>
<td>1306-APS</td>
<td>Genetics/genomics of cardiovascular and kidney disease</td>
</tr>
<tr>
<td>1307-APS</td>
<td>Renin-angiotensin system: genes and function</td>
</tr>
<tr>
<td>1308-APS</td>
<td>Functional genomics: transcriptomics, proteomics and metabolomics</td>
</tr>
<tr>
<td>1309-APS</td>
<td>Vascular disease: genes and function</td>
</tr>
<tr>
<td>1340-APS</td>
<td>Translational genomics: from model organisms to humans</td>
</tr>
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</table>
Renal Section

FEATURED TOPICS:
(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

1345-APS Renal Section Young Investigator Award Featured Topic (Pochynyuk)

POSTERS:
(NOTE: Highest scoring abstracts for the Renal Poster topic categories will be selected for oral presentation in two additional featured topics focusing on Advances in Renal Physiology)

1350-APS Diabetic renal disease
1351-APS Hormone and autacoid effects on the kidney
1352-APS Oxidative stress and hypoxia in the kidney
1353-APS Renal epithelial acid-base mechanisms
1354-APS Renal hemodynamics, glomerular filtration, and the renal vasculature

1355-APS Renal transport, trafficking, and regulation
1356-APS Kidney in hypertension
1357-APS Renal pathology, toxicology
1358-APS Renal water transport, urea transport, and countercurrent mechanisms
1359-APS Sex differences in renal function and disease
1360-APS Aging and renal function
1361-APS Nutrition, exercise and metabolic syndrome in renal function
1362-APS Omics and systems biology of renal function and disease
1363-APS Renal translational physiology
1364-APS Acute kidney injury
1365-APS Immune cells and inflammation impact on kidney function and hypertension
1366-APS Cilia in renal function

Respiration Section

FEATURED TOPICS:
(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

1370-APS Central Neuromodulation in the Control of Breathing (Garcia/Mitchell)
1371-APS Epigenetic Regulation of Lung Development, Injury, and Repair (Rogers/Tipple)
1372-APS Organelle Dysfunction in Pulmonary Vascular Disease: Mitochondria, Endoplasmic Reticulum, Lysosomes and Beyond (Shimoda/Ryan)
1373-APS Respiratory Control: Beyond the Diaphragm (Fuller/Turner)

POSTERS:

1375-APS Control of breathing: connectivity, neuromodulation and neurotransmission
1376-APS Control of breathing: chemoreception
1377-APS Control of breathing: development

1378-APS Control of breathing: integrated responses
1379-APS Control of breathing: respiratory motoneurons and muscles
1380-APS Control of breathing: respiratory plasticity
1381-APS Control of breathing: rhythm generation
1382-APS Lung physiology: airway epithelial cell biology
1383-APS Lung physiology: airway responsiveness and smooth muscle cell biology
1384-APS Lung physiology: alveolar epithelial cell biology
1385-APS Lung physiology: biophysics, surfactant and gas exchange
1386-APS Lung physiology: development and plasticity
1387-APS Lung physiology: endothelial cell biology
1388-APS Lung physiology: fluid balance
1389-APS Lung physiology: pulmonary hypertension
1390-APS Lung physiology: vascular smooth muscle cell biology, vascular regulation, and hypoxia

Teaching of Physiology Section

FEATURED TOPICS:
(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

1395-APS Innovations in Teaching Physiology (Osborne)

POSTERS:

8100-EB Computers in research and teaching
8200-EB Teaching, learning and testing in the biological and biomedical sciences
### Water & Electrolyte Homeostasis Section

**FEATURED TOPICS:**

(NOTE: if selected for inclusion in a featured topic, abstracts will be presented twice: once as a poster and once in the oral session)

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<td>Stress and Physiological Responses Throughout Life (Pollock/Taylor)</td>
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<td>Hypertension and Sodium Homeostasis-Developing Concepts (Sandberg/Gohar)</td>
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<td>New Animal Models and Their Utility for WEH Research (Palygin/Pochynyuk)</td>
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**POSTERS:**

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**ASBMB Spotlight Sessions – New in 2017!**

Submit your research to the ASBMB (topics with 2000-series numbers) and put a “spotlight” on your discoveries!

Opportunities to present short oral presentations are available Sunday through Tuesday, during the ASBMB’s afternoon series of Spotlight Sessions. We are looking for the most exciting and compelling research across the field of biochemistry and molecular biology to “spotlight” in Chicago.

Submit to an ASBMB topic category (number 2000-2324) by Nov. 17.

The Nov. 17 deadline is firm and will not be extended.

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**ASBMB Topic Categories**

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| **2240-ASBMB** CELL AND ORGANELLE DYNAMICS | **2244-ASBMB** Endoplasmic Reticulum |
| 2241-ASBMB Organelle Structure and Biogenesis | 2245-ASBMB Mitochondria in Health and Disease |
| 2242-ASBMB Vesicle Trafficking and Cargo | 2246-ASBMB Diseases of Organelle Malfunction |
| 2243-ASBMB Nuclear Dynamics | 2247-ASBMB Cytoskeletal Structure and Dynamics |

| **2260-ASBMB** GLYCANS AND GLYCOBIOLOGY | **2265-ASBMB** Microbial/Viral Glycobiology |
| 2261-ASBMB Glycan Chemistry and Structure | 2266-ASBMB Glycosyltransferases and Hydrolases |
| 2262-ASBMB Glycan Function and Control Mechanisms | 2267-ASBMB Protein-Glycan Interactions |
| 2263-ASBMB Glycans and Cell Recognition | 2268-ASBMB Glycans in Development and Disease |
| 2264-ASBMB Plant Glycobiology | 2269-ASBMB Glycan Biotechnology and Drug Development |

| **2280-ASBMB** SOCIETY FOR EXPERIMENTAL BIOLOGY AND MEDICINE (SEBM) INTERDISCIPLINARY RESEARCH | **2282-ASBMB** High Resolution Imaging in Medicine (SEBM) |
| 2281-ASBMB Organs on a Chip (SEBM) | 2283-ASBMB Nutrition Impact on Bacteria and Host Health (SEBM) |

| **2300-ASBMB** ASBMB EDUCATION AND PROFESSIONAL DEVELOPMENT | **2312-ASBMB** Improving STEM Transfer Student Success |
| 2301-ASBMB Career Development Plans and Opportunities for Undergrads, Grad Students, and Postdocs | 2313-ASBMB Interdisciplinary Education Concept Inventories |
| 2302-ASBMB Career Outlook for Hiring and Promotion in Academia | 2314-ASBMB Laboratory Courses |
| 2303-ASBMB Careers Inside Academia | 2315-ASBMB Large-Enrollment Courses |
| 2304-ASBMB Careers Outside Academia | 2316-ASBMB Learning Tools in Molecular Biology and Biochemistry Undergraduate Education |
| 2305-ASBMB Education and Professional Development – All Other | 2317-ASBMB Medical and Dental Education |
| 2306-ASBMB Engaging Students in STEM Learning | 2318-ASBMB Mentoring and Networking for Success |
| 2307-ASBMB Enrollment and Retention for STEM Students of All Backgrounds | 2319-ASBMB Mentoring Junior Faculty Towards Tenure and Promotion |
| 2308-ASBMB Expanding Undergraduate Research Opportunities | 2320-ASBMB Navigating the Academic and Employment Pipeline for Foreign STEM Students |
| 2309-ASBMB Flipping Classrooms and Research Labs | 2321-ASBMB New Tools in Online Education |
| 2310-ASBMB Graduate Education | 2322-ASBMB Undergraduate Education |
| 2311-ASBMB Handling Visa and Immigration Issues for STEM Students | 2323-ASBMB Using Electronic Tools to Revamp the Research Workspace: e-notebooks, archiving data and beyond |
| 2312-ASBMB Engaging Students in STEM Learning | 2324-ASBMB Using Social Media as a Tool for Student Success |

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### Abstract Topics - Pathology

#### 4001-ASIP Biobanking and Biorepositories

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#### 4003-ASIP Bioinformatics and Digital/Computational Pathology

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<td>Also see Immunohistochemistry, Microscopy, and Imaging</td>
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#### 4008-ASIP Blood Vessel Club™

(Please see Vascular Biology and Pathology)

#### 4009-ASIP Cardiac Pathobiology

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<td>Genetic basis of cardiac disease and development</td>
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<td>Stem/progenitor cells in cardiac pathology</td>
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#### 4019-ASIP Cell Death, Tissue Injury and Repair

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<td>Cellular responses to shear stress, stretch, and mechanical injury</td>
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<td>ER stress in cell death and survival</td>
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<td>Mitochondrial responses to cellular injury</td>
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<td>Oxidant, genotoxic, metabolic and other types of stress</td>
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<td>Ubiquitin proteasome system and ubiquitin-like proteins (SUMO, Nedd, others) in disease</td>
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#### 4029-ASIP Environmental and Toxicological Pathology

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#### 4033-ASIP Extracellular Matrix in Pathobiology

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### ASIP Topic Categories

#### 4165-ASIP PATHOBIOLOGY OF AGING
- 4166-ASIP Biolongevity
- 4167-ASIP Cell senescence
- 4168-ASIP Mitochondrial pathophysiology in aging
- 4169-ASIP Novel genetic and molecular markers of biolongevity

#### 4170-ASIP PATHOBIOLOGY OF INFECTIOUS DISEASE
- 4171-ASIP Host-pathogen immune interactions
- 4172-ASIP Host-pathogen mucosal interactions
- 4173-ASIP Innate immunity, TLRs, and pathogen recognition receptors
- 4174-ASIP Microbial pathogenesis
- 4175-ASIP Microbiota pathogenesis
- 4176-ASIP Model systems for infectious diseases
- 4177-ASIP Molecular genetics of infectious agents
- 4178-ASIP Pathobiology of organ-specific infections
- 4179-ASIP Sepsis and endotoxin
- 4180-ASIP Viral pathogenesis
- 4181-ASIP Parasitic pathogenesis
- 4182-ASIP Fungal pathogenesis

#### 4183-ASIP REGENERATIVE MEDICINE AND STEM CELLS
- 4184-ASIP Bioengineering
- 4185-ASIP Cell therapy
- 4186-ASIP Regenerative medicine
- 4187-ASIP Stem cells
- 4188-ASIP Also see NEOPLASIA

#### 4189-ASIP TRANSLATIONAL RESEARCH
- 4190-ASIP Gene therapy
- 4191-ASIP New technologies for research and diagnosis
- 4192-ASIP SNPs and genotyping

#### 4193-ASIP VASCULAR BIOLOGY AND PATHOLOGY
- 4194-ASIP Angiogenesis and vascular development
- 4195-ASIP Animal models of vascular diseases
- 4196-ASIP Atherosclerosis and restenosis
- 4197-ASIP Endothelial function and response to injury
- 4198-ASIP Extracellular matrix and proteases in vascular biology
- 4199-ASIP Extracellular particles and exosomes
- 4200-ASIP Genomics/proteomics in vascular biology and pathology
- 4201-ASIP Hemostasis
- 4202-ASIP Immune system in vascular disease(s)
- 4203-ASIP Lipid mediators and lipoproteins
- 4204-ASIP Mechano-sensing and signal transduction in the vessel wall
- 4205-ASIP Neurovascular connections/interactions
- 4206-ASIP Regulation of endothelial junctions
- 4207-ASIP Stem/progenitor cells in vascular biology
- 4208-ASIP Thrombosis, platelets and blood microparticles
- 4209-ASIP Vascular calcification
- 4210-ASIP Vascular cell biology & dysfunction in disease
- 4211-ASIP Vascular signal transduction
- 4212-ASIP Vascular smooth muscle biology
- 4213-ASIP Vascular tissue engineering
- 4214-ASIP Vasoactive molecules
- 4215-ASIP Also see NEOPLASIA
- 4216-ASIP Also see INFLAMMATION AND IMMUNOPATHOLOGY

#### 4217-ASIP VETERINARY AND COMPARATIVE PATHOLOGY
- 4218-ASIP Also see NON-NEOPLASTIC AND ORGAN PATHOLOGY
- 4219-ASIP Also see NEOPLASIA

#### 4220-ASIP EDUCATION IN PATHOBIOLOGY
Submit to an ASN topic category (5000-series number) by November 17. The November 17 deadline is firm and will not be extended.

### Aging and Chronic Disease

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### Nutrition, Neurobiology, Mood and Behavior

(Co-sponsor: Aging and Chronic Disease, Obesity, and Nutrition Translation Research Interest Sections)

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### Community and Public Health Nutrition

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<td>Policy and Systems Approaches in Community and Public Health Nutrition</td>
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### Carotenoids and Retinoids

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### Diet and Cancer

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### Dietary Bioactive Components

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### Experimental Animal Nutrition

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### Maternal, Perinatal and Pediatric Nutrition

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<td>5120-ASN</td>
<td>Relationships of Maternal Diet and Health to Lactation Performance and Infant Health</td>
<td>5126-ASN</td>
<td>Mechanisms and Tools to Assess How Nutrition Affects Physical Growth (e.g., linear growth, body composition)</td>
</tr>
<tr>
<td>5121-ASN</td>
<td>Predictors of Lactation Initiation and Duration and Interventions to Improve Lactation Success</td>
<td>5127-ASN</td>
<td>Development and Nutrition (e.g., nutrient requirements, nutrient assessment, maternal/fetal exchange, nutritional needs of preterm infants)</td>
</tr>
<tr>
<td>5122-ASN</td>
<td>Bioactive Components and Other Milk Constituents and Their Effect on the Infant</td>
<td>5128-ASN</td>
<td>Nutritional Care of Preterm Infants</td>
</tr>
<tr>
<td>5123-ASN</td>
<td>Biology of Lactogenesis, Lactation and Milk Composition</td>
<td>5129-ASN</td>
<td>Nutrition and Physical/Intellectual Disability</td>
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<tr>
<td>5124-ASN</td>
<td>Early Childhood Nutrition</td>
<td>5130-ASN</td>
<td>Prenatal Nutrient Programming in Humans</td>
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<tr>
<td>5125-ASN</td>
<td>Feeding Behavior of the Mother, Infant and Other Caregivers on Health and Disease</td>
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### Global Nutrition

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<tr>
<td>5140-ASN</td>
<td>Linear Growth and Growth Failure from Conception to Adulthood</td>
<td>5144-ASN</td>
<td>Nutrition, Infection and Inflammation</td>
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<tr>
<td>5141-ASN</td>
<td>Improving the Diets of Vulnerable Populations</td>
<td>5145-ASN</td>
<td>Measuring and Improving the Effectiveness of Nutrition Programs</td>
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<tr>
<td>5142-ASN</td>
<td>Obesity, Non-communicable Diseases and the Nutrition Transition</td>
<td>5146-ASN</td>
<td>Nutrition-sensitive and Integrated Nutrition Programs</td>
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<tr>
<td>ASN Topic Categories</td>
<td>5200-ASN</td>
<td>5202-ASN</td>
<td>5203-ASN</td>
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<tr>
<td>Medical Nutrition</td>
<td>Personalized Nutrition</td>
<td>Interventions for the Treatment and Prevention of Nutrition-Related Diseases</td>
<td>Applied Physiology, Nutrition and Metabolism</td>
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</table>

| 5201-ASN | The Microbiome and Nutrition (Co-sponsors: Nutrient-Gene Interactions RIS, Maternal, Perinatal and Pediatric Nutrition RIS, and Medical Nutrition Council) |
| 5261-ASN | Gut Microbiome and Obesity (Sponsor: Obesity RIS) |

| 5210-ASN | Evidence-Based Nutrition Education and Evaluation: Methods, Tools, and Techniques |
| 5211-ASN | Nutrition Education and Behavior Change |
| 5212-ASN | Childhood Obesity Prevention |
| 5213-ASN | Developing Healthy Eating and Physical Activity Behaviors Across the Lifespan |
| 5214-ASN | School-based Nutrition Education |
| 5215-ASN | Education and Extension |
| 5216-ASN | Nutrition Education and Technology |

| 5220-ASN | Nutrigenomics |
| 5221-ASN | Personalized Nutrition: Genetic Variations and Nutrition Requirements |
| 5222-ASN | Nutrition and the Epigenome |
| 5223-ASN | Metabolic Inflammation: The Potential Role of Nutritional Constituents |
| 5201-ASN | The Microbiome and Nutrition (Co-sponsors: Nutrient-Gene Interactions RIS, Maternal, Perinatal and Pediatric RIS, and Medical Nutrition Council) |

| 5230-ASN | Innovation and Validation of Dietary Assessment Tools and Their Applications |
| 5231-ASN | Epidemiological Research Addressing Diet and Health Outcomes |
| 5232-ASN | Nutrition and Chronic Disease Epidemiology |
| 5233-ASN | Research with Dietary Supplements and Bioactive Components |
| 5234-ASN | Advancing Nutritional Epidemiology with Public Use and Commercial Data Sets |
| 5235-ASN | Epidemiologic Methods in Examining Health Outcomes in Diverse Populations (Co-sponsor: Minority and Diversity Affairs Committee) |
| 5236-ASN | Exploring Geographic Based Methods in Nutrition Epidemiological Research |
| 5237-ASN | Childhood Nutrition Epidemiology |

| 5240-ASN | Nutritional Immunology and Inflammation |
| 5241-ASN | Nutrition and Infection |

| 5251-ASN | Food Science and Technology in Nutrition |
| 5252-ASN | Translation of Nutrition Science for Public Policy, Practice and the Consumer |
### Obesity

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>5260-ASN</td>
<td>Treatment of Obesity</td>
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<tr>
<td>5261-ASN</td>
<td>Gut Microbiome and Obesity</td>
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<tr>
<td>5262-ASN</td>
<td>Health Effects of Obesity</td>
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<tr>
<td>5263-ASN</td>
<td>Diet Composition and Obesity</td>
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<tr>
<td>5264-ASN</td>
<td>Body Composition</td>
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<tr>
<td>5265-ASN</td>
<td>Childhood Obesity: Causes, Correlations, and Treatment</td>
</tr>
<tr>
<td>5266-ASN</td>
<td>Beige Fat, Brown Fat and Obesity</td>
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<tr>
<td>5277-ASN</td>
<td>Ingestive and Physical Activity Behavior in Obesity</td>
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<tr>
<td>5278-ASN</td>
<td>Central Regulation of Obesity</td>
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<tr>
<td>5279-ASN</td>
<td>Energy Expenditure</td>
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<tr>
<td>5280-ASN</td>
<td>Adipose Tissue</td>
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<tr>
<td>5281-ASN</td>
<td>Muscle Metabolism in Obesity and Metabolic Disease</td>
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### Vitamins and Minerals

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<tbody>
<tr>
<td>5290-ASN</td>
<td>Water and Fat Soluble Vitamins and Chronic Disease</td>
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<tr>
<td>5291-ASN</td>
<td>Micronutrient Bioavailability and Antioxidant Function</td>
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<td>5292-ASN</td>
<td>Zinc</td>
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<td>5293-ASN</td>
<td>Selenium</td>
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<td>5294-ASN</td>
<td>B Vitamins and One-Carbon Metabolism</td>
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<tr>
<td>5295-ASN</td>
<td>Micronutrient Interventions</td>
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<tr>
<td>5296-ASN</td>
<td>Trace Element Transport and Homeostasis in Health and Disease</td>
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### Sports Nutrition

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<tbody>
<tr>
<td>5300-ASN</td>
<td>Nutrition, Dietary Supplements and Human Performance (Co-sponsor: Collegiate and Professional Sports Dietitians Association)</td>
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### Sustainability

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<tr>
<th>Code</th>
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<tbody>
<tr>
<td>5316-ASN</td>
<td>Factors Influencing Long-term Economic/Environmental Sustainability of the Food Supply (Co-sponsor: Global Nutrition Council)</td>
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### Education and Teaching

<table>
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<tr>
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<tbody>
<tr>
<td>5320-ASN</td>
<td>Nutrition Education in Medical and Other Professional Schools</td>
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<tr>
<td>5321-ASN</td>
<td>Nutrition Education for Practicing Clinicians</td>
</tr>
<tr>
<td>5322-ASN</td>
<td>Innovations in Undergraduate, Graduate and Medical Nutrition Education</td>
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### Policy

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<th>Code</th>
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<tr>
<td>5350-ASN</td>
<td>Innovations in Nutrition Monitoring</td>
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<tr>
<td>5351-ASN</td>
<td>Nutrition Policy Implementation and Evaluation</td>
</tr>
<tr>
<td>5024-ASN</td>
<td>Policy and Systems Approaches in Community and Public Health Nutrition</td>
</tr>
</tbody>
</table>
All accepted abstracts will receive a poster presentation slot for either Sunday, Monday, Tuesday or Wednesday.

**How to be considered for Oral Presentations**
Abstracts submitted by students and postdocs may also be considered for an oral presentation in related symposia or division platform sessions. **Topic areas with opportunities for oral presentation are marked below by * and in bold.** If selected for oral presentation, you will also be scheduled to present a poster. If your abstract is not accepted for an oral presentation, you will still be scheduled for a poster.

**How to be considered for ASPET Travel Awards**
Eligible students and postdocs must submit their work through EB to any ASPET category below AND complete the related ASPET application forms at [www.aspet.org/ASPET_Travel_Awards/](http://www.aspet.org/ASPET_Travel_Awards/).

**How to be considered for the ASPET Poster Competition**
Eligible students and postdocs must submit their work through EB to any ASPET category below AND complete the related ASPET application forms at [www.aspet.org/awards/best-presentation/](http://www.aspet.org/awards/best-presentation/).

---

**Cancer Pharmacology**
- 3000-ASPET Drug Targets in Cancer Pharmacology *
- 3001-ASPET Anticancer Drug Response *
- 3002-ASPET Cell Signaling and Cancer Therapeutics *
- 3003-ASPET Cancer Immunotherapy and Stem Cells *

**Cardiovascular Pharmacology (CVP)**
- 3004-ASPET Cardiac Pharmacology
- 3005-ASPET Vascular Pharmacology
- 3006-ASPET Cardiovascular Disease
- 3007-ASPET Cardiovascular Pharmacology – General/Other
- 3008-ASPET Cardiovascular Pathobiology of Inflammasomes *
- 3009-ASPET Perinatal Therapeutics and Cardiometabolic Disease Programming *
- 3010-ASPET Vascular Pharmacology of Hemostasis and Thrombosis *

**Cellular and Molecular Pharmacology**
- 3011-ASPET Heterotrimeric G Proteins and Effector Enzymes *
- 3012-ASPET Cell Surface Receptors (GPCRs) *
- 3013-ASPET Cell Surface Receptors (Tyrosine Kinases, Channels, Others) *
- 3014-ASPET Intracellular Targets (Nuclear Receptors, Kinases, Phosphatases, Epigenetic Modifiers) *
- 3015-ASPET CRISPR-Cas9 *

**Central Nervous System Pharmacology**
- 3016-ASPET Behavioral Pharmacology
- 3017-ASPET Drugs of Abuse
- 3018-ASPET Neuropharmacology
- 3019-ASPET Neuroprotection
- 3020-ASPET Pain Therapeutics
- 3021-ASPET Stress and Mood
- 3022-ASPET Cognitive Therapies

**Drug Discovery and Development**
- 3023-ASPET Drug Discovery and Development

---

**Key:** * Abstracts submitted by students and postdocs to poster categories marked with * may also be eligible for an oral presentation in related symposia or division platform sessions.

www.experimentalbiology.org
# Drug Metabolism and Disposition (DMD)

<table>
<thead>
<tr>
<th>Code</th>
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<tbody>
<tr>
<td>3024-ASPET</td>
<td>DMD - General *</td>
</tr>
<tr>
<td>3025-ASPET</td>
<td>DMD - Pharmacokinetics/Toxicokinetics *</td>
</tr>
<tr>
<td>3026-ASPET</td>
<td>DMD - Phase I Enzymes *</td>
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<tr>
<td>3027-ASPET</td>
<td>DMD - Phase II Enzymes *</td>
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<tr>
<td>3028-ASPET</td>
<td>DMD - Transporters *</td>
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# Pharmacogenomics and Translational Pharmacology

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<tr>
<td>3029-ASPET</td>
<td>Translational Research</td>
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<td>3030-ASPET</td>
<td>Clinical Pharmacology</td>
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<td>3031-ASPET</td>
<td>Preclinical Pharmacology</td>
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<td>3032-ASPET</td>
<td>Metabolic Pharmacology</td>
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<tr>
<td>3033-ASPET</td>
<td>Systems Pharmacology</td>
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<tr>
<td>3034-ASPET</td>
<td>Quantitative Systems / Precision Medicine *</td>
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<tr>
<td>3035-ASPET</td>
<td>Extracellular ATP *</td>
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<tr>
<td>3036-ASPET</td>
<td>Vascular Pharmacology of Hemostasis and Thrombosis *</td>
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<tr>
<td>3037-ASPET</td>
<td>Translational and Clinical Pharmacology Trainee Showcase *</td>
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# Pharmacology Education

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<td>3037-ASPET</td>
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# Toxicology

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<td>3038-ASPET</td>
<td>Biochemical/Mechanistic Toxicology</td>
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<td>3039-ASPET</td>
<td>Organ Toxicology</td>
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<td>3040-ASPET</td>
<td>Neurotoxicology</td>
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<td>3041-ASPET</td>
<td>In Vitro Toxicology</td>
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<tr>
<td>3042-ASPET</td>
<td>Epigenetics and Toxicity *</td>
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<tr>
<td>3043-ASPET</td>
<td>Inflammation and Tissue Injury</td>
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# Pharmacology – Other

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<tr>
<td>3044-ASPET</td>
<td>Pharmacology – All Other</td>
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## EB–SPONSORED ABSTRACT SESSIONS

### TEACHING POSTER SESSIONS

Recognizing that techniques and issues related to teaching and the use of computers in research and teaching cross all biomedical disciplines, EB 2017 will combine education posters from all participating societies into two special poster sessions. Although posters will be on display during exhibit hours Sunday through Tuesday, authors are required to be present at their posters during an assigned day and time for demonstration, which will be listed in the Program. Authors must prepare standard-sized posters in addition to their demonstrations.

### Computers in Research & Teaching – Topic Category 8100-EB

Demonstrate collegial (not for sale) software for research and teaching purposes. For more information, please contact Dr. Jerry Collins at 2113 Timberwood Place, Nashville TN 37215; telephone 615-243-5535 (cell); email: jerry@bothcollinses.com.

### Teaching, Learning and Testing in the Biological and Biomedical Sciences – Topic Category 8200-EB

This is for all teaching/education-related posters, regardless of discipline, that do not require a computer. Posters describing any aspect of teaching and learning in the biological and biomedical sciences should be submitted to this category. For presentations that involve a demonstration, authors are encouraged to bring the actual materials that they use for teaching.

---

*Abstracts submitted by students and postdocs to poster categories marked with * may also be eligible for an oral presentation in related symposia or division platform sessions.*
2017 Annual Meeting of the American Association of Anatomists

Please visit our website www.anatomy.org/annual-meeting-2017.html for program updates and changes.

2 Mini-Meetings

SUNDAY, APRIL 23
Applied Anatomy - Human Development and Disease Mini-Meeting

MONDAY, APRIL 24
The Evolution of Vertebrate Form and Function Mini-Meeting

Each mini-meeting will consist of feature plenary lectures plus 4-6 symposia related to the topic theme

Professional Development Symposia

❖ Is a Balanced Teaching/Research Career Fact or Fiction
❖ Work-Life Balance and Mental Health: How to Manage One without Losing the Other
❖ Storytelling and the Art of Effective Science Communication

Education & Teaching Symposia

❖ Anatomy Education Roundtable - Active Learning Approaches in Anatomy Education
❖ Building the Bridge: Connecting Prior Knowledge to New Knowledge (Hybrid) *
❖ Integrating and Assessing Anatomy & Physiology Education: What does the Educational Research Tell Us?
  AAA and APS Joint Session
❖ Preceding Professional Programs: Successful Anatomy Education in the Undergraduate Classroom
❖ So You Want to Create Digital Media for Education – Now What?
❖ Students and Faculty Discuss: How Best to Teach Anatomy in a Modern Medical Curriculum
❖ Sharing Resources for Integrated Education and Research – The Virtual Microscopy Database
  This session was funded and programmed in part by the AAA Innovations Program
❖ Using Ultrasound to Teach Cardiovascular Physiology and Anatomy  APS and AAA Joint Session

www.anatomy.org
Scientific Symposia

- Advances and Novel Approaches Illuminating Brain Development and Disorders
  Co-sponsored by Developmental Dynamics
- Anatomy in the 21st Century: Anatomical Networks and Systems Biology
  This session was funded and programmed in part by the AAA Innovations Program
- Biomechanics of Multicellular Organization
- Body on-Chip and 3D Culture
- Bone Remodeling in Health, Disease, and Aging
- Cranial Biomechanics and Evolution
- Crossmodal Plasticity: Structural and Functional Reorganization in the Cortex Following Sensory Deprivation
- Evolutionary Approaches to Medicine
  Co-sponsored by AAA’s Advisory Committee for Young Anatomists
- EXTREME Anatomy: Living Beyond the Edge
  Co-sponsored by The Anatomical Record
- Genital Functional Morphology: Mechanical Forces and Sexual Selection
  This session was funded in part by an AAA Three-Year Research Meetings Outreach Grant
- Induced Pluripotent Stem Cells and their Translational Applications
- Linked Modules in Anatomical Inference: New Approaches to Morphological Integration
- Mechanism of Palate Development
- Molecular Signals in Cardiovascular Biology
- Novel Function of Fibrinolysis in Tissue Repair
- Novel Roles for Mesenchymal Cells in Cardiovascular Cell Fate Decisions and Patterning
- Organoids: Recapitulating Anatomy in a Dish
- Progress of Human Brain Banking in China: Construction and Research
  Co-sponsored by the Chinese Society for Anatomical Sciences
- Reproducibility in Experimental and Preclinical Research
  Guest session sponsored by The Histochemical Society
- Single Cell Analysis in Developmental Biology
- The Anatomy of Cell Shape
- The Low Back: Anatomy, Dysfunction, and Mechanisms of Pain and Therapeutics
- The Mighty Osteocyte: No Bone about It
- Vascular Sprout Mechanisms

Platform Session Topics

- Anatomy Education *
- Cardiovascular Biology *
- Cell Biology *
- Developmental Biology *
- Evolution and Comparative Anatomy *
- Form and Function *
- Morphological Sciences *
- Neurobiology *
- Stem Cells & Tissue Engineering *

*AAA will be accepting abstracts for oral presentation within this session. Please see AAA topic categories starting on page 10.

STUDENT/POSTDOC TRAVEL AWARDS AVAILABLE

Travel awards of $250 and $350 are available for new and renewing AAA members who submit an abstract and present at EB 2017. All travel award applicants are also eligible for the on-site competition awards. The application is part of the abstract submission process, so apply online when you submit your abstract at www.experimentalbiology.org. Visit www.anatomy.org/travel-awards.html for details.

- Join or renew your AAA membership for 2017 by 11/18/16
- Be a First author and presenter at EB 2017
- List AAA/Anatomy as your sponsoring society
- Select an AAA abstract topic category
Please visit our website www.apsebmeeting.org for program updates

**President’s Symposium Series**

Research Advances in Sex/Gender and Developmental Programming of Chronic Diseases
Organized by: Jane F. Reckelhoff, Univ. of Mississippi Med. Ctr.

**LECTURE**
- APS Nobel Prize Award Lecture
  - Louis Ignarro

**SYMPOSIA**
- Developmental Programming of Diseases
  - Barbara Alexander
- Sex Differences in Physiology and Pathophysiology
  - Minolfa Prieto
- Women’s Health Research
  - Heddwen Brooks

**Distinguished Lectures**

- Physiology in Perspective: The Walter B. Cannon Memorial Award Lecture
  - Michael Welsh
- Henry Pickering Bowditch Award Lecture
  - Brant Isakson
- Robert M. Berne Distinguished Lectureship of the APS Cardiovascular Section
  - Benjamin D. Levine
- Hugh Davson Distinguished Lectureship of the APS Cell and Molecular Physiology Section
  - Jennifer Lippincott-Schwart
- Joseph Erlanger Distinguished Lectureship of the APS Central Nervous System Section
  - Jeff Lichtman
- Joseph Erlanger Distinguished Lectureship of the APS Central Nervous System Section
  - Jeff Lichtman
- August Krogh Distinguished Lectureship of the APS Comparative and Evolutionary Physiology Section
  - Warren Burggren
- Solomon Berson Distinguished Lectureship of the APS Endocrinology and Metabolism Section
  - Wolfgang Langhans
- Edward F. Adolph Distinguished Lectureship of the APS Environmental and Exercise Physiology Section
  - Larry Kenney
- Horace W. Davenport Distinguished Lectureship of the APS Gastrointestinal and Liver Physiology Section
  - John Wallace
- Carl Ludwig Distinguished Lectureship of the APS Neural Control and Autonomic Regulation Section
  - Robin McAllen
- Carl W. Gottschalk Distinguished Lectureship of the APS Renal Section
  - Paul Welling
- Julius H. Comroe, Jr. Distinguished Lectureship of the APS Respiration Section
  - Peter Wagner
- History of Physiology Lecture
  - Jack Rall
- Claude Bernard Distinguished Lectureship of the APS Teaching of Physiology Section
  - Jeffrey D. Karpicke
- Ernest H. Starling Distinguished Lectureship of the APS Water and Electrolyte Homeostasis Section
  - Peter Bie

**Techniques and Technology Workshop Program**

- Choosing the Right Diet for Your Animal Model
  - Kay Lund and Denise Ney
- Using Ultrasound to Teach Cardiovascular Physiology and Anatomy
  - Dee Silverthorn and Geoffrey Guttmann
Cardiovascular Section

SYMPOSIA

- Adipose Tissue and the Cardiovascular System: Interactions with Sleep and Cardiometabolic Risk Factors
  Naima Covassin and Maik Bollasch
- Emerging Concepts in the Local Regulation of Blood Flow
  Julie Freed and Dirk Duncker
- Mathematical Modeling of Cardiac Excitability and Arrhythmias
  Thomas Hund and Crystal Ripplinger
- Mechanisms of Stiffening in Large and Small Vessels: From the Cytoskeleton to the Extracellular Matrix
  Luis Martinez-Lemus
- MiRNA Regulation of the Mitochondrion in Cardiovascular Disease
  John Hollander and Dharendra Thapa
- Ubiquitin and Ubiquitin-Like Proteins in Cardiovascular Physiology and Disease
  Noah Weisleder and Xuejun Wang
- Vascular Autophagy and Endothelial Cell Nitric Oxide Generation
  David Symons and David Gutterman

FEATURED TOPICS

- Cardiovascular Control after Spinal Cord Injury
  Aaron A Phillips and Christopher R West
- Carl J. Wiggers Award Featured Topic
  Gerd F. Heusch
- Immune Cells Involved in Cardiovascular Disease
  Brett Mitchell and Meena Madhur
- Inflammation and Immunity and Heart Disease
  Ganesh Halade and Edward Thorp
- Kaley Lecture Featured Topic: The Complications of Diabetes and the Role of Inflammation: Mechanisms and Therapeutic Opportunities
  Ann Marie Schmidt
- Mitochondrial Physiology in Cardiovascular Disease
  John W. Calvert and John W. Elrod
- Novel insights in Vascular Pathophysiology
  Brant Isakson and Pooneh Bagher
- Sex Differences in Obesity and Cardiovascular Disease
  Eric J. Belin de Chantemele and Analia S Loria
- Vascular-Mediated Mechanisms of Cognition and the Role of Exercise
  Tracy Baynard

Careers in Physiology Committee

SYMPOSIUM

The Many Facets of a Teaching Career
Clintoria R. Williams and Josef Brandauer

Cell and Molecular Physiology Section

SYMPOSIA

- Glial Cell Development, Migration, and Pathophysiology
  Kenneth Gagnon and Harald Sontheimer
- Multi-omics to Study the Cellular Pathophysiology of Neurodegenerative Diseases
  Sanjay Pimplikar and Li-Huei Tsai
- Transport Proteins and Cellular Signaling in Choroid Plexus Epithelia
  Bonnie Blazer-Yost and Jeppe Praetorius
- Omics Approaches to Understanding Muscle Biology
  Jatin George Burniston and Yi-Wen Chen

FEATURED TOPICS

- Cellular Mechanisms of Stress and Inflammation
  Jennifer Bomberger and Carl White
- Ion Channels and Transporters in Health and Disease
  Kirk Hamilton and Ely Rodrigues
- Mechanisms and Influences on Cell Signaling
  Roger T. Worrell
Central Nervous System Section

SYMPOSIA
- Role of CNS Osmosensory Networks in the Regulation of Cardiovascular Function in Health and Disease.
  Javier E Stern and Melina Pires da Silva
- Non-motor Dysfunctions in Parkinson’s Disease
  R Alberto Travagli

FEATURED TOPICS
- New Insights Into the Role of Hypothalamic Peptides in the Control of Appetite and Energy Balance
  James Blevins
- Neuroglial Interactions in Health and Disease
  Brian Gulbransen

MINISYMPOSIUM
- CNS Erlanger Minisymposium

Communications Committee

SYMPOSIUM
- New Models of Science Communication: Increasing Reproducibility and Transparency
  Anne R Crecelius and Jorge M Serrador

Comparative & Evolutionary Physiology Section

SYMPOSIA
- Consequences of Physiological Stressors on the Development and Function of the Cardiovascular System
  Todd Gillis
- Developmental Programming of Vertebrate Health and Disease by Hypoxia
  Gina Galli

FEATURED TOPICS
- CEPS Trainee-Driven Featured Topic
- Comparative Perspectives on Hypoxia Signaling and Tolerance
  Graham Scott

Education Committee

REFRESHER COURSE
- Curricular Innovation in Sex and Gender Based Medical Physiology Education
  Karie Scrogin and Jennifer Sasser

Endocrinology and Metabolism Section

SYMPOSIA
- Central GLP-1 Receptors in the Regulation of Energy Homeostasis
  Wolfgang Langhans
- Fighting the Fat: Lifestyle Approaches to Protect Against Adipose Tissue and Liver Dysfunction
  David Wright
- Novel Imaging Technologies in Reproductive Physiology
  Liliya M. Yamaleyeva and Sarah H. Lindsey
- Sleep, Circadian Clocks and Metabolism
  Eve Van Cauter and Willis K. Samson
- Stressing the Beta Cell: The Good and The Bad
  John Corbett

FEATURED TOPICS
- Brown Fat vs Skeletal Muscle as Metabolic Targets: Activation of Thermogenesis or Glucose Oxidation
  Michael Symonds
- Central and Peripheral Mechanisms Regulating Body Weight and Glucose Homeostasis
  Andrea Zsombok
Environmental and Exercise Physiology Section

**SYMPOSIA**
- Blood Doping: Physiology, Pharmacology and Detection Challenges
  Larry Bowers
- Cerebral Function of Permanent Residents of High Altitude: Problems and Solutions
  John B West and Tatum S. Simonson
- Exercise Training Versus Metformin for the Treatment of Cardiometabolic Diseases
  William G Schrage and Nathan Jenkins
- Patent Foramen Ovale: The Hole Story of Environmental and Exercise Physiology
  John Halliwill and Andrew Lovering

**FEATURED TOPICS**
- SIRT1 in Muscle Health and Disease
  Vladimir Ljubicic

Epithelial Transport Group

**SYMPOSIUM**
- MicroRNAs in Kidney and Epithelial Transport Physiology, Development and Disease
  Johannes Loffing and Hui Cai

**FEATURED TOPICS**
- Hans Ussing Lecture Featured Topic
  Janet Klein

Gastrointestinal and Liver Physiology Section

**SYMPOSIA**
- Environmental, Microenvironmental and Nanoenvironmental Factors Which Drive Liver Disease Pathogenesis and Progression
  Michele T Pritchard
- Posttranscriptional Regulation of Intestinal Homeostasis: Stem Cells to Cancer
  Kathryn (Kate) Hamilton and Priya Chatterji

**FEATURED TOPICS**
- Autophagy: Driver of Microbiome Composition and intestinal Homeostasis
  Arianne L Theiss
- Cytoskeletal Proteins in GI and Liver Diseases
  Natasha T Snider and Diana Toivola

History of Physiology Group

**SYMPOSIUM**
- Twenty Years of Physiological Genomics
  David L. Mattson
## Hypoxia Group

**SYMPOSIUM**
- Intermittent Hypoxia: Molecular, Integrative, and Clinical Implications  
  Anna Svatikova and Ann Schreihofer

**FEATURED TOPIC**
- Physiological Adaptation to Hypoxia and High Altitudes  
  Rodrigo Iturriaga

## Integrative Physiology Symposium Series

- Engineering for Health: Integrating Engineering and Physiology to Combat Disease  
  Gina L.C. Yosten
- Exercise Intolerance in Metabolic, Pulmonary and Cardiovascular Diseases: Did We Forget the Brain?  
  Patrice Brassard and Damian Bailey
- Hypoglycemia: Neural Pathways of the Glucose Counter-Regulatory Response, Hypoglycemia Unawareness and Its Treatment  
  Tony J. Verberne
- The Impact of Exosomes on Muscle Atrophy, Hypertrophy and Myogenesis  
  Xiaonan W Wang and William E. Mitch

## Muscle Biology Group

**SYMPOSIUM**
- The Role of Ribosome Biogenesis in Skeletal Muscle Hypertrophy  
  John J. McCarthy

**FEATURED TOPICS**
- Satellite Cells: External and Systemic Influences  
  Naomi Brooks and Esther Dupont-Versteegden
- The Hot Zone: Skeletal Muscle Changes Caused by Hyperthermia and Heat Stress  
  Josh Selsby

## Neural Control and Autonomic Regulation Section

**SYMPOSIAS**
- Brain Secrets Revealed by Optogenetics/Chemogenetics Approaches  
  Kamal Rahmouni and Annette De Kloet

**FEATURED TOPIC**
- Cardiac Sensory Afferents: The Cornerstone for Autonomic Reflex Processing in Health and Disease  
  Kalyanam Shivkumar and Hanjun Wang
- NCAR Young Investigator Awards  
  Colin Young and Rasna Sabharwal
- Neural Control of the Heart: New Tools, New Mechanisms  
  Mark W. Chapleau

**MINISYMPOSIUM**
- Ludwig Minisymposium

**AWARD SESSION**
- DATA NCARnation

## Nutrition Physiology Interest Group

**SYMPOSIUM**
- From Cancer-Causing Villain to Health-Promoting Hero: Taking a U-turn on Dietary Nitrite and Nitrate?  
  Carl Keen and Alexandria Hast

[www.experimentalbiology.org](http://www.experimentalbiology.org)
Physiological Genomics Group

**SYMPOSIUM**
- Single Cell Analysis and Genomic Approaches
  Hilary Coller

**FEATURED TOPIC**
- Novel Genetic Risk Factors and Early-Pregnancy Mechanisms Contributing to Preeclampsia
  Justin L Grobe and Colin N Young

**AWARD SESSION**
- Trainee Highlights in Physiological Genomics

**SPECIAL SESSION**
- Fourth Annual Physiological Genomics Group Conference

Physiologists in Industry Committee

**SYMPOSIUM**
- Nitric Oxide Pathway Modulation for Therapeutic Intervention and Exercise Enhancement
  John Mattson

Publications Committee

**SYMPOSIUM**
- Publishing 101: How to Get Your Work Published and Avoid Ethical Minefields
  Curt Sigmund and Rita Scheman

Renal Section

**SYMPOSIA**
- Regulation of Glomeruli Physiological Function: Podocytes and Beyond
  Daria Ilatovskaya and Jochen Reiser
- Mining Protein-Protein Interactions to Study Renal Transporter Regulation
  Guangping Chen and Dennis Brown
- New Insights into the Regulation of Renal Blood Flow in Health and Disease
  Aaron Polichnowski and Jan Williams

**FEATURED TOPICS**
- Advances in Renal Physiology I
  Pablo Ortiz
- Advances in Renal Physiology II
  Edward Inscho
- Renal Section Young Investigator Award Featured Topic
  Oleh Pochynyuk

Respiration Section

**SYMPOSIA**
- Embracing the Heterogeneity of Lung Injury: A Bedside to Bench to Bedside Perspective
  Steven Dudek and Ciara Shaver
- Mechanisms Preserving Breathing Stability
  Jyoti Watters and Kendra Braegelmann
- The Emerging Role of Lipids in Lung Physiology and Disease
  Wolfgang M. Kuebler and Elephteria Letsiou
- Ventilatory Control and Function Following Perinatal Insults
  E. Fiona Baily and Ann Revill

**FEATURED TOPICS**
- Central Neuromodulation in the Control of Breathing
  Alfredo J Garcia and Gordon Mitchell
- Epigenetic Regulation of Lung Development, Injury, and Repair
  Lynette Kay Rogers and Trent E. Tipple
- Organelle Dysfunction in Pulmonary Vascular Disease: Mitochondria, Endoplasmic Reticulum, Lysosomes and Beyond
  Larissa Shimoda and John Ryan
- Respiratory Control: Beyond the Diaphragm
  David D Fuller and Sara M. Turner
Science Policy Committee

**SYMPOSIUM**
- Why Scientific Rigor Matters and Ways to Improve It
  Roy L Sutliff

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Sex/Gender Research Interest Group

**SYMPOSIUM**
- Sex Differences in Diabetes, Obesity and Blood Pressure Control
  Heddwen Brooks

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Teaching of Physiology Section

**SYMPOSIAS**
- Examining the Changing Landscape of Course Delivery and Student Learning
  Patricia A. Halpin and Chaya Gopalan
- Inclusive Practices for Diverse Student Populations
  Kathryn M.S. Johnson

**FEATURED TOPIC**
- Innovation in Teaching: Abstract Driven
  David Lee Osborne

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Trainee Advisory Committee

**SYMPOSIUM**
- Kick Start Your Funding: Looking Beyond NIH and NSF
  Jennifer Steiner and Kristi Streeter

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Translational Physiology Interest Group

**SYMPOSIA**
- Leptin Beyond Appetite Regulation
  Prachi Singh and Paul Cohen
- Peptides and Metabolites in Cardiovascular Disease
  Lisandra E. de Castro Brás and Ganesh V. Halade
- Vasodilation in Human Microvessels: From Bed to Bench and Back
  Petra Kleinbongard and Karima Ait-Aissa

**FEATURED TOPIC**
- Translation Physiology Showcase: Focus on Sex differences in Obesity and Blood Pressure, Developmental Programming, and Women’s Health
Water and Electrolyte Homeostasis Section

**LECTURE**
- WEH New Investigator Award Lecture

**SYMPOSIA**
- Hydration and Vasopressin Beyond the Kidney
  Lawrence E. Armstrong
- Sodium Homeostasis in Metabolic Syndrome: Sorting out New and Old Players
  Carolyn Ecelbarger and Swasti Tiwari
- Mechanisms of Hypertension Risk
  Carmen De Miguel and Justine Abais-Battad

**FEATURED TOPICS**
- Neural and Hormonal Modulation of Fluid Balance and Ion Homeostasis in Health and Disease
  Juan Gao and Alicia Schiller
- New Animal Models and Their Utility for WEH Research
  Oleg Palygin and Oleh Pochynyuk
- Hypertension and Sodium Homeostasis-Developing Concepts
  Kathryn Sandberg and Eman Gohar
- Stress and Physiological Responses Throughout Life
  Jennifer Pollock and Erin Taylor

**AWARD SESSION**
- WEH Trainee Award Finalists and Data Diuresis

Women in Physiology Committee

**SYMPOSIUM**
- Women in Physiology Committee Symposium 2017: Choosing the Right Lab and Personnel for Your Career
  Karen L Edelblum and Brandi Wynne

American College of Sports Medicine (ACSM)

**SYMPOSIUM**
- A Roadmap for the Future of Exercise Science: Key Research Directions
  Claude Bouchard

American Federation for Medical Research (AFMR)

**SYMPOSIA**
- New Insights into Insulin Resistance-Molecular Mechanisms and Therapeutic Implications
  Sharma Prabhakar and Meredith Hawkins
- Small GTPases: Basic Science to Translational Research
  Yutong Zhao and Anna Birukova

American Society for Human Genetics (ASHG)

**COSPONSORED SYMPOSIUM**
- Attatching Physiology to the Genome: Spotlight on Cardiovascular Genetics
  Guillaume Lettre and Bina Joe
Microcirculatory Society (MCS)

LECTURE
- MCS Landis Award Lecture

SYMPOSIA
- Depression and Its Effects on Microvascular Function and Vascular Adaptation
  Paul Chantler and Mark Olfert

- Investigating Microvascular Physiology and Pathophysiology using Novel Techniques
  Karen Y Stokes and Felicity N.E. Gavins

- President’s Symposium: (Not) Lost in Translation: Bridging the Gaps between Microcirculatory Basic Science and Clinical Science
  William M Chillian

Pan-American Societies (SFiB)

SYMPOSIUM
- Pan-American Symposium
  TBD

The Physiological Society-UK (PHYSOC)

SYMPOSIUM
- Sexual Dimorphism, Plasticity and Genomic Diversity of the Paraventricular Nucleus
  Willis Samson and Gina Yosten

COSPONSORED SYMPOSIUM
- The Modulation of Aging through Altered Proteostasis
  Benjamin Mille
ASBMB Spotlight Sessions – New in 2017!

Put your research in the “spotlight”! Opportunities to present short oral presentations of submitted research will be offered, Sunday through Tuesday, during ASBMB’s afternoon series of Spotlight Sessions. Based on the volunteered submissions, multiple Spotlight Sessions will be created to showcase the most exciting and compelling research across the field of biochemistry and molecular biology.

Submit your abstract to an ASBMB topic category (ASBMB topics number 2000-2324).

ASBMB 2017 Award Lectures

- Alice and C. C. Wang Award in Molecular Parasitology and Symposium  
  David L. Sibley, Washington University School of Medicine in St. Louis
- ASBMB Award for Exemplary Contributions to Education  
  Erin Dolan, The University of Texas at Austin
- ASBMB Young Investigator Award  
  Sinisa Urban, Johns Hopkins University School of Medicine
- ASBMB-Merck Award  
  Judith Frydman, Stanford University
- Avanti Award in Lipids  
  Volker Haucke, Leibniz Institute for Molecular Pharmacology
- Bert and Natalie Vallee Award in Biomedical Science  
  Ronald Evans, The Salk Institute for Biological Sciences and Howard Hughes Medical Institute  
  (Lecture will be presented in 2018.)
- DeLano Award for Computational Biosciences  
  Brian K. Shoichet, University of California, San Francisco
- Earl and Thressa Stadtmann Distinguished Scientist Award  
  Susan S. Taylor, University of California, San Diego
- Herbert Tabor Research Award  
  Susan Gottesman, National Cancer Institute
- Mildred Cohn Award in Biological Chemistry  
  Wei Yang, National Institute of Diabetes and Digestive and Kidney Diseases
- Ruth Kirschstein Diversity in Science Award  
  Douglas Robinson, Johns Hopkins University School of Medicine
- Walter A. Shaw Young Investigator Award in Lipid Research  
  Gregory D. Fairn, St. Michael’s Hospital
- William C. Rose Award  
  William T. Wickner, Dartmouth Medical School

ASBMB Speakers Symposia

The latest research from across the interdisciplinary world of biochemistry and molecular biology is in one place for you to explore. Daily, morning sessions feature invited presentations that will inform and inspire!

SUNDAY, APRIL 23, 2017

- Biochemistry, physiology, and pathophysiology of sphingolipids  
  Yusuf Hannun, Antonella De Matteis, Gregory D. Fairn, Timothy Hla, Howard Riezman
- Life at higher resolution: Single molecule and single cell technologies  
  Taekjip Ha, Hendrik Dietz, Erez S. Lieberman Aiden, Michelle Wang
- Hypoxia: Life at high altitude  
  William Kaelin, Fraydoon Rastinejad, Peter J. Ratcliffe, Eli M. Wallace
- Dynamics of cytoskeletal assembly  
  Thomas D. Pollard, Margaret Gardel, Melissa K. Gardner, Marcos Sotomayor
- New approaches for antibiotic discovery  
  Magda Barbu, Eric J. Brown, Eric Brown, Timothy Lu
- High resolution imaging in medicine  
  Sponsored by the Society for Experimental Biology and Medicine  
  Warren Zimmer
MONDAY, APRIL 24, 2017

- New insights into nuclear structure and function
  David L. Spector, Xavier Darzacq, Robert Goldman, Tracy L. Johnson
- Supramolecular complexes
  Anne-Claude Gingras, Albert J.R. Heck, Edward Marcotte, John Rubenstein
- Basis of longevity and age-related diseases
  Anne Brunet, Andrew Dillin, Matt R. Kaeberlein, Linda Partridge
- Discovery and development of new enzyme chemistry
  J. Martin Bollinger, Jr., Emily P. Balkus, Squire J. Booker,
- New insights into mechanisms of antibiotic action
  James Collins, Kim Lewis, Martin Schmeing, Nora Vazquez-Laslop
- Organs on a chip
  Sponsored by the Society for Experimental Biology and Medicine
  John Wikswo, Joanna E. Burdette, Thomas B. Knudsen, William L. Murphy, D. Lansing Taylor

TUESDAY, APRIL 25, 2017

- Organelle trafficking and signaling
  Gia K. Voeltz, Navdeep S. Chandel, Martin Hetzer, Erika L.F. Holzbaur
- Metal homeostasis
  Amy C. Rosenzweig, David Giedroc, Somshuvra Mukhopadhyay, Elizabeth M. Nolan

ASBMB Education and Professional Development Program

SUNDAY, APRIL 23, 2017

- Enhancing STEM student success and retention in the academic pipeline
  Lisa Elfring, Sarah Jewett, Gloria Trujillo
- Immigration and visa issues for foreign STEM graduate students and postdoctoral fellows
  Jennifer Kerilla, Rajendrani Mukhopadhyay, Nancy Vizer, Vivian Wang

MONDAY, APRIL 24, 2017

- Biochemical basis of cellular processes
  Xiaodong Wang, Feng Shao, Guo-Liang Xu, Bing Zhu
- Glycobiology, glycan receptors and functional glycomics
  Nancy M. Dahms, Galit Alter, Richard D. Cummings, Laura L. Kiessling
- Antibiotic resistance
  Gautam Dantas, Ken Gerdes, Deborah T. Hung, Joao Xavier
- Nutrition impact on bacteria and host health: From basic science to global view
  Sponsored by the Society for Experimental Biology and Medicine
  Clinton Allred, Arul Jayaraman, Sharon M. Donovan, Mark J. Manary, Stephen J.D. O’Keefe

WEDNESDAY, APRIL 26, 2017

- New insights in regulated lipid metabolism
  Rudolf Zechner, Russell A. DeBose-Boyd, Lina M. Obeid, Stephen G. Young
- Molecular quality control
  David Ron, Susan L. Ackerman, Bernd Bukau, Adam Frost, Christopher D. Lima
- Low complexity domain proteins and the making of germ cells
  Angelika Amon, Abby F. Dernburg, Ruth Lehmann, Geraldine Seydoux
- Redox signaling and the metabolome
  Ruma Banerjee, Joan B. Broderick, Vadim Gladyshev, David H. Sherman

ASBMB Workshops: Tools, Techniques and Development

Daily workshops will explore the latest methodologies, technology and tools that will help propel research projects from the bench to publication. Some workshops will include demonstrations and hands-on work. Professional development workshops will support attendees at all career stages. Visit www.asbmb.org/meeting2017.
ASBMB Travel Awards
Applicant is responsible for following all application requirements posted at www.asbmb.org/meeting2017/travelawards. Applicant must submit his/her own application by the posted deadline. Advisors should NOT submit abstracts or applications on behalf of a student/trainee.

ASBMB Undergraduate Student Research Poster Competition
Saturday, April 22, 2017 • Chicago, IL
Cash prizes awarded to students making the best poster presentations.
Sign up information and competition details for competitors and judges available at www.asbmb.org/meeting2017.

ASBMB Special Events
- Graduate and Postdoctoral Professional Development Program
- Undergraduate Student Research Poster Competition
- Welcome and Networking Reception sponsored by the ASBMB Minority Affairs Committee
- Women Scientists Panel and Networking

ASBMB PRESENTS A DAY OF DEVELOPMENT
Calling all graduate students and postdoctoral fellows. Get the most out of your ASBMB meeting experience and sign up for a day of activities especially with your professional development needs in mind. Saturday, April 22nd, will include a career panel, workshops, speakers luncheon and networking. Connect with other graduate students and postdoctoral fellows on Saturday and make contacts for the entire meeting and beyond.
Sign up during the EB meeting registration process. Activity fee applies.
LECTURES

- ASIP Cotran Early Career Investigator Award Recipient: Unraveling the Complexity of Drug Resistance in Lung Cancer
  Awardee: KATERINA POLITI, PhD

- ASIP Gold-Headed Cane Award Lecture: Understanding Vascular Endothelium: A Pilgrim’s Progress
  Awardee: MICHAEL A. GIMBRONE, JR., MD

- ASIP Outstanding Investigator Award Recipient: Why Autophagy is Important to the Liver
  Awardee: XIAO-MING YIN, MD, PhD

- ASIP Young Scientist Leadership Award Lecture: A Balancing Act: Role of HNF4α/β-catenin Interaction in Hepatobiliary Development and Cholangiocarcinoma Formation
  Awardee: CHAD WALESKY, PhD

- ASMB Lecture: TBD
  Sponsored by ASIP and the American Society for Matrix Biology

  Speaker: JIN ZHANG, PhD
  Sponsored by The Histochemical Society

SYMPOSIA

- Biology and Pathobiology of Tissue Barriers
  Chaired: Asma Nusrat, MD and Andrei Ivanov, PhD

- Blood Vessel Club™: Endothelial Cell Mechanisms that Regulate Function and Permeability
  Chaired: Pilar Alcaide, PhD and Jonathon Homeister, MD, PhD

- Digital Computational Pathology
  Chaired: Stanley Cohen, MD and John Tomaszewski, MD
  Sponsored by the ASIP Digital and Computational Pathology Scientific Interest Group

- Diseases of the Endoplasmic Reticulum
  Chaired: Jonathan Lin, MD, PhD and Fumihiko Urano, MD, PhD

- HCS Symposium: Imaging Signaling In Vivo – From Cell Biology to Animal Models
  Chaired: Margarida Barroso and Douglas Rose
  Sponsored by the ASIP Immunohistochemistry & Microscopy Scientific Interest Group and The Histochemical Society

- MOLECULAR AND CELLULAR BASIS OF DISEASE: ACVP Symposium: Epigenetics and Cancer
  Chaired: Stacey Fossey, DVM, PhD and Robert Johnson, DVM, PhD
  Sponsored by the ASIP Veterinary and Comparative Pathology Scientific Interest Group and the American College of Veterinary Pathologists

- MOLECULAR AND CELLULAR BASIS OF DISEASE: Cancer Chemoprevention and Biomarker Development
  Chaired: William Stetler-Stevenson, MD, PhD

- MOLECULAR AND CELLULAR BASIS OF DISEASE: Liver Pathobiology Symposium: Novel Insights into the Mechanisms of Non-Alcoholic Fatty Liver Disease (NAFLD) and Autoimmune Liver Disease
  Chaired: Kari Nejak-Bowen, MBA, PhD and S. Paul Monga, MD
  Sponsored by the ASIP Liver Pathobiology Scientific Interest Group

- MOLECULAR AND CELLULAR BASIS OF DISEASE: Presidential Symposium: Liver Pathobiology: Prevention of Hepatic Disease and Regeneration
  Chaired: George K. Michalopoulos, MD, PhD
  Sponsored by the ASIP Liver Pathobiology Scientific Interest Group

- Neuropathology of Autonomic Dysfunction
  Chaired: Warren Tourtellotte, MD, PhD and Jose Otero, MD, PhD
  Sponsored by the ASIP Neuropathology Scientific Interest Group

- PAMPs and DAMPs: New Roles in Immunopathogenesis
  Chaired: Asma Nusrat, MD and Andrew Neish, MD

- SIPMeT Symposium: Metabolism and Prevention of Disease
  Chaired: Massimiliano M. Corsi Romanelli MD PhD
  Sponsored by ASIP and the Società Italiana di Patologia e Medicina Traslazionale /Italian Society of Pathology and Translational Medicine

- SCVP Symposium: New Roles for Inflammation in the Heart
  Chaired: James R. Stone, MD, PhD
  Sponsored by ASIP and the Society for Cardiovascular Pathology

Please visit our website www.asip.org/meetings/2017/index.cfm for program updates.
Society of Toxicologic Pathology Symposium: Challenges in Translation: Cardiovascular Modeling as an Exemplar for In Vitro to In Vivo Extrapolation
Chaired: Elizabeth Galbreath, PhD, DVM
Sponsored by the ASIP Environmental and Toxicologic Scientific Interest Group and the Society of Toxicologic Pathology

Stowell Symposium: Trends in Experimental Pathology: Gone with the Wnt: A Classic Tale of Stem Cells, Cancer and More
Chaired: Satdarshan Paul S. Monga, MD
Supported by an unrestricted educational grant from The Robert E. Stowell Endowment Fund

WORKSHOPS/SPECIAL SESSIONS

XVIIth Annual ASIP/AAA Career Development and Mentoring Program and Lunch: Developing Your Core Message: An Interactive Session on Crafting an Effective Elevator Speech
Chaired: Diane Bielenberg, PhD and Chad Walesky, PhD
Sponsored by the ASIP Committee for Career Development and Diversity and the American Association of Anatomists

XVIIth Annual Workshop on Graduate Education in Pathology: PhD Workforce
Chaired: Robin Lorenz, MD, PhD and Dani Zander, MD
Sponsored by the ASIP Education Committee

ASIP Awards Presentations and ASIP Business Meeting
Chair: George K. Michalopoulos

Breast Cancer Workshop: Ductal Carcinoma in Situ - Discerning Aggressive Versus Benign Disease Using Molecular Features
Chaired: William B. Coleman, PhD
Sponsored by the ASIP Breast Cancer and Tumor Microenvironment & Metastasis Scientific Interest Groups

Cell Injury Workshop: Creating a Scar: The Roles of Inflammation in Tissue Remodeling
Chaired: Cecelia C. Yates, PhD and Denuja Karunakaran, PhD
Sponsored by the ASIP Cell Injury Scientific Interest Group

Committee for Career Development & Diversity Workshop and Breakfast: Developing Your Personal Brand for Career Success
Chaired: Luisa DiPietro, DDS, PhD and Magali Saint-Geniez, PhD
Sponsored by the ASIP Committee for Career Development and Diversity

Course: Pathobiology for Research Scientists: Next-Generation Genomics for the Basic/Translational/Clinical Scientist
Chaired: William B. Coleman, PhD, Mark E. Sobel, MD, PhD and Gregory J. Tsongalis, PhD
Sponsored by the ASIP Education Committee

Targeting Transcription Regulation in Disease
Chaired: Philip Iannaccone, MD, PhD, Yan Qin, PhD and David Williams, MD, PhD
Sponsored by the Gene Expression Scientific Interest Group

Scientific Sleuthing of Human Disease for Undergraduate Students and High School Teachers and Students
Chaired: Kari Nejak-Bown, MBA, PhD and Marth B. Furie, PhD
Sponsored by the ASIP Committee for Career Development and Diversity

Highlights: Graduate Student Research in Pathology
Chaired: Titus A. Reaves, PhD
Sponsored by the ASIP Committee for Career Development and Diversity

Scientific Interest Group Networking Sessions and Poster Discussions
This session is open to all. All of the ASIP Scientific Interest Group Poster Sessions will be held at the same time in the same location. Select posters from each Scientific Interest Group will be on display for informal discussions.
- Biobanking
- Breast Cancer
- Club Hepatomania™ (Liver Pathobiology)
- Der Schadenklub (Cell Injury)
- Digital and Computational Pathology
- Environmental and Toxicologic Pathology
- Gene Expression
- Immunohistochemistry & Microscopy
- Inflammation/Immunopathology
- Molecular Diagnostic Pathology
- Neuropathology
- Pulmonary Pathology
- Regenerative Medicine and Stem Cells
- Tumor Microenvironment and Metastasis
- Vascular and Mucosal Pathobiology
- Veterinary and Comparative Pathobiology

Trainee Welcome Breakfast
Sponsored by the ASIP Committee for Career Development and Diversity

CME credits are available, see page 48 for more information.
ASIP’S CONTINUING MEDICAL EDUCATION (CME)

Please note that the only Society educational component of Experimental Biology 2017 that is eligible for CME credit is the ASIP 2017 Annual Meeting.

CME Accreditation Statement
This activity (“American Society for Investigative Pathology [ASIP] 2017 Annual Meeting”) has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American Society for Clinical Pathology (ASCP) and the American Society for Investigative Pathology (ASIP). ASCP is accredited by the ACCME to provide continuing medical education for physicians.

Please note that the designation of the maximum number of AMA PRA Category 1 Credit(s)™ for this “live” educational activity will be announced prior to the meeting.

Educational Objective/Target Audience
The objective of the ASIP 2017 Annual Meeting is to increase basic and applied pathology knowledge, and to provide a forum for the exchange of new research by scientists and investigators. The ASIP 2017 Annual Meeting is designed to meet the participants’ education needs in the physician competency area of Medical Knowledge, as defined by the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Medical Specialties (ABMS), and to support participants’ lifelong learning towards a goal of promoting patient safety and improving patient care and is specifically targeted to graduate and medical students, postdoctoral fellows, research scientists, clinical practitioners, and medical education professionals.

At the completion of the ASIP 2017 Annual Meeting, participants should be able to:
1. discuss the research underway and/or the current topics relevant to their areas of interest in pathology;
2. demonstrate a gained level of knowledge of the methods and techniques being used by researchers and practitioners in the field;
3. utilize information and data that leads to improvements in human health.

Disclosure of Financial Relationships and Resolution of Conflicts of Interest:
In order to ensure balance, independence, objectivity and scientific rigor in all its educational activities, and in accordance with ACCME Standards, the ASCP requires that all individuals in a position to influence and/or control the content of ASCP CME activities disclose to the ASCP and subsequently to learners whether they do or do not have any relevant financial relationships with proprietary entities producing health care goods or services that are discussed in CME activities. Faculty are asked to use generic names in any discussion of therapeutic options, to base patient care recommendations on scientific evidence and to base information regarding commercial products/services on scientific methods generally accepted by the medical community. All ASCP CME activities are evaluated by participants for the presence of any commercial bias and thus input is used to subsequent CME planning decisions. The primary purpose of this “live” CME activity is educational and the comments, opinions, and/or recommendations expressed by the faculty or authors are their own and not those of ASCP or ASIP.

CONTACT THE ASIP EDUCATION OFFICE
Please contact the ASIP Education Office

cme@asip.org
301-634-7440
if you have any questions regarding CME.
American Society for Nutrition @ Experimental Biology 2017

Join us for the American Society for Nutrition’s (ASN) 81st Scientific Sessions and Annual Meeting at Experimental Biology 2017 in Chicago! Our program convenes scientists and clinicians from around the world to analyze and share timely and significant advances in nutrition-related basic science and clinical, translational and public health research. The program features:

- Targeted Programming
  - Agriculture, Nutrition and Health in a Changing Environment: Making Connections to Address Global Priorities, a pre-conference to be held Friday, April 21.
  - Advances in Pediatric Nutrition, targeted programming to be held Saturday, April 22.

- Scientific symposia and educational sessions organized around the following themes:
  - Cellular and Molecular Nutrition
  - Clinical and Translational Nutrition
  - Global and Community Nutrition
  - Nutrition Across the Lifespan
  - Nutritional Epidemiology
  - Education
- More than 2,000 original research studies presented in oral and poster sessions;
- Special lectures and addresses delivered by some of the most recognized names in the field of nutrition; and
- Invaluable networking opportunities.

Award Lectures

- W.O. Atwater Memorial Lecture: Recognizes a scientist who has made unique contributions toward improving the diet and nutrition of people around the world in honor of Wilbur Olin Atwater (1844-1907), the U.S. Department of Agriculture’s first chief of nutrition investigations.
- Gilbert A. Leveille Lectureship and Award: Recognizes outstanding research and/or public service at the interface between the disciplines of nutrition and food science, over a period of five years or more, which has contributed to improved health and well-being.
- Kellogg Prize for International Nutrition Research and Lecture: Recognizes an individual actively engaged in research to benefit populations in non-industrialized countries and training new scientists for international nutrition research.
- Robert Suskind and Leslie Lewinter-Suskind Pediatric Nutrition Lifetime Achievement Award Lecture: Awarded to a physician, clinician or investigator who has made a significant lifetime contribution to the field of pediatric nutrition.

ASN on Demand

Nutrition science at your convenience! Access engaging talks on the latest nutrition research from your computer or mobile device through ASN’s online portal, ASN on Demand. ASN on Demand offers session content via podcasts, slide-synced audio recordings and mp3 downloads. Visit http://ondemand.nutrition.org/ to view select complimentary content and purchase additional sessions from previous ASN meetings.

Special offer for EB registrants! Add ASN on Demand to your registration for the special advance purchase price of $100. Post-Meeting price increases to $350. See page 7 (refer to ASN section of society ticketed events page) to sign-up or just check the box on your EB registration. Instructions and log-in information will be sent to you when content launches on ASN on Demand.

Visit scientificsessions.nutrition.org for the latest program details.
Oral and Poster Presentations

Abstracts selected for oral and poster presentation feature the latest advancements, emerging research and new innovative methods. Abstracts are grouped in the following content areas.

- Aging and Chronic Disease
- Community and Public Health Nutrition
- Carotenoids and Retinoids
- Diet and Cancer
- Dietary Bioactive Components
- Energy and Macronutrient Metabolism
- Experimental Animal Nutrition
- Maternal, Perinatal and Pediatric Nutrition
- Global Nutrition
- Medical Nutrition
- Microbiome
- Nutrition Education and Behavior Science
- Nutrient-Gene Interactions
- Nutritional Epidemiology
- Nutritional Immunology and Inflammation
- Nutrition Translation
- Obesity
- Vitamins and Minerals
- Sports Nutrition
- Sustainability
- Education and Training
- Policy

Networking Opportunities and Special Events

Take advantage of numerous opportunities to meet and network with your colleagues from around the globe, including:

- **Connect with fellow Students and Young Professionals:** ASN’s Student Interest Group and Young Professional Interest Group meet the unique needs of students and young investigators in nutrition science. Join in the Graduate Students Breakfast, Speed Mentoring, Students Meet the Fellows and other popular networking activities.
- **Department Heads Breakfast** and other activities for faculty members.

Interest Groups: Join hot-topic discussion sessions, mentoring activities, business meetings and other special events hosted by the ASN’s fifteen Research Interest Sections and three Councils – vibrant scientific communities that are vital to advancing nutrition science.

Other Special Events

- Emerging Leaders Poster Competition
- Opening Session
- Awards Ceremony
- Meet the ASN Journal Editors
- Fellows, 50-Year Members and Past Presidents Luncheon
- First-Time Attendee and New Member Orientation
- ASN Annual Business Meeting

Continuing Professional Education

ASN (Provider NS010) is accredited and approved by the Commission on Dietetic Registration (CDR) as a provider of Continuing Professional Education (CPE) programs for Registered Dietitians. Learn more at scientificsessions.nutrition.org.

Please contact meetings@nutrition.org or 240-428-3650 if you have any questions regarding CPE.
ATTENTION STUDENTS AND YOUNG PROFESSIONALS

Each year, ASN awards more than $90,000 in awards and travel grants to students and young professionals. To be considered, submit your research to one of more than 90 abstract categories related to nutrition, obesity, metabolism, public health, education and much more! See page 10 for a full list of abstract categories.

Clinical Emerging Leaders Award Competition
For graduate students or medical trainees submitting research in clinical nutrition
Organized by the Medical Nutrition Council

Graduate Student Research Award Competition
Tasks graduate students to hone their research presentation skills
Organized by the Nutritional Sciences Council

Global Nutrition Student Poster Competition
For graduate students submitting research on global nutrition topics
Organized by the Global Nutrition Council

Emerging Leaders in Nutrition Science Poster Competition
Recognizes the highest quality research presented by students and young investigators to ASN’s abstract categories

Postdoctoral Research Award Competition
Challenges early-career scientists and clinicians in nutrition by providing a juried abstract review and special oral session in which they compete in presenting their research findings
Organized by the Young Professional Interest Group and Endowed by DuPont Nutrition & Health

Young Minority Investigator Oral Competition
Honors young minority investigators in a special oral session in which finalists compete in presenting their research findings
Organized by the Minority and Diversity Affairs Committee and Supported by DSM Nutritional Products

Nutrition Translation Award Competition for Early-Career Investigators
Provides an opportunity for early-career scientists and clinicians to demonstrate how their research can be translated to a defined audience to improve public health and/or health outcomes

Some award competitions require an ASN membership to be considered. Students can become ASN members for only $35. To become an ASN member, visit nutrition.org/join.
LECTURES

 Julius Axelrod Award in Pharmacology Lecture
 Lessons from Endogenously Expressed GPCRs: Nature Knows Best!
 Keynote: Paul A. Insel

 Norman Weiner Lecture
 Keynote: Jack Bergman

 David Lehr Research Award Lecture
 Adenosine-Regulated Glutamate Signaling in Neuron-Glia Interaction and Alcoholism
 Keynote: Doo-Sup Choi

 Joint Lecture with the Japanese Pharmacological Society
 Imaging Ca2+ Signals in the Brain in Health and Disease
 Keynote: Masamitsu Iino

 Award Lectures
 Accepting nominations at www.aspet.org through 9/15/2016 for the following:
 • John J. Abel Award in Pharmacology Lecture
 • Reynold Spector Award in Clinical Pharmacology Lecture
 • Otto Krayer Award in Pharmacology Lecture

 SYMPOSIA


 DIVISION FOR BEHAVIORAL PHARMACOLOGY

 Mushrooming Potential of Psychedelics as Therapeutics
 Chairs: William Fantegrossi and Roland Griffiths

 Behavioral Models of Age-related Cognitive Decline
 Chairs: Kevin Murnane and Jennifer Bizon

 Nonpharmacological Factors Influencing Drug Action
 Chair: Michael Nader

 Behavioral Pharmacology Division Programming Symposium

 DIVISION FOR CANCER PHARMACOLOGY

 3-D Biology in Cancer Pharmacology - Is Flat Biology Dead?
 Chair: Mary-Ann Bjornst

 Challenges and Opportunities for Childhood Cancer Drug Development
 Chair: Peter Houghton

 Stem Cells in Cancer
 Chairs: Kip Guy and Shannon McKinney-Freeman

 Cancer Pharmacology Division Programming Session
 Abstract-based presentations selected from topic codes 3000-3003

 DIVISION FOR CARDIOVASCULAR PHARMACOLOGY

 Cardiovascular Pathobiology of Inflammasomes
 Chairs: Yang Zhang and Krishna Boini

 Perinatal Therapeutics and the Programming of Adult Cardiometabolic Disease
 Chairs: Stephane Bourque and Stella Goulopoulou

 Cardiovascular Pharmacology Division Trainee Showcase and Lucchesi Award
 Abstract-based presentations for showcase. Apply through the ASPET Best Presentation award portal.
 Lucchesi Award nominations accepted through December 1. See www.aspet.org.

 DIVISION FOR DRUG DISCOVERY AND DEVELOPMENT

 Tools and Targets: Overcoming Challenges in Modern Drug Discovery
 Chairs: Don Mattison and Craig Beeson

 Emerging Technologies for Selectively Modulating the Tumor Immune Contexture
 Chairs: Shiladitya Sengupta and Ashish Kulkarni

 Surmounting the Insurmountable: Obstacles in Drug Discovery and Development – Real World Case Studies
 Chairs: Kan He and Paul F. Hollenberg

 Targeting of GRKs and Beta-arrestins for Cardiovascular Therapy: Picking on Certain Siblings over Others in Some (Protein) Families
 Chairs: Anastasios Lymeropoulos and Guido Iaccarino

 For additional program details and highlights, visit: www.aspet.org/eb2017

 2017 ASPET Annual Meeting at Experimental Biology

 www.experimentalbiology.org

 ASPET Preliminary Program
DIVISION FOR DRUG METABOLISM

- Transporter Roles in Intracellular Drug Concentrations
  Chairs: Yurong Lai and Ikumi Tamai
- Physiological Regulation of Drug Metabolism and Transport
  Chair: Edward Morgan
- Cytochrome P450 Structure in Human Health
  Chairs: Ross Wilderman and James Haupert
- Emerging Technologies for Characterizing Preclinical Biotherapeutics
  Chairs: Larry Wienkers and Dan Rock
- James Gillette Award and Platform Session
  Abstract-based presentations selected from topic codes 3024-3028
- Early Career Achievement Award Lecture
  Accepting nominations at www.aspet.org through 9/15/2016

DIVISION FOR TRANSLATIONAL AND CLINICAL PHARMACOLOGY

- Novel Regulators of Platelet Function and Thrombogenesis: Multiple Trails Towards a Broadway
  Chairs: Fadi Khasawneh and Michael Holinstat
  Chairs: Jessie Au and Jerry Lee
- Release and Processing of Extracellular ATP: New Insights and Therapeutic Targets
  Chairs: Ross Corriden and Amanda MacLeod
- Young Investigator Awards Platform Session
  Abstract-based presentations selected from topic code 3036

DIVISION FOR TOXICOLOGY

- Intestine-liver Crosstalk, New Frontier for Drug Metabolism, Liver Injury and Repair
  Chairs: Grace Guo and Lauren Aleksunes
- Mitochondria: Guardians of the Cell
  Chairs: John Schuetz and Rick Schnellmann
- Epigenetic Regulation of Toxicity and Implications for Risk Assessment
  Chairs: Brian Cummings and Dana Dolinoy
- Toxicology Division Programming Symposium
  Chair: Monica Valentovic

DIVISION FOR MOLECULAR PHARMACOLOGY

- The CRISPR-Cas9 Revolution in Pharmacology
  Chairs: Karen Tonsfeldt and Lakshmi Devi
- The Pharmacological and Therapeutic Legacy of Dr. Alfred G. Gilman
  Chairs: Myron Toews and Paul Sternweis
- Chemical Biology and Drug Discovery in Epigenetics
  Chairs: Dong Wang and Chuan He
- Division for Molecular Pharmacology Postdoctoral Scientist Award Finalists
  Abstract-based presentations selected from 3011-3014

DIVISION FOR NEUROPHARMACOLOGY

- Therapeutic Prospectives for Cannabinoids: Beyond Marijuana and Pain
  Chairs: Harshini Neelakantan and Sara Ward
- Developing Novel Therapeutic Strategies to Modulate K+/Cl- Co-transporter 2 (KCC2) Function
  Chairs: Paul Davies and Tarek Deeb
- Mechanistic Studies in Cholinergic Neurobiology: Focus on Nicotinic Acetylcholine Receptors
  Chair: Ryan Drenan
- Division for Neuropharmacology Postdoctoral Scientist Award Finalists
  Abstract-based presentations. Apply through the ASPET Best Presentation award portal.

DIVISION FOR PHARMACOLOGY EDUCATION

- Game-Based Learning and Clinical Simulation for Pharmacology
  Chairs: Mark Hernandez and Kelly Quesnelle
- Teaching Institute: Supporting Experiment Design and Rigor in Graduate Training
  Chairs: Joey Barnett and Richard Okita
- IPE: Educating a New Generation of Healthcare Professionals
  Chair: Ashley McFalls
- Delivering Innovative Solutions in Pharmacology Education: Leveraging Web-Based Technologies
  Chairs: John Szarek and Simon Maxwell

DIVISION FOR CLINICAL ANATOMY

- The Use of Imaging in Clinical Decision Making
  Chairs: Karen B. Taylor and Lisa M. Koller
- Medical Decision Making in the 21st Century
  Chairs: Jennifer M. Marcial and Scott L. Horwitz
- Clinical Anatomy Postgraduate Program
  Abstract-based presentations selected from 3015-3017

DIVISION FOR CLINICAL PHARMACOLOGY

- Clinical Pharmacology: From Bench to Bedside
  Chairs: Aruna Sarfraz and Scott J. Haas
- Patient-Centered Clinical Pharmacology
  Chairs: Sarah R. Schwartz and Jennifer H. Xie
- Clinical Pharmacology Postdoctoral Scientist Award Finalists
  Abstract-based presentations selected from 3018-3023
ASPET MEETING HIGHLIGHTS

- Presentation of Scientific Achievement Awards and Travel Awards
- Keynote lectures by award winners
- Student-Postdoc Poster Competition
- Student-Postdoc mixer

- Nightly division mixers
- Closing reception
- ASPET members lounge
- The Shop ASPET store open in ASPET booth #601

Opportunities for Undergraduates, Graduate Students and Postdocs!

Open to ASPET members. Join today at www.aspet.org/membership/.

ASPET Poster Competition

Submit an abstract to EB in an ASPET topic category by November 17th, and then apply for the ASPET Poster Competition at www.aspet.org/awards by November 21st. See website for details.

ASPET Travel Awards

Submit an abstract to EB in an ASPET topic category by November 17th, and then apply for an ASPET travel award at www.aspet.org/awards by December 1st. See website for details.
PROFESSIONAL DEVELOPMENT SESSIONS


ANATOMY
- Is a Balanced Teaching/Research Career Fact or Fiction
- Work-Life Balance and Mental Health: How to Manage One without Losing the Other
- Storytelling and the Art of Effective Science Communication

PHYSIOLOGY
- The Many Facets of a Teaching Career
- Publishing 101: How to Get Your Work Published and Avoid Ethical Minefields
- Kick Start Your Funding: Looking Beyond NIH and NSF
- Choosing the Right Lab and Personnel for Your Career

BIOCHEMISTRY
- ASBMB Graduate and Postdoctoral Professional Development Program
- ASBMB Women Scientists Panel and Networking Reception
- Attaining Employment, Tenure and Promotion Across the Academic Landscape
- Immigration and Visa Issues for Foreign STEM Graduate Students and Postdoctoral Fellows
- Welcome and Networking Reception, sponsored by the ASBMB Minority Affairs Committee

PATHOLOGY
- Committee for Career Development & Diversity Workshop and Breakfast: Developing Your Personal Brand for Career Success
- XVIIIth Annual ASIP/AAA Career Development and Mentoring Program and Lunch: Developing Your Core Message: An Interactive Session on Crafting an Effective Elevator Speech

NUTRITION
- Speed Mentoring for Students, organized by the Early Career and Student Interest Groups
- Clinical Emerging Leaders Award Competition, organized by the Medical Nutrition Council
- Graduate Student Research Award Competition, organized by the Nutrition Sciences Council
- Emerging Leaders in Nutrition Science Poster Competition
- Postdoctoral Research Award Competition, organized by the Early Career Interest Group and endowed by DuPont Nutrition and Health.
- Young Minority Investigator Oral Competition, organized by the Minority and Diversity Affairs Committee and supported by DSM Nutritional Products
- Nutrition Translation Award Competition for Early-Career Investigators, organized by the Nutrition Translation Research Interest Section in cooperation with the Public Information Committee

PHARMACOLOGY
- Graduate Student-Postdoctoral Colloquium
- Teaching Institute: Supporting Experiment Design and Rigor in Graduate Training
- ASPET Journals Symposium: Hear It from the Editors
- Science and Government: How to Make a Difference through Advocacy
- Meet-a-Mentor and Meet-the-Experts sessions
- Diversity Mentoring Breakfast
- Undergraduate Networking and Career Development Luncheon

PROFESSIONAL DEVELOPMENT PROGRAMS SPONSORED BY FASEB MARC PROGRAM
- Get Up with Something on Your Mind: Strategic Thinking Tips for Achieving Academic/Career/Personal Success
- Networking: A Required Life Skill
- Goal Setting, Prioritizing, Time and Stress Management
- Striving for EXCELLENCE: Prerequisite for Academic/Career/Life Success
- Making the Case for Graduate School
- Navigating the Protocol, Milestones, and Graduate Degree Requirements
- Developing and Writing the Doctoral Dissertation Proposal
- Overcoming Communication Barriers
- Global Inter Skills: A Practice Workshop for International Candidates
- Job Search in Academia and Industry: Timelines and Effective Strategies
- Negotiation Strategies for Scientists
- Making the Grade: Job Talk/Chalk Talk
- I Said What?!??!
- Networking: Is it Only Who You Know?
- Attitudes and Behaviors: How are you Perceived?
- Successful Behaviors for Winning an Interview
- Making the Connection: The Relationship between the Resume, the Interview and the Job
- Your Behavioral CV
- Understanding Search Community & Finding Job Announcements
- Creating Effective CVs, Cover Letters, Research & Teaching Statements
- Nailing the Job Talk & Interview Prep
- Identifying Your Options using ScienceCareers.org, LinkedIn & More
Building Your Skills, Networking, and Informational Interviews
Translating Your Credentials on Paper (CV → Resume) and In Person
How to Choose Your Ideal Career
Job Hunting in Biotech Part 1 – Finding and Applying for Scientist Positions
Job Hunting in Biotech Part 2 – Interviewing for Scientist Positions
Job Hunting in Biotech Part 3 – Compensation Negotiation for Scientist Positions
But I have no Skills!
Talking About Yourself: Interviewing Well
Transforming Your CV
Developing Your Core Message/“Elevator Pitch”
Ten Ways to Get Lucky in the Job Search
Beyond the Bench: Preparing for Your Career Transition in the Life Sciences
Ten Tough Industrial Interview Questions, (and Ten Pretty Good Responses)
The CV, The Resume, and the Scientist’s Job Search: Which, When and Why?
The Industrial Hiring Process: Learn the Nuisances, Get the Offer
An Interview Tune Up: Putting Your Best Foot Forward When it Really counts
Workplace Dynamics

NIH GRANTS
NIH Career Development Programs and Early-State Investigators

FASEB CAREER RESOURCES/MARC PROGRAM
A SERVICE OF FASEB OFFICE OF SPONSORED PROGRAMS, DIVERSITY AND GRANTS ADMINISTRATION (OSPDGA)
ARRANGED BY EXPERIMENTAL BIOLOGY 2017. THE EB 2017/FASEB CAREER CENTER WILL FEATURE:

Virtual Career Fair (before, during and after the meeting)
Computer-assisted registration, ‘search-and-referral’ services, interview scheduling and message services
On-site interview facilities
‘Position Available’ posting area
Career development seminars
Cover letter and resume critique workshops
Message center for job-seekers and employers
Job-Seeker database (year-round job-seeker resume referrals)
Note: Access to the Career Center is FREE to all registered Experimental Biology 2017 meeting attendees.

NIH K AWARDS
This presentation will focus on the NIH’s new K99/00 Pathways to Independence Award (for postdoctoral scientists) and the K08 Mentored Clinical Scientist Development Award (for individuals with a health professional doctoral degree committed to a career in laboratory or field-based research.) The interactive discussion will give attendees an opportunity to ask questions of and obtain insight from an NIH representative.

NIH FELLOWSHIP (F) AWARDS
This presentation will focus on the NIH’s Ruth L. Kirschstein National Research Service Awards (NRSA). The NRSA research training fellowship (F) awards are targeted to individuals with or seeking research doctoral degrees (Ph.D. and equivalent) and clinical doctoral degrees (M.D. and equivalent). Among the F awards discussed will be the F30, NRSA Individual Predoctoral MD/PhD or Other Dual-Doctoral Degree Fellowship Award, the F31 NRSA Individual Predoctoral Fellowship, the F32 NRSA Individual Predoctoral Fellowship to Promote Diversity in HealthRelated Research Award, the F33 NRSA Individual Postdoctoral Fellowship Award, and the NRSA Individual Senior Fellowship Award. The interactive discussion will give attendees an opportunity to ask questions of and obtain insight from an NIH representative on these and other awards available for pre- and postdoctoral fellows and senior investigators.

IMPORTANT: Handouts and resource materials will be provided on-site.

EB 2017 MENTORED POSTER/PLATFORM PRESENTER TRAVEL AWARDS
The FASEB OSPDGA will be sponsoring EB 2017 Mentored Travel Awards to help support the participation first-time presenters at the EB meeting. Full-time postdoctoral fellows and students from underrepresented groups are eligible to apply. The travel awards are funded up to $1,500 each for travel-related expenses and meeting registration. Travel awards are provided as reimbursements after the meeting. The travel awards are supported by a federal training grant from the NIGMS/NIH; therefore, only U.S. citizens and permanent residents of the U.S. are eligible for the travel awards. For travel award information, contact marcasm@faseb.org
Note: Travel award application deadline—March 3, 2017.

NIH GRANTS SEMINARS & WORKSHOPS
The FASEB OSPDGA will offer NIH grant seminars as part of the Career Center at the Experimental Biology 2017 Annual Meeting.
An NIH representative will give presentations on the “NIH K and F Awards.”

NIH CAREER CENTER
Email: careers@faseb.org or clientserv@yourmembership.com • Phone: 860-437-5700 (M–F, 7:30am - 7:00pm EDT)

www.experimentalbiology.org
Timeline

As soon as possible:
› Submit your abstract
› Register for the meeting
› Make hotel reservations
› Make airline reservations

November 17, 2016
› Abstract deadline: Deadline to submit abstract and $65 non-refundable abstract processing fee
› Deadline to withdraw or make changes to a submitted abstract

February 23, 2017
› Deadline for early registration.
   You may register online after this date; however your registration will be at the higher fee.

March 23, 2017
› Deadline to request a refund of advance registration.

March 31, 2017
› Deadline for hotel reservations.
   Rates and availability cannot be guaranteed after this date.

April 22-26, 2017
› Attend Experimental Biology meeting in Chicago, IL!

FOLLOW EB AND THE SOCIETIES ON FACEBOOK AND TWITTER FOR MEETING UPDATES!
FASEB Office of Scientific Meetings and Conferences
9650 Rockville Pike
Bethesda, MD 20814-3998

November 17, 2016 Abstract Submission Deadline
February 23, 2017 Early Registration Deadline
March 23, 2017 Registration Cancellation Deadline
March 31, 2017 Hotel Reservations Deadline

www.experimentalbiology.org