ANNUAL MEETING OF:
American Association of Anatomists (AAA)
The American Physiological Society (APS)
American Society for Biochemistry and Molecular Biology (ASBMB)
American Society for Investigative Pathology (ASIP)
American Society for Nutrition (ASN)
American Society for Pharmacology and Experimental Therapeutics (ASPET)

San Diego
Experimental Biology
April 26-30, 2014 – San Diego Convention Center

Abstract Deadline: Friday, November 8, 2013
The Guest Societies participating in EB 2014 include:

**AAA - American Association of Anatomists**
Canadian Association for Anatomy, Neurobiology, and Cell Biology (CAANCB)

**APS - American Physiological Society**
American Federation for Medical Research (AFMR)
Association of Latin American Physiological Societies (ALACF)
Biomedical Engineering Society (BMES)
International Research Network on Cerebral Hemodynamic Regulation (CARnet)
Microcirculatory Society (MCS)
Society for Experimental Biology and Medicine (SEBM)
The Physiological Society (TPS)

**ASBMB - American Society for Biochemistry and Molecular Biology**
Biochemical Society
Division of Biological Chemistry – American Chemical Society
Panamerican Association for Biochemistry and Molecular Biology (PABMB)

**ASIP - American Society for Investigative Pathology**
American College of Veterinary Pathologists (ACVP)
American Society for Matrix Biology (ASMB)
Association of Pathology Chairs (APC)
The Histochemical Society (HCS)
International Society for Biological and Environmental Repositories (ISBER)
Society for Cardiovascular Pathology (SCVP)
Societa Italiana di Patologia e Medicine Traslazionale/Italian Society of Pathology and Translational Medicine (SIPMeT)

**ASN - American Society for Nutrition**
Academy of Nutrition and Dietetics (AND)
American Society of Animal Science (ASAS)
Association of Nutrition Departments and Programs (ANDP)
ILSI North America (ILSI)
Korean Nutrition Society (KNS)
Plant Phenolic and Human Health Research Interest Group (PhenHRIG)
Society for Nutrition Education and Behavior (SNEB)
Southern Society for Clinical Investigation (SSCI)
The Nutrition Society (NS)

**ASPET - American Society for Pharmacology and Experimental Therapeutics**
Behavioral Pharmacology Society (BPS)
Chinese Pharmacological Society (CNPHARS)
Global GI Club
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The complete Call for Abstracts and general meeting information are at [www.experimentalbiology.org](http://www.experimentalbiology.org)

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## Preliminary Programs

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- Biochemistry: American Society for Biochemistry and Molecular Biology (ASBMB) | 23-27 |
- Pathology: American Society for Investigative Pathology (ASIP)        | 28-29 |
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## Abstract Information/Using the Topic Categories

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## General Information

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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: eb@faseb.org
[www.experimentalbiology.org](http://www.experimentalbiology.org)
Experimental Biology is an annual meeting comprised of more than 14,000 scientists representing six sponsoring societies and 30 guest societies. Primary focus areas include anatomy, physiology, biochemistry and molecular biology, investigative pathology, nutrition and pharmacology. EB 2014 is open to all members and nonmembers of organizing and guest societies interested 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 poster presentations, on-site career services, and exhibits spotlighting equipment, supplies and publications required for research labs and experimental study.

Experimental Biology 2014 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

Mark your Calendar

Experimental Biology 2014 “Transforming the Future through Science”

April 26-30

San Diego Convention Center
111 West Harbor Drive
San Diego, CA 92101-7899

Scientific Sessions:
Saturday, April 26 – Wednesday, April 30

Poster Sessions:
Sunday, April 27 – Wednesday, April 30

Exhibits:
Sunday, April 27 – Tuesday, April 29

Contact us at:
Experimental Biology
9650 Rockville Pike
Bethesda, MD 20814-3998

(T) 301-634-7010
(F) 301-634-7014

eb@faseb.org
www.experimentalbiology.org
CAREER DEVELOPMENT SESSIONS


ANATOMY
Advancing Your Career through Social Networks
Individual Growth and Career Planning for Graduate Students/Postdocs and New Faculty

PHYSIOLOGY
Symposium: Bridging Career Pathways for an Evolving Biomedical Workforce
Symposium: Publishing 101: How to Get Your Work Published and Avoid Ethical Minefields
Symposium: Conscious Choice and Serendipity in Your Career Trajectory: A Panel Discussion
Symposium: Ahead of the Curve: Taking the Lead
Symposium: The Other Side of the Submit Button: The Ins and Outs of the Manuscript Review Process

BIOCHEMISTRY
ASBMB Graduate and Postdoctoral Professional Development Program
ASBMB Women Scientists Panel and Networking Reception
Building A Sustainable Research Enterprise,

sponsored by the ASBMB Public Affairs Advisory Committee
Careers in Science Policy,

sponsored by the ASBMB Minority Affairs Committee
Career Choices: Roads Less Traveled
Fostering Partnerships between Colleges, Universities and K-12 Schools Workshop
Measuring Success in Undergraduate Education
Mentoring and Networking: Preparing for the Future
Online Education and the Rise of the Massive Open Online Course (MOOC)
Promoting Concept Driven Teaching Strategies in BMB through Concept Assessments
Welcome and Networking Reception,

sponsored by the ASBMB Minority Affairs Committee
ASBMB Undergraduate Events: Start Trek the Next Generation
Beam Me Up Scotty! A Galactic Overview/Orientation of the ASBMB Annual Meeting
Boldly Go Where No Scientist Has Gone Before! Exploring Careers after College
Live Long and Prosper! ASBMB Award Winner and Undergraduate Breakfasts
Vulcan Mind Probe! ASBMB 18th Annual Undergraduate Student Research Poster Competition

PATHOLOGY
Career Development Workshop and Breakfast:
Beyond the Job Offer: Exploring the Art of Effective Negotiation
XIVth Annual ASIP/AAA Career Development and Mentoring Program and Lunch: GUILTY until proven INNOCENT: Scientific Integrity and Getting Published!
F TROOP: Roadmap to Fellowship Grant Applications

NUTRITION
Nutrition Competencies in Health Professionals’ Education and Training: A New Paradigm
Interpreting Epidemiological Data in Nutritional Literature: An Historical Perspective
Best Practices for Your Research Toolkit
Successful Scientist: What’s the Winning Formula?

PHARMACOLOGY
Diversity Mentoring Breakfast
Graduate Student-Postdoctoral Colloquium: TBA
Co-sponsored by the Committee on Graduate Recruitment and Education and the Committee on Mentoring and Career Development
Chair: TBA at www.aspet.org

MARC & PROFESSIONAL DEVELOPMENT PROGRAMS
Networking: A Required Life Skill
Get Up with Something on Your Mind
Goal Setting, Prioritizing, Time Management
Making the Case for Graduate School
What You Seek Is What You Get
Professionalism for Students in Today’s World
Navigating Graduate Work, Protocol, Milestones, Requirements
Overcoming Communications Barriers in the Grad Research Lab
Fundamentals for Managing the Postdoctoral Experience
Developing/Writing the Doctoral Dissertation
Negotiation Strategies for Scientists
Global Interview Skills: A Practice Workshop for International Candidates
Making the Grade: Job Talk/Chalk Talk
Job Search in Academia & Industry
Revealing Your Character through Your Resume
Sometimes It’s Who You Know: Winning at Networking
Making the Connection: The Relationship between the Resume, the Interview and the Job

www.experimentalbiology.org
NIH Grants
"Write Winning Grants"® All-day Seminar & Workshop [advance registration required]
Overview of the NIH Career Development Program

"WRITE WINNING GRANT PROPOSALS"®
(all-day seminar/workshop)
This widely acclaimed seminar comprehensively addresses both practical and conceptual aspects that are important to the proposal-writing process. It is designed for faculty members and advanced postdoctoral fellows who have had some exposure to writing grant applications, either through training/mentoring or personal experience. The presentation is tailored to meet the needs of the audience, i.e., to emphasize the funding agencies (federal, private, and/or industrial sources) that are of greatest interest to the attendees. Emphasis is given to such things as idea development, identification of the most appropriate granting agency, how to write for reviewers, and tips and strategies that are of proven value in presenting an applicant’s case to reviewers.

This seminar program presented at EB 2014 will focus on NIH and emphasize how to cope with the changes in how grant proposals to NIH are written and reviewed. Regardless of the agency, participants are taught to write with a linear progression of logic, which leads reviewers through their applications. It is stressed that applicants are writing for two different audiences – the assigned reviewers, who have read the application in its entirety, and non-assigned reviewers who may have read little, or nothing, of the proposal before the meeting of the review panel. Strategies designed to merit a fundable priority score are emphasized. [Advanced registration and pre-approval are required to participate in the seminar/workshop.]

To apply for the seminar/workshop, visit https://www.surveymonkey.com/s/WWGPatEB2014.
EDUCATION-RELATED SESSIONS


ANATOMY
- Anatomy Education Breakfast Roundtables
- An Integrated Medical Curriculum: Successes and Pitfalls across Disciplines
- Energizing our Educational Research
- Interprofessional Education in the Anatomical Sciences (Hybrid Symposium)
- Musculoskeletal Ultrasound Workshop
- Outside of the Classroom: A Look at Factors Influencing Education
- Active, Clinical, Mobile Educational Tools in Anatomy
- Anatomy Education [Platform]

BIOCHEMISTRY
- ASBMB Award for Exemplary Contributions to Education Lecture
- Career Choices: Roads Less Traveled
- Fostering Partnerships between Colleges, Universities and K-12 Schools Workshop
- Measuring Success in Undergraduate Education
- Mentoring and Networking: Preparing for the Future
- Online Education and the Rise of the Massive Open Online Course (MOOC)
- Promoting Concept Driven Teaching Strategies in BMB through Concept Assessments

PATHOLOGY
- Course: Pathobiology for Basic Scientists: After the (Inflammatory) Deluge: Resolution of Inflammation, Wound Healing and Fibrosis
- XIVth Annual Workshop on Graduate Education in Pathology: Pathology Curricula in Graduate Programs: How to Succeed in the Business of Training Tomorrow's Medical Researchers
- High School Teacher Session: Scientific Sleuthing of Human Disease for High School Teachers
- Lunch and Learn: Necessary Evils: The Responsibility and Process to Protect Human and Animal Subjects in Research

PHARMACOLOGY
- 2014 Teaching Institute: Practical Technologies for Effective Teaching
- Sponsored by the Committee on Graduate Recruitment and Education and the Division for Pharmacology Education
- Chairs: Renee L. Hayslett and Catherine M. Davis
- Career Opportunities Beyond the Bench: Education as a Viable Path
- Chairs: Jayne S. Reuben and Karen Marcdante
- Collaborative Role of Pharmacology in Education of Healthcare Professions
- Chairs: Sandra Carlin Andrieu and Robert J. Theobald, Jr.
- Pharmacology Education Division Symposium: Addressing Prescribing Errors through Medical Student Education and Assessment
- Chairs: Senthil K. Rajasekaran and David W. Nierenberg

EB SPECIAL JOINT LECTURE
(coming soon)
**SCIENCE POLICY**


**PHYSIOLOGY**
- Animal Care Regulation and Compliance: Hot Topics for the IACUC
- Refresher Course on Exercise Physiology: The Role of Exercise in Disease Prevention, Treatment, and Optimal Aging
- Translation of Cardiovascular Endpoints Across Species
- Storytelling: Mandatory Training for Today’s Scientists
- Computational Modeling
- Using Retrieval Practice and Other Advances from Cognitive Science to Enhance Student Learning
- Claude Bernard Distinguished Lectureship of the APS Teaching of Physiology Section
- On the Origin of Science Faculty with Education Specialties (SFES): Perspectives on Their Roles and Tensions
- MCAT 2015 Update: Are We Ready?

**BIOCHEMISTRY**
- Building a Sustainable Research Enterprise
## SOCIETY AWARDS AND TRAVEL FUNDING OPPORTUNITIES

Details and award application forms are available on the websites noted below.  

**ANATOMY:** Visit [www.anatomy.org](http://www.anatomy.org) for details and apply online when submitting your abstract

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All deadlines are November 8, 2013

**PHYSIOLOGY:** Visit [www.apsebmeeting.awards/index.htm](http://www.apsebmeeting.awards/index.htm)

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<td>APS Environmental &amp; Exercise Physiology Section Military Award for Beginning Investigators</td>
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<td>APS Gastrointestinal &amp; Liver Physiology Section New Investigator Award</td>
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APSGastrointestinal & Liver Physiology Section Takeda Travel Awards .......................... 12/13/2013
Details and award application forms are available on the websites noted below ..........................

APSMead Johnson Research Award in Endocrinology & Metabolism .................................. 11/08/2013
APSNeural Control & Autonomic Regulation Section Michael J. Brody Young Investigator Award .................................. 11/15/2013
APSNeural Control & Autonomic Regulation Section New Investigator Award .......................... 11/15/2013
APSNeural Control & Autonomic Regulation Section Research Recognition Award .......................... 11/15/2013
APSNike, Inc. Environmental and Exercise Physiology Postdoctoral Research Award .......................... 11/08/2013
APSNike, Inc. Environmental and Exercise Physiology Predoctoral Research Award .......................... 11/08/2013
APSPhysiologists in Industry Committee Postdoctoral Novel Disease Model Award .......................... 12/14/2013
APSPhysiologists in Industry Committee Predoctoral Novel Disease Model Award .......................... 12/14/2013
APSRenal Section Amgen Postdoctoral Excellence in Research Award .......................... 11/22/2013
APSRenal Section New Investigator Award .......................... 11/22/2013
APSRenal Section Predoctoral Excellence in Renal Research Awards .......................... 11/22/2013
APSRenal Section Research Recognition Award .......................... 11/22/2013
APSRespiration Section New Investigator Award .......................... 11/15/2013
APSRespiration Section Research Recognition Award .......................... 11/15/2013
APSScience M. Horvath Professional Opportunity Award .......................... 11/08/2013
APSTeaching of Physiology Section New Investigator Award .......................... 11/08/2013
APSTeaching of Physiology Section Research Recognition Award .......................... 11/08/2013
APS Virendra B. Mahesh Award of Excellence in Endocrinology .......................... 11/08/2013
APSWater & Electrolyte Homeostasis Section New Investigator Award in Regulatory and Integrative Physiology .......................... 11/22/2013
APSWater & Electrolyte Homeostasis Section Predoctoral Research Recognition Award .......................... 11/08/2013
APSWater & Electrolyte Homeostasis Section Juan Carlos Romero Postdoctoral Research Recognition Award .......................... 11/08/2013
APSMinority Travel Fellowship Awards .......................... 11/15/2013
SEBM Young Investigator Award (www.sebm.org/youngaward.php) .......................... 12/17/2013

BIOCHEMISTRY: Visit www.asbmb.org/meeting2014
Awards requiring society membership, applicant must be a current member of ASBMB at the time of application submission with dues paid through 2014. New ASBMB membership applications may take up to 72 hours for processing. All application criteria: www.asbmb.org/meeting2014.
ASMBM Annual Meeting Childcare Grant .................................. 11/19/2013
ASMBM Graduate Minority Travel Award .................................. 11/19/2013
ASMBM Graduate/Postdoctoral Travel Award .................................. 11/19/2013
ASMBM Undergraduate Affiliate Network Faculty Travel Award .................................. 11/19/2013
ASMBM Undergraduate Affiliate Network Student Travel Award .................................. 01/31/2014
ASMBM Undergraduate Student Competitive Travel Award .................................. 11/19/2013
ASMBM Undergraduate Affiliate Network Outstanding Chapter Award .................................. 03/15/2014

PATHOLOGY: Visit www.asip.org/mtgs/eb14
ASIP Experimental Pathologist-in-Training Award .................................. 11/15/2013
ASIP Experimental Pathologist-in-Graduate Training Award .................................. 11/15/2013
ASIP Trainee Travel Awards .................................. 11/15/2013
ASIP Minority Trainee Travel Awards .................................. 11/15/2013
Gotlieb Family Fund for Undergraduate Education in Pathobiology Trainee Travel Award .................................. 11/15/2013
The Histochemical Society Sponsored Trainee Travel Award .................................. 11/15/2013
Societa Italiana di Patologia e Medicine Traslazionale Young Investigator Award .................................. 11/15/2013
The Marcos Rojkind - ASIP Trainee Travel Award .................................. 11/15/2013

NUTRITION: Visit: www.nutrition.org/about asn/awards/
ASN Conrad Elvehjem Award for Public Service in Nutrition .................................. 09/15/2013
ASN David Kritchevsky Career Achievement Award .................................. 09/15/2013
ASN E.L.R. Stokstad Award .................................. 09/15/2013
ASN E.V. McCollum Award .................................. 09/15/2013
Details and award application forms are available on the websites noted below.

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<td>ASN Norman Kretchmer Memorial Award in Nutrition and Development</td>
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<td>ASN Pfizer Consumer Healthcare Nutritional Sciences Award</td>
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<td>ASN Roland L. Weinsier Award for Excellence in Medical/Dental Education</td>
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<td>ASN Bio-Serv Award in Experimental Animal Nutrition</td>
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<td>ASN Mary Swartz Rose Investigator Award</td>
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<td>ASN Peter J. Reeds Young Investigator Award</td>
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<td>ASN Nutrition Science Media Award, organized by the Public Information Committee</td>
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<td>ASN Graduate Student Research Award Competition, supported by the Nutritional Sciences Council</td>
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<td>ASN Clinical Emerging Leader Award Competition, supported by the Medical Nutrition Council</td>
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<td>ASN Global Nutrition Council Kellogg International Student Prize</td>
<td>09/15/2013</td>
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<td>ASN Clinical Nutrition Internship Program</td>
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<td>ASN Physician Nutrition Specialist Award</td>
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<td>ASN MARC Travel Award</td>
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<td>ASN MARC Young Minority Investigator Travel Award</td>
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<td>ASN Volunteer of the Year Award</td>
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<td>ASN Sustaining Partner Roundtable Award of Distinction</td>
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<td>ASN Korean Nutrition Society Award</td>
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<td>W.O. Atwater Lectureship Award</td>
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<td>PHARMACOLOGY: Visit <a href="http://www.aspet.org/awards">www.aspet.org/awards</a></td>
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<td>John J. Abel Award</td>
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<td>Julius Axelrod Award</td>
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<td>Pharmacia-ASPET Award in Experimental Therapeutics</td>
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<td>Robert R. Ruffolo Career Achievement Award</td>
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<td>Bernard B. Brodie Award in Drug Metabolism</td>
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<td>P.B. Dews Lifetime Achievement Award for Research in Behavioral Pharmacology</td>
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<td>Goodman and Gilman Award in Receptor Pharmacology</td>
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<td>Paul M. Vanhoutte Distinguished Lectureship in Vascular Pharmacology</td>
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<tr>
<td>ASPET Division for Drug Discovery and Development Young Investigator Award</td>
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<tr>
<td>ASPET Graduate Student Best Abstract Awards</td>
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<td>ASPET Pharmacology Educators Travel Award</td>
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<td>ASPET Postdoctoral Scientist Awards</td>
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<td>ASPET Summer Undergraduate Research Fellow Travel Awards</td>
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<td>ASPET Undergraduate Student Best Abstract Awards</td>
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<tr>
<td>ASPET Young Scientist Travel Awards</td>
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FASEB-MARC PROGRAM: Visit www.faseb.org/marc for forms and information

Minority Travel Awards                                                  03/08/2014
FASEB Career Resources/MARC Program

A service of FASEB Office of MARC & Professional Development Programs, arranged by Experimental Biology 2014

The EB 2014/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 2014 meeting attendees.

MARC PROGRAM

The FASEB MARC Program will be sponsoring EB 2014 Travel Awards to help support the participation of full-time faculty/mentors, postdoctoral fellows, and students from minority institutions (MIs) and historically black colleges and universities (HBCUs). The travel awards are funded up to $1,850 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. Faculty/mentors, students and postdoctoral fellows from underrepresented groups at majority institutions are also eligible to apply for the travel awards. For travel award information, contact marcssm@faseb.org

Note: Travel award application deadline—March 7, 2014.

NIH GRANTS SEMINARS & WORKSHOPS

The FASEB Office of MARC & Professional Development Programs will offer NIH grant seminars as part of the Career Center at the Experimental Biology 2014 Annual Meeting. Dr. Henry Khachaturian of NIGMS, NIH will give presentations on the “NIH K Awards”.

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.

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

For further information, contact:
FASEB Office of MARC and Professional Development Programs
9650 Rockville Pike,
Bethesda, MD 20814-3998
Email: marc@faseb.org
KEYNOTE SPEAKER
Andrew McMahon
Keck School of Medicine of USC

PLENARY LECTURES
Henry Gray/Elsevier Distinguished Educator Award Lecture
Jeffrey T. Laitman, Ph.D. (Icahn School of Medicine at Mount Sinai)
Beyond Facts: The Deeper Responsibility of Teachers to Their Students

Henry Gray/Lippincott Williams & Wilkins Scientific Achievement Award Lecture
Drew M. Noden, Ph.D. (Cornell Univ., College of Veterinary Medicine)
Getting A Head: Changing Perspectives on Craniofacial Development

AAA/Wiley A.J. Ladman Exemplary Service Award Lecture
Kathy K. H. Svoboda, Ph.D. (Texas A&M Univ. Baylor College of Dentistry)
30 Years in 30 Minutes: Integrating Imaging, Cell and Developmental Biology with Teaching and Service

YOUNG INVESTIGATOR AWARD SYMPOSIUM LECTURES*
R.R. Bensley Award Lecture in Cell Biology
C.J. Herrick Award Lecture in Neuroanatomy
H.W. Mossman Award Lecture in Developmental Biology
Morphological Sciences Award Lecture

*award winners to be announced in November

EDUCATION & TEACHING TRACK
Anatomy Education Breakfast Roundtables - Student Assessment: Assessing ‘for’ Learning vs. Assessment ‘of’ Learning
Chair: Jennifer McBride (Cleveland Clinic Lerner College of Medicine)

An Integrated Medical Curriculum: Successes and Pitfalls across Disciplines
Chair: Judith Venuti (Oakland Univ. William Beaumont School of Medicine)

Energizing our Educational Research
Chair: Rebecca Lufler (Tufts Univ. School of Medicine)

Interprofessional Education in the Anatomical Sciences (Hybrid Symposium) *
Chair: Mary Bee (Oakland Univ. William Beaumont School of Medicine/UDM)

Musculoskeletal Ultrasound Workshop
Chair: Geoffrey Guttmann (Univ. of North Texas Health Science Center)

Outside of the Classroom: A Look at Factors Influencing Education
Chair: Polly Husmann (Case Western Reserve Univ.)

Active, Clinical, Mobile Educational Tools in Anatomy
Chair: Adam Fisch (Indiana Univ. School of Medicine)

Anatomy Education Platform I*
Chairs: Anna Edmondson (Georgia Health Sciences Univ.) and Gabrielle Finn (Durham Univ.)

Anatomy Education Platform II*
Chairs: Ann Poznanski (Oakland Univ. William Beaumont School of Medicine) and Paulette Bernd (Columbia Univ.)

PROFESSIONAL DEVELOPMENT TRACK
Advancing Your Career through Social Networks
Chair: David Mills (Louisiana Tech Univ.)

Individual Growth and Career Planning for Graduate Students/Postdocs and New Faculty
Chairs: Michael Lehman (Univ. of Mississippi Medical Center) and Linda May (East Carolina Univ.)
MINI-MEETINGS

Sunday, April 27
Signaling by Natural and Engineered Extracellular Matrix Mini-Meeting
Chairs: Rocky Tuan (Univ. of Pittsburgh School of Medicine) & Charles Little (Kansas Univ. Medical Center)
Plenary speakers, 2 symposia and platform session

Monday, April 28
Organogenesis Mini-Meeting
Chair: Paul Trainor (Stowers Institute for Medical Research)
Plenary speakers, and 2 symposia

SCIENTIFIC SYMPOSIA

Advances in Neuroimaging: Linking Structure and Function toward the Connectome
Chair: Todd Parrish (Northwestern Univ.)

Anatomy Ontologies: Bioinformatics in the Anatomical Sciences (Hybrid Symposium)*
Chair: Robert Druzinsky (Univ. of Illinois at Chicago, College of Dentistry)

Bioflyers: Anatomy of Animal Flight
Chair: Michael Habib (Univ. of Southern California)

Collateral Vessels: Recent Insights into Mechanisms and Clinical Significance
Chair: Robert Tomanek (Univ. of Iowa)

Excellence in Canadian Research – Cancer Biology
Chair: Michael Kawaja (Queen’s Univ.)

Getting Nervous about the Immune System
Chair: Keith Kelley (Univ. of Illinois)

Inflammation: At the Crossroads of Regeneration and Repair
Chair: Traci Wilgus (The Ohio State Univ.)

The Molecular Basis of Gastrointestinal Disease (Hybrid Symposium)*
Co-sponsored by AAA’s Advisory Committee for Young Anatomists
Chair: Julian Guttman (Simon Fraser Univ.)

The Obstetrical Dilemma in the Human Pelvis: Constraints, Compromises and Complications
Chair: Kirsten Brown (George Washington School of Medicine)

Unexpected Morphological Consequences of Highly Specific Genetic Alterations
Chair: Amy Merrill (Univ. of Southern California)

Vascularization and Bone Regeneration (Hybrid Symposium)*
Chair: Kurt Hankenson (Univ. of Pennsylvania)

Wound’omics’ or the Contribution of Personal Genetics to Tissue Repair
Chair: Martine Dunnwald (The Univ. of Iowa)

PLATFORM SESSIONS

Cardiovascular Biology *
Chair: Eduard Dedkov (New York Institute of Technology)

Development and Disease - It’s all about Anatomy *
Chair: Paul Trainor (Stowers Institute for Medical Research)

Form, Function and Evolution *
Chair: TBD

Neurobiology *
Chair: TBD

Signaling by Natural and Engineered Extracellular Matrix *
Chair: TBD

Stem Cells and Tissue Injury *
Chair: Ralph Marcucio (Univ. of California, San Francisco)

Tissue Engineering and Regenerative Medicine *
Chair: TBD

Anatomy Education Platform I*
Chairs: Anna Edmondson (Georgia Health Sciences Univ.) and Gabrielle Finn (Durham Univ.)

Anatomy Education Platform II*
Chairs: Ann Poznanski (Oakland Univ. William Beaumont School of Medicine) and Paulette Bernd (Columbia Univ.)

*AAA will be accepting abstracts for oral presentation within this session. Please see AAA topic categories starting on page 38-39.
Please visit www.apsebmeeting.org for programming updates and meeting information

**APS PRESIDENT’S SYMPOSIUM SERIES**

**Multiscale Physiology: Linking Cellular and Molecular Insights to the Health of Organisms and Populations**
Organized by: Kim E. Barrett, Univ. of California, San Diego

- **Sunday, April 27, 2014 – 3:15 PM**
  - Early Life Origins of Adult Disease
  - Charles H. Lang
  - Translational Physiology Track

- **Monday, April 28, 2014 – 3:15 PM**
  - Life at Extremes: Adaptations to Diverse Challenges to Normal Homeostasis
  - Willis K. Samson

- **Tuesday, April 29, 2014 – 3:15 PM**
  - Physiological Relevance of the Intestinal Microbiome: Moving Beyond the Gut
  - P. Kay Lund
  - Gut Interactions Track

- **Wednesday, April 30, 2014 – 4:45 PM**
  - APS Nobel Lecture in Physiology or Medicine
  - Bruce Beutler
  - Translational Physiology Track

**NAMED LECTURES**

- **Saturday, April 26, 2014 – 5:30 PM**
  - Physiology in Perspective – The Walter B. Cannon Memorial Award Lecture
  - James Anderson

- **Sunday, April 27, 2014 – 10:30 AM**
  - Claude Bernard Distinguished Lectureship of the APS Teaching of Physiology Section
  - Robert G. Carroll
  - Education Track

- **Sunday, April 27, 2014 – 2:00 PM**
  - Hugh Davson Distinguished Lectureship of the APS Cell and Molecular Physiology Section
  - Raymond A. Frizzell
  - Regulation of Epithelial Function Track

- **Sunday, April 27, 2014 – 4:15 PM**
  - Ernest H. Starling Distinguished Lectureship of the APS Water and Electrolyte Homeostasis Section

- **Sunday, April 27, 2014 – 5:45 PM**
  - Henry Pickering Bowditch Award Lecture
  - Kazuhiro Nakamura

- **Monday, April 28, 2014 – 8:00 AM**
  - Carl Ludwig Distinguished Lectureship of the APS Neural Control and Autonomic Regulation Section
  - Mohan Raizada
  - Central Control of Homeostasis Track

- **Monday, April 28, 2014 – 10:30 AM**
  - Solomon A. Berson Distinguished Lectureship of the APS Endocrinology and Metabolism Section
  - Carol F. Elias

- **Monday, April 28, 2014 – 2:00 PM**
  - Edward F. Adolph Distinguished Lectureship of the APS Environmental and Exercise Physiology Section
  - Malcolm Jackson

- **Monday, April 28, 2014 – 3:15 PM**
  - Joseph Erlanger Distinguished Lectureship of the APS Nervous System Section
  - Barry Levin
  - Central Control of Homeostasis Track

- **Monday, April 28, 2014 – 3:15 PM**
  - Carl W. Gottschalk Distinguished Lectureship of the APS Renal Section
  - Susan Wall
  - Transporters and Ion Channels Track

Please visit www.experimentalbiology.org for programming updates and meeting information.
Tuesday, April 29, 2014 – 10:30 AM
Julius H. Comroe, Jr. Distinguished Lectureship of the APS
Respiration Section
Gordon S. Mitchell
Hypoxia Track

Tuesday, April 29, 2014 – 2:00 PM
Robert M. Berne Distinguished Lectureship of the APS
Cardiovascular Section
Virend Somers

Tuesday, April 29, 2014 – 2:00 PM
Horace W. Davenport Distinguished Lectureship of the APS
Gastrointestinal and Liver Physiology Section
Fayez Ghishan
Transporters and Ion Channels Track
Gut Interactions Track

Tuesday, April 29, 2014 – 3:15 PM
August Krogh Distinguished Lectureship of the APS
Comparative and Evolutionary Physiology Section
Hannah V. Carey
Gut Interactions Track

SUNDAY, APRIL 27, 2014
8:00 AM
Sleepless in San Diego: Is Sleep Deprivation the New Silent Killer?
Jason R. Carter and Eve Van Cauter
Pericyte-Endothelial Interactions
Shawn Bearden and Jamie Mayo
Sponsored by: Cardiovascular Section

8:00 AM
Refresher Course on Exercise Physiology: The Role of Exercise in Disease Prevention, Treatment, and Optimal Aging
Kim Henige and Catharine G. Clark
Sponsored by: Education Committee
Education Track

9:00 AM
Microcirculatory Society President’s Symposium I: Innovative Approaches to Microvascular Science
Jefferson Frisbee

1:00 PM
Translation of Cardiovascular Endpoints Across Species
Kerrie Northcott
Education Track

1:00 PM
Animal Care Regulation and Compliance: Hot Topics for the IACUC
Sponsored by: Animal Care and Experimentation Committee
Science Policy Track

2:00 PM
Microcirculatory Society President’s Symposium II

3:00 PM
Storytelling: Mandatory Training for Today’s Scientists
Barbara Goodman
Sponsored by: Communications Committee
Education Track

3:15 PM
Computational Modeling
Irene C. Solomon
Education Track

3:15 PM
WEH Trainee Award Finalists Session and Data Diuresis

SATURDAY, APRIL 26, 2014
8:00 AM
Sleepless in San Diego: Is Sleep Deprivation the New Silent Killer?
Jason R. Carter and Eve Van Cauter
Pericyte-Endothelial Interactions
Shawn Bearden and Jamie Mayo
Sponsored by: Cardiovascular Section

Perivascular Adipose Tissue in Vascular Health and Disease: Friend or Foe?
Jonathan Tune and Maik Gollasch
Sponsored by: Cardiovascular Section

Bridging Career Pathways for an Evolving Biomedical Workforce
Michael J. Friedlander and H. Rex Gaskins
Sponsored by: Society for Experimental Biology and Medicine Career Development Track

Is the Kidney a Key Sensory Organ in Neurogenic Cardiovascular Disease?
Mark M. Knuepfer and John W. Osborn
Sponsored by: Neural Control and Autonomic Regulation Section
Central Control of Homeostasis Track

NO, CO and H2S: Toxic Gases, Gasotransmitters and Therapeutic Targets
Kenneth R. Olson and Catharine G. Clark
Sponsored by: Physiologists in Industry Committee
Translational Physiology Track

Nucleic Acid Aptamers: An Emerging Frontier in the Diagnosis and Treatment of Disease
Francis J. Miller and Paloma H. Giangrande
Sponsored by: American Federation for Medical Research
Translational Physiology Track
Novel Role of Hormones in Trauma
Catherine F.T. Uyehara and Carmen Hinojosa-Laborde
Sponsored by: Water and Electrolyte Homeostasis Section

Using Retrieval Practice and Other Advances from Cognitive Science to Enhance Student Learning
John Dobson and Mary Pat Wenderoth
Sponsored by: Teaching of Physiology Section
Education Track

Epigenetics and Epigenomics
Mingyu Liang
Sponsored by: Physiological Genomics Group
Genetics Track

10:30 AM
Publishing 101: How to Get Your Work Published and Avoid Ethical Minefields
Hershel Raff and Rita Scheman
Sponsored by: Publications Committee
Career Development Track

Adaptations in the Oxygen Transport System at Altitude: Is Polycythemia Helpful or Harmful?
Tatum Simonson and Peter D. Wagner
Sponsored by: Hypoxia Group
Hypoxia Track

Emerging Concepts in Inflammation: Roles of Intravascular Leukocyte Crawling, Pericytes, and Generation of Sequential Chemoattractant Waves to Instruct Neutrophil Trafficking
Ronald J. Korthuis and Sussan Nourshargh
Sponsored by: Cardiovascular Section
Inflammation Track
Blood Pressure Regulation Track

Establishing Epithelial Cell Polarity
Jeppe Praetorius and Lene Niemann Nejsum
Sponsored by: Cell and Molecular Physiology Section
Regulation of Epithelial Function Track

Sex Differences in Physiology and Pathophysiology
Jane Reckelhoff
Sex and Gender Track
Blood Pressure Regulation Track

Crossing the Epithelium: New Insights into Pulmonary Barrier Function and Transepithelial Transport
Ramana Sidhaye and Bonnie Blazer-Yost
Sponsored by: Respiration Section
Channels and Transporters Track
Regulation of Epithelial Function Track

NCAR Trainee Featured Topic
Eric Lazartigues
Central Control of Homeostasis Track

Sympathetic Mechanisms in the Etiology of Obesity-Related Hypertension
Daniela Sartor and Sean D. Stocker
Sponsored by: Central Nervous System Section
Central Control of Homeostasis Track
Blood Pressure Regulation Track

Hypoxia as a Unifying Mechanism for Kidney Disease
Fredrik Palm and Christopher S. Wilcox
Sponsored by: Renal Section
Hypoxia Track

Sex/Gender Influences on the Cardiovascular System
Milton Hamblin and Qi Fu
Sponsored by: Cardiovascular Section
Sex and Gender Track
Blood Pressure Regulation Track

3:15 PM
WEH New Investigator Award Lecture

Microcirculatory Society Landis Award Lecture

Diabetes-Related Contractile Dysfunction of the Heart: Clinical Implications, Underlying Molecular Mechanisms, and Exercise-Related Cardio-protection
M. Faadiel Essop and Monte S. Willis
Sponsored by: Endocrinology and Metabolism Section

The preBötzinger Complex: Where are We 25 Years Later?
Gilles Fortin
Sponsored by: Respiration Section
Education Track

Epigenetic Regulation of CNS Function
William J. Martin
Sponsored by: Central Nervous System Section
Central Control of Homeostasis Track
Genetics Track

On the Origin of Science Faculty with Education Specialties (SFES): Perspectives on Their Roles and Tensions
Nancy Pelaez and Trevor Anderson
Sponsored by: Teaching of Physiology Section
Education Track

Hematopoietic Stem Cells Give Rise to Inflammation in Cardiovascular Disease
Merry Lindsey and Matthias Nahrendorf
Sponsored by: Cardiovascular Section
Inflammation Track
Blood Pressure Regulation Track

Bioengineering and Regenerative Medicine
Leach Christman and Kent Leach
Sponsored by: Biomedical Engineering Society
Tissue Remodeling and Repair Track
Renin-Angiotensin-Aldosterone System Regulation of the Sodium Chloride Cotransporter
Benjamin Ko and Arohan Subramanya
Sponsored by: Renal Section
Channels and Transporters Track

Diverse Effects of Angiotensin Peptides on Autonomic Regulation in Health and Disease
Rasna Sabharwal
Sponsored by: Neural Control and Autonomic Regulation Section
Central Control of Homeostasis Track

MONDAY, APRIL 28, 2014

8:00 AM
Imaging Cell Signaling and Tissue Remodeling
Tzung Hsiai and Yingxiao Wang
Sponsored by: Biomedical Engineering Society
Cell Signalling Track

MCAT 2015 Update: Are We ready?
Dee Silverthorn and William Galey
Sponsored by: Teaching of Physiology Section
Education Track

Bioengineering the Lung: From Myth to Reality
Y.S. Prakash and Kurt R. Stenmark
Sponsored by: American Journal of Physiology: Lung Cellular and Molecular Physiology
Tissue Remodeling and Repair Track

Bioactive Lipids in Lung Inflammatory Diseases
Yutong Zhao and Viswanathan Natarajan
Sponsored by: American Federation for Medical Research
Translational Physiology Track

Water and Electrolyte Homeostasis: Physiology and Pathophysiology
Tom Cunningham
Sponsored by: Water and Electrolyte Homeostasis Section

New Insights into the Chemical Control of Breathing and Blood Pressure
Thiago S. Moreira and Daniel K. Mulkey
Sponsored by: Respiration Section
Central Control of Homeostasis Track
Hypoxia Track

Pregnancy and Exercise
Sean Newcomer
Sponsored by: Environmental and Exercise Physiology Section
Sex and Gender Track

Vascular Remodeling and Stiffening in Cardiovascular Pathology: Commonalities and Differences
Aaron J. Trask and Bradley S. Fleenor
Sponsored by: Cardiovascular Section
Tissue Remodeling and Repair Track

Ion Channels and Transporters in Health and Disease
Kirk L. Hamilton
Sponsored by: Cell and Molecular Physiology Section
Channels and Transporters Track

9:00 AM
NCAR Section Minisymposium
Karla Vincent
Central Control of Homeostasis Track

10:30 AM
Microcirculatory Society Young Investigator Symposium
Sponsored by: Microcirculatory Society

Autonomic Regulation of the Immune System in Health and Disease
Francois Abboud and Jasenka Zubcevic
Sponsored by: Neural Control and Autonomic Regulation Section
Central Control of Homeostasis Track
Inflammation Track

Advances in Regulation of Epithelial Transport by Protein Glycosylation
Guangping Chen and Rebecca P. Hughey
Sponsored by: Renal Section
Channels and Transporters Track
Regulation of Epithelial Function Track

CEPS Abstract-Driven Trainee Featured Topic
Heidy Contreras and Bernard Rees

Hypertension: Mechanisms and Consequences
Helmut Gottlieb
Sponsored by: Water and Electrolyte Homeostasis Section
Blood Pressure Regulation Track

CNS Control of Feeding and Metabolism
Christopher Madden
Sponsored by: Central Nervous System Section
Central Control of Homeostasis Track

Cellular Interaction of the Microbiome and Eukaryotic Cell Function
Roger T. Worrell and Jennifer Bomberger
Sponsored by: Cell and Molecular Physiology Section
Gut Interactions Track

Influence of Maturation on Cell- and Systems-Level Hypoxic Behaviors
Irene C. Solomon and Christopher G. Wilson
Sponsored by: Hypoxia Group
Hypoxia Track
TUESDAY, APRIL 29, 2014

8:00 AM
RNAseq Approaches to Understanding Extreme Physiological Adaptations
Daniel E. Warren and Les Buck
Sponsored by: Comparative and Evolutionary Physiology Section

Conscious Choice and Serendipity in Your Career Trajectory: A Panel Discussion
Lisa R. Leon and Erica Wehrwein
Sponsored by: Careers in Physiology Committee
Career Development Track

Insights Gleaned from Pharmaco-genetic Dissection and Modeling of Cardio-respiratory Neural Networks
David J. Paterson and Julian F.R. Paton
Sponsored by: Journal of Physiology, The Physiological Society, and The American Physiological Society
Genetics Track

Cellular Adaptation and Survival to Hypoxic Conditions: Epigenetic Mechanisms
Harold G. Klemcke and Yufeng Wang
Sponsored by: Physiological Genomics Group
Genetics Track
Hypoxia Track

AltiudeQomics 2012
Rob Roach
Sponsored by: Environmental and Exercise Physiology Section
Hypoxia Track

Inflammation in Beta Cell Dysfunction: From Mouse to Man
John Corbett
Sponsored by: Endocrinology and Metabolism Section
Inflammation Track

Therapeutic Targets for Diabetic Cardiomyopathy
Amy J. Davidoff and Rebecca Ritchie
Sponsored by: Cardiovascular Section
Tissue Remodeling and Repair Track

Regulation of Epithelial Transporters, Paracellular Transport, and Regulatory Proteins
Kirk L. Hamilton and Yoshinori Marunaka
Sponsored by: Epithelial Transport Group
Channels and Transporters Track
Regulation of Epithelial Function Track

GI and Liver Physiology Section Flex Session
Declan McCole and Jennifer Uno
10:30 AM
Origins of Hypertension: The CNS, the Kidney and Beyond
Richard Wainford
Blood Pressure Regulation Track
Central Control of Homeostasis Track

Heat Stress and Compromised Blood Pressure Control: Cardiovascular, Cerebral, Cutaneous and Respiratory Considerations
David Low and Craig Crandall
Sponsored by: Environmental and Exercise Physiology Section
Blood Pressure Regulation Track
Central Control of Homeostasis Track

Novel Aspects of G Protein-Coupled Receptor Signaling
Willis K. Samson and Kathryn Sandberg
Sponsored by: Endocrinology and Metabolism Section
Cell Signaling Track

Organismal Adaptation/Response to Hypoxic Environments
Cassandra Williams and Birgitte McDonald
Sponsored by: Comparative and Evolutionary Physiology Section
Hypoxia Track

Muscle Fatigue: A Cross Discipline Approach
Christina Karatzafier and Mike Geeves
Sponsored by: Muscle Biology
Muscle Track

Wiggers Award Featured Topic: Mechanisms of Local Regulation of Blood Flow
William Chilian
Sponsored by: Cardiovascular Section

Adverse Perinatal Environment and Priming of Metabolic and Cardiovascular System to Chronic Disease
Analia Loria and Doa H. Ho
Sponsored by: Water and Electrolyte Homeostasis Section
Blood Pressure Regulation Track

Cell Signaling: Pathways and Proteins
Neil Bradbury
Sponsored by: Cell and Molecular Physiology Section
Cell Signaling Track

Sympathetic Vascular Transduction: Bridging the Divide in Blood Pressure Regulation
Paul J. Fadel and Seth Fairfax
Sponsored by: Neural Control and Autonomic Regulation Section
Central Control of Homeostasis Track

Organoid Culture Systems: An Innovative Research Tool for the Study of Gastrointestinal Development, Physiology and Disease
Yana Zavros
Sponsored by: Gastrointestinal and Liver Physiology Section
Regulation of Epithelial Function Track
Gut Interactions Track

3:15 PM
New Perspectives on Regulation, Interaction, and Noise Found in Physiological Systems
Nicholas Mellen and Alona Ben-Tal

Cardiometabolic Consequences of Sleep Deficiency and Circadian Disruption
Josiane L. Broussard and Kristen Knutson
Sponsored by: Endocrinology and Metabolism Section

Recent Advances in Hypothalamic Signaling Mechanisms in Health and Disease States
Javier E. Stern and Alan Kim Johnson
Sponsored by: Central Nervous System Section
Central Control of Homeostasis Track
Blood Pressure Regulation Track

Tumor Necrosis Factor: A Two-Faced Cytokine?
Vanessa D. Ramseyer and Nicholas Ferreri
Sponsored by: Renal Section
Inflammation Track

Trafficking in Epithelial Cells
Moshe Levi and Judith Blaine
Sponsored by: Epithelial Transport Group
Regulation of Epithelial Function Track

Novel Mechanisms of Transcriptional Regulation in Cardiac Hypertrophy
Heidi Medford and Susan Marsh
Sponsored by: Cardiovascular Section
Tissue Remodeling and Repair Track

Tissue Fibrosis: General Mechanisms with Variations on a Theme
Paul A. Insel and Sophie Lotersztajn
Sponsored by: Cell and Molecular Physiology Section and AJP:Cell
Tissue Remodeling and Repair Track

Defining the Thermoneutral Zone of Laboratory Mice
Christopher J. Gordon
Sponsored by: Environmental and Exercise Physiology Section
Central Control of Homeostasis Track
WEDNESDAY, APRIL 30, 2014

8:00 AM
ALACF Symposium
Sponsored by: Association of Latin American Physiological Societies

Ahead of the Curve: Taking the Lead
Caroline B. Appleyard and Maria L. Urso
Sponsored by: Women in Physiology Committee
Career Development Track

The Regulation of Anabolic Signaling in Skeletal Muscle: The Integration of Mechanical, Metabolic and Inflammatory Stimuli
James P. White
Sponsored by: Environmental and Exercise Physiology Section
Muscle Track
Cell Signaling Track

Sex Disparities in Cardiovascular Disease: Implications for Prevention, Prognosis, and Treatment
Stella Goulopoulou and Raffaele Altara
Sponsored by: Cardiovascular Section
Sex and Gender Track
Blood Pressure Regulation Track

Organ Injury in Diabetes
Christine Maric-Bilkan and Kumar Sharma
Sponsored by: Translational Physiology Group
Tissue Remodeling and Repair Track

Unlocking the Molecular Mechanisms of Liver Cancer
Li Wang and Shelly Lu
Sponsored by: Gastrointestinal and Liver Physiology Section
Translational Physiology Track

Airway Defensive Reflexes: Ex Vivo, In Vivo, In Silico and Translation to Bedside
Donald C. Bolser and Teresa Pitts
Sponsored by: Respiration Section
Translational Physiology Track

Brown and Beige Adipose Tissue: New Insights into Primary Targets for Obesity Prevention
Michael Symonds
Sponsored by: Endocrinology and Metabolism Section

Thin and Thick Filament Regulation of Cardiac Sarcomere
Pamela A. Lucchesi and Sakthivel Sadayappan
Sponsored by: Cardiovascular Section
Blood Pressure Regulation Track

New Insights in Vascular Biology
Benedito Machado and Rodrigo Iturriaga
Sponsored by: Association of Latin American Physiological Societies (ALACF)

Carotid Body Chemoreceptors: Beyond the O₂ Frontier
Blair Johnson and Jacqueline Limberg
Sponsored by: Neural Control and Autonomic Regulation Section
Central Control of Homeostasis Track
Hypoxia Track

Cerebral Autoregulation in Pathological Conditions
Sponsored by: International Research Network on Cerebral Hemodynamic Regulation (CARnet)

10:30 AM
The Other Side of the Submit Button: The Ins and Outs of the Manuscript Review Process
Nicole Nichols and Megan M. Greenlee
Sponsored by: Trainee Advisory Committee
Career Development Track

Systems and Synthetic Engineering of Cell Signaling
Amina Qutub and John Duber
Sponsored by: Biomedical Engineering Society
Cell Signalling Track

From Friend to Foe: The Emerging Role of Intestinal Pathobionts in the Etiopathogenesis of Disease
Suzanne Devkota and Hannah Carey
Sponsored by: Gastrointestinal and Liver Physiology Section
Gut Interactions Track

Adaptations of Mitochondrial Oxidative Phosphorylation to Changing Sub-Environments
Thomas L. Clanton and L. Bruce Gladden
Sponsored by: Environmental and Exercise Physiology Section
Hypoxia Track

Historical Perspective of Peripheral and Central Chemoreception of Hypoxia and Hypercapnia
Jan Marino Ramirez
Sponsored by: History of Physiology Group
Hypoxia Track

Important Signaling Networks for the Structure and Function of Airway Smooth Muscle Cells
Yufeng Wang and Christina Pabelick
Sponsored by: Respiration Section

Muscle Loss in Diabetes: Not Your Same Old Sarcopenia
Joseph Brozinick
Sponsored by: Muscle Biology
Muscle Track

Cell Therapy versus Non-cellular Therapy for Myocardial Repair
Robert A. Kloner and Ronhlih Liao
Sponsored by: Cardiovascular Section
Tissue Remodeling and Repair Track
Regulation of Epithelial Ion and Water Channels, and Regulatory Proteins
Hui Cai and Reena Rao
Sponsored by: Epithelial Transport Group
Channels and Transporters Track
Regulation of Epithelial Function Track

Autonomic and Other Control of the Cerebral Circulation
Sponsored by: International Research Network on Cerebral Hemodynamic Regulation (CARnet)

2:30 PM
Physiological and Pathophysiological Signaling Between the Gut and the Kidney: Role in Diabetic Kidney Disease
Carel le Roux
Sponsored by: Experimental Physiology, The Physiological Society
Gut Interactions Track

Molecular Mechanisms of Muscle Atrophy
David Hood
Sponsored by: Environmental and Exercise Physiology Section
Muscle Track
Tissue Remodeling and Repair Track

New Mechanisms of Heart Failure Based on Protein Misfolding
Federica Del Monte and Roberta Gottlieb
Sponsored by: Cardiovascular Section
Tissue Remodeling and Repair Track

Sialic Acids: How Glycans Impact Human Physiology and Disease
Lars Bode
Translational Physiology Track

Novel Mechanisms of Diabetic Cardiac Dysfunction
Jessica M. Bradley and Jason D. Gardner
Sponsored by: Cardiovascular Section
Blood Pressure Regulation Track

Ambient Hypoxia, Muscle Mass Control and Energy Metabolism
Michele Beaudry
Sponsored by: Muscle Biology
Muscle Hypoxia Track

Cerebral Autoregulation – The Quandry of Quantification
Sponsored by: International Research Network on Cerebral Hemodynamic Regulation (CARnet)
ASBMB 2014 AWARD AND PLENARY LECTURES

Herbert Tabor Research Award
Bruce W. Stillman, Cold Spring Harbor Laboratory

Alice and C.C. Wang Award in Molecular Parasitology
Ken Stuart, Seattle Biomedical Institute

ASBMB Award for Exemplary Contributions to Education
Harold B. White, III, University of Delaware

ASBMB Merck Award
Benjamin F. Cravatt, The Scripps Research Institute

ASBMB Plenary Lecture
Jonathan Weissman, HHMI/University of California, San Francisco

ASBMB Young Investigator Award
Samie R. Jaffrey, Weill Cornell Medical College of Cornell University

Avanti Award in Lipids
Sandra L. Hofmann, UT Southwestern Medical Center at Dallas

Bert and Natalie Vallee Award in Biomedical Science (New)
Michael M. Gottesman, National Cancer Institute

DeLano Award for Computational Biosciences
Michael Levitt, Stanford University

Early and Thressa Stadtman Scholar Award
Aviv Regev, HHMI/Broad Institute

Herbert A. Sober Lectureship
Dana Carroll, University of Utah School of Medicine

Mildred Cohn Award in Biological Chemistry
Lila M. Gierasch, University of Massachusetts - Amherst

Ruth Kirschstein Diversity in Science Award
Freeman Hrabowski and Michael Summers, University of Maryland, Baltimore County

Walter A. Shaw Young Investigator Award in Lipid Research
Mary L. Kraft, University of Illinois

William C. Rose Award
Lynne E. Maquat, University of Rochester Medical Center School of Medicine and Dentistry

PRELIMINARY PROGRAM

ASBMB 2014 PROGRAM PLANNING COMMITTEE CO-CHAIRS
Enrique M. De La Cruz*, Yale University and Geeta Narlikar*, UCSF

ASBMB PUBLIC POLICY SYMPOSIUM
sponsored by the ASBMB Public Affairs Advisory Committee
Building A Sustainable Research Enterprise
Jeremy M. Berg, Michael Marletta, Lita Nelson, Lana Skirboll, Paula Stephan

DNA REPLICATION, RECOMBINATION AND REPAIR
Theme Organizers:
M. Todd Washington*, University of Iowa and Virginia A. Zakian*, Princeton University

SYMPOSIA
Replication and Protection of DNA Ends
Maria Jasin, Roger Reddel, Dorothy Shippen

Coping with Barriers to DNA Replication
Aneel Aggarwal, Marco Foiani, Virginia A. Zakian

Architecture and Dynamics of Replication, Repair, and Recombination Complexes
Priscilla K. Cooper, M. Todd Washington

Post-translational Modification in Replication, Repair, and Recombination
Maria Spies, Samuel H. Wilson, Xiaolan Zhao

(*) ASBMB Annual Meeting Program Planning Committee
RNA PROCESSING AND TRANSCRIPTION
Theme Organizers:
Karen M. Arndt*, University of Pittsburgh and Karla M. Neugebauer*, Yale University

SYMPOSIA
Regulation of Transcription, Chromatin, and RNA Processing
Karen M. Arndt, Tyagi Sanjay, Jerry Workman

Probing Mechanisms in Gene Expression with Global Methods
Frank Pugh, Sarah Teichmann, Bin Tian

Structural and Mechanistic Insights into Transcription and RNA Processing
Irina Artsimovitch, Jonathan P. Staley, Cynthia Wolberger

The Cell Biology of Transcription, Chromatin and RNA
Asifa Akhtar, Jason Brickner, Karla M. Neugebauer

PROTEIN SYNTHESIS, FOLDING, LOCALIZATION AND QUALITY CONTROL
Theme Organizers:
Ruben L. Gonzalez, Jr.*, Columbia University and Shu-ou Shan*, Caltech

SYMPOSIA
Mechanism and Regulation of Protein Synthesis
Ruben L. Gonzalez, Jr., Ignacio Tinoco, Jr.

Protein Folding and Processing
Carlos Bustamante, Sylvia Cavagnero

Protein Localization: Targeting and Translocation
Arnold Driessen, Shu-ou Shan, Irmgard Sinning

Protein Quality Control
Raymond Deshaies, Hidde L. Ploegh, Michael Rape

POST-TRANSLATIONAL PROTEIN REGULATION AND MODIFICATION
Theme Organizers:
Randy Hampton*, UCSD and Andreas Martin*, UC, Berkeley

SYMPOSIA
Protein Modification in Prokaryotes and Pathogens
Julie Maupin-Furlow, Eilika Weber-Ban, Ramink Xavier

Autophagy
Ana Marie Cuervo, James Hurley, Yoshinori Ohsumi

Ubiquitination
Eric Bennett, Randy Hampton, David Komander

Proteasomes
Andreas Martin, Gentry Patrick, Robert Sauer

FRONTIERS IN GLYCOBIOLOGY
Theme Organizers:
Lara Mahal*, NYU and Natasha Zachara*, Johns Hopkins University

SYMPOSIA
Glycan Control Mechanisms: From Genome to Glycome
Gordan Lauc, Lara Mahal, Jamey Marth

Glycans in the Brain and Nervous System
Shanthini Sockanathan, David Vocadlo, Yu Yamaguchi

Glycans in Injury and Inflammation
Karin Hoffmeister, James Paulson, Natasha Zachara

Glycans in Vaccine Development and the Immune System
Brian Cobb, Stuart Levitz, Lai-Xi Wang

MEMBRANE BIOLOGY
Theme Organizers:
Karen G. Fleming*, Johns Hopkins University and Vinzenz Unger*, Northwestern University

SYMPOSIA
Membrane Interfaces: A New Frontier
Adam Frost, Mary B. Kennedy, Christien Merrifield

Membrane Protein Folding
Karen G. Fleming, Marcelo C. Sousa, Xin Sheng Zhao

Heavy Metals Rock
Valerie Culotta, Jerry Kaplan, Vinzenz Unger

Movin’ in the Membrane: Membrane Protein Dynamics
Kerney Jebrell Glover, Katherine Henzler-Wildman, Eduardo Perozo

ENZYME MECHANISMS AND CHEMICAL BIOLOGY
Theme Organizers:
Karen S. Anderson*, Yale University and Kevin D. Walker*, Michigan State University

SYMPOSIA
Biocatalysis and Enzyme Mechanism
J. Martin Bollinger, Jr., Amnon Kohen, Kevin D. Walker

Probing Enzyme Structure and Catalysis
Ruma Banerjee, John A. Gerlt, Brandon T. Ruotolo

Chemical Biology and Enzyme Evolution
Andreas S. Bommarius, Dan Tawfik, Sylvie Garneau-Tsodikova

(*) ASBMB Annual Meeting Program Planning Committee
Molecular Tools for Protein Signaling
Karen S. Anderson, Kevan Shokat, Alice Y. Ting

OMICS, SYSTEMS BIOLOGY AND THEIR TRANSLATIONAL APPLICATIONS
Theme Organizers:
Ralph Bradshaw*, UCSF, Mass Spectrometry Facility and Michael Snyder*, Stanford University

SYMPOSIA
?
Systems Biology
Ruedi Aebersold, Doug Lauffenburger, Lucy Shapiro

Genomics/Transcriptomics in Disease
Andrea Califano, Dana Pe’er, Paul Spellman

Metabolomics
Oliver Fiehn, Robert Gerszten, Gary Siuzdak

Omics and the Development of Personalized Medicine
Vamsi Mootha, Amanda Paulovich, Michael Snyder

EMERGING ROLES OF MITOCHONDRIA IN CELL SIGNALING, PHYSIOLOGY AND DISEASE
Theme Organizers:
Craig E. Cameron*, Penn State University and Heidi McBride*, McGill University

SYMPOSIA
?
mtDNA Genetics, Replication and Expression
Craig E. Cameron, Carolyn K. Suzuki, Douglas C. Wallace

Mitochondrial Dynamics
Gerald W. Dorn, II, Edward A. Fon, Janet Shaw

Mitochondrial Function in Cell Fate
Heidi McBride, Luca Scorrano, Naeha Subramanian

Mitochondrial (Dys)Function and Disease
Nika N. Danial, Dave Pagliarini, Gerald A. Shadel

SIGNAL TRANSDUCTION
Theme Organizers:
Kim Orth*, UT Southwestern and Sivaraj Sivaramakrishnan*, University of Michigan

SYMPOSIA
?
Manipulation of Cell Signaling by Pathogens
Kim Orth, David Sibley, Julie Theriot

Signaling Across the Nuclear Envelope
YuhMin Chook, Karsten Weis, Rick Wozniak

Structural Dynamics in Cell Signaling
Sivaraj Sivaramakrishnan, Jo Ann Trejo, Gianluigi Veglia

Mechanotransduction: Cytosol to Nucleus
Alex Dunn, Miriam Goodman, GV Shivashankar

SCIENCE OF ADDICTION
sponsored by the ASBMB Minority Affairs Committee
Theme Organizers:
Squire Booker*, Penn State University and Habibeh Khoshbouei*, University of Florida

SYMPOSIA
?
Molecular Basis of Addiction: Neurocognitive Deficits and Memory
Sanika Chirwa, Carl Hart, David Sweatt

Molecular Basis of Addiction: Transporters
Aurelio Galli, Urlik Gether, Harlold Sitte

Molecular Basis of Addiction: Synaptic Modification
Marc G. Caron, Paul J. Kenny, David Sulzer

Careers in Science Policy
ASBMB Minority Affairs Committee sponsored issues-based symposium
Jeremy M. Berg, Benjamin Corb, Joseph Francisco

21ST-CENTURY APPROACHES TO TEACHING AND COMMUNICATING BMB
sponsored by the ASBMB Education and Professional Development Committee
Theme Organizers:
Marilee Benore*, University of Michigan and Frederick Hughson*, Princeton University

SYMPOSIA
?
Measuring Success in Undergraduate Education
Catherine Drennan, James Hazzard, Sarah L. Simmons

Mentoring and Networking: Preparing for the Future
Marilee Benore, Kevin Eagan, Fred Maxfield

Online Education and the Rise of the MOOC
Maria Klawe, Henry A. Lester

Career Choices: Roads Less Traveled
Lori B. Andrews, Cynthia Fuhrmann, Debra Gordon

ASBMB PUBLIC OUTREACH AND SCIENCE COMMUNICATION
sponsored by the ASBMB Public Outreach Committee
This interactive program of events teaches attendees techniques for effectively communicating their science to the lay public. Science Café, workshop, posters and more are being planned now, so visit www.asbmb.org/meeting2014 for current details.
SCIENCE OUTREACH POSTERS
On time, volunteered abstracts detailing successful outreach activities or programs will be accepted for poster presentation during the ASBMB Opening Reception. Submit to ASBMB topic categories #2460-2465.

SPECIAL EVENTS
• ASBMB Graduate and Postdoctoral Travel Award Plenary Lecture and Poster Session **
• ASBMB Graduate and Postdoctoral Professional Development Program **
• ASBMB Opening Lecture and Reception
• ASBMB Welcome and Networking Reception sponsored by the ASBMB Minority Affairs Committee
• ASBMB Women Scientists Panel and Networking Reception
• Science Café, sponsored by the ASBMB Public Outreach Committee
• Science Outreach Posters
• YES Mixer (Young Experimental Scientists)

ASBMB TRAVEL AWARDS GUIDELINES
ASBMB travel award applicants must successfully submit an abstract as first author to an ASBMB topic category (#2000-2427) by the November 8 abstract deadline.
• All travel award applications must be complete and submitted by the November 19, 2013, ASBMB travel award application deadline, unless otherwise noted.

• Not all travel awards categories require ASBMB membership. To be considered a member, you must be a current ASBMB member, in good standing, at the time of application submission. Log in to the application site using the email address and password associated with an ASBMB member account is required. Member dues must be paid for the billing cycle which includes the 2014 Annual Meeting (through Dec. 2014). New ASBMB membership applications require a review and approval process before membership is activated (process can take up to 72 hours depending on number of applications being processed). Submit a new membership application well before the application deadline.

• Applicant is responsible for all criteria associated with the award/application. Only one application is accepted per applicant, unless otherwise noted. Visit www.asbmb.org/meeting2014 for a complete list of ASBMB travel award application criteria and award requirements.

ASBMB UNDERGRADUATE EVENTS: START TREK THE NEXT GENERATION
• Beam Me Up Scotty! A Galactic Overview/Orientation of the ASBMB Annual Meeting
• Boldly Go Where No Scientist Has Gone Before! Exploring Careers after College
• Live Long and Prosper! ASBMB Award Winner and Undergraduate Breakfasts **
• Vulcan Mind Probe! ASBMB 18th Annual Undergraduate Student Research Poster Competition **

(**) Advance registration required
18TH ANNUAL ASBMB
UNDERGRADUATE STUDENT RESEARCH POSTER COMPETITION
Saturday, April 26, 2014, San Diego

Cash prizes awarded to students making the best poster presentations.

HOW DO I SIGN UP?

1) Undergraduate, FIRST AUTHOR must successfully submit an abstract to a qualifying ASBMB topic category (#2000-2427), by the November 8th deadline. A complete list of ASBMB topic categories is available at www.asbmb.org/meeting2014.

2) During abstract submission, undergraduate student must be the first author AND select “Undergraduate” as the first author status/designation.
   
   ASBMB strongly recommends the student-first author create the abstract submission login using her/his own email address. The advisor’s email address must be provided in the sponsor information field. This allows ASBMB to communicate directly with students and their advisors.

3) Successful submission requires payment of the $65 non-refundable abstract processing fee.

4) A unique submission is required from each competitor. There are NO “Co-First Authors.” Only the First Author can be the presenting author.

Eligible first authors will receive a “Sign Up,” email invite to join the competition from ASBMB in January, 2014. The invite will be sent to the address provided when logging in to submit an abstract. ASBMB can only identify undergraduate abstracts when the first author status, “UNDERGRADUATE,” has been selected. All other status selections, including, ‘None of the Above’ are not eligible for the competition.

Saturday, April 26, 2014, the competition begins promptly at 1:00 PM. Onsite check in for the competition begins at 12:30 PM. An optional undergraduate meeting orientation is scheduled at 11:30 AM. Plan an early arrival on Saturday to process/pick up your EB2014 meeting badge.

For event information visit www.asbmb.org/meeting2014.

CALL FOR VOLUNTEER JUDGES

Have fun and meet lots of great people while volunteering a few hours of service to judge posters! ASBMB needs 125 PIs and PUI faculty members to serve as volunteer judges during the Undergraduate Poster Competition. (Sorry, we cannot accept graduate students or postdocs to serve as judges at this time.) You will not be asked to judge posters from your own institution.

Judges must be available
   
   11:30 AM – 5:00 PM, on Saturday, April 26, to attend a judges’ orientation and the poster competition.

For more information and to sign up, visit www.asbmb.org/meeting2014.

ABSTRACT INFORMATION & USING THE TOPIC CATEGORIES
American Society for Biochemistry and Molecular Biology (ASBMB)
Phone: 240-283-6600
Email: meetings@asbmb.org
Website: http://www.asbmb.org/meeting2014
American Society for Investigative Pathology (ASIP) 2014 Annual Meeting with The Histochemical Society

For further details, please visit our website at http://www.asip.org/meetings/2014/meeting_program.cfm

LETTURES

ASIP COTRAN EARLY CAREER INVESTIGATOR AWARD LECTURE: Intestinal Antigen Presenting Cells during Homeostasis and Inflammation
Award Recipient: TIMOTHY DENNING

ASIP OUTSTANDING INVESTIGATOR AWARD LECTURE: Beta-Catenin in Liver Pathobiology: You Wnt Some, You Lose Some!
Award Recipient: S. PAUL MONGA

ASIP ROUS-WHIPPLE AWARD LECTURE: The Mast Cell-IgE Paradox: From Homeostasis to Anaphylaxis
Award Recipient: STEPHEN GALLI

ASIP YOUNG SCIENTIST LEADERSHIP AWARD: Targeting Beta-Catenin Reveals Novel Roles in Hepatocyte Survival and Bile Acid Metabolism
Award Recipient: KARI NEJAK-BOWEN

ASMB LECTURE: Ankrd1, A Modulator of Tissue Repair, Cell-Matrix Interactions and Matrix Metabolism
Speaker: Jeffery Davidson
Sponsored by ASIP and the American Society for Matrix Biology

THE JOURNAL OF HISTOCHEMISTRY & CYTOCHEMISTRY LECTURE: Structural Mapping of Force Transmission during Directed Cell Migration; Imaging One Cell at a Time
Chair: John Couchman
Speaker: Dorit Hanein
Sponsored by The Histochemical Society

HCS SYMPOSIUM: Advanced Imaging Techniques and Systems for Live Cell Microscopy
Chairs: Eduardo Rosa-Molinar and Paul Goodwin
Sponsored by The Histochemical Society

HCS SYMPOSIUM: Unlocking New Tools for Experimental Pathology: Advances in Immunohistochemistry and In Situ Hybridization
Chairs: Charles Frevert and Stephen Hewitt
Sponsored by The Histochemical Society

SYMPOSIAS

ACVP Symposium: Lessons from the Canine Genome for Human Cancer Therapy
Chairs: Timothy LaBranche and Melissa M. Schutten
Sponsored by the ASIP Veterinary Pathology Scientific Interest Group and the American College of Veterinary Pathologists

Novel Mechanisms of Oncogenesis
Chair: Jay Debnath

Decoding Cancer by Single-Cell Genomics
Chairs: Jonathan Pollack and Nicholas Navin

Mechanistic Basis of Neuronal Susceptibility to Toxicants: New Avenues for Drug Discovery
Chair: Elizabeth Whitley and Arthi Kanthasamy

Blood Vessel Club™: Vascular Permeability in Health and Disease
Chair: W. Francis (Bill) Luscinskas and Donald McDonald

Molecular and Cellular Basis of Disease: Inflammation and Disease I
Chair: Andrew Neish and Sean Colgan

Molecular and Cellular Basis of Disease: Inflammation and Disease II
Chair: Angela Santoni and Charles Parkos
Sponsored by ASIP and the Societa Italiana di Patologia e Medicine Translazionale/Italian Society of Pathology and Translational Medicine

Blood Vessel Club™: New Players and Concepts in Leukocyte Trafficking During Inflammation
Chair: Martha Furie and Dietmar Vestweber

Neurobiology of Disease: From Model Organisms to Humans
Chair: Warren Tourtellotte and Jeffrey Golden
Pathogen Interactions with Cellular Junctions  
**Chairs:** Andrei Ivanov and Asma Nusrat

Personalized Medicine Therapies for Lung Cancer  
**Chairs:** Mary Sunday and Dani Zander

President’s Symposium: Investigative Pathology in the New Century  
**Chair:** James Musser

Regenerative Medicine  
**Chair:** Themis Kyriakides

SCVP Symposium: Stem Cells for Cardiac Repair  
**Chairs:** James Stone and Monte Willis  
**Sponsored by** ASIP and the Society for Cardiovascular Pathology

Stowell Symposium: Trends in Experimental Pathology: The Role of Biospecimens in Precision Medicine  
**Chairs:** Mark E. Sobel and Gregory Tsongalis  
**Supported by** an unrestricted educational grant from The Robert E. Stowell Endowment Fund

**WORKSHOPS/SPECIAL SESSIONS**

XIVth Annual ASIP/AAACareer Development and Mentoring Program and Lunch: GUILTY Until Proven INNOCENT: Scientific Integrity and Getting Published!  
**Chairs:** Jayne Reuben, Titus Reaves and Jacqueline Jones  
**Sponsored by** the ASIP Committee for Career Development, Women & Minorities, the American Association of Anatomists and the FASEB Maximizing Access to Research Careers (MARC) Office

XIVth Annual Workshop on Graduate Education in Pathology: Pathology Curricula in Graduate Programs: How to Succeed in the Business of Training Tomorrow’s Medical Researchers  
**Chairs:** Kari Nejak-Bowen and Wendy Mars  
**Sponsored by** the ASIP Education Committee and the Association of Pathology Chairs

ASIP Awards Reception  
*Open to all EB2014 Attendees*

ASIP Membership Business Meeting  
**Chair:** James Musser

Breast Cancer Workshop: Pathology, Pathogenesis, and Pathophysiology of Triple-Negative Breast Cancer  
**Chair:** William B. Coleman  
**Sponsored by** the ASIP Breast Cancer Scientific Group

Career Development Workshop and Breakfast: Beyond the Job Offer: Exploring the Art of Effective Negotiation  
**Chairs:** Christi Kolarcik and Edward Medina  
**Sponsored by** the ASIP Committee for Career Development, Women & Minorities and the FASEB Maximizing Access to Research Careers (MARC) Office

Cell Injury Workshop: Cellular Survival: Tumors and Wounds  
**Chairs:** Alan Wells and Cecelia Yates  
**Sponsored by** the ASIP Cell Injury Scientific Interest Group

Course: Pathobiology for Basic Scientists: After the (Inflammatory) Deluge: Resolution of Inflammation, Wound Healing and Fibrosis  
**Chairs:** Wendy Mars and Richard Mitchell  
**Sponsored by** the ASIP Education Committee

F TROOP! Roadmap to Fellowship Grant Applications  
**Chairs:** Linda McManus and Cecilia Yates  
**Sponsored by** the ASIP Committee for Career Development, Women & Minorities

HCS Members Awards Presentation, Business Meeting and Reception

High School Teacher Session: Scientific Sleuthing of Human Disease for High School Teachers  
**Chairs:** Kari Nejak-Bowen and Martha Furie  
**Sponsored by** the ASIP Education Committee

Highlights: Graduate Student Research in Pathology  
**Chairs:** Monte S. Willis and Kari Nejak-Bowen  
**Sponsored by** the ASIP Liver Pathobiology Scientific Interest Group

Liver Workshop: Liver Regeneration  
**Chairs:** Udayan Apte and George Michalopoulos  
**Sponsored by** the ASIP Liver Pathobiology Scientific Interest Group

Lunch and Learn: Necessary Evils: The Responsibility and Process to Protect Human and Animal Subjects in Research  
**Chairs:** Monte Willis and Richard Mitchell  
**Sponsored by** the ASIP Education Committee and the ASIP Committee for Career Development, Women & Minorities

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. Selected posters from each Scientific Interest Group will be on display for informal discussions.
- Breast Cancer
- Der Schadenklub (Cell Injury)
- Club Hepatomania™ (Liver Pathobiology)
- Neuropathology
- Vascular and Mucosal Pathobiology
- Veterinary Pathobiology

Trainee Welcome Reception  
**Sponsored by** the ASIP Committee for Career Development, Women & Minorities
SYMPOSIA

THE PRESIDENTIAL SYMPOSIUM
Malnutrition and Inflammation: Intimate Partners
Burning Down the House: Inflammation as an Adaptive Response versus Self-Destruction
Chair: Gordon Jensen, MD, PhD

Human Milk Oligosaccharides
Chairs: Lars Bode, PhD and Sharon Donovan, PhD, RD

IT’S ALIVE: Microbes and Cells in Human Milk and their Potential Benefits to Mother and Infant
Chairs: Lars Bode, PhD and Mark McGuire, PhD

The Science of Cocoa Flavanols: Bioavailability, Emerging Evidence and Proposed Mechanisms
Chair: Jeffrey Blumberg, PhD

Unscientific Beliefs about Scientific Topics in Nutrition
Chairs: David B. Allison, PhD and Andrew W. Brown, PhD

Optimizing Protein Quantity and Distribution to Improve Health Outcomes
Chairs: Heather J. Leidy, PhD and Wayne W. Campbell, PhD

International Breast Cancer and Nutrition: A Model for Research, Training and Policy in Diet, Epigenetics and Chronic Disease Prevention
Chair: Connie M. Weaver, PhD and Dorothy Teegarden, PhD

Dietary Patterns Methods Project: Systematic Analyses of Index-Based Dietary Patterns and the Associations with Mortality
Chairs: Jill Reedy, PhD, MPH, RD

Modifying Eating Behavior: Novel Approaches for Reducing Body Weight
Chairs: Megan A. McCrory, PhD and Nana Gletsu-Miller, PhD

Use of Metabolomics in Population-Based Research
Chairs: L. Joseph Su, PhD, MPH and Krista A. Zanetti, PhD, MPH, RD

Sustainable Diets for Healthy People, Healthy Planet
Chairs: Nancy Auestad, PhD and Jeannie Gazzaniga-Moloo PhD, RD

Beyond Blood Pressure: New Paradigms in Sodium Intake Reduction and Health Outcomes
Chairs: Janet King, PhD and Kristin Reimers, PhD, RD

Novel Mathematical Models for Investigating Topics in Obesity
Chairs: Steven B. Heymsfield, MD and David B. Allison, PhD

Fortification Today and Tomorrow
Chairs: John Milner, PhD, Kathryn Wiener, MS, RD and Kevin Miller, PhD

Applications of Complex Systems Science in Obesity and Non-communicable Chronic Disease Research
Chairs: Youfa Wang, MD, MS, PhD and Terry T-K Huang, PhD, MPH

Research Advances and Considerations for Investigating the Human Diet, Nutrient Utilization and Microbiota Interface Across the Life Course
Chairs: Cindy Davis, PhD and Joann McDermid, PhD

EDUCATION TRACK SESSIONS

Nutrition Competencies in Health Professionals’ Education and Training: A New Paradigm
Chairs: Penny M. Kris-Etherton, PhD, RD and Edward Saltzman, MD

Interpreting Epidemiological Data in Nutritional Literature: A Historical Perspective
Chairs: David H. Alpers, MD and Dennis Bier, MD

Best Practices for Your Research Toolkit
Chairs: Rebecca Anne Creasy

The Future of Nutrition Research at NIH
Chair: Sarah Ohlhorst, MS, RD

Successful Scientist: What’s the Winning Formula?
Chair: April J. Stull, PhD, RD and Eric Ciappio, PhD, RD
AWARDS LECTURES
The ASN Scientific Program includes the following awards lectures. Additional information to be announced:
- E.V. MCCOLLUM LECTURE
- KELLOGG PRIZE IN INTERNATIONAL NUTRITION RESEARCH LECTURE
- W.O. ATWATER MEMORIAL LECTURE

MINISYMPOSIA AND POSTER SESSIONS
Minisymposia and/or poster sessions will be organized on the following topics:

AGING & CHRONIC DISEASE
Community Nutrition Programs and Policies for Older Adults (Co-sponsored with the Community and Public Health Nutrition RIS) (new!)
Nutrition Interventions for Risk Factor Modification in Chronic Disease
Nutritional Assessment and Status in Older Populations
Nutrition, Physical Performance and Bone Health (new!)
Nutrition and Cognition Across the Lifespan (Co-sponsored with the Nutritional Epidemiology RIS) (new!)

COMMUNITY AND PUBLIC HEALTH NUTRITION
Community and Public Health Nutrition Interventions
Food Security and its Connections to Nutrition and Health (new!)
Health Disparities and Promoting Health in Diverse Populations (new!)
Food Environment
Health Systems and Food Systems Approaches in Community and Public Health Nutrition (new!)

CARIG
Carotenoids and Health
Carotenoids and Retinoids: Molecular Mechanisms of Action
Bioavailability and Metabolism of Carotenoids and Vitamin A
Biofortification of Staple Crops with Micronutrients

DIET AND CANCER
Diet and Cancer: Molecular Targets
Diet and Cancer: Animal Studies
Diet and Cancer: Clinical and Human Studies (new!)

DIETARY BIOACTIVE COMPONENTS
Bioavailability, Metabolism and Biomarkers of Dietary Bioactive Components
Mechanisms of Action and Molecular Targets of Dietary Bioactive Components
Effects of Dietary Bioactive Components on Experimental Models of Chronic Disease Risk
Antioxidant and Anti-inflammatory Effects of Dietary Bioactive Components
Cardiovascular Effects of Dietary Bioactive Components
Dietary Bioactive Components of Medicinal, Functional and Whole Foods (including Probiotics and Fermented Foods)

ENERGY AND MACRONUTRIENT METABOLISM
Energy Balance, Macronutrients and Weight Management
Obesity and the Metabolic Syndrome (Co-sponsored with the Obesity RIS)
Protein and Amino Acid Metabolism
Lipid and Fatty Acid Metabolism and Transport
Dietary Factors Affecting Lipid Metabolism
Energy and Macronutrient Metabolism and the Gut (new!)
Metabolic Phenotyping, Metabolomics and Biomarkers
Carbohydrate Metabolism
Diet and/or Exercise Regulation of Food Intake (Co-sponsored with the Obesity RIS) (new!)
Energy Metabolism and Aging (Co-sponsored with the Aging and Chronic Disease RIS)
Protein Intake and Health Implications (new!)

EXPERIMENTAL ANIMAL NUTRITION
Companion Animal Nutrition and Physiology
Animal Research Models for Macronutrient Metabolism
Animal Research Models Investigating Nutrition and Inflammation
Animal Research Models in Intestinal Physiology and Digestive Function (new!)
Animal Research Models in Nutrition and Musculoskeletal Development
Animal Research Models of Fetal Programming (new!)

LACTATION
Biology of Milk Production and Secretion
Bioactive Compounds and other Milk Constituents
Determinants of Lactogenesis, Lactation Duration, and Other Indicators of Lactation Success
Effects of Lactation/Breastfeeding on the Recipient Infant and/or Lactating Mother

GLOBAL NUTRITION
Global Nutrition

MEDICAL NUTRITION
Personalized Nutrition
Nutrition and the Microbiome
Interventions for the Treatment and Prevention of Nutrition-Related Diseases
Nutrition and Inflammation
Prenatal Nutrient Programming in Humans

NUTRITION EDUCATION
Evidence-Based Nutrition Education: Development, Testing, and Evaluation
Nutrition Education and Behavior Change
Childhood Obesity Prevention
Culturally Sensitive Nutrition Education Interventions in Diverse Populations
Nutrition Education in the Clinical Setting (new!)
Developing Healthy Eating and Physical Activity Behaviors Across the Lifespan (new!)
NUTRIENT-GENE INTERACTIONS
Nutrient-Gene Interactions: Nutritional Regulation of Epigenetics (new!)
Nutrient-Gene Interactions: Nutrition and the Genome (new!)
Nutrition and (Stem) Cell Differentiation (new!)
Nutrient Control of Proteomics and Metabolomics
Nutrient-Gene Interactions in Obesity and Inflammation (new!)
Nutrient-Gene Interactions in Metabolic and Neurodegenerative Diseases (new!)
Nutrient-Gene Interactions in Autoimmune Diseases (new!)

NUTRITIONAL EPIDEMIOLOGY
Innovation and Validation of Dietary Assessment Tools and Their Applications (new!)
Epidemiological Research Addressing Diet and Health Outcomes
Nutrition and Chronic Disease Epidemiology
Research with Dietary Supplements and Bioactive Components
Advancing Nutritional Epidemiology with Public Use and Commercial Data Sets
Assessment of Child and Adolescent Nutritional Status, Growth, and Obesity
Epidemiologic Methods in Examining Health Outcomes in Diverse Populations (Co-sponsored with the Minority Affairs Committee) (new!)
Exploring Geographic-Based Methods in Nutrition Epidemiological Research (new!)

NUTRITIONAL IMMUNOLOGY
Nutritional Immunology
Nutrition, Infection and Immunity

NUTRITION TRANSLATION
Nutrition Science Translation for Policy, Practice and Consumers
Food-Related Behaviors and Implications for Food Policy
Novel Food Ingredients and Their Impact on Health

OBESITY
Diet and Behavior (new!)
Devices, Medications and Surgery (new!)
Physical Activity
Chronic Diseases
Insulin Resistance (new!)
Body Composition

VITAMINS AND MINERALS
Water and Fat Soluble Vitamins and Chronic Disease
Micronutrient Bioavailability and Antioxidant Function
Zinc
Selenium
B Vitamins and One-Carbon Metabolism
Micronutrient Interventions

SPORTS NUTRITION
Dietary Supplements and Human Performance
Sports Nutrition

OTHER
Innovative Applications and Technologies in Nutrition and Food Science
Dairy and Yogurt: Health and Nutrition Effects

EDUCATION AND TEACHING
Nutrition Education in Medical and Other Professional Schools
Nutrition Education for Practicing Clinicians
Innovations in Undergraduate, Graduate and Medical Nutrition Education

POLICY
Nutrition Policy Efforts to Improve the Health of Children (new!)
Nutrition Policy Efforts to Improve the Health of Minorities (new!)
Nutrition Monitoring (new!)
Nutrition Policy Implementation and Evaluation (new!)
Nutrition Policy in Community and Public Health Settings (new!)
Public Policy Efforts to Prevent Overweight/Obesity (new!)

SPECIAL EVENTS
Membership Reception and University Mixer
ASN Annual Business Meeting
Awards Ceremony
Graduate Student Breakfast
Department Heads Breakfast
Meet the Editors Session
Fellows, 50-Year Members, and Past Presidents Luncheon
Council and RIS Business Meetings and Special Functions

THANK YOU
ASN thanks its partners that support ASN’s scientific symposia, awards, special events and more.

Mini-Symposia may be organized by ASN Scientific Councils and Research Interest Sections (RIS). Not all topics presented in this call will be scheduled into mini-symposia. Visit www.nutrition.org for details.

To learn how you can get involved in ASN’s Scientific Sessions and Annual Meeting at EB 2014, please contact meetings@nutrition.org.
2014 SYMPOSIA

“Target-Site” Drug Metabolism and Transport
Chair: Robert S. Foti

12-Lipoxygenase and Disease: New Insights into Regulation and Inhibition of a Critical Enzyme
Chair: Michael Holinstat

Animal Models of Polydrug Abuse
Chair: Paul Czoty and Richard De La Garza

Arginase as an Emerging Therapeutic Target
Chair: R. William Caldwell

Career Opportunities Beyond the Bench: Education as a Viable Path
Chair: Jayne S. Reuben and Karen Marcdante

Chemical Biology in Drug Discovery
Chair: Haian Fu and Hong-Zhuan Chen

Collaborative Role of Pharmacology in Education of Healthcare Professions
Chair: Sandra Carlin Andrieu and Robert J. Theobald, Jr.

Drug Discovery against Protozoal Pathogens
Chair: Margaret A. Phillips

Drug-Induced Idiosyncratic Reactions and Immunotoxicity
Chair: Jack Uetrecht

Emerging Integrative Approaches to Predicting Host Response to Antimicrobials
Chair: Namandje Bumpus

Emerging Technologies in Neuropeptide Research: Identification and Validation of Neuropeptide Systems as Therapeutic Targets
Chair: Stewart D. Clark

Fetal Programming of Adult Cardiovascular Disease
Chair: Mark C. Chappell and Allyson C. Marshall

Future Therapies for Chronic Pain: Focus on Novel Non-opioid Targets
Chair: Beverley Greenwood-Van Meerveld

Hydrogen Sulfide: From Physiological Messenger to Pharmacological Target
Chair: Nancy Kanagy and Utpal Sen

Improving Maternal Therapeutics: Drug Metabolism and Transport during Pregnancy and Lactation
Chair: Nina Isoherranen, Hollie Swanson and Donald Mattison

Inhibitory G Protein-Coupled Receptors as Therapeutic Targets for Obesity and Type 2 Diabetes
Chair: Michelle E. Kimple

Julius Axelrod Symposium: Surprises at the Synapse
Chair: Lee E. Limbird

Mitochondrial Fragments: A Novel Mediator between Inflammation and Cardiovascular Disease
Chair: R. Clinton Webb and Camilla Ferreira Wenceslau

New Insights Derived from Cell Specific Knockout of Heterotrimeric G-alpha Proteins
Chair: Fiona Murray and Paul Insel

New Preclinical and Clinical Perspectives for Smoking Cessation
Chair: Rajeev I. Desai and Dorothy K. Hatsuaki

Not Just a Glue: Pharmacology, Physiology and Pathology of Transglutaminases
Chair: Stephanie Watts and Erik Bakker

Nuclear Receptors as Therapeutic Targets
Chair: Donald P. McDonnell and David Mangelsdorf

Ray Fuller Symposium: Treatment-Resistant Depression (TRD): Biological Bases and Treatments
Chair: Jeffrey M. Witkin

Role of (Drug) Transporters in Imaging in Health and Disease
Chair: Bruno Stieger and Yuichi Sugiyama
Scientists versus Street Chemists: The Toxicity of Designer Marijuana
*Chairs*: Laura P. James and Jeffrey H. Moran

Sleep Disruptions Associated with Neuropsychiatric and Degenerative Disorders: Implications, Preclinical Models and Development of Novel Pharmacotherapies
*Chairs*: Robert Gould and Carrie Jones

Targeted / Individualized Therapy: Approaches for the Future Translational Pharmacologist
*Chairs*: Jeffrey Paul and Zhou Honghao

Therapeutic Potential of Targeting Oxidative Stress Pathways
*Chairs*: Philip R. Mayeux and Wu Chenfu

Transporters in Glial Cells as New Therapeutic Targets
*Chair*: Lucio Annunziato

**DIVISION SESSIONS**

Behavioral Pharmacology Division Symposium: Making the Right Choice: Translational Use of Choice Procedures in Understanding the Neurobiology and Development of Pharmacotherapies for Drug Addiction
*Chair*: TBA at www.aspet.org

Cardiovascular Pharmacology Division Trainee Showcase

Drug Discovery and Development Division Symposium: TBA
*Chair*: TBA at www.aspet.org

Drug Metabolism Division James Gillette Best Paper Award and Platform Session

Integrative Systems, Translational and Clinical Pharmacology Young Investigator Awards Platform Session

Molecular Pharmacology Division Postdoctoral Award Finalists

Neuropharmacology Division Postdoctoral Scientist Award Finalists

Pharmacology Education Division Symposium: Addressing Prescribing Errors through Medical Student Education and Assessment
*Chairs*: Senthil K. Rajasekaran and David W. Nierenberg

Toxicology Division Symposium: TBA
*Chair*: TBA at www.aspet.org

**LECTURES**

**JOHN J. ABEL AWARD LECTURE**
*Speaker*: TBA at www.aspet.org

**JULIUS AXELROD AWARD LECTURE**: Seasons of the Lives of Scientists: The Journey from Training to Careers in Discovery to Service for Society
*Speaker*: Lee E. Limbird

**RAY FULLER LECTURE**: AMPA Receptor Potentiation: Implications for the Discovery of Medicines for Treatment-Resistant Depression
*Speaker*: Jeffrey M. Witkin

**B.B. BRODIE AWARD LECTURE IN DRUG METABOLISM**
*Speaker*: TBA at www.aspet.org

**P.B. DEWS AWARD LECTURE IN BEHAVIORAL PHARMACOLOGY**
*Speaker*: TBA at www.aspet.org

**PAUL VANHOUTTE AWARD LECTURE IN VASCULAR PHARMACOLOGY**
*Speaker*: TBA at www.aspet.org

**MEETING HIGHLIGHTS**

Division Mixers
Meet the Leaders at the ASPET Booth
Student-Postdoc Best Abstract Competition
Student-Postdoc Mixer
WIP into Shape Networking Walk
Opening & Closing Receptions
ASPET STUDENT-POSTDOC BEST ABSTRACT COMPETITION

Sunday April 27, 2014
Cash awards to students and postdocs making the best poster presentations

1. Submit an abstract as first author by November 8, 2013 to EB2014
2. Go online to www.aspet.org/awards and select Graduate Student Best Abstract Awards, Postdoctoral Scientist Awards, Drug Discovery and Development Young Investigator Awards or Undergraduate Student Best Abstract Awards, as appropriate.
3. Apply online by November 13, 2013 to the Division in which the presented research falls.
4. Finalists will be asked to present their poster at the Graduate Student-Postdoc Best Abstract Competition from 6:30 p.m. - 8:30 p.m. on Sunday, April 27.
5. Posters will be judged by judges from the Divisions.
EB–SPONSORED 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 2014 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. A special area of the Exhibit Hall will have poster boards and provisions for both IBM PC compatible and Mac computers with Internet access. Authors are encouraged to bring laptops. 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. Tables and electrical outlets will be available at each poster board for demonstrations.

ABSTRACT INFORMATION & USING THE TOPIC CATEGORIES

ABSTRACT DEADLINE:
Friday, November 8, 2013
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 38-54 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 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 and ASBMB 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 are only oral presentations. Abstracts not selected will be programmed as posters.
NOTIFICATION OF PROGRAMMING
The first author and the sponsor will be notified via email in mid-February of:
• Title, date, and time of session in which abstract has been programmed
• Format of presentation (oral, poster or both)
• Program number
• Presentation time
This information will not be available prior to that time! It will be emailed prior to the February 22, 2014 early registration deadline. Co-authors will not receive notification.

Poster Policy
Presenters must mount their posters no later than 8:30AM on their day of presentation.
The Exhibit Hall opens at 7:00AM to mount posters.
Presenters are expected to be at their poster boards during the assigned session presentation time, as designated by each society.
Posters must remain on display all day from 8:30AM – 5:00PM (except on Wednesday.)
Posters that do not remain on display all day during their assigned day may, at the discretion of the programming society, be ineligible for awards.
Recording (photographing, audio taping or videotaping) any presentation/session is PROHIBITED, except by an EB-authorized agent or by First Authors who want to photograph their poster presentation.

E-Posters
Following the EB 2014 meeting, all poster authors are invited to upload their poster to the EB website.
The e-posters will be accessible to all registered attendees for viewing after the conclusion of the meeting.
Instructions for uploading your poster will be sent with your confirmation in February.

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

FOR GENERAL QUESTIONS, CONTACT THE SOCIETY RESPONSIBLE FOR PROGRAMMING YOUR ABSTRACT:
American Association of Anatomists (AAA)
Phone: 301-634-7910; Fax: 301-634-7965
Email: cshultz@anatomy.org

The American Physiological Society (APS)
Phone: 301-634-7967; Fax: 301-634-7264
Email: meetings@the-aps.org

American Society for Biochemistry and Molecular Biology (ASBMB)
Phone: 240-283-6600, Fax: 301-881-3110
Email: meetings@asbmb.org

American Society for Investigative Pathology (ASIP)
Phone: 301-634-7950; Fax: 301-634-7990
Email: tsnethen@asip.org

American Society for Nutrition (ASN)
Phone: 301-634-7043; Fax: 301-634-7894
Email: meetings@nutrition.org

American Society for Pharmacology and Experimental Therapeutics (ASPET)
Phone: 301-634-7989; Fax: 301-634-7061
Email: djordan@aspet.org
Review the list of topics below and decide where your work fits in. You may select either a broad category or a more specific subcategory. AAA platform and hybrid talks will be selected from the submitted abstracts. **You may also submit more than one abstract.** Go to [www.experimentalbiology.org](http://www.experimentalbiology.org) to submit your abstract, register for the meeting, and book your hotel.

### POSTER TOPICS

<table>
<thead>
<tr>
<th>Topic ID</th>
<th>Topic Category</th>
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<tbody>
<tr>
<td>7000-AAA</td>
<td>Anatomy</td>
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<tr>
<td>7001-AAA</td>
<td>Anatomy: Animal Models</td>
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<tr>
<td>7002-AAA</td>
<td>Anatomy: Bones Cartilage &amp; Teeth</td>
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<tr>
<td>7003-AAA</td>
<td>Anatomy: Cardiovascular</td>
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<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: Gastrointestinal</td>
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<td>7007-AAA</td>
<td>Anatomy: Muscle</td>
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<td>7008-AAA</td>
<td>Anatomy: Neural</td>
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<td>7009-AAA</td>
<td>Anatomy: Tendons &amp; Ligaments</td>
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<td>7010-AAA</td>
<td>Anatomy: Urogenital</td>
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<td>7011-AAA</td>
<td>Anatomy Education</td>
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<td>7012-AAA</td>
<td>Anatomy Education: Assessment, Curriculum &amp; Mentoring</td>
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<tr>
<td>7013-AAA</td>
<td>Anatomy Education: Clinical Based Approaches</td>
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<td>7014-AAA</td>
<td>Anatomy Education: Computer-assisted Learning</td>
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<td>7015-AAA</td>
<td>Anatomy Education: Teaching Methods &amp; Innovations</td>
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<td>7016-AAA</td>
<td>Biological Anthropology</td>
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<td>7017-AAA</td>
<td>Bones, Cartilage &amp; Teeth</td>
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<td>7018-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Anatomy &amp; Morphology</td>
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<td>7019-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Craniofacial</td>
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<td>7020-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Development</td>
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<td>7021-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Evolution &amp; Anthropology</td>
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<td>7022-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Exercise, Biomechanics; Bioengineering</td>
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<td>7023-AAA</td>
<td>Bones, Cartilage &amp; Teeth: Molecular Mechanisms</td>
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<td>7024-AAA</td>
<td>Cardiovascular Biology</td>
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<td>7025-AAA</td>
<td>Cardiovascular Biology: Aging</td>
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<td>7026-AAA</td>
<td>Cardiovascular Biology: Anatomy &amp; Morphology</td>
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<td>7027-AAA</td>
<td>Cardiovascular Biology: Angiogenesis; Lymphangiogenesis; Vasculogenesis</td>
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<td>7028-AAA</td>
<td>Cardiovascular Biology: Biomechanics; Bioengineering</td>
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<td>7029-AAA</td>
<td>Cardiovascular Biology: Dysfunction; Disease; Genetic Disorders</td>
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<td>7030-AAA</td>
<td>Cardiovascular Biology: Heart Development &amp; Growth</td>
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<td>7031-AAA</td>
<td>Cardiovascular Biology: Imaging</td>
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<td>7032-AAA</td>
<td>Cardiovascular Biology: Sex &amp; Gender Related Differences</td>
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<td>7033-AAA</td>
<td>Cardiovascular Biology: Stem Cells, Cell &amp; Molecular Biology</td>
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<td>7034-AAA</td>
<td>Cell Biology</td>
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<td>7035-AAA</td>
<td>Cell Biology: Membranes &amp; Cytoskeleton</td>
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<td>7036-AAA</td>
<td>Cell Biology: Signaling &amp; Molecular Biology</td>
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<td>7037-AAA</td>
<td>Cell Biology: Organelles</td>
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<td>7038-AAA</td>
<td>Development &amp; Growth</td>
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<td>7039-AAA</td>
<td>Development &amp; Growth: Birth Defects</td>
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<td>7040-AAA</td>
<td>Development &amp; Growth: Craniofacial</td>
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<td>7041-AAA</td>
<td>Development &amp; Growth: Limbs</td>
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<td>7042-AAA</td>
<td>Development &amp; Growth: Neural Crest &amp; Placodes</td>
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<td>7043-AAA</td>
<td>Development &amp; Growth: Patterning</td>
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<td>7044-AAA</td>
<td>Development &amp; Growth: Reproduction</td>
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<td>7045-AAA</td>
<td>Development &amp; Growth: Gene &amp; Protein Expression</td>
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<td>7046-AAA</td>
<td>Extracellular Matrix</td>
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<td>7047-AAA</td>
<td>Imaging</td>
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<td>7048-AAA</td>
<td>Imaging: Anatomy</td>
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<td>7049-AAA</td>
<td>Imaging: Functional Imaging</td>
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<td>7050-AAA</td>
<td>Imaging: Technology &amp; Methods</td>
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<tr>
<td>7051-AAA</td>
<td>Imaging: Computational Biology</td>
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<td>7052-AAA</td>
<td>Muscle</td>
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<td>7053-AAA</td>
<td>Muscle: Biomechanics &amp; Exercise</td>
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<tr>
<td>7054-AAA</td>
<td>Muscle: Development</td>
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<tr>
<td>7055-AAA</td>
<td>Muscle: Stem Cells &amp; Regeneration</td>
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</tbody>
</table>
HYBRID & PLATFORM TOPICS
A hybrid symposium includes invited talks and up to four 15-minute oral presentations selected from abstracts; a platform session includes six-eight 15-minute oral presentations selected from abstracts. Abstracts not programmed in a hybrid symposium or platform session will be scheduled in an appropriate poster session.

7074-AAA Form, Function, & Evolution
7075-AAA Development and Disease - It's All about Anatomy
7076-AAA Signaling by Natural and Engineered Extracellular Matrix
7077-AAA Anatomy Ontologies: Bioinformatics in the Anatomical Sciences
7078-AAA Vascularization and Bone Regeneration
7079-AAA Anatomy Education Hybrid - Interprofessional Education in the Anatomical Sciences
7080-AAA Anatomy Education Platform

EB TEACHING POSTER SESSIONS
If you would like to submit an abstract to one of EB’s Teaching poster sessions (#8100-8200 below), then you will have the opportunity to present your poster twice - once with the EB Teaching posters and a second time with the AAA Education posters. See page 36 for information about the EB Teaching posters.

8100-EB Computers in Research & Teaching
8200-EB Teaching, Learning and Testing in the Biological and Biomedical Sciences
**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  Cell Therapy versus Non-cellular Therapy for Myocardial Repair (Kloner/Liao)
1002-APS  Kaley Lecture and Short Complementary Talks (Zucker)
1003-APS  MicroRNAs — Novel Regulators of the Cardiac Remodeling Process (Bagchi/Czubryt)
1004-APS  Novel Mechanisms of Diabetic Cardiac Dysfunction (Bradley/Gardner)
1005-APS  Sex/Gender Influences on the Cardiovascular System (Hamblin/Fu)
1006-APS  Therapeutic Targets for Diabetic Cardiomyopathy (Davidoff/Ritchie)
1007-APS  Thin and Thick Filament Regulation of Cardiac Sarcomere (Lucchesi/Sadayappan)
1008-APS  Vascular Remodeling and Stiffening in Cardiovascular Pathology: Commonalities and Differences (Trask/Fleenor)
1009-APS  Conscious Choice and Serendipity in Your Career Trajectory: A Panel Discussion (Leon/Wehrwein)

**POSTERS:**
1010-APS  Angiogenesis and vascular growth
1011-APS  Blood pressure regulation
1012-APS  Cardiac electrophysiology
1013-APS  Cardiac function and dynamics
1014-APS  Cerebral circulation
1015-APS  Coronary circulation
1016-APS  Diabetes and insulin resistance
1017-APS  Endothelial cell biology
1018-APS  Extracellular matrix and cardiac remodeling
1019-APS  Free radical signaling, oxidant stress, and injury
1020-APS  Gene expression and cardiovascular function
1021-APS  Genetic models of cardiovascular function
1022-APS  Hypertension
1023-APS  Microcirculation
1024-APS  Myocardial ischemia/myocardial metabolism
1025-APS  Nitric oxide/carbon monoxide/vasoactive molecules
1026-APS  Peripheral circulation

**THE MICROCIRCULATORY SOCIETY**

**POSTERS:**
1035-APS  Angiogenesis/microvascular remodeling/injury & repair
1036-APS  Atherosclerosis/thrombosis/platelets
1037-APS  Inflammation/leukocyte-endothelium interactions
1038-APS  Instrumentation, methodology, and experimental models
1039-APS  Ischemia-reperfusion/free radical biology
1040-APS  Lymphatic and venular function
1041-APS  Microvascular cell signaling pathways
1042-APS  Microvascular development and aging
1043-APS  Microvascular flow regulation/oxygen delivery/networks
1044-APS  Microvascular mechanics/hemodynamics/rheology
1045-APS  Microvascular pathophysiology-pharmacology, therapeutics and translational aspects
1046-APS  Pericytes and stem cells
1047-APS  Permeability/flow & solute exchange/glycocalyx
1048-APS  Tissue-microvessel interactions/extracellular matrix
1049-APS  Vasomotor control: endothelium/smooth muscle/nerves

**BIOMEDICAL ENGINEERING SOCIETY**

**POSTERS:**
1055-APS  Mathematical models of organ systems, tissues or cells
1056-APS  Mechanobiology
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)

1064-APS  Cell Signaling: Pathways and Proteins (Bradbury)
1065-APS  Cellular Interaction of the Microbiome and Eukaryotic Cell Function (Worrell/Bomberger)
1066-APS  Ion Channels and Transporters in Health and Disease (Hamilton)

POSTERS:
1067-APS  Apoptosis and cell death
1068-APS  ATPase-driven ion pumps
1069-APS  Cell volume, osmoregulation and water transport
1070-APS  Cellular signaling
1071-APS  Intracellular pH and acid-base transport
1072-APS  Membrane trafficking and domains, macromolecular complexes, and cell polarity
1073-APS  Oxidative stress and metabolism
1074-APS  Stem cells and cell growth, development and differentiation, autophagy
1075-APS  Transports: transmitters, nutrients, metabolites, and drugs
1076-APS  Cell migration, contractility, cytoskeleton, and adhesion
1077-APS  Endothelial and epithelial barrier function
1078-APS  Cellular responses to inflammation

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)
1080-APS  Sympathetic Mechanisms in the Etiology of Obesity-Related Hypertension (Sartor/Stocker)
1081-APS  CNS Control of Feeding and Metabolism (Madden)

POSTERS:
1082-APS  Cognition and behavior
1083-APS  Blood-brain barrier, brain blood flow and metabolism
1084-APS  Brain development and aging
1085-APS  Neuroinflammation/neuroprotection/ischemia
1086-APS  Neuroendocrinology/neuroimmunology
1087-APS  Neuronal excitability/neuroplasticity
1088-APS  Neurotransmission and signaling molecules
1089-APS  Central nervous system: other
1090-APS  Central regulation of food intake and body weight
1091-APS  Central regulation of body fluid homeostasis
1092-APS  Neuroglial interactions

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)
1100-APS  Comparative Physiology of Aging and Senescence (Roberts/Kirkton)

POSTERS:
1101-APS  Comparative cardiovascular and respiratory physiology
1102-APS  Comparative metabolic physiology, biochemistry and endocrinology
1103-APS  Comparative muscle physiology, locomotion and behavior
1104-APS  Comparative osmotic, ionic, and acid-base regulation
1105-APS  Other comparative and evolutionary physiology

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)
1115-APS  Brown and Beige Adipose Tissue: New Insights into Primary Targets for Obesity Prevention (Symonds)
1116-APS  Inflammation in Beta Cell Dysfunction: From Mouse to Man (Corbett)

POSTERS:
1117-APS  Cardiovascular endocrinology, including renin-angiotensin-aldosterone
1118-APS  Exercise, nutrition and muscle protein synthesis
1119-APS  Gestation, fetal, and neonatal biology, including mammary gland and lactation
1120-APS  Growth, connective tissue and bone metabolism
1121-APS  Lipid, lipoprotein and cholesterol metabolism
1122-APS  Mitochondrial function
1123-APS  Neuroendocrinology, hypothalamus and pituitary
1124-APS  Obesity and satiety
1125-APS  Pancreatic hormones and diabetes
1126-APS  Protein, amino acid and carbohydrate metabolism
1127-APS  Reproduction and sex hormones
1128-APS  Stress and trauma including adrenal gland

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)
1134-APS  Defining the Thermoneutral Zone of Laboratory Mice (Gordon)
1135-APS  Pregnancy and Exercise (Newcomer)
1136-APS  AltitudeOmics 2012 (Roach)

POSTERS:
1138-APS  Acute exercise responses
1139-APS  Altitude and hypoxia
1140-APS  Cardiac responses to exercise
1141-APS  Circadian and biological timekeeping
1142-APS  Exercise training responses
| 1143-APS | Exercise, health and disease |
| 1144-APS | Fluid balance, blood volume regulation and trauma |
| 1145-APS | Metabolism and energetics of muscle and related tissues |
| 1146-APS | Muscle atrophy and hypertrophy |
| 1147-APS | Muscle plasticity and gene regulation/expression |
| 1148-APS | Neural control of the circulation during exercise |
| 1149-APS | Neural-endocrine control during exercise |
| 1150-APS | Reduced gravity and hyperbaric environments |
| 1151-APS | Respiratory responses to exercise |
| 1152-APS | Neural-endocrine control during exercise |
| 1153-APS | Responses of bone and connective tissue to exercise and inactivity |
| 1154-APS | Signaling with muscle among cells, tissues and organs |
| 1155-APS | Vascular responses to exercise and environmental stress |
| 1178-APS | Gastrointestinal motility |
| 1179-APS | Gastrointestinal nutrient sensors |
| 1180-APS | GI hormones, peptides and receptors |
| 1181-APS | GI and liver epithelial junctions |
| 1182-APS | Growth factors, proliferation, differentiation and apoptosis |
| 1183-APS | Hepcidin and iron homeostasis |
| 1184-APS | Immunology and microbiology of the gut |
| 1185-APS | Intestinal inflammation and pathophysiology |
| 1186-APS | Liver physiology and pathophysiology |
| 1187-APS | Mechanisms of intestinal nutrient, water and electrolyte transport |
| 1188-APS | Membrane trafficking and secretion in digestive epithelia |
| 1189-APS | Metal ion transport |
| 1190-APS | Metabolic disease: GI and liver function |
| 1192-APS | Microbiome of the GI tract |
| 1193-APS | Nuclear receptors in the liver and GI tract |
| 1194-APS | Pancreatic physiology and pathophysiology |

**EPITHELIAL TRANSPORT 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)

| 1160-APS | Ussing Award FT: Regulation of Epithelial Ion and Water Channels, and Regulatory Proteins (TBA) |
| 1161-APS | Hebert Award FT: Regulation of Epithelial Transporters, Paracellular Transport, and Regulatory Proteins (TBA) |

**POSTERS:**

| 1162-APS | Epithelial development, polarity, differentiation |
| 1163-APS | Transporters and modulatory proteins, lipids and hormones |
| 1164-APS | Water and ion channels and modulatory proteins, lipids, and hormones |
| 1165-APS | Transcellular and paracellular permeability |

**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)

| 1170-APS | Intestinal and Liver Stem Cells: Physiology, Pathophysiology and Nutrition (Lund/Ney) |
| 1171-APS | Organoid Culture Systems: An Innovative Research Tool for the Study of Gastrointestinal Development, Physiology and Disease (Zavros) |

**POSTERS:**

| 1172-APS | Alcoholic and nonalcoholic fatty liver diseases |
| 1173-APS | Barrier function and repair |
| 1174-APS | Effects of diet on GI and liver physiology |
| 1175-APS | Gastric physiology and pathophysiology |
| 1176-APS | Gastrointestinal cancer and metastasis |
| 1177-APS | Gastrointestinal development |

**HISTORY OF PHYSIOLOGY GROUP**

**POSTERS:**

| 1200-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)

| 1201-APS | Influence of Maturation on Cell- and Systems-Level Hypoxic Behaviors (Solomon/Wilson) |

**POSTERS:**

| 1202-APS | Carotid body structure and function |
| 1203-APS | Hypoxia-induced gene expression |
| 1204-APS | Hypoxia/transmitters, second messengers, and signal transduction |
| 1205-APS | Hypoxia and ion channels |
| 1206-APS | Intermittent hypoxia/oxidative stress |
| 1207-APS | Responses to acute or chronic hypoxia exposure and altitude |

**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)

| 1215-APS | Muscle Loss in Diabetes: Not Your Same Old Sarcopenia (Brozinick) |
| 1216-APS | Ambient Hypoxia, Muscle Mass Control and Energy Metabolism (Beaudry) |

**POSTERS:**

| 1217-APS | Aging and muscle function |
| 1218-APS | Calcium and muscle contractility |
| 1219-APS | Calcium homeostasis |
| 1220-APS | Cardiac muscle, physiology |
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)

1235-APS Carotid Body Chemoreceptors: Beyond the 02 Frontier (Johnson/Limberg)
1236-APS Diverse Effects of Angiotension Peptides on Autonomic Regulation in Health and Disease (Sabharwal)
1237-APS NCAR Trainee Featured Topic (Vincent)
1238-APS Sex Matters When it Comes to Blood Pressure Regulation (Joyner)
1239-APS Sympathetic Vascular Transduction: Bridging the Divide in Blood Pressure Regulation (Fadel/Fairfax)

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)

1250-APS Epigenetics and Epigenomics (Liang)

POSTERS:

1240-APS Central autonomic regulation
1241-APS Neural control of cardiovascular function: the brain
1242-APS Neural control of cardiovascular function: the heart
1243-APS Neural control of cardiovascular function: the kidney
1244-APS Neural control of cardiovascular function: vasculature
1245-APS Neural control of visceral and metabolic function
1246-APS Neural mechanisms in cardiovascular disease

RENSAL 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)

1265-APS Hypoxia as a Unifying Mechanism for Kidney Disease (Palm/Wilcox)

POSTERS:

1266-APS Aging and renal function
1267-APS Diabetic renal disease
1268-APS Hormone and autoid effect on the kidney
1269-APS Kidney in hypertension
1270-APS Oxidative stress and the kidney
1271-APS Renal epithelial acid-base mechanisms
1272-APS Renal hemodynamics and glomerular filtration rate
1273-APS Renal pathology, toxicology, and cysitic diseases
1274-APS Renal transport, trafficking, and regulation
1275-APS Renal water transport, urea transport, and countercurrent mechanisms
1276-APS Sex differences in renal function and disease

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)

1280-APS Genetic Manipulation in Respiratory Control: Basic Science to Clinical Trials (Fuller)
1281-APS Important Signaling Networks for the Structure and Function of Airway Smooth Muscle Cells (Wang/Pabelick)
1282-APS New Insights into the Chemical Control of Breathing and Blood Pressure (Moreira/Mulkey)
1283-APS Signaling in Pulmonary Hypertension (Bonnet/Paulin)

POSTERS:

1284-APS Control of breathing: connectivity, neuromodulation and neurotransmission
1285-APS Control of breathing: chemoreception
1286-APS Control of breathing: development
1287-APS Control of breathing: integrated responses
1288-APS Control of breathing: respiratory motoneurons and muscles
1289-APS Control of breathing: respiratory plasticity
1290-APS Control of breathing: rhythm generation
1291-APS Lung physiology: airway epithelial cell biology
1292-APS Lung physiology: airway responsiveness and smooth muscle cell biology
1293-APS Lung physiology: alveolar epithelial cell biology
1294-APS Lung physiology: biomechanics, surfactant and gas exchange
1295-APS Lung physiology: development and plasticity
1296-APS Lung physiology: endothelial cell biology
1297-APS Lung physiology: fluid balance
### INTERNATIONAL RESEARCH NETWORK ON CEREBRAL HEMODYNAMIC REGULATION (CARnet)

- **1335-APS** Cerebral autoregulation in pathological conditions
- **1336-APS** Cerebral autoregulation: the quandry of quantification
- **1337-APS** Autonomic and other control of the cerebral circulation
- **1338-APS** Cerebral blood flow regulation in aging

### TEACHING OF PHYSIOLOGY SECTION

**FEATURED TOPICS:**

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

- **1298-APS** Lung physiology: pulmonary hypertension
- **1299-APS** Lung physiology: vascular smooth muscle cell biology, vascular regulation, and hypoxia

**POSTERS:**

- **8100-EB** Computers in Research and Teaching
- **8200-EB** Teaching, Learning and Testing in the Biological and Biomedical Sciences

### TRANSLATIONAL PHYSIOLOGY GROUP

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

- **1305-APS** Using Retrieval Practice and Other Advances from Cognitive Science to Enhance Student Learning (Dobson/Wenderoth)

### WATER & ELECTROLYTE HOMEOSTASIS SECTION

**FEATURED TOPICS:**

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

- **1315-APS** Adverse Perinatal Environment and Priming of Metabolic and Cardiovascular System to Chronic Disease (Loria/Ho)
- **1316-APS** Hypertension: Mechanisms and Consequences (Gottlieb)
- **1317-APS** Novel Role of Hormones in Trauma (Uyehara/Hinojosa-Laborde)
- **1318-APS** Water and Electrolyte Homeostasis: Pathophysiology and Physiology (Cunningham)

**POSTERS:**

- **1319-APS** Blood pressure and fluid volume regulation in pregnancy and developmental programming
- **1320-APS** Developmental programming and cardio-renal function in adults
- **1321-APS** Cardiovascular and renal mechanisms in diabetes and metabolic syndrome
- **1322-APS** Neurohumoral mechanisms of blood pressure and volume regulation
- **1323-APS** Renin-angiotensin-aldosterone system in regulation of blood pressure and renal function
- **1324-APS** Sex differences in blood pressure and fluid volume homeostasis
ASBMB Topic Tips:

Best Poster Awards! Scientific abstracts will be judged for ASBMB Thematic Best Poster honors and cash prizes!

ASBMB topic categories are grouped by scientific theme.

Short talks are selected from the volunteered abstracts. Oral presenters ALSO present posters.

ASBMB travel award applicants must submit a scientific abstract as first author to an ASBMB topic category (2000 - 2427) by the November 8 abstract deadline. Complete travel award information: www.asbmb.org/meeting2014.

**TOPIC CATEGORIES – BIOCHEMISTRY AND MOLECULAR BIOLOGY**

**2000-ASBMB** DNA Replication, Recombination and Repair

**2001-ASBMB** Replication and Protection of DNA Ends

**2002-ASBMB** Coping with Barriers to DNA Replication

**2003-ASBMB** Architecture and Dynamics of Replication, Repair, and Recombination Complexes

**2004-ASBMB** Post-translational Modifications in Replication, Repair, and Recombination

**2005-ASBMB** DNA Enzymes

**2006-ASBMB** DNA Repair Mechanisms

**2007-ASBMB** DNA Replication Mechanisms

**2008-ASBMB** DNA Replication Origins

**2009-ASBMB** Double-Stranded Breaks and DNA Recombination

**2010-ASBMB** Genome Diversity and DNA Recombination

**2011-ASBMB** Genome Stability and DNA Repair

**2012-ASBMB** Inhibitors of DNA Transactions

**2013-ASBMB** Mechanism of DNA Recombination

**2014-ASBMB** Regulation of Translesion Synthesis

**2015-ASBMB** Replicases and Replisomes

**2016-ASBMB** Replication Fork Dynamics

**2017-ASBMB** Replication Initiation

**2018-ASBMB** Signaling Responses to DNA Damage

**2019-ASBMB** Telomeres and Telomerase

**2020-ASBMB** Translesion and Error-Prone DNA Polymerases

**2030-ASBMB** DNA

**2031-ASBMB** DNA Structure

**2032-ASBMB** Probes of DNA Conformation

**2040-ASBMB** Post-translational Protein Regulation and Modification

**2041-ASBMB** Prokaryotes and Protein Modification

**2042-ASBMB** Regulation of Autophagy

**2043-ASBMB** Ubiquitination

**2044-ASBMB** Chambered Proteases

**2045-ASBMB** ATP-Dependent Protein Degradation

**2046-ASBMB** Autophagy and Neurodegenerative Disease

**2047-ASBMB** Cotranslational Degradation

**2048-ASBMB** Mitophagy

**2049-ASBMB** Posttranslational Modifications

**2050-ASBMB** Prokaryotic and Archaeal Ubiquitin-Like Modifiers

**2051-ASBMB** Protease Adaptors

**2052-ASBMB** Protease: Structure and Regulation

**2053-ASBMB** Proteases in Disease

**2054-ASBMB** Proteasome Evolution

**2055-ASBMB** Proteasome Inhibition

**2056-ASBMB** Proteasomes in Neuronal Morphogenesis and Degeneration

**2057-ASBMB** Proteasomes: Structure and Regulation

**2058-ASBMB** Protein Quality Control (Post-translational Protein Regulation and Modification)

**2059-ASBMB** Role of the UPS in Pathogenesis

**2060-ASBMB** Selective Autophagy Pathways

**2061-ASBMB** The Ubiquitin Code

**2062-ASBMB** Ubiquitination and Chromatin

**2063-ASBMB** Ubiquitin-ligases: Structure and Function

**2070-ASBMB** RNA Processing and Transcription

**2071-ASBMB** Regulation of Transcription, Chromatin, and RNA Processing

**2072-ASBMB** Probing Mechanisms in Gene Expression with Global Methods

**2073-ASBMB** Structural and Mechanistic Insights into Transcription and RNA Processing

**2074-ASBMB** The Cell Biology of Transcription, Chromatin and RNA

**2075-ASBMB** Alternative RNA Splicing

**2076-ASBMB** Catalytic RNA

**2077-ASBMB** Molecular Recognition and Enzymology of RNA

**2078-ASBMB** Non-coding RNAs: Expression, Function, and Regulation

**2079-ASBMB** RNA Editing and Modification: Mechanism and Function

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<td>Lipid mediators and lipoproteins</td>
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<td>Regulation of endothelial junctions</td>
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<td>Stem/progenitor cells in vascular biology</td>
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<td>Thrombosis, platelets and blood microparticles</td>
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<td>Molecular genetics of infectious agents</td>
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<td>Host-pathogen mucosal interactions</td>
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<td>Host-pathogen immune interactions</td>
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<td>Model systems for infectious diseases</td>
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<td>4159-ASIP</td>
<td>Pathobiology of organ-specific infections</td>
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<td>Exogenous pathogen-associated molecular</td>
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<td>Microbiota and systemic disease</td>
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<td>Sepsis and endotoxin</td>
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<td>Community Nutrition Programs and Policies for Older Adults (Co-sponsor: Community and Public Health Nutrition) (new!)</td>
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<td>Nutrition Interventions for Risk Factor Modification in Chronic Disease</td>
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<td>5003 ASN</td>
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<td>Nutrition and Cognition Across the Lifespan (Co-sponsor: Nutritional Epidemiology RIS) (new!)</td>
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| Community and Public Health Nutrition | 5020 ASN | Community and Public Health Nutrition Interventions |
| 5021 ASN | Food Security and Its Connections to Nutrition and Health (new!) |
| 5022 ASN | Health Disparities and Promoting Health in Diverse Populations (new!) |
| 5023 ASN | Food Environment |
| 5024 ASN | Health Systems and Food Systems Approaches in Community and Public Health Nutrition (new!) |

| CARIG | 5030 ASN | Carotenoids and Health |
| 5031 ASN | Carotenoids and Retinoids: Molecular Mechanisms of Action |
| 5032 ASN | Bioavailability and Metabolism of Carotenoids and Vitamin A |
| 5033 ASN | Biofortification of Staple Crops with Micronutrients |

| Diet and Cancer | 5040 ASN | Molecular Targets |
| 5041 ASN | Animal Studies |
| 5042 ASN | Clinical and Human Studies (new!) |

| Dietary Bioactive Components | 5060 ASN | Bioavailability, Metabolism and Biomarkers of Dietary Bioactive Components |
| 5061 ASN | Mechanisms of Action and Molecular Targets of Bioactive Components |

| TOPIC CATEGORIES – NUTRITION | 5062 ASN | Effects of Dietary Bioactive Components on Experimental Models of Chronic Disease Risk |
| 5063 ASN | Antioxidant and Anti-inflammatory Effects of Dietary Bioactive Components |
| 5064 ASN | Cardiovascular Effects of Dietary Bioactive Components |
| 5065 ASN | Dietary Bioactive Components of Medicinal, Functional and Whole Foods (including Probiotics and Fermented Foods) |

| Energy and Macronutrient Metabolism | 5080 ASN | Energy Balance, Macronutrients and Weight Management |
| 5081 ASN | Obesity and the Metabolic Syndrome (Co-sponsor: Obesity RIS) |
| 5082 ASN | Protein and Amino Acid Metabolism |
| 5083 ASN | Lipid and Fatty Acid Metabolism and Transport |
| 5084 ASN | Dietary Factors Affecting Lipid Metabolism |
| 5085 ASN | Energy and Macronutrient Metabolism and the Gut (new!) |
| 5086 ASN | Metabolic Phenotyping, Metabolomics and Biomarkers |
| 5087 ASN | Carbohydrate Metabolism |
| 5088 ASN | Diet and/or Exercise Regulation of Food Intake (Co-sponsor: Obesity RIS) (new!) |
| 5089 ASN | Energy Metabolism and Aging (Co-sponsor: Aging and Chronic Disease RIS) |
| 5090 ASN | Protein Intake and Health Implications (new!) |

| Experimental Animal Nutrition | 5100 ASN | Companion Animal Nutrition and Physiology |
| 5101 ASN | Animal Research Models for Macronutrient Metabolism |
| 5102 ASN | Animal Research Models Investigating Nutrition and Inflammation |
| 5103 ASN | Animal Research Models in Intestinal Physiology and Digestive Function (new!) |
| 5104 ASN | Animal Research Models in Nutrition and Musculoskeletal Development |
| 5105 ASN | Animal Research Models of Fetal Programming (new!) |
Lactation
5120-ASN Biology of Milk Production and Secretion
5121-ASN Bioactive Compounds and other Milk Constituents
5122-ASN Determinants of Lactogenesis, Lactation Duration and Other Indicators of Lactation Success
5123-ASN Effects of Lactation/Breastfeeding on the Recipient Infant and/or Lactating Mother

Global Nutrition
5140-ASN Global Nutrition

Medical Nutrition
5200-ASN Personalized Nutrition
5201-ASN Nutrition and the Microbiome
5202-ASN Interventions for the Treatment and Prevention of Nutrition-Related Diseases
5203-ASN Nutrition and Inflammation
5204-ASN Prenatal Nutrient Programming in Humans

Nutrition Education
5210-ASN Evidence-Based Nutrition Education: Development, Testing, and Evaluation
5211-ASN Childhood Obesity Prevention
5212-ASN Culturally Sensitive Nutrition Education Interventions in Diverse Populations
5214-ASN Nutrition Education in the Clinical Setting (new!)
5215-ASN Developing Healthy Eating and Physical Activity Behaviors Across the Lifespan (new!)

Nutrient-Gene Interactions
5220-ASN Nutrient-Gene Interactions: Nutritional Regulation of Epigenetics (new!)
5222-ASN Nutrient-Gene Interactions - Nutrition and the Genome (new!)
5223-ASN Nutrition and (Stem) Cell Differentiation (new!)
5224-ASN Nutrient Control of Proteomics and Metabolomics
5225-ASN Nutrient-Gene Interactions in Obesity and Inflammation (new!)
5226-ASN Nutrient-Gene Interactions in Metabolic and Neurodegenerative Diseases (new!)
5227-ASN Nutrient-Gene Interactions in Autoimmune Diseases (new!)

Nutritional Epidemiology
5230-ASN Innovation and Validation of Dietary Assessment Tools and Their Applications (new!)
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 Assessment of Child and Adolescent Nutritional Status, Growth, and Obesity
5236-ASN Epidemiologic Methods in Examining Health Outcomes in Diverse Populations (Co-sponsor: Minority Affairs Committee) (new!)
5237-ASN Exploring Geographic Based Methods in Nutrition Epidemiological Research (new!)

Nutritional Immunology
5240-ASN Nutritional Immunology
5241-ASN Nutrition, Infection and Immunity

Nutrition Translation
5250-ASN Nutrition Science Translation for Policy, Practice and Consumers
5251-ASN Food Related Behaviors and Implications for Food Policy
5252-ASN Novel Food Ingredients and Their Impact on Health

Obesity
5260-ASN Diet and Behavior (new!)
5261-ASN Devices, Medications and Surgery (new!)
5262-ASN Physical Activity
5263-ASN Chronic Diseases
5264-ASN Insulin Resistance (new!)
5266-ASN Body Composition

Vitamins and Minerals
5281-ASN Water and Fat Soluble Vitamins and Chronic Disease
5282-ASN Micronutrient Bioavailability and Antioxidant Function
5283-ASN Zinc
5284-ASN Selenium
5285-ASN B Vitamins and One-Carbon Metabolism
5286-ASN Micronutrient Interventions

Sports Nutrition
5300-ASN Dietary Supplements and Human Performance
5301-ASN Sports Nutrition

Other
5310-ASN Innovative Applications and Technologies in Nutrition and Food Science
5320-ASN Dairy and Yogurt: Health and Nutrition Effects

Education and Teaching
5320-ASN Nutrition Education in Medical and Other Professional Schools
5321-ASN Nutrition Education for Practicing Clinicians
5322-ASN Innovations in Undergraduate, Graduate and Medical Nutrition Education

Policy
5350-ASN Nutrition Policy Efforts to Improve the Health of Children (new!)
5351-ASN Nutrition Policy Efforts to Improve the Health of Minorities (new!)
5352-ASN Nutrition Monitoring (new!)
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<td>Nutrition Policy in Community and Public Health Settings (new!)</td>
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<td>5355-ASN</td>
<td>Public Policy Efforts to Prevent Overweight/Obesity (new!)</td>
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<td>5000-ASN</td>
<td>Community Nutrition Programs and Policies for Older Adults (Co Sponsor: Comm and Pub Hlth Nutr RIS) (new!)</td>
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<td>Nutrition Science Translation for Policy, Practice and Consumers</td>
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<tr>
<td>5251-ASN</td>
<td>Food Related Behaviors and Implications for Food Policy</td>
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## TOPIC CATEGORIES – PHARMACOLOGY

### Education
- **8100-EB** Computers in Research & Teaching
- **8200-EB** Teaching, Learning, and Testing in the Biological and Biomedical Sciences

### Cardiovascular Pharmacology (CVP)
- **3000-ASPET** Cardiac Pharmacology — Injury, Remodeling, Protection
- **3001-ASPET** Cardiac Pharmacology — Signaling
- **3002-ASPET** Vascular Pharmacology — Endothelium
- **3003-ASPET** Vascular Pharmacology — Smooth Muscle
- **3004-ASPET** Vascular Pharmacology — Ion Channels
- **3005-ASPET** Vascular Pharmacology — Signaling
- **3006-ASPET** Vascular Pharmacology — Injury
- **3007-ASPET** Vascular Pharmacology — Angiogenesis Thrombosis
- **3008-ASPET** Cerebrovascular Pharmacology
- **3009-ASPET** Pulmonary Vascular Pharmacology
- **3010-ASPET** Coronary Vascular Pharmacology
- **3011-ASPET** Cardiovascular Disease — Hypertension
- **3012-ASPET** Cardiovascular Disease — Diabetes
- **3013-ASPET** Cardiovascular Disease — Stroke
- **3014-ASPET** Cardiovascular Pharmacology – All other

### Cellular and Molecular Pharmacology
- **3015-ASPET** Biologics/Biosimilars
- **3016-ASPET** Chemotherapy (Non-cancer)
- **3017-ASPET** Gene Expression/Regulation
- **3018-ASPET** Genomics/Proteomics
- **3019-ASPET** Signal Transduction — General
- **3020-ASPET** Signal Transduction — Cell Surface Receptors
- **3021-ASPET** Signal Transduction — G Proteins/GPCRs
- **3022-ASPET** Signal Transduction — Ion Channels
- **3023-ASPET** Signal Transduction — Kinases/Phosphatases
- **3024-ASPET** Signal Transduction — Second Messenger Systems
- **3025-ASPET** Signal Transduction — Nuclear Receptors
- **3026-ASPET** Mechanisms of Cell Injury/Death

### Central Nervous System Pharmacology
- **3027-ASPET** Behavioral Pharmacology — General
- **3028-ASPET** Drugs of Abuse
- **3029-ASPET** Memory/Cognition/Learning
- **3030-ASPET** Neuroparmacology — General
- **3031-ASPET** Neuropsychiatric Disorders

### Drug Metabolism and Disposition (DMD)
- **3032-ASPET** Neurotoxicology — General
- **3033-ASPET** Neurotoxicology — Neuroprotective Agents
- **3034-ASPET** Neurotransmission
- **3035-ASPET** Neurotransmitter Receptors
- **3036-ASPET** Blood-Brain Barrier

### Systems Pharmacology and Toxicology
- **3044-ASPET** Anti-inflammatories
- **3045-ASPET** Developmental Pharmacology/Toxicology
- **3046-ASPET** Diabetes and Metabolic Syndrome
- **3047-ASPET** Gastrointestinal Pharmacology/Toxicology
- **3048-ASPET** General Pharmacology/Toxicology
- **3049-ASPET** Genotoxicity/Mutagenesis
- **3050-ASPET** Hormones and Hormone Receptors
- **3051-ASPET** Immunopharmacology/Toxicology
- **3052-ASPET** Integrative Organ Systems Pharmacology
- **3053-ASPET** Mechanisms of Toxicity
- **3054-ASPET** Ocular Pharmacology/Toxicology
- **3055-ASPET** Pharmacology and Women’s Health
- **3056-ASPET** Pulmonary Pharmacology/Toxicology
- **3057-ASPET** Regenerative Pharmacology/Stem Cells
- **3058-ASPET** Regenerative Pharmacology/Tissue Engineering
- **3059-ASPET** Renal Pharmacology/Toxicology
- **3060-ASPET** Skeletal Muscle Pharmacology/Toxicology
- **3061-ASPET** Smooth Muscle Pharmacology/Toxicology
- **3062-ASPET** Targets of Toxicant Sensitivity in Aging

### Pharmacogenomics and Translational Pharmacology
- **3063-ASPET** Clinical Pharmacology/Toxicology
- **3064-ASPET** Computational Biology Applied to Pharmacology
- **3065-ASPET** Pharmacogenomics/Proteomics/Metabolomics
- **3066-ASPET** Pharmacology of Networks
- **3067-ASPET** Translational PK/PD
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<tr>
<td>Drug Discovery and Development</td>
<td>Chemical Biology and Experimental Therapeutics</td>
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<td>Drug Formulation and Delivery</td>
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<td>High Throughput Screening</td>
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<td>Natural Products</td>
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<td>New Methodology for Drug Discovery and Screening</td>
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<td>Peptide Drug Development</td>
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<td>Polypharmacology</td>
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<td>Proteins as Drug Targets</td>
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<td>Technology in Pharmacology Teaching</td>
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<td>Use of Social Media in Pharmacology Education</td>
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<td>Assessment Pharmacology</td>
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<td>Cancer Stem Cells</td>
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<tr>
<td>Pharmacology – Other</td>
<td>Pharmacology — All Other</td>
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* For topic categories 8100 and 8200 see page 39.
** Abstracts submitted to this category may be eligible for presentation at the Drug Metabolism Platform Session as well as inclusion in a poster session.
REGISTRATION
Register by February 21, 2014 to receive the discounted registration fee. Complete instructions are on the website at www.experimentalbiology.org.

The registration fee includes entrance to scientific sessions, exhibits, and a copy of the Program. **NOTE: The Program will NOT be mailed this year. You may pick up your program on-site.** The abstracts will be published online in 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
- **Mail** the form and payment to:
  EB 2014 Registration Office
  9650 Rockville Pike
  Bethesda, MD 20814
  The form is online at www.experimentalbiology.org as an interactive PDF.
- **Fax** the form to 301-634-7008 (credit card payments only).

Mailed and faxed registration forms will only be accepted until February 21. Several societies have planned special activities that require a fee in addition to the Experimental Biology 2014 registration fee. Details on the activities and how to register for these activities are included on pages 59-60.

### IMPORTANT DATES

<table>
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<tr>
<td>November 8, 2013</td>
<td>Abstract Submission Deadline</td>
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<tr>
<td>February 21, 2014</td>
<td>Early Registration Deadline</td>
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<tr>
<td>March 21, 2014</td>
<td>Hotel Reservations Deadline</td>
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<td>March 21, 2014</td>
<td>Cancellation Deadline</td>
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### EB Registration Fees

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*Graduate Student Registration (including all Society student members): 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 student 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 will be allowed to pay an adjusted full member or nonmember fee.**

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

**Undergraduate Students, High School Students and High School Teachers:** Registration will be accepted online in advance. To receive complimentary registration on-site, bring your student or teacher ID card or a letter signed by your department head, research advisor, principal or teacher.
Press Registration:
Complimentary registration is available for qualified press to cover EB2014. Pre-registration for members of the media and freelance writers is encouraged. A letter of assignment is necessary. Please visit [http://experimentalbiology.org/content/PressInformation.aspx](http://experimentalbiology.org/content/PressInformation.aspx) to view our full press credentials policy. Send your completed request to media@faseb.org.

ALL REGISTRANTS – PLEASE NOTE: NO MATERIALS WILL BE MAILED IN ADVANCE
You will not receive your badge or program prior to the meeting. There will be on-site kiosks set up to print your badge upon your arrival at the meeting. Programs will not be mailed in advance and can be picked up at the meeting along with other materials.

On-site Registration: On-site registration will be available at the San Diego Convention Center beginning Friday, April 25, continuing through Wednesday, April 30.

Cancellation and Refunds: The badge, receipt and a letter requesting a refund of the registration fee must be received by March 21, 2014. A $50 non-refundable processing fee will be deducted from the refund. After March 21, 2014 no refunds will be issued. Mail to: EB2014 Registration Office, 9650 Rockville Pike, Bethesda, MD 20814-3998.

**HOTEL INFORMATION**
Deadline for hotel reservations: March 21, 2014
A list of participating hotels with locations, 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 providers for the Experimental Biology meeting.
The following special Society activities have been planned and require a fee in addition to the Experimental Biology 2014 registration fee. If you plan to attend any of these activities, please note where and how to register.

**SOCIETY TICKETED EVENTS**

**ANNUAL AAA AWARDS BANQUET & RECEPTION**
Tuesday, April 29, 7:30 PM to 10:00 PM
The American Association of Anatomists cordially requests the pleasure of your company at the Annual AAA Awards Banquet on Tuesday, April 29, 2014. The Banquet—from 7:30 PM to 10:00 PM at the San Diego Marriott Marquis & Marina—will feature a cocktail reception, dinner, and 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.

**THE APS OPENING CEREMONY AND WALTER B. CANNON LECTURE**
Saturday, April 26, 5:30 PM
Room 20A. Lecture is free of charge.

**APS OPENING RECEPTION**
Saturday, April 26, 7:00 PM – 9:00 PM
San Diego Convention Center, is free for APS members and those expressing an interest in physiology on their registration form.

**APS CLOSING PARTY**
Wednesday, April 30, 7:00 PM – 10:00 PM
Room TBD, tickets are $15 in advance/$25 onsite. **ADMISSION IS BY TICKET ONLY**

**ASBMB EVENTS**

Sign up for the following ASBMB organized activities while registering for the EB2014 meeting. Event registration will close when fully subscribed. There will be no on-site event registration. Visit www.asbmb.org/meeting2014 for details and program information.

**ASBMB GRADUATE/POSTDOCTORAL PROFESSIONAL DEVELOPMENT PROGRAM**
Saturday, April 26, 9:00 AM – 4:30 PM
Features a career forum, workshops and networking luncheon: $25 ASBMB members, $35 all other EB registrants. Recipients of the ASBMB 2014 Graduate Minority and Graduate/Postdoctoral Travel Awards receive event registration as part of the award and do not have to register separately for this event.
The following special Society activities have been planned and require a fee in addition to the Experimental Biology 2014 registration fee. If you plan to attend any of these activities, please note where and how to register.

**SOCiETY TiCKETED EVENTS, CONTINUED**

**ASN FELLOWS, 50-YEAR MEMBERS, AND PAST PRESIDENTS LUNCHEON**
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 2014 ASN Fellows. All members are invited to attend; guests are permitted. All newly inducted Fellows will receive complimentary registration. Tickets can be purchased from www.nutrition.org.

**F TROOP! ROADMAP TO FELLOWSHIP GRANT APPLICATIONS**
Saturday, April 26, 2014 at 8:30AM
FREE for ASIP Members
$10 for Non-Members

**XIVth WORKSHOP ON GRADUATE EDUCATION IN PATHOLOGY: PATHOLOGY CURRICULA IN GRADUATE PROGRAMS: HOW TO SUCCEED IN THE BUSINESS OF TRAINING TOMORROW’S MEDICAL RESEARCHERS**
Saturday, April 26, 2014 at 11:30AM
FREE for ASIP Members
$10 for Non-Members

**CAREER DEVELOPMENT WORKSHOP AND BREAKFAST: BEYOND THE JOB OFFER: EXPLORING THE ART OF EFFECTIVE NEGOTIATION**
Sunday, April 27, 2014 at 7:00AM
FREE for ASIP Members
$10 for Non-Members

**XIVth ANNUAL ASIP/AAA CAREER DEVELOPMENT AND MENTORING PROGRAM AND LUNCH: GUILTY UNTIL PROVEN INNOCENT: SCIENTIFIC INTEGRITY AND GETTING PUBLISHED!**
Sunday, April 27, 2014 at 11:45AM
ASIP Trainee members and AAA Student Members will receive a complimentary ticket.
Tickets are $20 for all others.

**LUNCH AND LEARN: NECESSARY EVILS: THE RESPONSIBILITY AND PROCESS TO PROTECT HUMAN AND ANIMAL SUBJECTS IN RESEARCH**
Tuesday, April 29, 2014 at 11:45AM
FREE for ASIP Members
$10 for Non-Members

Please sign up for these events when registering for the meeting by checking the boxes on the registration form.
EXHIBITION AND SPONSORSHIP OPPORTUNITIES AT EB 2014

APPLY FOR SPACE TODAY!
Don’t miss the opportunity to meet with the leaders and decision makers looking for products and services like yours! Reserve your booth space by January 8, 2014 to have your company information printed in the meeting program. Application can be found online under Exhibitors.

Advertising
Display your company name, logo, booth number and message in the meeting program. The program is posted in full on the website in advance of the meeting. Advertising rates, specifications and order forms can be found on the website.

Booth Upgrade
Increase your exposure and ROI by upgrading your booth in our virtual floor plan. Other options include adding your URL, company logo, product promotion and company video. Please contact Jkearney@faseb.org for additional information.

Product Workshops
Highlighting your company’s products and services in a private theater setting. Product workshops will be held on the exhibit floor and in session rooms for one hour increments and includes complimentary A/V equipment. Requests are accepted on a first-come, first-served basis. Complete the online application located on our website. Deadline for consideration is January 8, 2014. A description of the presentation will be included in the meeting program.

Attendee Mailing Lists
Reach new prospects and stay connected by purchasing the advance or post show attendee mailing lists. Names are sorted by zip code and can be segmented by domestics, Canadian or International addresses. Complete the online order form located on our website.

Company Box Ad
Maximize your visibility by displaying your company’s logo next to your company information in the meeting program. Further details and pricing can be found online.

Sponsorship Opportunities
Sponsorship and marketing opportunities are a great way to get the brand recognition and visibility that you want. Further details can be found online.

For information or to reserve your exhibit space please visit: www.experimentalbiology.org/exhibits.

Over 14,000 independent scientists representing the participating and sponsoring societies of Experimental Biology
Welcome to San Diego

Saturday, April 26, 2014
7:00 AM - 8:30 AM
The Experimental Biology 2014 sponsoring societies and the designated official block hotels along with city of San Diego are hosting an Experimental Biology 2014 Coffee Break Social

Join fellow Experimental Biology attendees at your EB 2014 official block hotel for a cup of coffee and conversation.

Welcome to San Diego, California’s second largest city, where blue skies keep watch over 70 miles of majestic coastline and a gentle Mediterranean climate and friendly locals create a welcoming vibe all its own.

San Diego, CA— Downtown, Diverse Dining, Delightful Dalliances and it doesn’t stop there...

Downtown San Diego is a veritable foodie’s paradise, with plenty of options for every type of cuisine you can imagine. Many of San Diego’s downtown restaurants feature celebrity chefs, farm-to-table options, and fresh catches of the day. From the freshest seafood and sushi, authentic Italian, Mexican or Thai, to New American and California cuisine, if you crave it, you’ll find in downtown San Diego.

The heart of every city lives in its downtown, and San Diego is no exception. Located only minutes from the airport, San Diego’s thriving downtown districts, including the historic Gaslamp Quarter, offer a plethora of options for accommodations, activities, and dining, shopping and cultural attractions, all within walkable city blocks. Visit their website at www.sandiego.org. There you will also find details on 25 Fun and Free (and almost free) Things to Do, and maps to get you around town.

Air Travel/Ground Transportation:
San Diego International Airport (SAN) is conveniently located, approximately three and one half miles from the heart of downtown San Diego. It is serviced by 22 major and commuter airlines and receives more than 16 million passengers a year. San Diego offers plenty of convenient public transportation options that are safe, clean and efficient, from the trolley, to the Coaster train, to the metropolitan bus system.
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 www.experimentalbiology.org

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

November 8, 2013
- Deadline to submit abstract and $65 non-refundable abstract processing fee.
- Deadline to withdraw or make changes to a submitted abstract.

February 21, 2014
- Deadline for early registration. You may register online after this date, however your registration will be at the higher fee.

March 21, 2014
- Deadline for hotel reservations. Rates and availability cannot be guaranteed after this date.

March 21, 2014
- Deadline to request a refund of advance registration.

April 26 - 30, 2014
- Attend Experimental Biology meeting in San Diego, CA!

FOLLOW EB AND THE SOCIETIES ON FACEBOOK AND TWITTER FOR MEETING UPDATES!
IMPORTANT DATES

EB 2014

November 8, 2013
Abstract Submission Deadline

February 21, 2014
Early Registration Deadline

March 21, 2014
Hotel Reservations Deadline

www.experimentalbiology.org