Call for Abstracts and Program Information

SPONSORS:
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)

Abstract Deadline: Tuesday, November 8, 2011
The Guest Societies participating in EB 2012:

AAA American Association of Anatomists
- Brazilian Society of Anatomy (SBA)
- Chinese Society of Anatomical Sciences (CSAS)

APS The American Physiological Society
- American Federation for Medical Research (AFMR)
- Association of Latin American Physiological Societies (ALACF)
- Association of Physiologists and Pharmacologists of India (APPI)
- Austrian Physiological Society (APS)
- Biomedical Engineering Society (BMES)
- Brazilian Society of Physiology (SBFis)
- Hungarian Physiological Society (MET)
- Kazakh Physiological Society (KPS)
- The Microcirculatory Society (MCS)
- Physiological Society of India (PSI)
- The Physiological Society – UK (TPS)
- Sociedad Mexicana de Ciencias Fisiologicas (SMCF)
- Société de Physiologie – France (SP)
- Society of Experimental Biology and Medicine (SEBM)
- Turkish Society of Physiological Science (TFBD)

ASBMB American Society for Biochemistry and Molecular Biology
- Division of Biological Chemistry – American Chemical Society

ASIP American Society for Investigative Pathology
- American College of Veterinary Pathologists
- American Society for Matrix Biology
- International Society for Analytical and Molecular Morphology
- International Society for Biological and Environmental Repositories
- Società Italiana di Patologia/Italian Pathology Society
- Society for Cardiovascular Pathology

ASN American Society for Nutrition
- American Dietetic Association
- American Society of Animal Science
- ILSI North America
- Korean Nutrition Society
- Plant Phenolic and Human Health Research Interest Group (PhenHRIG)

ASPET American Society for Pharmacology and Experimental Therapeutics
- Behavioral Pharmacology Society
# Table of Contents

The complete Call for Abstracts and general information is available at www.experimentalbiology.org

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>About EB 2012</td>
<td>2</td>
</tr>
<tr>
<td>Career Development Sessions</td>
<td>3</td>
</tr>
<tr>
<td>Education-Related Sessions</td>
<td>4</td>
</tr>
<tr>
<td>Society Awards and Travel Funding Opportunities</td>
<td>5</td>
</tr>
<tr>
<td>FASEB Career Resources/MARC Program</td>
<td>9</td>
</tr>
<tr>
<td>Preliminary Programs</td>
<td></td>
</tr>
<tr>
<td>• Anatomy: American Association of Anatomists (AAA)</td>
<td>10</td>
</tr>
<tr>
<td>• Physiology: The American Physiological Society (APS)</td>
<td>12</td>
</tr>
<tr>
<td>• Biochemistry: American Society for Biochemistry and Molecular Biology (ASBMB)</td>
<td>20</td>
</tr>
<tr>
<td>• Pathology: American Society for Investigative Pathology (ASIP)</td>
<td>24</td>
</tr>
<tr>
<td>• Nutrition: American Society for Nutrition (ASN)</td>
<td>26</td>
</tr>
<tr>
<td>• Pharmacology: American Society for Pharmacology and Experimental Therapeutics (ASPET)</td>
<td>29</td>
</tr>
<tr>
<td>EB-Sponsored Session</td>
<td></td>
</tr>
<tr>
<td>• Teaching Poster Sessions</td>
<td>31</td>
</tr>
<tr>
<td>Abstract Information/Using the Topic Category List</td>
<td>32</td>
</tr>
<tr>
<td>Topic Categories</td>
<td></td>
</tr>
<tr>
<td>• Anatomy: American Association of Anatomists (AAA)</td>
<td>33</td>
</tr>
<tr>
<td>• Physiology: The American Physiological Society (APS)</td>
<td>35</td>
</tr>
<tr>
<td>• Biochemistry: American Society for Biochemistry and Molecular Biology (ASBMB)</td>
<td>39</td>
</tr>
<tr>
<td>• Pathology: American Society for Investigative Pathology (ASIP)</td>
<td>43</td>
</tr>
<tr>
<td>• Nutrition: American Society for Nutrition (ASN)</td>
<td>45</td>
</tr>
<tr>
<td>• Pharmacology: American Society for Pharmacology and Experimental Therapeutics (ASPET)</td>
<td>47</td>
</tr>
<tr>
<td>General Information</td>
<td>48</td>
</tr>
<tr>
<td>Society Ticketed Events</td>
<td>49</td>
</tr>
<tr>
<td>San Diego Information</td>
<td>50</td>
</tr>
<tr>
<td>Important Procedural information and Deadline Dates</td>
<td>52</td>
</tr>
<tr>
<td>Exhibition and Sponsorship Opportunities</td>
<td>53</td>
</tr>
</tbody>
</table>

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
About EB 2012

Experimental Biology is an annual meeting comprised of 14,000 scientists and exhibitors representing six sponsoring societies and 30 guest societies. General fields of study include anatomy, physiology, biochemistry, pathology, nutrition, and pharmacology. EB 2012 is open to all members of the sponsoring and guest societies and nonmembers with interest in research and life sciences. The majority of scientists represent university and academic institutions as well as government agencies, non-profit organizations and private corporations.

This multidisciplinary, scientific meeting features plenary and award lectures, pre-meeting workshops, oral and poster sessions; on-site career services and publications; exhibits featuring an array of equipment and supplies essential for research labs and experimental study.

Contact Us
EB 2012
9650 Rockville Pike
Bethesda, MD 20814-3998
(T) 301-634-7010 • (F) 301-634-7014
eb@faseb.org • www.experimentalbiology.org

Experimental Biology 2012 offers:

• Access to 6 collective society meetings in one location with one registration fee
• More than 50 concurrent scientific sessions comprising 6 scientific disciplines and open to all attendees
• Over 400 exhibit booths on display from nearly 300 companies
• Four days of poster sessions with over 5000 poster displays and author presentations
• Over 90 award programs and travel funding opportunities, plus poster competitions (awards vary by society)
• A diverse audience, representing approximately sixty-five countries
• CME credits available (ASIP sessions only)

Mark your Calendar!

Experimental Biology 2012
Translating Science for Tomorrow’s Health
April 21-25, 2012
San Diego Convention Center
111 West Harbor Drive
San Diego, CA  92101-7899

Scientific Sessions
Saturday, April 21 – Wednesday, April 25

Poster Sessions
Sunday, April 22 – Wednesday, April 25

Exhibits
Sunday, April 22 – Tuesday, April 24
Career Development Sessions

ANATOMY
- Climbing the Academic Ladder: Skills Needed for Each Rung
- Connecting with Different Audiences: The Anatomy of Communication

PHYSIOLOGY
- Conflict Resolution: How to Keep Everyone Happy!
- Do I Need Another Degree?
- E-Media Tools for the Professional Scientist
- Publishing 101: How to Get Your Work Published in APS Journals and Avoid Minefields Along the Way

BIOCHEMISTRY
- ASBMB 16th Annual Undergraduate Student Research Poster Competition
- ASBMB Graduate and Postdoctoral Professional Development Program
- ASBMB Welcome and Networking Reception sponsored by the ASBMB Minority Affairs Committee
- ASBMB Women Scientists Panel and Networking Reception
- Inside the JBC: A How-To Workshop for Authors
- Maximizing Institutional Effectiveness
- Maximizing Teaching Effectiveness
- Maximizing Your Marketability
- Maximizing Your Global Outreach
- Professional Development Workshop for Students, Postdocs and Junior Faculty
- Speed Dating: Finding Your Perfect Career “Match” (for Undergraduates)

PATHOLOGY
- Career Development Workshop and Breakfast: Getting Your Dream Job: Preparing Your CV and Managing Your Interview
- 12th Annual Career Development Program and Lunch: Fundamental Basics for Success: How to Write Award-Winning Grants

NUTRITION
- Scientific Career Advancement for Early Stage Investigators
- A Nurturing Environment Produces Future Legends: Development of Career through Successful Mentor-Mentee Relationships
- Medical Nutrition Council Clinical Emerging Leader Award Competition
- Nutritional Sciences Council Graduate Student Research Award Competition
- International Nutrition Council Kellogg International Student Prize Competition
- Postdoctoral Research Award Competition endowed by Solae, LLC

PHARMACOLOGY
- Graduate Student-Postdoctoral Colloquium: Communication
- Women in Pharmacology; Networking Session
- Diversity Mentoring Breakfast
- WIP into Shape Networking Walk
- Student–Postdoc Best Abstract Competition

MARC & PROFESSIONAL DEVELOPMENT PROGRAMS
- Utilizing LinkedIn in the PhD Job Search
- Beyond the Bench...Preparing for Your Career Transition in the Life Sciences
- The Industrial Hiring Process: Learn the Nuances, Get the Offer
- Postdocs: What Should You Be Looking For and How to Find Them
- CV → Resume
- The Job Talk
- PhD Negotiation Skills and strategies: How to Get What You Want and Need
- The Academic Job Search in the Life Sciences: Part 1 – Understanding the Search Process from the Perspective of Search Committees and Find Job Announcements
- The Academic Job Search in the Life Sciences: Part 2 – Creating Your Written Application Materials: CVs, Cover Letters, Teaching Portfolios, etc.
- Professional Development for PhDs
- Fundamentals for Managing the Postdoctoral Experience
- Annual Strategic Planning Tips for Junior Faculty and Postdocs
- Networking: A Required Life Skill
- Get Up with Something on Your Mind
- Making the Case for Graduate School
- Goal Setting, Prioritizing, Time Management
- Leadership Principles for Today’s Professional
- Tips for Formatting Your CV or Resume in Microsoft Word
- Job Hunting in the Biotech Industry
- Launching Your Academic Job Search
- Ten Ways to Get Lucky in the Job Search
- Handshakes, Eye Contact, Small Talk: How to Build Your Professional Network
- Getting the Industry Job: The Tailored Resume/CV, the Perfect Cover Letter
- Talking about Money: Compensation Negotiation for Scientists Transitioning to Industry

NIH SEMINARS
- NIH Career Development (K) Awards
- Formula for Grant Success: Part 1 – Scientific Peer Review (Faculty/Postdoctorates/Graduate Students)
- Formula for Grant Success: Part II – Grant Writing for Success (Faculty/Postdoctorates/Graduate Students)
## ANATOMY
- Anatomical Education for Allied Health Care Professionals
- Anatomy Education Breakfast Roundtables
- Gross Anatomy for the Physician Assistant
- Master Class: Neural Innervation of the Heart and Its Role in Pathophysiology and Treatment
- Pedagogy (Hybrid Symposium)
- Refresher Course: The Facts about Formaldehyde: What Every Anatomist Should Know
- Teaching Innovations in Anatomy
- Trends in the Anatomical Sciences: How Are We Teaching North American Dental Students?

## BIOCHEMISTRY
- ASBMB Award for Exemplary Contributions to Education Lecture
- Maximizing Institutional Effectiveness
- Maximizing Teaching Effectiveness
- Maximizing Your Global Outreach
- Scientific Cover Advancement for Early Stage Investigators

## PATHOLOGY
- 12th Annual Workshop on Graduate Education in Pathology; Genomics and Personalized Medicine in the Graduate Curriculum
- Lunch & Learn: Best Practices of Biobanking and Specimen Collection
- Pathobiology for Basic Scientists: Cell Injury and Inflammation: New Riffs on a Classical Score
- Scientific Sleuthing of Human Disease for High School Teachers

## NUTRITION
- Clinical Nutrition Update 2012 (CPE credits available)
- Workshop on Establishing and Evaluating Health Claims for Probiotics
- Utilizing a Multi-level Team Approach: Lessons Learned from the Vitamin D DRI Setting Activity
- Zinc Nutrition: From Discovery to Global Health Impact
- Meet the Editors
- Session for First Time Attendee and New Member

## CONTINUING MEDICAL EDUCATION (CME)
This activity ("ASIP 2012 Annual Meeting at Experimental Biology 2012") has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Federation of American Societies for Experimental Biology (FASEB) and the American Society for Investigative Pathology (ASIP). FASEB is accredited by the ACCME to provide continuing medical education for physicians.

The Federation designates this "live" educational activity for a maximum of 48 AMA PRA Category 1 Credit(s)™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

CME application forms will be available online beginning April 21, 2012 on the ASIP website (www.asip.org). There is a $50 CME application fee, payable upon submission of the online CME application.

### Meeting Objective/Target Audience
The objective of the ASIP 2012 Annual Meeting at Experimental Biology 2012 is to increase basic and applied pathology knowledge and to provide a forum for the exchange of new research by scientists and investigators. The meeting is designed to support participants’ educational needs in the physician competency area of Medical Knowledge, as defined by the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Medical Specialties (ABMS). At the completion of this meeting, participants should be able to:

1. discuss the research underway and/or the current topics relevant to their areas of interest in pathology;
2. demonstrate a gained level of knowledge into the methods and techniques being used by researchers and practitioners in this field; and

3. utilize information and data that lead to improvements in human health.

This meeting is targeted to graduate students, postdoctoral fellows, research scientists, clinical practitioners, and medical education professionals.

Disclosure Policy
The Federation requires that audiences at FASEB-sponsored educational programs be informed of the organizers’ and presenters’ (speaker, faculty, author, or contributor) academic and professional affiliations, and the existence of any relevant financial relationship a presenter has with any proprietary entity producing health care goods or services consumed by, or used on patients, with the exemption of non-profit or government organizations and non-health care related companies. The intent of this disclosure is not to prevent a speaker from making a presentation. This policy allows the listener/attendee to be fully knowledgeable in evaluating the information being presented.

Disclosure includes any relationship that may bias one’s presentation or which, if known, could give the perception of bias. These situations may include, but are not limited to:
1) stock options or bond holdings in a for-profit corporation or self-directed pension plan; 2) research grants; 3) employment (full or part-time); 4) ownership or partnership; 5) consulting fees or other remuneration; 6) non-remuneration positions of influence such as officer, board member, trustee, or public spokesperson; 7) receipt of royalties; 8) speaker’s bureau; 9) other. For full-time employees of industry or government, the affiliation listed in the Program will constitute full disclosure.
SOCIETY AWARDS AND TRAVEL FUNDING OPPORTUNITIES

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

PHYSIOLOGY: Visit http://the-aps.org/meetings/eb12/awards

APS Comparative & Evolutionary Physiology Scholander Award ...................................................... 12/2/11
APS Comparative & Evolutionary Physiology Travel Award sponsored by Novo Nordisk Foundation ................................................................. 12/2/11
APS Dale J. Benos Early Career Professional Service Award ................................................................. 1/23/12
APS David S. Bruce Awards for Excellence in Undergraduate Research .................................................. 1/9/12
APS Endocrinology & Metabolism Section New Investigator Award .................................................. 11/8/11
APS Endocrinology & Metabolism Section Research Recognition Award ........................................... 11/8/11
APS Environmental & Exercise Physiology Section 2012 Edward F. Adolph Distinguished Lectureship ................................................................. 3/1/12
APS Environmental & Exercise Physiology Section Gatorade Beginning Investigator Award ............... 11/8/11
APS Environmental & Exercise Physiology Section Gatorade Pre-Doctoral Investigator Award .............. 11/8/11
APS Environmental & Exercise Physiology Section Rigel Pharmaceuticals Postdoctoral Investigator ....... 11/11/11
APS Environmental & Exercise Physiology Section Pharmaceuticals Predoctoral Investigator ................. 11/11/11
APS Environmental & Exercise Physiology Section Honor Award ...................................................... 3/1/12
APS Environmental & Exercise Physiology Section Military Award for Beginning Investigators ........... 11/8/11
APS Environmental & Exercise Physiology Section New Investigator Award ...................................... 11/8/11
APS Environmental & Exercise Physiology Section Pre-Doctoral Military Physiology Award ............... 11/8/11
APS Environmental & Exercise Physiology Section Predoctoral Recognition Award ......................... 11/8/11
APS Environmental & Exercise Physiology Section Recognition Award for Beginning Investigators ........ 11/8/11
APS Environmental & Exercise Physiology Section Space Biomedical Research Institute’s Gravitational Physiology Beginning Investigator Award ........................................................................... 11/8/11
APS Environmental & Exercise Physiology Section Space Biomedical Research Institute’s Predoctoral Gravitational Physiology Award ................................................................................................. 11/8/11
APS Gastrointestinal & Liver Physiology Section New Investigator Award ........................................... 12/8/11
APS Gastrointestinal & Liver Physiology Section Predoctoral and Postdoctoral Poster Awards ............ 12/8/11
APS Gastrointestinal & Liver Physiology Section Research Recognition Award .................................... 12/8/11
APS Gastrointestinal & Liver Physiology Section Takeda Distinguished Research Award .................... 12/8/11
APS Gastrointestinal & Liver Physiology Section Takeda Travel Awards ............................................ 12/8/11
APS Horace W. Davenport Distinguished Lectureship of the APS Gastrointestinal & Liver Physiology Section .............................................................................................................................................. 12/8/11
APS Mead Johnson Research Award in Endocrinology & Metabolism .................................................. 11/8/11
APS Michael J. Brody Young Investigator Award of the Neural Control & Autonomic Regulation Section ................................................................. 11/8/11
APS Neural Control & Autonomic Regulation Section New Investigator Award .................................. 11/8/11
APS Neural Control & Autonomic Regulation Section Research Recognition Award .......................... 11/8/11
APS Physiologists in Industry Committee Postdoctoral Novel Disease Model Award .......................... 12/14/11
APS Physiologists in Industry Committee Predoctoral Novel Disease Model Award .......................... 12/14/11
APS Renal Section Amgen Postdoctoral Excellence in Research Award ................................................ 11/8/11
APS Renal Section New Investigator Award .......................................................................................... 11/8/11
APS Renal Section Predoctoral Excellence in Renal Research Awards ................................................ 11/8/11
APS Renal Section Research Recognition Award ................................................................................... 11/8/11
APS Renal Section Young Investigator Award ..................................................................................... 3/31/12
APS Respiration Section New Investigator Award .............................................................................. 11/11/11
APS Respiration Section Research Recognition Award ........................................................................... 11/11/11
APS Steven M. Horvath Professional Opportunity Award ....................................................................... 11/8/11
APS Teaching of Physiology Section New Investigator Award ............................................................. 11/8/11
APS Teaching of Physiology Section Research Recognition Award .................................................... 11/8/11
APS Virendra B. Mahesh Award of Excellence in Endocrinology .......................................................... 11/8/11
APS Water & Electrolyte Homeostasis Section New Investigator Award in Regulatory and Integrative Physiology .............................................................................................................................................. 11/8/11
APS Juan Carlos Romero and Water & Electrolyte Homeostasis Section Postdoctoral Travel and Research Recognition Award ..................................................................................................................... 11/8/11
APS Water & Electrolyte Homeostasis Section Predoctoral Travel and Research Recognition Award .... 11/8/11
APS/NIDDK Minority Travel Fellowship Awards ................................................................................. 11/15/11
Robert W. Berliner Award for Excellence in Renal Physiology sponsored by Abbott Laboratories ........ 11/8/11
SEBM Young Investigator Award ........................................................................................................ 12/16/11
Details and award application forms are available on the websites noted below.

## SOCIETY AWARDS AND TRAVEL FUNDING OPPORTUNITIES

<table>
<thead>
<tr>
<th>Award</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASBMB Annual Meeting Childcare Grant</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASBMB Graduate Minority Travel Award</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASBMB Graduate/Postdoctoral Travel Award</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASBMB Undergraduate Affiliate Network Travel Award</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASBMB Undergraduate Affiliate Network Student Travel Award</td>
<td>1/25/12</td>
</tr>
<tr>
<td>ASBMB Undergraduate Student Competitive Travel Award</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASBMB Undergraduate Affiliate Network Outstanding Chapter Award</td>
<td>2/15/12</td>
</tr>
<tr>
<td>ASN Centrum Center for Nutrition Science</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Conrad Elvehjem Award for Public Service in Nutrition</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN David Kritchevsky Career Achievement Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN E.L.R. Stokstad Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN E.V. McCollum Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Gilbert A. Leveille Lectureship and Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN General Mills Institute of Health and Nutrition Innovation Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Mary Swartz Rose Senior Investigator Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN McCormick Science Institute Research Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Milton L. Sunde Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Norman Kretcher Memorial Award in Nutrition and Development</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Osborne and Mendel Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Robert H. Herman Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Excellence in Nutrition Education Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Dannon Institute Mentorship Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Roland L. Weinsier Award for Excellence in Medical/Dental Education</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Bio-Serv Award in Experimental Animal Nutrition</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Mary Swartz Rose Young Investigator Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Mead Johnson Award for Research</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Peter J. Reeds Young Investigator Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Samuel J. Fomon Young Physician Award, sponsored by Nestlé Nutrition Institute</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Postdoctoral Research Award Competition, endowed by Solae, LLC...</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASN Predoctoral Fellowship for Students in Nutrition Research</td>
<td>12/01/11</td>
</tr>
<tr>
<td>ASN Vernon R. Young Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Nutrition Science Media Award</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Nutritional Sciences Council Graduate Student Research Award Competition</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASN Medical Nutrition Council Clinical Emerging Leader Award Competition</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASN International Nutrition Council Kellogg International Student Prize</td>
<td>9/15/11</td>
</tr>
<tr>
<td>ASN Clinical Nutrition Internship Program</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASN Physician Nutrition Specialist Award</td>
<td>11/8/11</td>
</tr>
<tr>
<td>ASN MARC Travel Award</td>
<td>2/23/12</td>
</tr>
<tr>
<td>ASN W.O. Atwater Lectureship Award</td>
<td>11/03/11</td>
</tr>
<tr>
<td>ASN Volunteer of the Year Award</td>
<td>1/13/12</td>
</tr>
<tr>
<td>ASN Sustaining Member Committee Award of Distinction</td>
<td>1/13/12</td>
</tr>
<tr>
<td>ASN Korean Nutrition Society Award</td>
<td>1/13/12</td>
</tr>
</tbody>
</table>
### Society Awards and Travel Funding Opportunities

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

#### Pathology: Visit [http://www.asip.org/mtgs/eb12](http://www.asip.org/mtgs/eb12)
- ASIP Experimental Pathologist-in-Training Award ................................................................. 11/15/11
- ASIP Experimental Pathologist-in-Geraduate Training Award ........................................... 11/15/11
- ASIP Trainee Travel Awards .................................................................................................. 11/15/11
- ASIP Minority Trainee Travel Awards .................................................................................. 11/15/11

#### Pharmacology: Visit [http://www.aspet.org/awards/](http://www.aspet.org/awards/)
- ASPET Division for Drug Discovery, Development & Regulatory Affairs Young Investigator Award ................................................................. 11/15/11
- ASPET Graduate Student Best Abstract Awards ................................................................. 11/15/11
- ASPET Graduate Student Travel Awards ............................................................................ 12/15/11
- ASPET Minority Graduate Student Travel Awards .............................................................. 12/15/11
- ASPET Minority Young Scientist Travel Awards ................................................................. 12/15/11
- ASPET Pharmacology Educator’s Travel Award ................................................................. 1/04/12
- ASPET Postdoctoral Scientist Awards ............................................................................... 11/15/11
- ASPET Summer Undergraduate Research Fellow Travel Awards ..................................... 12/15/11
- ASPET Young Scientist Travel Awards ............................................................................... 12/15/11

- Minority Travel Awards ....................................................................................................... 3/09/12
A service of FASEB Office of MARC & Professional Development Programs, arranged by Experimental Biology 2012

The EB 2012/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 2012 meeting attendees.

MARC PROGRAM
The FASEB MARC Program will be sponsoring EB 2012 Travel Awards to help support the participation of faculty/mentors, postdoctoral fellows, and students from minority institutions (MIs) and historically black colleges and universities (HBCUs). The travel awards are funded up to $1,650 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. Underrepresented minority faculty, students and postdoctoral fellows from 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 9, 2012.

NIH GRANTS SEMINARS & WORKSHOPS
The FASEB Office of MARC & Professional Development Programs will offer NIH grant seminars in the Career Center at the Experimental Biology 2012 Annual Meeting. Dr. Henry Khachaturian of NIGMS, NIH and Dr. Anthony M. Coelho, Jr. of Grant Success Associates, Inc. will present the seminars and workshops. EB 2012 registration is required to participate in the seminars.

Formula for Grant Success: Part I – Scientific Peer Review
Learn what is important to know and understand about a sponsoring agency’s peer review process. Learn why this understanding peer review can enhance your chances of being funded. This presentation uses the scientific peer review at NIH as an example of what you need to know about peer review at any funding agency and how to use this information in preparation of your grant applications and competing successfully for funding.

Formula for Grant Success: Part II – Grant Writing for Success
This presentation focuses on the principles of Grant Writing for Success: and the common reasons that grant applications fail or succeed. Learn how to make an application meet the needs of the reviewers and the funding agency. Learn how to avoid the need for resubmission. Learn about sponsored agency resources and how to use them in the preparation of your application.

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: marcmedia@faseb.org

Career Center
http://careers.faseb.org
Email: careers@faseb.org
Phone: 860-437-5700

FASEB MARC Program Travel Awards
Email: marcssm@faseb.org
Phone: 301-634-7109
KEYNOTE SPEAKER
MicroRNA Control of Heart Disease and Repair
Eric Olson
UT Southwestern Medical Center at Dallas

PLENARY SPEAKERS
Open Minds, Open Opportunities
Henry Gray/Elsevier Distinguished Educator Award Lecture
Richard Drake
Cleveland Clinic Lerner College of Medicine

Vascular Endothelial Cells as a Source of Multipotent Stem-Like Cells
Henry Gray/Lippincott Williams & Wilkins Scientific Achievement Award Lecture
Bjorn Olsen
Harvard School of Dental Medicine

PLENARY SYMPOSIA
Gross Anatomy for the Physician Assistant
Henry Gray/Elsevier Distinguished Educator Award Symposium
Chair: Jennifer McBride (Cleveland Clinic Lerner College of Medicine)

Vascular Endothelium in Health and Disease
Henry Gray/Lippincott Williams & Wilkins Scientific Achievement Award Symposium
Chair: Bjorn Olsen (Harvard School of Dental Medicine)

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

These lectures will be given in AAA’s Young Investigator Award Symposium; speakers to be announced.

REGULATORY RNA MINI-MEETING
Cell Biology and Regulatory RNAs
Chair: Prasanth Kannanganattu (Univ. of Illinois at Urbana)

Epigenetics and Regulatory RNAs [Platform Session] *
Chair: Rebecca Hartley (Univ. of New Mexico)

MicroRNAs in Cardiac Development and Disease
Chair: Da-Zhi Wang (Boston Children’s Hospital/Harvard Medical School)

MicroRNAs in Stem Cells and Cancer
Chair: Rebecca Hartley (Univ. of New Mexico)

PROFESSIONAL DEVELOPMENT TRACK
Climbing the Academic Ladder: Skills Needed for Each Rung
Chairs: Rebecca Pratt (Michigan State Univ. College of Medicine) and Kimberly Topp (Univ. of California San Francisco)

Connecting with Different Audiences: The Anatomy of Communication
Chair: Darrell Evans (Brighton & Sussex Medical School)

EDUCATION & TEACHING TRACK
Anatomical Education for Allied Health Care Professionals
Chair: Anne Burrows (Duquesne Univ.)

Anatomy Education Breakfast Roundtables
Chair: Jennifer McBride (Cleveland Clinic Lerner College of Medicine)

Gross Anatomy for the Physician Assistant
Henry Gray/Elsevier Distinguished Educator Award Plenary Symposium
Chair: Jennifer McBride (Cleveland Clinic Lerner College of Medicine)

*AAA will be accepting abstracts for oral presentation within this session. Please see AAA topic categories on pages 33-34.
Master Class: Neural Innervation of the Heart and Its Role in Pathophysiology and Treatment  
Chair: Jennifer McBride (Cleveland Clinic Lerner College of Medicine)

Pedagogy [Hybrid Symposium] *  
Chair: Samuel Marquez (SUNY Downstate Medical Center)

Refresher Course: The Facts about Formaldehyde: What Every Anatomist Should Know  
Chair: Rebecca Fisher (Univ. of Arizona College of Medicine-Phoenix)

Teaching Innovations in Anatomy I & II *  
Chairs: Baljit Singh (Univ. of Saskatchewan) and Todd Hoagland (Medical College of Wisconsin)

Trends in the Anatomical Sciences: How Are We Teaching North American Dental Students?  
Chair: H. Wayne Lambert (West Virginia Univ. School of Medicine)

SCIENTIFIC SYMPOSIA

Adult Stem Cells: From Basic Research to Clinical Applications  
Co-sponsored by The Anatomical Record  
Chair: Mari Dezawa (Tohoku Univ. Grad. School of Medicine)

Bioengineering Principles during Development [Hybrid Symposium] *  
Chair: Elizabeth Jones (McGill Univ.)

Cardiac Tissue Engineering  
Chair: Gordana Vunjak-Novakovic (Columbia Univ.)

Craniofacial Birth Defects  
Co-sponsored by AAA's Advisory Committee for Young Anatomists  
Chair: L. Bruno Ruest (Baylor College of Dentistry)

Digital Imaging  
Sponsored by CSAS and AAA  
Chair: Shaoxiang Zhang (Third Military Medical Univ.)

Diseases of the Nervous System  
Sponsored by CSAS and AAA  
Chair: Yunqing Li (The Fourth Military Medical Univ.)

Epigenetic Plasticity in Health and Disease [Hybrid Symposium] *  
Chair: Frederick Domann (Univ. of Iowa)

Excellence in Canadian Research – Neural Regeneration  
Co-sponsored by Canadian Association for Anatomy, Neurobiology & Cell Biology  
Chair: Michael Kawaja (Queen’s Univ.)

The Exquisite, Little Brains of Big Insects  
Chair: John Hildebrand (Univ. of Arizona)

Global Positioning Systems Guide Neuronal Migration and Synapse Formation [Hybrid Symposium] *  
Chair: Alexis Stranahan (Georgia Health Sciences Univ.)

Lung Development and the Origins of Disease  
Co-sponsored by Developmental Dynamics  
Chairs: David Ornitz (Washington Univ.)

Morphometry and Applied Anatomy  
Sponsored by SBA and AAA  
Chair: Richard Halti Cabral (Metropolitan Univ. of Santos)

Novel Views of the Eye  
Co-sponsored by the Association of Anatomy, Cell Biology & Neurobiology Chairpersons  
Chair: John Clark (Univ. of Washington)

Reactivation of Embryonic Processes in Regeneration & Repair  
Chairs: Martine Dunnwald (Univ. of Iowa) and Jill Helms (Stanford Univ.)

Stem Cell Biology  
Sponsored by CSAS and AAA  
Chair: Guoming Zhou (Shanghai Medical College of Fudan Univ.)

The Nucleus: New Insights and Understanding  
Chair: Mark Alliegro (Marine Biological Laboratory)

The Role of Variation during Morphogenesis in Evolution and Disease  
Chairs: Benedikt Hallgrimsson (Univ. of Calgary) and Ralph Marcucio (UCSF) (Univ. of California, San Francisco)

Visualizing Complex Biomedical Systems  
Chair: Christopher Johnson (Univ. of Utah)

SCIENTIFIC PLATFORM SESSIONS

Cardiovascular Biology *  
Chair: Joey Barnett (Vanderbilt Univ. Medical Center)

Development and Growth *  
Chair: Paul Trainor (Stowers Institute for Medical Research)

Form, Function and Evolution *  
Chair: Kathleen Muldoon (Dartmouth Medical School)

Muscles and Bones: Evolution & Development *  
Chair: Richard Schneider (Univ. of California, San Francisco)

Tissue Engineering, Regeneration and Repair *  
Chair: Ralph Marcucio (Univ. of California, San Francisco)

*AAA will be accepting abstracts for oral presentation within this session. Please see AAA topic categories on pages 33-34.
Physiology InFocus: Physiology in Medicine
Organized by: Joey P. Granger, Univ. of Mississippi Med. Ctr.

Sunday, April 22, 2012, 3:30 PM
Obesity and Diabetes
John Hall

Monday, April 23, 2012, 3:30 PM
Using Physiology to Translate Cardiac Remodeling and Heart Failure
Merry Lindsey and Margaux Horn

Tuesday, April 24, 2012, 3:30 PM
Hypertension and Chronic Kidney Diseases
Pedro Jose

Wednesday, April 25, 2012, 3:30 PM
APS Nobel Prize in Physiology or Medicine Lecture
Nobel Prize in Physiology or Medicine Lecture
Oliver Smithies

APSNamed Lectures and Workshops

Saturday, April 21, 2012, 1:00 PM
Workshop: Overcoming the Fear of Making Your own Transgenic and Knockout Mice
Donald E. Kohan and Mark de Caestecker

Saturday, April 21, 2012, 3:15 PM
Workshop: Toolkit for Genomic Biomarker Discovery by Physiologists
Bina Joe and Lance Miller

Saturday, April 21, 2012, 5:45 PM
Physiology in Perspective — The Walter B. Cannon Memorial Award Lecture
L. Gabriel Navar

Sunday, April 22, 2012, 10:30 AM
Hugh Davson Distinguished Lectureship of the APS Cell & Molecular Physiology Section
Mark Knepper

Sunday, April 22, 2012, 3:30 PM
Claude Bernard Distinguished Lectureship of the APS Teaching of Physiology Section
William Galey

Sunday, April 22, 2012, 6:00 PM
Microcirculatory Society Landis Award Lecture
Mingyu Liang

Monday, April 23, 2012, 8:00 AM
Carl Ludwig Distinguished Lectureship of the APS Neural Control & Autonomic Regulation Section
Irving H. Zucker

Monday, April 23, 2012, 10:30 AM
Solomon A. Berson Distinguished Lectureship of the APS Endocrinology & Metabolism Section
Michael Schwartz

Monday, April 23, 2012, 2:00 PM
Edward F. Adolph Distinguished Lectureship of the APS Environmental and Exercise Physiology Section
Laurie Goodyear
Monday, April 23, 2012, 3:30 PM
Carl W. Gottschalk Distinguished Lectureship of the APS Renal Section
Michael J. Caplan
Joseph Erlanger Distinguished Lectureship of the APS Central Nervous System Section
Stephen Woods

Tuesday, April 24, 2012, 8:00 AM
August Krogh Distinguished Lectureship of the APS Comparative and Evolutionary Physiology Section
(Supported by Novo Nordisk Foundation)
James Hicks

Tuesday, April 24, 2012, 10:30 AM
Julius H. Comroe, Jr. Distinguished Lectureship of the APS Respiration Section
Nanduri Prabhakar

Tuesday, April 24, 2012, 2:00 PM
Robert M. Berne Distinguished Lectureship of the APS Cardiovascular Section
Rhian M. Touyz

Tuesday, April 24, 2012, 3:30 PM
Horace W. Davenport Distinguished Lectureship of the APS Gastrointestinal & Liver Physiology Section
Hamid Said

Blood Pressure Regulation Track
LECTURES:
Tuesday, April 24, 2012, 2:00 PM
Robert M. Berne Distinguished Lectureship of the APS Cardiovascular Section
Rhian M. Touyz

SYMPOSIA:
Sunday, April 22, 2012, 10:30 AM
Control of Vascular Tone by Extraluminal Nucleotides
(Sponsored by: Cardiovascular Section)
Brett S. Kirby and Stefan P. Mortensen

Monday, April 23, 2012, 10:30 AM
Pendrin: Hearing, Blood Pressure, Thyroid Function and More
(Sponsored by: Renal Section)
Susan M. Wall

Tuesday, April 24, 2012, 10:30 AM
Novel Roles of the Renin-Angiotensin System in Aging and Other Pathologies
(Sponsored by: Endocrinology and Metabolism Section)
Mark C. Chappell

Tuesday, April 24, 2012, 3:30 PM
Physiological Remodeling of Resistance Arteries
(Sponsored by: Cardiovascular Section)
Judy M. Delp and Michael D. Delp

Wednesday, April 25, 2012, 3:30 PM
Regulation of Muscle Blood Flow by ATP during Exercise
(Sponsored by: Environmental and Exercise Physiology Section)
Grant H. Simmons and Shawn B. Bender

FEATURED TOPICS:
Sunday, April 22, 2012, 8:00 AM
Immune Cells and their Role in the Regulation of Blood Pressure and Sodium Homeostasis
(Sponsored by: Water and Electrolyte Homeostasis Section)
Translational Biomarkers of Hypertension: Insights from Animal Models
(Sponsored by: Physiological Genomics Group)
Bina Joe

Sunday, April 22, 2012, 10:30 AM
Disruption to Central Sympathetic Control Mechanisms: Implications for Obesity-Related Hypertension
(Sponsored by: Central Nervous System Section)
Daniela Sartor and Sean D. Stocker

Monday, April 23, 2012, 10:30 AM
novel roles of the renin-Angiotensin System in Aging and other Pathologies
(Sponsored by: Endocrinology and Metabolism Section)
Mark C. Chappell

Tuesday, April 24, 2012, 3:30 PM
Physiological remodeling of resistance Arteries
(Sponsored by: Cardiovascular Section)
Judy M. Delp and Michael D. Delp

Wednesday, April 25, 2012, 8:00 AM
Conflict Resolution: How to Keep Everyone Happy!
(Sponsored by: Women in Physiology Committee)
Jane F. Reckelhoff and Roy L. Sutliff

Wednesday, April 25, 2012, 10:30 AM
E-Media Tools for the Professional Scientist
(Sponsored by: Trainee Advisory Committee)
Jennifer Bomberger and Erica Dale-Nagle

Central Control of Homeostasis Track
LECTURE:
Monday, April 23, 2012, 3:30 PM
Joseph Erlanger Distinguished Lectureship of the APS Central Nervous System Section
Stephen Woods
SYMPOSIA:
Sunday, April 22, 2012, 3:30 PM
Functional Integration in the Hypothalamic Paraventricular Nucleus (Sponsored by: Central Nervous System Section)
Alan Watts and Greti Aguilera

Monday, April 23, 2012, 8:00 AM
Towards a Biology of Body Weight Regulation: The Work of Stephen C. Woods (Sponsored by: Central Nervous System Section)
Randy Seeley and Stephen C. Woods

Tuesday, April 24, 2012, 3:30 PM
Kisspeptin Neurons: Central Mediator of Reproduction and Metabolism (Sponsored by: Endocrinology and Metabolism Section)
Willis K. Samson and Martin J. Kelly

FEATURED TOPICS:
Sunday, April 22, 2012, 10:30 AM
Disruption to Central Sympathetic Control Mechanisms: Implications for Obesity-Related Hypertension (Sponsored by: Central Nervous System Section)
Daniela Sartor and Sean D. Stocker

Monday, April 23, 2012, 10:30 AM
Chronic Intermittent Hypoxia: Respiratory, Autonomic and Cardiovascular Consequences (Sponsored by: Central Nervous System Section)
Ann M. Schreihofer and Glenn M. Toney

Monday, April 23, 2012, 3:30 PM
Compensatory Responses to Acute or Chronic Hypoxia Exposure (Sponsored by: Hypoxia Group)
William G. Schrage

Education Track
LECTURE:
Sunday, April 22, 2012, 10:30-11:15 AM
Claude Bernard Distinguished Lectureship of the APS Teaching of Physiology Section
William Galey

REFRESHER COURSE:
Saturday, April 21, 2012, 8:00 AM-12:00 PM
Refresher Course in Endocrinology: Diabetic Complications (Sponsored by: Education Committee)
Clintoria Williams and Michael Ryan

SYMPOSIA:
Saturday, April 21, 2012, 1:00 PM
Workshop: Overcoming the Fear of Making Your Own Transgenic and Knockout Mice
Donald E. Kohan and Mark de Caestecker

Saturday, April 21, 2012, 3:15 PM
Workshop: Toolkit for Genomic Biomarker Discovery by Physiologists
Bina Joe and Lance Miller

Sunday, April 22, 2012, 3:30 PM
What Do Competencies Have To Do With My Teaching? (Sponsored by: Teaching of Physiology Section)
Vikki McCleary and Katherine Sukalski

Monday, April 23, 2012, 8:00 AM
Assessment of Student Learning and Scientific Teaching (Sponsored by: Teaching of Physiology Section)
Mary Pat Wenderoth

FEATURED TOPIC:
Sunday, April 22, 2012, 8:00 AM
Innovative Use of Technology for Teaching and Student Assessment in Physiology (Sponsored by: Teaching of Physiology Section)
Chaya Gopalan

Hypoxia and Oxidative Stress Track
LECTURE:
Tuesday, April 24, 2012, 10:30 AM
Julius H. Comroe, Jr. Distinguished Lectureship of the APS Respiration Section
Nanduri Prabhakar

SYMPOSIA:
Sunday, April 22, 2012, 8:00 AM
Air Pollution – Friend or Foe to the Cardiopulmonary Systems? (Sponsored by: Hypoxia Group)
Loren E. Wold

Monday, April 23, 2012, 8:00 AM
Hypoxia Inducible Factors (HIFs) in Health and Disease
Bernard B. Rees and Michiko Watanabe

Tuesday, April 24, 2012, 3:30 PM
Hydrogen Sulfide: Ecology, Physiology, and Clinical Applications (Sponsored by: Comparative and Evolutionary Physiology Section)
Kenneth R. Olson

nrf2 Modulation in Exercise, Aging and Chronic Disease (Sponsored by: Environmental and Exercise Physiology Section)
Benjamin F. Miller and G. A. Brooks

Wednesday, April 25, 2012, 10:30 AM
S-Glutathionylation as a Mechanism of Oxidative Signaling (Sponsored by: Respiration Section)
Jessica Snow and Yvonne M.W. Janssen-Heininger

FEATURED TOPICS:
Monday, April 23, 2012, 8:00 AM
Novel Mechanisms for Improving Mitochondrial Efficiency (Sponsored by: Endocrinology and Metabolism Section)
Stephen J. Crozier
Monday, April 23, 2012, 10:30 AM  
Future Directions of Mitochondrial Bioenergetics in Integrative Physiology  
(Sponsored by: Comparative and Evolutionary Physiology Section)  
Martin Jastroch

Monday, April 23, 2012, 3:30 PM  
Compensatory Responses to Acute or Chronic Hypoxia Exposure  
(Sponsored by: Hypoxia Group)  
William G. Schrage

Wednesday, April 25, 2012, 3:30 PM  
Diabetic Cardiovascular Dysfunction: ROS-Dependent and -Independent Causes and Complications  
(Sponsored by: Cardiovascular Section)  
Loren E. Wold and J. Gary Meszaros

Inflammation and Immune Response Track  
LECTURE:  
Tuesday, April 24, 2012, 2:00 PM  
Robert M. Berne Distinguished Lectureship of the APS  
Cardiovascular Section  
Rhian M. Touyz

SYMPOSIA:  
Sunday, April 22, 2012, 8:00 AM  
Emerging Paradigms in Inflammation and Microvascular Dysfunction: F59Novel Insights and Future Trends  
(Sponsored by: Cardiovascular Section)  
Sanjukta Chakraborty and Mariappan Muthuchamy

Sunday, April 22, 2012, 3:30 PM  
Endoplasmic Reticulum Stress and Vascular Physio-pathology  
(Sponsored by: Endocrinology and Metabolism Section)  
Khalid Matrougui and Emily Wilson

Wednesday, April 25, 2012, 3:30 PM  
Nuclear Receptors in Liver Disease  
(Sponsored by: Gastrointestinal and Liver Physiology Section)  
Li Wang and John Chiang

FEATURED TOPICS:  
Sunday, April 22, 2012, 8:00 AM  
Immune Cells and their Role in the Regulation of Blood Pressure and Sodium Homeostasis  
(Sponsored by: Water and Electrolyte Homeostasis Section)  
TBD

Translational Biomarkers of Hypertension: Insights from Animal Models  
(Sponsored by: Physiological Genomics Group)  
Bina Joe

Monday, April 23, 2012, 8:00 AM  
Communication between Cardiac Cells and the Extracellular Matrix  
(Sponsored by: Cardiovascular Section)  
Jiang Chang and Jason D. Gardner

Tuesday, April 24, 2012, 10:30 AM  
Intestinal Solute Transport in Inflammation  
(Sponsored by: Gastrointestinal and Liver Physiology Section)  
Lars Eckmann

Wednesday, April 25, 2012, 8:00 AM  
Novel Regulators of Cardiac Fibroblast Function and Fate  
(Sponsored by: Cardiovascular Section)  
Michael P. Czubryt

Wednesday, April 25, 2012, 3:30 PM  
Leptin: Metabolic, Cardiovascular and Immune Control. Does it All Come from the Brain?  
(Sponsored by: Cardiovascular Section)  
Eric J. Belin de Chantemene and Heinrich Lob

Metabolic Diseases Track  
LECTURES:  
Monday, April 23, 2012, 10:30 AM  
Solomon A. Berson Distinguished Lectureship of the APS  
Endocrinology & Metabolism Section  
Michael Schwartz

Monday, April 23, 2012, 2:00 PM  
Edward F. Adolph Distinguished Lectureship of the APS  
Environmental and Exercise Physiology Section  
Laurie Goodyear

Monday, April 23, 2012, 3:30 PM  
Joseph Erlanger Distinguished Lectureship of the APS Central Nervous System Section  
Stephen Woods

SYMPOSIA:  
Sunday, April 22, 2012, 3:30 PM  
Functional Integration in the Hypothalamic Paraventricular nucleus  
(Sponsored by: Central Nervous System Section)  
Alan Watts and Greti Aguilera

Monday, April 23, 2012, 8:00 AM  
Towards a Biology of Body Weight regulation: The Work of Stephen C. Woods  
(Sponsored by: Central Nervous System Section)  
Randy Seeley and Stephen C. Woods

Monday, April 23, 2012, 3:30 PM  
Impact of Environmental Estrogens and Androgens on Human and Animal Health and Reproductive Function  
(Sponsored by: Comparative and Evolutionary Physiology Section)  
Nina Stachenfeld and Bernard B. Rees

Wednesday, April 25, 2012, 8:00 AM  
Mitochondrial Dynamics in Cardiac Physiology  
(Sponsored by: Cardiovascular Section)  
William C. Stanley and Julie Rennison

Wednesday, April 25, 2012, 10:30 AM  
Insulin Resistance: A Defense Mechanism for the Stressed Heart?  
(Sponsored by: Cardiovascular Section)  
Heinrich Taegtmeyer and Louis Hue

FEATURED TOPICS:  
Sunday, April 22, 2012, 10:30 AM  
Disruption to Central Sympathetic Control Mechanisms: Implications for Obesity-Related Hypertension  
(Sponsored by: Central Nervous System Section)  
Daniela Sartor and Sean D. Stocker
Monday, April 23, 2012, 3:30 PM
Origins of Impaired Cardiovascular-Renal Function and Body Fluid Balance
(Sponsored by: Water and Electrolyte Homeostasis Section)
Hiroko Nishimura

Tuesday, April 24, 2012, 8:00 AM
Effect of Exercise and Nutritional Perturbations on Cumulative Muscle Protein Synthesis
(Sponsored by: Endocrinology and Metabolism Section)
Steven E. Riechman

Wednesday, April 25, 2012, 8:00 AM
Anabolic Resistance to Exercise with Aging or Disease
(Sponsored by: Environmental and Exercise Physiology Section)
James D. Fluckey and Sue C. Bodine

Wednesday, April 25, 2012, 3:30 PM
Diabetic Cardiovascular Dysfunction: ROS-Dependent and -Independent Causes and Complications
(Sponsored by: Cardiovascular Section)
Loren E. Wold and J. Gary Meszaros

Physiology of Development Track
SYMPOSIA:
Sunday, April 22, 2012, 8:00 AM
A Complex Interplay Coming Together to Build the Heart
(Sponsored by: Cardiovascular Section)
Maike Krenz and Luis Polo-Paradab

Sunday, April 22, 2012, 3:30 PM
Stress-Related Respiratory Disorders: From Clinical Manifestations to Abnormal Chemosensitivity
(Sponsored by: Respiration Section)
Luciane Gargaglioni and Richard Kinkead

Monday, April 23, 2012, 3:30 PM
Impact of Environmental Estrogens and Androgens on Human and Animal Health and Reproductive Function
(Sponsored by: Comparative and Evolutionary Physiology Section)
Nina Stachenfeld and Bernard B. Rees

Tuesday, April 24, 2012, 3:30 PM
Computational Modeling in Central Respiratory Control and CO₂ Chemoreception
(Sponsored by: Respiration Section)
Irene C. Solomon and Juan C. Cordovez

Wednesday, April 25, 2012, 10:30 AM
Regulation of Intestinal Stem Cells during Development, Homeostasis, Adaptation and Pathophysiology
(Sponsored by: Gastrointestinal and Liver Physiology Section)
Yana Zavros and N. Nanda Nanthakumar

FEATURED TOPICS:
Monday, April 23, 2012, 8:00 AM
Development of the Control of Breathing
(Sponsored by: Respiration Section)
Fiona Bailey and Ryan Bavis

Monday, April 23, 2012, 3:30 PM
Origins of Impaired Cardiovascular-Renal Function and Body Fluid Balance
(Sponsored by: Water and Electrolyte Homeostasis Section)
Hiroko Nishimura

Public Policy Track
SYMPOSIA:
Saturday, April 21, 2012, 1:00-3:00 PM
Public Outreach and Animal Research: A Toolkit for Investigators
(Sponsored by: Public Affairs Committee)
Bill Yates

Translational Physiology Track
LECTURES:
Monday, April 23, 2012, 3:30 PM
Joseph Erlanger Distinguished Lectureship of the APS Central Nervous System Section
Stephen Woods

Tuesday, April 24, 2012, 2:00 PM
Robert M. Berne Distinguished Lectureship of the APS Cardiovascular Section
Rhian M. Touyz

Tuesday, April 24, 2012, 3:30 PM
Horace W. Davenport Distinguished Lectureship of the APS Gastrointestinal & Liver Physiology Section
Hamid Said

SYMPOSIA:
Sunday, April 22, 2012, 8:00 AM
MicroRNAs in Human Disease and as Novel Therapeutics
(Sponsored by: Industry)
Rebecca L. Persinger and John T. Liles

Stem Cell Biology 2012: Basic Science and Translational Advances
(Sponsored by: Society for Experimental Biology and Medicine)
Martin L. Adamo and Amy J. Wagers

Sunday, April 22, 2012, 10:30 AM
The Role of Oxygen Metabolism for the Development of Kidney Disease
(Sponsored by: Renal Section)
Fredrik Palm and Pamela K. Carmines

Sunday, April 22, 2012, 3:30 PM
Systems Biology of Cardiovascular Genomes and Proteomes
(Sponsored by: Cardiovascular Section)
Joseph Loscalzo and Thomas Vondriska

Monday, April 23, 2012, 8:00 AM
Hypoxia Inducible Factors (HIFs) in Health and Disease
Bernard B. Rees and Michiko Watanabe

Towards a Biology of Body Weight Regulation: The Work of Stephen C. Woods
(Sponsored by: Central Nervous System Section)
Randy Seeley and Stephen C. Woods

Monday, April 23, 2012, 10:30 AM
Pendrin: Hearing, Blood Pressure, Thyroid Function and More
(Sponsored by: Renal Section)
Susan M. Wall
Tuesday, April 24, 2012, 10:30 AM
Vasopressin Mediated Phosphorylation and Trafficking of Transporters Involved in Urine Concentration
(Sponsored by: Renal Section)
Jeff M. Sands and Misti A. Blount

Tuesday, April 24, 2012, 3:30 PM
Hydrogen Sulfide: Ecology, Physiology, and Clinical Applications
(Sponsored by: Comparative and Evolutionary Physiology Section)
Kenneth R. Olson

Novel Advances in Cystic Fibrosis Research and Drug Discovery
(Sponsored by: Epithelial Transport Group)
Bruce A. Stanton and Jennifer Bomberger

Nrf2 Modulation in Exercise, Aging and Chronic Disease
(Sponsored by: Environmental and Exercise Physiology Section)
Benjamin F. Miller and G. A. Brooks

Role of Adipose Tissue Macrophages in Mediating the Metabolic Effects of Obesity
(Sponsored by: American Federation for Medical Research)
Meredith Hawkins

Wednesday, April 25, 2012, 8:00 AM
Mitochondrial Dynamics in Cardiac Physiology
(Sponsored by: Cardiovascular Section)
William C. Stanley and Julie Rennison

Neurovascular Mechanisms and Targets in Stroke: From Cells to Humans
(Sponsored by: American Federation for Medical Research)
MingMing Ning and Eng H. Lo

Wednesday, April 25, 2012, 10:30 AM
Regulation of Intestinal Stem Cells During Development, Homeostasis, Adaptation and Pathophysiology
(Sponsored by: Gastrointestinal and Liver Physiology Section)
Yana Zavros and N. Nanda Nanthakumar

Wednesday, April 25, 2012, 3:30 PM
Mammalian Target of Rapamycin (mTOR) as a Central Player in Energy Balance Regulation
(Sponsored by: Translational)
Ivan Torre-Villalvazo and Alejandro R. Chade

FEATURED TOPICS:
Sunday, April 22, 2012, 10:30 AM
Disruption to Central Sympathetic Control Mechanisms: Implications for Obesity-Related Hypertension
(Sponsored by: Central Nervous System Section)
Daniela Sartor and Sean D. Stocker

Sunday, April 22, 2012, 3:30 PM
Young Investigator Award Featured Topic: Regulation of Transport Proteins in Kidney Intercalated Cells
(Sponsored by: Renal Section)
Nuria Pastor-Soler and Snezana Petrovic

Monday, April 23, 2012, 10:30 AM
Chronic Intermittent Hypoxia: Respiratory, Autonomic and Cardiovascular Consequences
(Sponsored by: Central Nervous System Section)
Ann M. Schreihofer and Glenn M. Toney

Future Directions of Mitochondrial Bioenergetics in Integrative Physiology
(Sponsored by: Comparative and Evolutionary Physiology Section)
Martin Jastrow

Sodium Water Homeostasis: Genetic and Comparative Models
(Cosponsored by CEP Section)
Thomas L. Pannabecker and Kelly Hyndman

Monday, April 23, 2012, 3:30 PM
Origins of Impaired Cardiovascular-Renal Function and Body Fluid Balance
(Sponsored by: Water and Electrolyte Homeostasis Section)
Hiroko Nishimura

Tuesday, April 24, 2012, 8:00 AM
Regulation of Water and Ion Channels and Modulatory Proteins, Lipids, and Hormones
(Sponsored by: Epithelial Transport Group)

Tuesday, April 24, 2012, 10:30 AM
The Lethality of Trauma: New Insights into the Physiology of Hemorrhage
(Sponsored by: Environmental and Exercise Physiology Section)
Victor A. Convertino

Regulation of Transporters and Modulatory Proteins, Lipids, and Hormones
(Sponsored by: Epithelial Transport Group)

Wednesday, April 25, 2012, 8:00 AM
Gastrointestinal Physiology and the Microbiome
(Sponsored by: Gastrointestinal and Liver Physiology Section)
Roger T. Worrell and Hannah V. Carey

Transporters and Ion Channels Track
LECTURES:
Sunday, April 22, 2012, 10:30 AM
Hugh Davson Distinguished Lectureship of the APS Cell and Molecular Physiology Section
Mark Knepper

SYMPOSIA:
Sunday, April 22, 2012, 3:30 PM
The Role of Novel WNK Signaling Pathway in the Regulation of Sodium Channel and Transporters
(Sponsored by: Cell and Molecular Physiology Section)
Hui Cai

Functional Integration in the Hypothalamic Paraventricular Nucleus
(Sponsored by: Central Nervous System Section)
Alan Watts and Greti Aguilera

Monday, April 23, 2012, 8:00 AM
Ion Channels as Macromolecular Complexes
(Sponsored by: Cell and Molecular Physiology Section)
William A. Coetzee and Mario Delmar

Monday, April 23, 2012, 10:30 AM
Pendrin: Hearing, Blood Pressure, Thyroid Function and More
(Sponsored by: Renal Section)
Susan M. Wall
Monday, April 23, 2012, 3:30 PM
Cellular CO₂, HCO₃⁻, and pH Sensing
(Sponsored by: Cell and Molecular Physiology Section)
Jeppe Praetorius and Dennis Brown

Tuesday, April 24, 2012, 10:30 AM
Vasopressin Mediated Phosphorylation and Trafficking of Transporters Involved in Urine Concentration
(Sponsored by: Renal Section)
Jeff M. Sands and Misti A. Blount

Tuesday, April 24, 2012, 3:30 PM
Novel Advances in Cystic Fibrosis Research and Drug Discovery
(Sponsored by: Epithelial Transport Group)
Bruce A. Stanton and Jennifer Bomberger

Role of Ion Channels in Cell Migration
(Sponsored by: Cell and Molecular Physiology Section)
Scott O’Grady and Emmanuelle Brochiero

FEATURED TOPICS:
Sunday, April 22, 2012, 10:30 AM
Lung Ion Channels and Fluid Homeostasis
(Sponsored by: Respiration Section)
Sadis Matalon and Wolfgang Kuebler

Sunday, April 22, 2012, 3:30 PM
Young Investigator Award Featured Topic: Regulation of Transport Proteins in Kidney Intercalated Cells
(Sponsored by: Renal Section)
Nuria Pastor-Soler and Snezana Petrovic

Monday, April 23, 2012, 10:30 AM
Ion Channels
(Sponsored by: Cell and Molecular Physiology Section)
Cathy Fuller

Tuesday, April 24, 2012, 8:00 AM
Regulation of Water and Ion Channels and Modulatory Proteins, Lipids, and Hormones
(Sponsored by: Epithelial Transport Group)

Transient Receptor Potential (TRP) Channels and Endothelial Calcium Regulation in Native Cells and Whole Vessels
(Sponsored by: Cardiovascular Section)
Sean P. Marelli and Scott Earley

Tuesday, April 24, 2012, 10:30 AM
Intestinal Solute Transport in Inflammation
(Sponsored by: Gastrointestinal and Liver Physiology Section)
Lars Eckmann

Regulation of Transporters and Modulatory Proteins, Lipids, and Hormones
(Sponsored by: Epithelial Transport Group)

Ubiquitylation and Deubiquitylation of Ion Channels and Transporters
(Sponsored by: Cell and Molecular Physiology Section)
Kirk Hamilton and Corina Balut

Non-Track Sessions
SYMPOSIA:
Saturday, April 21, 2012, 9:00-11:30 AM
Microcirculatory Society President’s Symposium
(Sponsored by: The Microcirculatory Society) M. Boegehold

Saturday, April 21, 2012, 2:00-4:30 PM
MCS President’s Symposium II/Young Investigator Novel Trends
(Sponsored by: The Microcirculatory Society)

Saturday, April 21, 2012, 3:00-5:00 PM
APS Communications Committee Symposium
James Hicks

Sunday, April 22, 2012, 8:00 AM
Brain Insulin: The Forgotten Metabolic Partner of Leptin?
Kamal Rahmouni and Virginia Brooks

Red Blood Cell Mechanisms of Tissue Blood Flow Control: Physiological Insights in Health and Disease
(Sponsored by: The Physiological Society, Journal of Physiology)
Jose Gonzalez-Alonso

Sunday, April 22, 2012, 10:30 AM
Frontiers in Mechanobiology
(Sponsored by: Biomedical Engineering Society)
Tzung Hsiai and Shu Chien

Molecular and Cellular Therapy for Cardiovascular Disease
(Sponsored by: Physiological Genomics Group)
Zhongjie Sun

Monday, April 23, 2012, 8:00 AM
Regulation of Water and Electrolyte Balance in Diabetic Nephropathy
(Sponsored by: Water and Electrolyte Homeostasis Section)
Richard Roman and Carmen deMiguel

Monday, April 23, 2012, 10:30 AM
Altered Central and Ganglionic Catecholaminergic Transmission in Cardiovascular Disease
(Sponsored by: Neural Control and Autonomic Regulation Section)
David J. Paterson and Anja Teschemacher

Mechanobiology in the Lungs
(Sponsored by: Respiration Section)
Christopher M. Waters and Karen Ridge

Microcirculatory Society Young Investigator Symposium
(Sponsored by: The Microcirculatory Society)

Monday, April 23, 2012, 3:30 PM
Cell Motility in Health and Disease
(Sponsored by: Biomedical Engineering Society)
Aikaterini Kontrogianni Konstantopoulos and Denis Wirz

Novel Sites of Regulation in the Pulmonary Vasculature: Contradictions and Non-traditional Responses
(Sponsored by: Respiration Section)
Marlowe W. Eldridge and Melissa Bates
Tuesday, April 24, 2012, 8:00 AM
From Microscopes to Microneurography: Innovative Techniques for the Study of Central Neural Control
(Sponsored by: Neural Control and Autonomic Regulation Section)
Colin N. Young and Catharine G. Clark

Tuesday, April 24, 2012, 8:00 AM
Physiology of Calcium-Activated Potassium Channels
(Sponsored by: The Physiological Society)
Mike Shipston

Tuesday, April 24, 2012, 3:30 PM
Kruppel-Like Factors (KLFs) in Muscle Biology
(Sponsored by: Muscle Biology Group)
Saptarsi Haldar and Mukesh K. Jain

Wednesday, April 25, 2012, 8:00 AM
Contemporary Approaches to the Pathophysiology of the Cardiovascular System
(Sponsored by: ALACF—Assoc. of Latin American Physiological Societies)
Rodrigo Iturriaga and Benedito H. Machado

Recent Advances in Physiology and Disease: The Role of the Circadian Clock in Neural, Cardiovascular and Metabolic Function
Michelle L. Gumz and R. Daniel Rudic

Wednesday, April 25, 2012, 10:30 AM
American Physiological Society: 125 Years of Progress
(Sponsored by: History of Physiology Group)
Charles M. Tipton and Kathy Ryan

Bioengineering of Regenerative Medicine
(Sponsored by: Biomedical Engineering Society)
Nenad Bursac and Celeste Nelson

Essential Insights into Protein Interactions in Epithelia
Robert A. Fenton

Oxygen Transport and Fatigue in Humans: Unravelling the Mechanisms
(Sponsored by: Environmental and Exercise Physiology Section)
Jose Antonio Lopez Calbet and Jerome Dempsey

FEATURED TOPICS:
Sunday, April 22, 2012, 10:30 AM
Autonomic Control of Visceral Functions
(Sponsored by: Neural Control and Autonomic Regulation Section)
R. Alberto Travagli

Microvascular Permeability: Paracellular versus Transcellular Transport
(Sponsored by: Cardiovascular Section)
David Lominadze and Martha O'Donnell

Sunday, April 22, 2012, 3:30 PM
NCAR Trainee Featured Topic
(Sponsored by: Neural Control and Autonomic Regulation Section)
Jason R. Carter

Monday, April 23, 2012, 8:00 AM
Trainee Highlights in Physiological Genomics
(Sponsored by: Physiological Genomics Group)
Jia Long Zhuo and Carol Moreno-Quinn

Renal Section Abstract-Driven Featured Topic
(Sponsored by: Renal Section)

Monday, April 23, 2012, 10:30 AM
Wiggers Award Featured Topic: Calcium Homeostasis and Endoplasmic Reticulum Stress in Vascular Function
(Sponsored by: Cardiovascular Section)
Clinton Webb

Monday, April 23, 2012, 3:30 PM
Molecular Sensors in Afferents Neurons that Contribute to Pain, Fatigue, and Activation of Autonomic Reflexes in Health and Disease
(Sponsored by: Neural Control and Autonomic Regulation Section)
Christopher J. Benson

Tuesday, April 24, 2012, 8:00 AM
Cell and Molecular Physiology Section Abstract-Driven Featured Topic
(Sponsored by: Cell and Molecular Physiology Section)

Cell-Cell and Cell-Matrix Adhesions in Control of Lung Fluid Balance and Innate Immunity: Talking Is Critical!
(Sponsored by: Respiration Section)
Konstantin G. Biukov and Dolly Mehta

Renal Section Abstract-Driven Featured Topic
(Sponsored by: Renal Section)

Thermal Physiology: From Acute Responses to Protective Adaptation
(Sponsored by: Environmental and Exercise Physiology Section)
Christopher J. Minson

Tuesday, April 24, 2012, 10:30 AM
Neurovascular Responses to Aging and Disease: Adaptations and Interventions
(Sponsored by: Neural Control and Autonomic Regulation Section)
William G. Schrage

Targeted Proteomic Analyses of Heart Failure
(Sponsored by: Cardiovascular Section)
Peipei Ping and Merry L. Lindsey

Understanding the Evolution of Physiology: Insights from Selection Experiments in Rodent Models
(Sponsored by: Comparative and Evolutionary Physiology Section)
Theodore Garland, Jr.

Wednesday, April 25, 2012, 8:00 AM
Bone-Muscle Crosstalk
(Sponsored by: Muscle Biology Group)
Marco Brotto and Mark Johnson

Respiratory Pattern Variability: Insights into Respiratory Control Mechanisms in Health and Disease
(Sponsored by: Respiration Section)
Thomas E. Dick

Wednesday, April 25, 2012, 10:30 AM
Mechanical Muscle Damage: Is Titin the Giant, or is the Z-line Samson?
(Sponsored by: Muscle Biology Group)
Kathryn H. Myburgh
ASBMB 2012 Annual Meeting Program Planning Committee
Co-chairs: Russell DeBose-Boyd and Hongtao Yu, UT Southwestern Medical Center

ASBMB 2012 AWARD LECTURES
Herbert Tabor / Journal of Biological Chemistry Lectureship
Stuart Kornfeld, Washington University Medical School

Alice and C.C. Wang Award in Molecular Parasitology (New)
Recipient announced at www.asbmb.org/meeting2012

ASBMB Award for Exemplary Contributions to Education
Judith G. Voet, Swarthmore College and Donald Voet, University of Pennsylvania

ASBMB-Merck Award
Xiaodong Wang, National Institute of Biological Sciences, Beijing
(2012 recipient)
Christine Guthrie, University of California, San Francisco
(2011 recipient)

ASBMB Young Investigator Award
Kim Orth, University of Texas Southwestern Medical Center

Avanti Award in Lipids
George M. Carman, Rutgers University

Avanti Young Investigator Award in Lipid Research
Peter Espenshade, Johns Hopkins University School of Medicine

DeLano Award for Computational Biosciences
Barry Honig, HHMI/Columbia University

Earl and Thressa Stadtman Scholar Award (New)
David M. Sabatini, Whitehead Institute for Biomedical Research

Herbert A. Sober Lectureship
Peggy Farnham, University of Southern California

(*) denotes session chair

Ruth Kirschstein Diversity in Science Award
Lovell A. Jones, University of Texas MD Anderson Cancer Center

William C. Rose Award
Susan Marqusee, University of California, Berkeley

ASBMB 2012 PLENARY LECTURE SERIES
Steven L. McKnight, UT Southwestern Medical Center at Dallas

PRELIMINARY PROGRAM

Gene Regulation
Theme Organizers:
Karen Adelman, NIEHS, NIH and Yang Shi, Harvard Medical School

SYMPOSIA
Fundamental Mechanisms in Gene Regulation
Karen Adelman (*), Joan Conaway, Ramin Shiekhattar, Dylan J. Taatjes

Transcriptional Regulation during Growth and Development
Joaquin M. Espinosa, Susan Mango, Joanna Wysocka (*), Ken Zaret

Interplay between Chromatin Structure and the Transcription Machinery
Karen Adelman, Or Gozani, Gordon Hager, Yang Shi (*)

Histone Modifications and Their Recognition
Dinshaw J. Patel, Yang Shi, Joanna Wysocka, Ken Zaret (*)

DNA Replication, Recombination, Repair
Theme Organizers:
Peter Baumann, Stowers Institute for Medical Research and Patrick Sung, Yale University School of Medicine

SYMPOSIA
Mechanism and Regulation of DNA Repair
Hiroshi Iwasaki, Sua Myong, Patrick Sung (*), Lorraine S. Symington

www.asbmb.org/meeting2012
Mechanism of DNA Replication
Peter Baumann (*), John F.X. Diffley, Prasad V. Jallepalli, Mike E. O’Donnell

Coupling of DNA Repair and Replication
Anthony M. Carr, Angelo Constantinou, Catherine H. Freudenberg, Lorraine S. Symington (*)

Telomeres and Telomerase
Peter Baumann, Julia P. Cooper, John F.X. Diffley (*), Madalena Tarsounas

RNA
Theme Organizers:
Manny Ares, Jr., UC, Santa Cruz and Tracy L. Johnson, UC, San Diego

SYMPOSIAS
The Spliceosome: Fitting the Pieces Together
Tracy L. Johnson, Anna M. Pyle (*), Melissa S. Jurica, Soo-Chen Cheng

RNA Dynamics: Function Follows Folding
Manny Ares, Jr., Eckhard Jankowsky, Jon Lorsch (*), Anna M. Pyle

RNA-Based Regulation: A Diversity of Mechanisms
Richard Gregory, Tracy L. Johnson (*), Lynne E. Maquat, Becky M. Tens

Ribosomes: Regulation of Access to mRNA
Manny Ares, Jr. (*), Jon Lorsch, Tatyana Pestova, Nahum Sonenberg

Protein Synthesis, Targeting and Quality Control
Theme Organizers:
Jeffrey L. Brodsky, University of Pittsburgh and William Clemons, California Institute of Technology

SYMPOSIAS
The Ribosome and Early Folding Decisions
William Clemons (*), Walid A. Houry, Joseph D. Puglisi, Wolfgang Wintermeyer

Protein Targeting and Translocation
William Clemons, Joseph D. Puglisi (*), Gunnar von Heijne, Peter Walter

Factors Modulating Protein Quality Control
Jeffrey L. Brodsky, Jason Gestwicki (*), Tricia Serio, Richard Wojcikiewicz

Protein Quality Control and Disease
Jeffrey L. Brodsky (*), Edward Fisher, Jason Gestwicki, Phyllis Hanson

Chemical Biology and Catalysis
Theme Organizers:
Philip A. Cole, Johns Hopkins University and Jason K. Sello, Brown University

SYMPOSIAS
Metabolomics
Anne Osbourn (*), Alan Saghatelian, Michael Snyder

Chemistry in the Service of Medicine
Gabriela Chiosis, Philip A. Cole (*), David A. Spiegel

Metabolic Engineering: From Antibiotics to Biofuels
David E. Cane (*), Jason K. Sello, Christina Smolke, Michael G. Thomas

Frontiers in Mechanistic Enzymology
David E. Cane, Chuan He, Hening Lin, Jason K. Sello (*)

Drug Development
Theme Organizers:
Peter K. Jackson, Genentech, Inc. and Randall W. King, Harvard Medical School

SYMPOSIAS
Drug Development and Apoptosis: Linking Tumor Regression to Cell Death
Vishna Dixit, Randall W. King (*), Loren D. Walensky, Junying Yuan

Targeted Cancer Drug Development: Defining Molecular Profiles of Sensitivity
Alan Ashworth, Valeria Fantin, William Hahn (*), Neil Rosen

New Methodologies for Target Discovery and Target Validation
William Hahn, Peter K. Jackson (*), Randall W. King, Garry Nolan

Alice and C.C. Wang Award in Molecular Parasitology Symposium
Recipient announced at www.asbmb.org/meeting2012

Systems Biology
Theme Organizers:
Steven Altschuler, UT Southwestern Medical Center and Alexander Hoffmann, UC, San Diego

SYMPOSIAS
Constructing Networks
Martha L. Bulyk, Trey Ideker, Nevan J. Krogan, Peter Sorger (*)

Networks and Time
Martha L. Bulyk (*), Alexander Hoffmann, Karla Neugebauer, Peter Sorger

Networks and Space
Steven Altschuler (*), Victor Sourjik, Orion D. Weiner, Lani Wu

Networks and Noise
Steven Altschuler, Jeff Hasty, Alexander Hoffmann (*), Chris Voigt

(*) denotes session chair
Lipid and Lipid Signaling
Theme Organizers:
Dawn L. Brasaeemle, Rutgers, The State University of New Jersey and
Timothy Osborne, Sanford-Burnham Medical Research Institute

**SYMPOSIAS**
Lipid Droplets: A Dynamic Subcellular Compartment
Dawn L. Brasaeemle, Deborah M. Muoio (*), David Silver, Tobias Walthers

Metabolic Branchpoints/Lipid Channeling
Kaveh Ashrafi, Dawn L. Brasaeemle (*), Peter J. Espenshade, Deborah M. Muoio

Lipid Signaling, Infection and Atherosclerosis
Peter J. Espenshade (*), Christopher K. Glass, Timothy Osborne, Melanie Ott

Lipid Regulation of Protein Function
Benjamin Cravatt, Jerrold M. Olefsky, Timothy Osborne (*), Fraydoon Rastinejad

Metabolism and Disease
Theme Organizers:
Reuben J. Shaw, Salk Institute for Biological Studies and
Benjamin P. Tu, UT Southwestern Medical Center

**SYMPOSIAS**
Organismal Metabolism
Joe Bass, Manuel Llinas, Jared Rutter (*), Benjamin P. Tu

Signaling and Metabolism
Anne Brunet, Jared Rutter, Reuben J. Shaw, Eileen White (*)

Cancer Cell Metabolism
Heather Christofk, Gregg L. Semenza, Reuben J. Shaw (*),
Eileen White

Aging Metabolism
Charles Brenner, Benjamin P. Tu (*), Marc Van Gilst, Meng C. Wang

Organelle Dynamics
Theme Organizers:
David C. Chan, HHMI/California Institute of Technology and
Benjamin S. Glick, University of Chicago

**SYMPOSIAS**
Mitochondrial Dynamics
David C. Chan, Thomas Langer (*), Jodi Nunnari, Hiromi Sesaki

Organelle Quality Control
David C. Chan (*), Thomas Langer, Gia Voeltz, Tamotsu Yoshimori

Organization of the Secretory Pathway
Benjamin S. Glick, Adam D. Linstedt, Catherine Rabouille (*),
Nava Segev

Endomembrane System Dynamics
Jon Audhya, Benjamin S. Glick (*), Catherine Rabouille, Christian Ungermann

Glycobiology
Theme Organizers:
Karen Colley, University of Illinois College of Medicine and
Anant K. Menon, Weil Cornell Medical College

**SYMPOSIAS**
Glycoconjugates in Pathogen Invasion and Virulence
Igor C. Almeida, Lora V. Hooper, Malcolm McConville, Anant K. Menon (*)

Role of Glycoconjugates in Signaling and Development
Thomas Biederer, Hannes Buelow, Jeffrey D. Esko (*),
David E. Levin

Novel Metabolic Routes of Glycoconjugate Assembly
Karen Colley, John Hanover (*), Anant K. Menon, Debra Mohennen

Roles of Glycoconjugates in Metabolism and Disease
Karen Colley (*), Jeffrey D. Esko, John A. Hanover, Lance Wells

Tuberculosis
*Sponsored by the ASBMB Minority Affairs Committee*
Theme Organizers:
Clifton E. Barry III, NIAID, NIH and
Squire J. Booker, Pennsylvania State University

**SYMPOSIAS**
In vivo Biochemistry of the Pathogen
Squire J. Booker (*), William R. Jacobs Jr., Valerie Mizrahi,
Natasha M. Nesbitt

Biomedical Mediators of the Host-Pathogen Interaction
Clifton E. Barry III (*), Carolyn Bertozzi, Sonia Flores, Mary Jackson

Relationship of Host and Pathogen
Clifton E. Barry III, Miriam Braunstein, Sarah Fortune, Mary Jackson (*)

Will Combined MD-PhD Training Make Me Twice as Successful?
Arthur Gutierrez-Hartmann, Stephen I-Hong Hsu, Robin Lorenz,
Frank Talamantes (*)

Maximizing Competitiveness During Challenging Economic Times
*Sponsored by the ASBMB Education and Professional Development Committee*
Theme Organizers:
Suzanne Barbour, Virginia Commonwealth University and
Peter J. Kennelly, Virginia Polytechnic Institute & State University

**WORKSHOPS**
Speed Dating: Finding Your Perfect Career “Match”
A workshop for undergraduates
Suzanne Barbour (*)

**SYMPOSIAS**
Maximizing Institutional Effectiveness
Cecile Andraos-Selim, Judith S. Bond (*), Peter J. Kennelly, Joseph J. Provost

(*) denotes session chair
Maximizing Teaching Effectiveness
Paul A. Craig, Neena Grover, Estralita Martin (*), Dennis D. Wykoff

Maximizing Your Marketability
Lisa Balbes, Judith S. Bond, Joseph J. Provost (*), Martin Rosenberg

Maximizing Your Global Outreach
Paul A. Craig (*), Anthony A. James, Estralita Martin, Shirish Shenolikar

ASBMB 2012 Science Policy Symposium
Sponsored by the ASBMB Public Affairs Advisory Committee
Session details at www.asbmb.org/meeting2012

(*) denotes session chair

SPECIAL EVENTS
• 16th Annual ASBMB Undergraduate Student Research Poster Competition **
• ASBMB 5K Fun Run/Walk **
• ASBMB Graduate and Postdoctoral Travel Award Plenary Lecture and Poster Session **
• ASBMB Graduate and Postdoctoral Professional Development Program **
• ASBMB Opening Reception
• ASBMB Welcome and Networking Reception sponsored by the ASBMB Minority Affairs Committee
• ASBMB Women Scientists Panel and Networking Reception
• Inside the JBC: A How-To Workshop for Authors
• Lipid Droplets: Basic Working Principles
• Professional Development Workshop for Students, Postdocs and Junior Faculty **
• Scientific Thematic receptions
• Speed Dating: Finding Your Perfect Career “Match” (for Undergraduates)
• YES Mixer (Young Experimental Scientists)

** Advance registration required

HOW DO I SIGN UP?
1) Submit an abstract by November 8th to an ASBMB (2000 – 2432 series number) topic category.

A complete list of ASBMB topic categories is available at www.asbmb.org/meeting2012.

2) Undergraduate student must be the first author of the abstract to qualify for the competition. A unique submission is required from each competitor. There are NO “Co-First Authors.”

3) Early January, 2012, first author will receive an email invite to join the competition. The invite will be sent to the address provided when logging in to submit your abstract.

4) Saturday, April 21, 2012, the competition begins promptly at 1:00 PM. Travel plans must accommodate arrival at the venue by 12:30 PM for check in and set up.

5) A complete list of guidelines for signing up to compete is available at www.asbmb.org/meeting2012.

VOLUNTEER JUDGES NEEDED
PIs and PUI faculty members are needed to volunteer to judge student posters. Volunteers must be available 11:30 a.m. – 5:00 p.m., on Saturday, April 21, to attend a judges orientation and the poster competition. For more information and to sign up, visit www.asbmb.org/meeting2012
American Society for Investigative Pathology

LECTURES

ASIP COTRAN EARLY CAREER INVESTIGATOR AWARD LECTURE: TBD
Award Recipient: TBD

ASIP EXCELLENCE IN SCIENCE AWARD LECTURE: Mechanisms of TDP-43 Mediated Neurodegeneration in ALS and FTLD
Award Recipient: EDWARD B. LEE

ASIP OUTSTANDING INVESTIGATOR AWARD LECTURE: Lost in Ubiquitination, Found by Mass Spectrometry: Identification of E3 Ligase Substrates Controlling Critical Cellular Events and Cancer
Award Recipient: KOJO J. ELENITOA-JOHNSON

ASIP ROUS-WHIPPLE AWARD LECTURE: The Many Roles of VEGF in the Adult
Award Recipient: PATRICIA D’AMORE

Fibronectin Matrix assembly in development and disease
ASMB LECTURE:
Speaker: Jean Schwarzbauer
Sponsored by ASIP and the American Society for Matrix Biology

SYMPOSIA

ACVP Symposium: Evolutionary Aspects of Animal Models
Chaired: Elizabeth Uhl and Michael Oglesbee
Sponsored by ASIP and the American College of Veterinary Pathologists

Computational Phenomics: The Potential of Whole Animal Image Analysis in Elucidating Gene Function and Chemical Toxicity
Chaired: Keith C. Cheng and Anant Madabhushi
Sponsored by the ASIP Biophysical Pathology Scientific Interest Group

Innate Immunity in the Brain
Chaired: Clayton A. Wiley
Sponsored by the ASIP Neuropathology Scientific Interest Group

iPS CELLS: Are We There Yet!
Chaired: S. Paul Monga

ISBER Symposium: Better Disease Biomarkers through Biobanking
Chaired: Galen Hostetter and Michael Hogan
Sponsored by ASIP and International Society for Biological and Environmental Repositories

Mesenchymal Stem Cells and Lung Disease
Chaired: Michael A. Matthay and Dani Zander

Molecular and Cellular Basis of Disease: Host-Microbe Interactions, the Gut and Beyond
Session 1: The Microbiota and Systemic Disease
Chaired: Andrew Neish and Susan Lynch
Session 2: New Concepts in Vascular Biology: Endothelial Bacterial Interactions
Chaired: Michael Hickey and Francis W. Luscinskas
In addition to invited speakers, talks and posters will be included from abstract submissions

Molecular and Cellular Basis of Disease: Liver Pathology
Session 1: Liver Development, Stem Cells and Regeneration
Session 2: Liver Injury, Fibrosis and Hepatocellular Cancer
Chaired: S. Paul Monga
Sponsored by the ASIP Liver Pathobiology Scientific Interest Group
In addition to invited speakers, talks will be included from abstract submissions

Presidential Symposium: Pathogen-Host Interactions: Provoking and Evading the Immune Response
Chaired: Martha B. Furie

Protein Misfolding and Chaperonopathies
Chaired: Monte S. Willis and Jonathan Lin

www.asip.org/mtgs/eb12/
Recent Advances in the Pathobiology of Diabetic Complications
Chaired: Sridevi Devaraj and Ishwarlal Jialal

Regulation of Epithelial Junctions in Development and Diseases
Chaired: Andrei Ivanov and Asma Nusrat

Resolution of Inflammation
Chaired: Sean P. Colgan and Andrew S. Neish

SCVP Symposium: The Pathogenesis and Molecular Diagnosis of Cardiomyopathies
Chaired: Jon Seidman and L. Maximilian Buja
*Sponsored by ASIP and the Society for Cardiovascular Pathology*

Stowell Symposium: Trends in Experimental Pathology: Metabolism & Cancer
Chaired: Sebastiano Andò and Alberto Mantovani
*Sponsored by ASIP and Società Italiana di Patologia/Italian Pathology Society (SIP)*
*Supported by unrestricted educational grant from the Robert E. Stowell Endowment Fund*

The Myofibroblast: Biological Features and Therapeutic Perspective
Chaired: Cory M. Hogaboam

WORKSHOPS/SPECIAL SESSIONS

12th Annual Career Development Program and Lunch: Fundamental Basics for Success: How to Write Award-Winning Grants
Chaired: Titus A. Reaves and Jayne Reuben
*Sponsored by the ASIP Committee for Career Development, Women and Minorities, and the FASEB MARC (Minority Access to Research Careers) Office and the American Association of Anatomists*

12th Annual Workshop on Graduate Education in Pathology: Genomics and Personalized Medicine in the Graduate Curriculum
Chaired: Richard Mitchell
*Sponsored by the ASIP Education Committee*

Blood Vessel Club: Vascular Development
Chaired: David S. Milstone

Breast Cancer Scientific Interest Group Lunch/Networking Session
Chaired: Ashley G. Rivenbark
*Sponsored by the ASIP Breast Cancer Scientific Interest Group*

Breast Cancer Workshop: Personalized Medicine & Breast Cancer
Chaired: Ashley G. Rivenbark and William B. Coleman
*Sponsored by the ASIP Breast Cancer Scientific Interest Group*

Career Development Workshop and Breakfast: Getting Your Dream Job: Preparing Your CV and Managing Your Interview
Chaired: Tara Sander and Roberto Barrios
*Supported by the ASIP Committee for Career Development, Women and Minorities and the FASEB Minority Access to Research Careers (MARC) Office*

Club Hepatomania
Chaired: S. Paul Monga
*Sponsored by the ASIP Liver Pathobiology Scientific Interest Group*

Die Schaden Klub (Cell Injury Scientific Interest Group Networking Event)
Chaired: Cecelia C. Yates and Monte S. Willis
*Sponsored by the ASIP Cell Injury Scientific Interest Group*

Highlights: Graduate Student Research in Pathology
Chaired: Diane Bielenberg and Keli Kolegraff
*Sponsored by the ASIP Committee for Career Development, Women & Minorities*

High School Teachers Program: Scientific Sleuthing of Human Disease for High School Teachers
Chaired: Martha B. Furie and Kari Nejak-Bowen
*Sponsored by the ASIP Education Committee*
*Supported by an unrestricted educational grant from the InterSociety Council for Pathology Information*

Lunch & Learn: Best Practices of Biobanking and Specimen Collection
Chaired: Wendy Mars
*Sponsored by the ASIP Education Committee*

Pathobiology for Basic Scientists: Cell Injury and Inflammation: New Rifts on a Classical Score
Chaired: Richard N. Mitchell and Martha B. Furie
*Sponsored by the ASIP Education Committee*

Veterinary Pathology Scientific Interest Group Lunch/Networking Event
Chaired: Mark McArthur, Elizabeth Galbreath and Elizabeth Whitley
*Sponsored by the ASIP Veterinary Pathology Scientific Interest Group*

Workshop: Mechanisms and Biological Roles of Autophagy
Chaired: Andrei Ivanov and Monte S. Willis
*In addition to invited speakers, talks will be included from abstract submissions*
Symposia

Probiotics for Optimal Nutrition: From Efficacy to Guidelines
Chairs: Sharon M. Donovan and Gordon S. Howarth

GPEC Forum: Using Interdisciplinary Tools to Evaluate Nutritional Interventions
Organized by International Nutrition Council and the Graduate and Professional Education Committee
Chairs: Jere D. Haas and Grace S. Marquis

Metabolic Regulation by Amino Acids for Optimal Health
Chairs: Susan M. Hutson and Tracy G. Anthony

Adipose Dysfunction: Interaction of ROS and Inflammation
Chairs: Matthew J. Picklo, Sr., Kate J. Claycombe, and Mohsen Meydani

Emerging Biomarkers for Cardiovascular Disease: Beyond LDL Cholesterol
Chair: Keigan M. Park and Beth Rice

Food Insecurity and Health Across the Lifespan
Chairs: Mary Ann Johnson and Jung Sun Lee

Energy Balance: A New Paradigm
Chairs: John Milner and Maxime Buyckx

Controversies Regarding Reported Trends: Has the Obesity Epidemic Leveled Off in the United States?
Chairs: Youfa Wang and William H. Dietz

Expanding the Frontiers of Nutrition Research: New Questions, New Methods and New Approaches
Chairs: David Pelletier and Christine Porter

Monounsaturates: The Forgotten Fats
Chair: David Heber

Frontiers in Fiber Nutrition Research and Applications
Chairs: Shiu-Ming Kuo and Christine L. Pelkman

Fructose, Sucrose and High Fructose Corn Syrup: Modern Scientific Findings and Health Implications
Chair: Penny Kris-Etherton

Real-World Nutritional Translation Blended with Food Science
Chairs: Mario Ferruzzi and Roger Clemens

Sustainable Food Systems: An Integrated Approach for a Healthy Population and a Healthy Planet
Organized by The Public Information Committee
Chairs: Nancy Auestad and Jeannie M. Gazzaniga-Moloo

Presidential Symposium featuring Jeffrey I. Gordon, 8th Danone International Prize for Nutrition Laureate
Chair: Sharon Donovan, ASN President

Workshops/Special Sessions/Career Development (Education Track)

Clinical Nutrition Update 2012
Organized by Medical Nutrition Council
Chairs: Edward Saltzman, Connie W. Bales, and Mary Ann Johnson

Establishing and Evaluating Health Claims for Probiotics
Chairs: Sharon M. Donovan and Mary Ellen Sanders

Utilizing a Multi-level Team Approach: Lessons Learned from the Vitamin D DRI-Setting Activity
Chairs: Nancy Engelmann Moran and Victoria Vieira Potter

Zinc Nutrition: From Discovery to Global Health Impact
Organized by The history of Nutrition Committee
Chairs: Harold H. Sandstead and Ananda S. Prasad
Minisymposia

Scientific Career Advancement for Early Stage Investigators
Organized by Young Professional Interest Group
Chair: Victoria Vieira Potter, PhD

A Nurturing Environment Produces Future Legends:
Development of Career through Successful Mentor-Mentee Relationships
Organized by Student Interest Group
Chair: Sheau Ching Chai

Medical Nutrition Council Clinical Emerging Leader Award Competition
Nutritional Sciences Council Graduate Student Research Award Competition
International Nutrition Council Kellogg International Student Prize Competition
Postdoctoral Research Award Competition endowed by Solae, LLC.

Minisymposia

Aging and Chronic Disease
Nutrition and Cognitive and Mental Health in Older Adults
Community Nutrition Programs and Policies for Older Adults
Nutrition Interventions for Risk Factor Modification in Chronic Disease
Nutritional Assessment and Status in Older Populations
Nutrition, Sarcopenia and Physical Performance in Older Adults
Correlates, Consequences and Treatment of Obesity in Older Adults
Osteoporosis and Bone Metabolism in Aging

Community and Public Health Nutrition
Diet, Food Security and Health Promotion in Diverse Communities
Community and Public Health Nutrition Interventions
Community and Public Health Nutrition
Behavioral Economics and Nutrition
The Role of the Food Industry in Community Nutrition Research
Social Equity and Nutrition
Food Safety and Community Food Interventions

CARIG
Carotenoids and Health
Molecular Mechanism of Action
Bioavailability and Metabolism
Eye and Brain Health

Diet and Cancer
Diet and Cancer – Molecular Targets
Diet and Cancer – Animal Studies
Diet and Cancer – Translational, Clinical and Survivorship
Diet and Cancer – Stem Cells
Diet and Cancer – Proteomic Technologies and the Detection of Molecular Targets for Bioactive Food Components

Dietary Bioactive Components
Epidemiologic Associations between Dietary Bioactive Components and Health
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
Systems Biology Approaches to Study 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
Protein and Amino Acid Metabolism
Lipid and Fatty Acid Metabolism and Transport
Dietary Factors Affecting Lipid Metabolism
Polyunsaturated Fatty Acids and Health
Metabolic Phenotyping, Metabolomics and Biomarkers
Carbohydrate Metabolism
Regulation of Food Intake

Experimental Animal Nutrition
Companion Animal Nutrition and Physiology
Animal Research Models for Macronutrient Metabolism
Animal Research Models for Nutrient Digestion and Absorption
Animal Research Models for Gut Development and Health
Animal Research Models Investigating Nutrition and Inflammation
Animal Research Models in Nutrition and Musculoskeletal Development

Lactation
Lactation: Biology of Milk Production and Secretion
Milk Bioactive Compounds
Breastfeeding: Determinants of Initiation, Duration and Other Lactation Success Outcomes
Breastfeeding and Human Milk: Effects on the Recipient Infant and/or Lactating Mother

International Nutrition Council
International Nutrition

Medical Nutrition Council
Diet-Gene Interactions in the Etiology of Obesity and Weight-related Comorbidities
Nutrition and the Microbiome
Interventions for the Treatment and Prevention of Nutrition-related Diseases
Nutrition and Inflammation
Prenatal Nutrient Programming
Bioactive Nutrients – Building an Evidence Base for DRI

Minisymposia are planned by the ASN Scientific Councils and Research Interest Sections (RIS), which also program many business meetings, poster competitions, and networking events at the annual meeting. Please visit www.nutrition.org for further details.
Nutrition Education
- Aligning Nutrition Education Programs and Research to Promote Change
- Preventing Childhood Obesity
- Development of Evidence-Based Nutrition Education
- Nutrition Education in Diverse Populations
- Synergy between Nutrition Education and Industry Initiatives
- Behavioral Science and Eating Behavior Change
- Nutrition Intervention in Diabetes Care
- Nutrition Education in “The Field”: Interventions Related to Farm and Garden Programs

Nutrient Gene Interactions
- Epigenetics and Nutrition
- Maternal Programming of Gene Expression
- Nutrient Gene Interaction in Neurodegenerative/Neuromuscular Disease
- Nutrient Gene Interactions
- Nutrient-Sensing Mechanisms
- DNA Methylation in Disease
- Nutrient Gene Interaction: Animal Models of Human Disease

Nutritional Epidemiology
- Innovative Tools for Assessment of Diet, Physical Activity, and Related Behaviors
- Longitudinal Analysis of Associations between Diet and Health Outcomes
- Dietary Supplements as a Population Exposure in Relation to Causation, Prevention, and Management of Disease
- Applications and Challenges of Public Use Data Sets for Secondary Data Analysis Nutrition Research
- Assessment of Child and Adolescent Nutritional Status, Growth, and Obesity
- Influences of Water and Beverage Consumption on Health Outcomes
- Application of Novel Statistical Methods for Use in Nutritional Epidemiology
- Global Health: Dietary Intakes and Health Outcomes in Diverse Populations

Nutrition Immunology
- Nutritional Immunology
- Immune Modulating Nutraceuticals and Functional Foods

Nutrition Translation
- The Use of Consumer Research Insights to Guide Scientific Research
- Nutrition Science Translation for Policy, Practice and Consumers
- Understanding and Communicating Benefits/Risks of Natural-State Foods (e.g., minimally processed, natural, organic)
- Nutrition and Sustainability
- Food Related Behaviors – Critical for Food Policy
- Nutrition Science Applied Through Food Science for Health
- Clinical Support for Novel Food Ingredients
- Translation of Nutrition Science to Public Health

Obesity
- Redefine Obesity: Body Weight vs. Adiposity
- Neuroscience of Food Intake and Obesity: Food Addiction?
- Childhood Obesity: When Should We Intervene?
- Metabolic Communication and Obesity: Adipokins
- Obesity, Inflammation and Chronic Diseases: Modulation by Dietary Phytonutrients
- Activity and Obesity: Sitting Disease – Obesity’s True Culprit

Vitamins and Minerals
- Iron, Copper and Chronic Disease
- Vitamin D and Obesity: From Cellular to Clinical Trials
- Fat Soluble Vitamins and Chronic Disease
- Micronutrient Bioavailability
- Antioxidant Micronutrients
- Water Soluble Vitamins
- B Vitamins and One-Carbon Metabolism
- Micronutrient Interventions

Special Events
- Membership Reception and University Mixer
- Graduate Student Breakfast
- Awards Ceremony
- Department Heads Breakfast
- ASN Annual Business Meeting
- Meet the Editors
- Luncheon for Fellows and 50-Year Members

Thank You
ASN extends its appreciation to the organizations that support ASN symposia, awards, special events and more.
If you are interested in getting involved with ASN’s 2012 Annual Meeting at EB, please email meetings@nutrition.org
2012 SYMPOSIA

Adapting TBL techniques to teach pharmacology to graduate, professional and medical students
Chair: R. Senthil Kumar

Applications of biomaterials and drug delivery systems for enhancing tissue engineering and regeneration
Chair: Karl-Erik Andersson and George J. Christ

Building a pharmacology course from scratch: Benefits and pitfalls of a cut and paste pharmacology course
Chair: John L. Szarek

Clinical pipeline of marine natural products: The odyssey continues
Chair: Keith B. Glaser and Alejandro M.S. Mayer

Cognitive enhancement to improve treatment outcome and quality of life associated with neuropathologies
Chair: Robert W. Gould and Michael A. Nader

Discovery of protein kinase inhibitors for CNS disorders: Opening new avenues for unmet needs
Chair: Margaret Gnegy and Daniel M. Watterson

Emerging concepts in G protein dependent PLC regulation and physiology
Chair: Alan V. Smrcka

Emerging role of heme oxygenase in cardiovascular and metabolic diseases
Chair: Nader G. Abraham

From structure to knockout: Common themes between CYPs and ABC transporters
Chair: Mary Vore

Location, location, location: The role of membrane microdomains in dopamine transporter function and trafficking
Chair: Haley Melikian and Habibeh Khoushbouei

Membrane rafts in endothelial signaling
Chairs: Irena Levitan and Pin-Lan Li

Models of affective disorders and pharmacological interventions: The influence of etiology in treatment approach
Chairs: Michael A. Nader and Leonard L. Howell

Multi-target agents – the yin and yang of rational drug discovery
Chairs: Alan J. Cross and Michael W. Wood

NADPH-cytochrome P450 oxidoreductase: roles in physiology, pharmacology, and toxicology
Chairs: David S. Riddick and Todd D. Porter

Neurophysiological correlates of stimulant treatment for ADHD in adolescents and adults
Chair: Claire Advokat

Opioid-induced bowel dysfunction
Chair: Hamid I. Akbarali

Perivascular (p) fat: Pharmacology, physiology and function
Chair: Anne Dorrance and Stephanie W. Watts

Pharmacology and therapeutic potential of histamine H3 and H4 receptor ligands
Chair: Robin Thurmond

Protein-protein interaction (PPI) interfaces as therapeutic targets: Promises and challenges
Chair: Haian Fu

Regulation of TRP channels
Chair: Michael Xi Zhu

Role of nuclear receptors in lipid dysregulation and obesity-related diseases
Chairs: John Chiang and Hollie Swanson
Role of pharmacogenetics in oncology
Chair: Hollie Swanson

Steroid signaling via G protein-coupled receptors
Chair: Eric Prossnitz

Targeting PI3K for human diseases
Chair: Tadimeti S. Rao

The behavioral pharmacology of pain
Chair: Thomas J. Martin

The nociceptin/orphanin FQ-NOP receptor system: Neurobiology, pharmacology and therapeutic opportunities
Chair: Girolamo Calo

The real world of therapeutic drugs: Bench to boardroom, the bedside and beyond
Chair: P.K. Rangachari

Toll-like receptors in neuroplasticity and disease
Chair: Mark P. Mattson

DIVISION SESSIONS
Behavioral Pharmacology Division Symposium: The behavioral pharmacology of drugs of abuse and drug dependence: A tribute to Steve Holtzman and Bob Schuster
Chairs: Linda Dykstra and Carol Paronis

Cardiovascular Pharmacology Division Trainee Showcase

Drug Discovery, Development & Regulatory Affairs Division Symposium: Mitochondrial dysfunction in human disease
Chairs: Robert E. Davis and Michael Williams

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:
Chair: TBA at www.aspet.org

Toxicology Division Symposium: The utilization of genetically modified mice to determine mechanisms of toxicity
Chair: Jack A. Hinson

LECTURES
JULIUS AXELROD LECTURE
Speaker: Elaine Sanders-Bush

RAY FULLER LECTURE
Speaker: Mark Bear

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

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 DISTINGUISHED LECTURE IN VASCULAR PHARMACOLOGY
Speaker: TBA at www.aspet.org

SPECIAL SESSIONS
Julius Axelrod Symposium
Chair: Elaine Sanders-Bush

Ray Fuller Symposium: Progress toward Autism Drug Discovery
Chair: Mark Bear

Graduate Student-Postdoctoral Colloquium: Communication
Sponsored by the Committee on Graduate Recruitment and Education
Chair: Lisa Schrott and Jeff Fedan

2012 Teaching Institute
Chair: TBA at www.aspet.org

Public Affairs Workshop: FDA session to be determined
Chair: TBA at www.aspet.org

Behavioral Pharmacology Society Meeting
Contact Joseph Moerschbaecher at jmoers@lsuhsc.edu

Meeting Highlights
Behavioral Pharmacology & Neuropharmacology Joint Division Mixer
Cardiovascular Pharmacology Division Mixer
Molecular Pharmacology Division Mixer
Drug Metabolism & Toxicology Division Mixer
Drug Discovery, Drug Development and Regulatory Affairs & Integrative Systems, Translational and Clinical Pharmacology & Pharmacology Education Joint Division Mixer
Student-Postdoc Mixer
WIP into Shape Networking Walk
Diversity Mentoring Breakfast
Closing Reception on Wednesday Evening
Volunteer Service Day

Student-Postdoc Best Abstract Competition
Sunday April 22, 2012
Cash awards to students and postdocs making the best poster presentations

1. Submit an abstract as first author by November 8, 2011 to EB2012
2. Go online to www.aspet.org/awards and select Graduate Student Best Abstract Award, Postdoctoral Scientist Award, or Drug Discovery, Development and Regulatory Affairs Young Investigator Award, as appropriate.
3. Apply online by November 15, 2011 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 4:30 p.m. - 8:00 p.m. on Sunday, April 22.
5. Posters will be judged by judges from the Divisions.
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 “on request”. 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. (WiFi communication will not be available for this session). Access to remote websites must be provided through hardwired Internet Connections.

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.

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 2012 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.
ABSTRACT INFORMATION / USING THE TOPIC CATEGORY LIST

Abstract Deadline:
Tuesday, November 8, 2011
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 33-47 or at www.experimentalbiology.org before submitting your abstract.

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 a minisymposium or featured topic is not necessarily an automatic request for oral presentation. You may request a poster presentation when submitting to a minisymposium or featured topic.
• AAA hybrid symposia and platform sessions (formerly called minisymposia) are only oral presentations. Abstracts not selected will be programmed as posters.

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 23, 2012 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.
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 2012 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: exec@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
Email: meetings@asbmb.org

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

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

American Society for Pharmacology and Experimental Therapeutics (ASPET)
Phone: 301-634-7066; Fax: 301-634-7061
Email: araptakis@aspet.org

wwwperimentalbiology.org
AAA invites you to submit an abstract for a hybrid symposium, platform, or poster session. A hybrid symposium includes two invited talks and four 15-minute oral presentations selected from abstracts; a platform session includes 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.

Review the list of topics below & decide where your work fits in. You may select either a broad category or a more specific subcategory. AAA platform & hybrid talks will be selected from the submitted abstracts. You may also submit more than one abstract. Go to www.experimentalbiology.org to submit your abstract, register for the meeting, and book your hotel.

7000-AAA.. Anatomy
7001-AAA......Anatomy: Animal Models
7002-AAA......Anatomy: Bones Cartilage & Teeth
7003-AAA......Anatomy: Cardiovascular
7004-AAA......Anatomy: Form & Variation
7005-AAA......Anatomy: Functional Anatomy & Biomechanics
7006-AAA......Anatomy: Gastrointestinal
7007-AAA......Anatomy: Muscle
7008-AAA......Anatomy: Neural
7009-AAA......Anatomy: Tendons & Ligaments
7010-AAA......Anatomy: Urogenital

7011-AAA.. Anatomy Education **
7012-AAA......Anatomy Education: Assessment, Curriculum & Mentoring **
7013-AAA......Anatomy Education: Clinical Based Approaches **
7014-AAA......Anatomy Education: Computer-Assisted Learning **
7015-AAA......Anatomy Education: Teaching Methods & Innovations **
7016-AAA......Anatomy Education: Undergraduate **

7017-AAA.. Biological Anthropology
7018-AAA.. Bones, Cartilage & Teeth
7019-AAA......Bones, Cartilage & Teeth: Anatomy & Morphology
7020-AAA......Bones, Cartilage & Teeth: Craniofacial
7021-AAA......Bones, Cartilage & Teeth: Development
7022-AAA......Bones, Cartilage & Teeth: Evolution & Anthropology
7023-AAA......Bones, Cartilage & Teeth: Exercise, Biomechanics; Bioengineering
7024-AAA......Bones, Cartilage & Teeth: Molecular Mechanisms

7025-AAA.. Cardiovascular Biology
7026-AAA......Cardiovascular Biology: Aging
7027-AAA......Cardiovascular Biology: Anatomy & Morphology
7028-AAA......Cardiovascular Biology: Angiogenesis; Lymphangiogenesis; Vasculogenesis
7029-AAA......Cardiovascular Biology: Biomechanics; Bioengineering
7030-AAA......Cardiovascular Biology: Dysfunction; Disease; Genetic Disorders
7031-AAA......Cardiovascular Biology: Heart Development & Growth
7032-AAA......Cardiovascular Biology: Imaging
7033-AAA......Cardiovascular Biology: Sex & Gender Related Differences
7034-AAA......Cardiovascular Biology: Stem Cells, Cell & Molecular Biology

7035-AAA.. Cell Biology
7036-AAA......Cell Biology: Membranes & Cytoskeleton
7037-AAA......Cell Biology: Signaling & Molecular Biology
7038-AAA......Cell Biology: Organelles

7039-AAA.. Development & Growth
7040-AAA......Development & Growth: Birth Defects
7041-AAA......Development & Growth: Craniofacial
7042-AAA......Development & Growth: Limbs
7043-AAA......Development & Growth: Neural Crest & Placodes
7044-AAA......Development & Growth: Patterning
7045-AAA......Development & Growth: Reproduction
7046-AAA......Development & Growth: Gene & Protein Expression

7047-AAA.. Extracellular Matrix

7048-AAA.. Imaging
7049-AAA......Imaging: Anatomy
7050-AAA......Imaging: Functional Imaging
7051-AAA......Imaging: Technology & Methods
7052-AAA......Imaging: Computational Biology

7053-AAA.. Muscle
7054-AAA......Muscle: Biomechanics & Exercise
7055-AAA......Muscle: Development
7056-AAA......Muscle: Stem Cells & Regeneration

7057-AAA.. Neurobiology
7058-AAA......Neurobiology: Behavior; Neuropsychiatric Disorders; Disease; Aging
7059-AAA......Neurobiology: Brain
7060-AAA......Neurobiology: Development
7061-AAA......Neurobiology: Neural Cell Biology
7062-AAA......Neurobiology: Neuronal & Spinal Cord Degeneration, Repair & Regeneration
7063-AAA......Neurobiology: Neuroprotection & Neuroimmunology
7064-AAA.. Regenerative Medicine
7065-AAA.....Regenerative Medicine: Organ & Tissue Regeneration
7066-AAA.....Regenerative Medicine: Stem Cells
7067-AAA.....Regenerative Medicine: Tissue Engineering

7068-AAA.. Stem Cells
7069-AAA.....Stem Cells: Aging & Disease
7070-AAA.....Stem Cells: Muscle
7071-AAA.....Stem Cells: Wound Healing & Tissue Repair

7072-AAA.. Regulatory RNA
7073-AAA.. Bioengineering
7074-AAA.. Wound Healing

Hybrid & Platform Topics
7075-AAA.....Anatomy Education- Pedagogy
7076-AAA.....Epigenetics and Regulatory RNAs
7077-AAA.....Muscles and Bones: Evolution & Development
7078-AAA.....Form, Function and Evolution
7079-AAA.....Epigenetic Plasticity in Health and Disease
7080-AAA.....Bioengineering Principles during Development
7081-AAA.....Global Positioning Systems Guide Neuronal Migration and Synapse Formation
7082-AAA.....Teaching Innovations in Anatomy **

** “Teaching Innovations in Anatomy” is an AAA platform session with ORAL presentations. If you prefer to do a poster presentation, consider one of the Anatomy Education topics listed (#7011-7016) or one of the EB teaching sessions (see page 31).
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......Communication between Cardiac Cells and the Extracellular Matrix (Chang/Gardner)
1002-APS......Diabetic Cardiovascular Dysfunction: ROS-Dependent and -Independent Causes and Complications (Wold/Meszaros)
1003-APS......Emerging Paradigms in Microvascular Signaling (Straub/Westcott)
1004-APS......Leptin: Metabolic, Cardiovascular and Immune Control. Does it All Come from the Brain? (Belin de Chantemele/Lob)
1005-APS......Microvascular Permeability: Paracellular versus Transcellular Transport (Lominadze/O’Donnell)
1006-APS......Novel Regulators of Cardiac Fibroblast Function and Fate (Czubryt)
1007-APS......Targeted Proteomic Analyses of Heart Failure (Ping/Lindsey)
1008-APS......Angiogenesis and vascular growth
1009-APS......Blood pressure regulation
1010-APS......Cardiac electrophysiology
1011-APS......Cardiac function and dynamics
1012-APS......Cerebral circulation
1013-APS......Coronary circulation
1014-APS......Diabetes and insulin resistance
1015-APS......Endothelial cell biology
1016-APS......Extracellular matrix and cardiac remodeling
1017-APS......Free radical signaling, oxidant stress, and injury
1018-APS......Gene expression and cardiovascular function
1019-APS......Genetic models of cardiovascular function
1020-APS......Hypertension
1021-APS......Lipid metabolism
1022-APS......Microcirculation
1023-APS......Myocardial ischemia/myocardial metabolism
1024-APS......Nitric oxide/carbon monoxide/vasoactive molecules
1025-APS......Peripheral circulation
1026-APS......Shock
1027-APS......Vascular pathobiology
1028-APS......Vascular smooth muscle

The Microcirculatory Society

POSTERS:
1031-APS......Angiogenesis/microvascular remodeling/injury & repair
1032-APS......Atherosclerosis/thrombosis/platelets
1033-APS......Diabetes and insulin resistance
1034-APS......Endothelial cell biology
1035-APS......Gene expression and cardiovascular function
1036-APS......Hypertension
1037-APS......Microcirculation
1038-APS......Myocardial ischemia/myocardial metabolism
1039-APS......Nitric oxide/carbon monoxide/vasoactive molecules
1040-APS......Peripheral circulation
1041-APS......Shock
1042-APS......Vascular pathobiology
1043-APS......Vascular smooth muscle

Biomedical Engineering Society

POSTERS:
1048-APS......Biomaterials
1049-APS......Cell adhesion and migration in cancer
1050-APS......Cell mechanics
1051-APS......Mathematical models of organ systems, tissues or cells
1052-APS......Mechanobiology
1053-APS......New approaches to biomedical data analysis
1054-APS......New approaches to biomedical experimentation
1055-APS......Regenerative medicine
1056-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)

1057-APS......Ion Channels (TBD)
1058-APS......Ubiquitination and Deubiquitination of Ion Channels and Transporters (Hamilton/Balut)

POSTERS:
1059-APS......Apoptosis and cell death
1060-APS......ATPase-driven ion pumps
1061-APS......Cell volume, osmoregulation and water transport
1062-APS......Cellular signalling: second messengers, extracellular matrix, cell-cell interaction, kinases
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)

1068-APS.....Consequences of Chronic Intermittent Hypoxia
             (Schreihofer/Toney)
1069-APS.....Sympathetic Disregulation in Obesity (Sartor/Stocker)

POSTERS:
1070-APS.....Cognition and behavior
1071-APS.....Blood-brain barrier, brain blood flow and metabolism
1072-APS.....Brain development and aging
1073-APS.....Neuroinflammation/neuroprotection/ischemia
1074-APS.....Neurodegenerative and neurotoxic disorders
1075-APS.....Neuroendocrinology/neuroimmunology
1076-APS.....Neuronal excitability (ion channels, transporters)
1077-APS.....Neuroplasticity
1078-APS.....Neurotransmission and signaling molecules
1079-APS.....Central nervous system: other
1080-APS.....Central regulation of food intake and body weight
1081-APS.....Central regulatory systems

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)

1082-APS.....Laboratory Selection and the Evolution of Physiological Traits (Garland)
1083-APS.....Mitochondrial Bioenergetics in Comparative and Integrative Physiology (Jastroch)
1221-APS.....Sodium Water Homeostasis: Genetic and Comparative Models (Pannebecker/Hyndman)

POSTERS:
1084-APS.....Comparative cardiovascular and respiratory physiology
1085-APS.....Comparative metabolic physiology, biochemistry and endocrinology
1086-APS.....Comparative muscle physiology, locomotion and behavior
1087-APS.....Comparative osmotic, ionic, and acid-base regulation
1088-APS.....Other comparative and evolutionary physiology
1089-APS.....Scholander award competition

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)

1090-APS.....Exercise/nutrition and Muscle Protein Synthesis
             (Riechman)
1091-APS.....Mitochondrial Function (Crozier)

POSTERS:
1092-APS.....Cardiovascular endocrinology, including renin-angiotensin-aldosterone
1093-APS.....Gestation, fetal, and neonatal biology, including mammary gland and lactation
1094-APS.....Growth, connective tissue and bone metabolism
1095-APS.....Immunoenocrinology
1096-APS.....Insulin, glucagon and other pancreatic hormones
1097-APS.....Lipid, lipoprotein and cholesterol metabolism
1098-APS.....Neuroendocrinology, hypothalamus and pituitary
1099-APS.....Obesity and satiety
1100-APS.....Protein, amino acid and carbohydrate metabolism
1101-APS.....Reproduction and sex hormones
1102-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)

1103-APS.....Anabolic Resistance to Exercise with Aging or Disease
             (Flueky/Bodine)
1104-APS.....The Lethality of Trauma: New Insights into the Physiology of Hemorrhage (Convertino)
1105-APS.....Thermal Physiology: From Acute Responses to Protective Adaptation (Minson)

POSTERS:
1106-APS.....Altitude and hypoxia
1107-APS.....Cardiovascular responses to exercise
1108-APS.....Circadian and biological timekeeping
1109-APS.....Diving and hyperbaria
1110-APS.....Exercise metabolism and locomotion
1111-APS.....Exercise responses and training
1112-APS.....Fever and hypothermia
1113-APS.....Gravitational and space
1114-APS.....Metabolism in muscle
1115-APS.....Muscle plasticity and gene regulation/pseudogenes
1116-APS.....Neural control of the circulation during exercise
1117-APS.....Physiological adaptations to inactivity
1118-APS.....Respiratory responses to exercise
1119-APS.....Signaling in muscle
1120-APS.....Temperature regulation and fluid balance

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)

1121-APS.....Regulation of Transporters and Modulatory Proteins, Lipids, and Hormones (TBD)
1122-APS.....Regulation of Water and Ion Channels and Modulatory Proteins, Lipids, and Hormones (TBD)

POSTERS:
1123-APS.....Epithelial development, polarity, differentiation
1124-APS.....Transporters and modulatory proteins, lipids and hormones
1125-APS.....Water and ion channels and modulatory proteins, lipids, and hormones
1126-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)

1127-APS.....Intestinal Solute Transport in Inflammation (Eckmann)
1128-APS.....Gastrointestinal Physiology and the Microbiome (Worrell/Carney)
POSTERS:
1129-APS......Alcoholic and nonalcoholic fatty liver diseases
1130-APS......Barrier function and repair
1131-APS......Gastrointestinal cancer and metastasis
1132-APS......Gastrointestinal development
1133-APS......Gastrointestinal motility
1134-APS......Gastrointestinal nutrient sensors
1135-APS......GI and liver stem cells
1136-APS......GI hormones, peptides and receptors
1137-APS......Growth factors, proliferation, differentiation and
apoptosis
1138-APS......Hepcidin and iron homeostasis
1139-APS......Immunology and microbiology of the gut
1140-APS......Intestinal inflammation and pathophysiology
1141-APS......Liver physiology and pathophysiology
1142-APS......Mechanisms of intestinal nutrient, water and electrolyte
transport
1143-APS......Membrane trafficking and secretion in digestive epithelia
1144-APS......Metal ion transport
1145-APS......Nuclear receptors in the liver and GI tract
1146-APS......Pancreatic physiology and pathophysiology

History of Physiology Group
POSTERS:
1147-APS......History of Physiology

Hypoxia Group
FEATURED TOPICS:
(NO: if selected for inclusion in a featured topic, abstracts will be
presented twice: once as a poster and once in the oral session)
1148-APS......Compensatory Responses to Actue or Chronic Hypoxia
Exposure (Schrage)

POSTERS:
1149-APS......Altitude
1150-APS......Carotid body
1151-APS......Hypoxia-induced gene expression
1152-APS......Hypoxia/transmitters and second messengers
1153-APS......Hypoxic pulmonary vasoconstriction
1154-APS......Intermittent hypoxia/oxidative stress
1155-APS......Ion channels
1156-APS......Oxygen sensing and signal transduction

Muscle Biology Group
FEATURED TOPICS:
(NO: if selected for inclusion in a featured topic, abstracts will be
presented twice: once as a poster and once in the oral session)
1157-APS......Bone-Muscle Crosstalk (Brotto/Johnson)
1158-APS......Mechanical Muscle Damage: Is Titin the Giant, or is the
Z-line Samson? (Myburgh)

POSTERS:
1159-APS......Aging and muscle function
1160-APS......Calcium and muscle contractility
1161-APS......Calcium homeostasis
1162-APS......Cardiac muscle, physiology
1163-APS......Contractile and regulatory proteins
1164-APS......Excitation-contraction coupling mechanisms
1165-APS......Heat shock proteins and muscle function
1166-APS......Muscle chemistry and metabolism
1167-APS......Skeletal muscle, physiology
1168-APS......Smooth muscle, physiology/pharmacology

Neural Control & Autonomic Regulation Section
FEATURED TOPICS:
(NO: if selected for inclusion in a featured topic, abstracts will be
presented twice: once as a poster and once in the oral session)
1169-APS......Autonomic Control of Visceral Functions (Travagli)
1170-APS......Molecular Sensors in Afferents Neurons that Contribute
to Pain, Fatigue, and Activation of Autonomic Reflexes
in Health and Disease (Benson)
1171-APS......NCAR Trainee Featured Topic (Carter)
1172-APS......Neurovascular Responses to Aging and Disease:
Adaptations and Interventions (Schrage)

POSTERS:
1173-APS......Central autonomic regulation
1174-APS......Neural control of cardiopulmonary function
1175-APS......Neural control of cardiovascular function
1176-APS......Neural control of visceral and metabolic function
1177-APS......Neural mechanisms in cardiovascular disease

Physiological Genomics Group
FEATURED TOPICS:
(NO: if selected for inclusion in a featured topic, abstracts will be
presented twice: once as a poster and once in the oral session)
1178-APS......Translational Biomarkers of Hypertension: Insights from
Animal Models (Joe)

POSTERS:
1179-APS......Biomarkers, stem cells, and personalized medicine
1180-APS......Genomics, genetics, and gene expression
1181-APS......microRNA (miRNA), siRNA, and other regulatory RNA
1182-APS......Novel technologies in physiology and genomics
1183-APS......Physiological genomics of exercise, respiration, and
skeletal muscles
1184-APS......Physiological genomics of nutrition, endocrine,
metabolism, and the gastrointestinal system
1185-APS......Physiological genomics of the cardiovascular and renal
systems
1186-APS......Physiological genomics of the nervous system
1187-APS......Systems biology, computational modeling, and
bioinformatics
1188-APS......Transcriptomics, proteomics, and metabolomics

Renal Section
FEATURED TOPICS:
(NO: if selected for inclusion in a featured topic, abstracts will be
presented twice: once as a poster and once in the oral session)
1189-APS......Regulation of Transport Proteins in Kidney Intercalated
Cells (Pastor-Soler/Petrovic)

POSTERS:
1190-APS......Diabetic renal disease
1191-APS......Hormone and autacoid effects on the kidney
1192-APS......Oxidative stress and the kidney
1193-APS......Renal epithelial acid-base mechanisms
1194-APS......Renal hemodynamics and glomerular filtration rate
1195-APS......Renal ion transport, trafficking, and regulation
1196-APS......Renal organic solute transport
1197-APS......Renal pathology, toxicology, and cystic diseases
1198-APS......Renal water transport, urea transport, and
countercurrent mechanisms
1199-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)

1200-APS......Cell-Cell and Cell-Matrix Adhesions in Control of Lung Fluid Balance and Innate Immunity: Talking is Critical! (Birukov/Mehta)
1201-APS......Development of the Control of Breathing (Bailey/Bavis)
1202-APS......Lung Ion Channels and Fluid Homeostasis (Matalon/Kuebler)
1203-APS......Respiratory Pattern Variability: Insights into Respiratory Control Mechanisms in Health and Disease (Dick)

POSTERS:
1204-APS......Control of breathing: connectivity, neuromodulation and neurotransmission
1205-APS......Control of breathing: chemoreception
1206-APS......Control of breathing: development
1207-APS......Control of breathing: integrated responses
1208-APS......Control of breathing: respiratory motoneurons and muscles
1209-APS......Control of breathing: rhythm generation
1210-APS......Lung physiology: airway epithelial cell biology
1211-APS......Lung physiology: airway responsiveness and smooth muscle cell biology
1212-APS......Lung physiology: alveolar epithelial cell biology
1213-APS......Lung physiology: biomechanics, surfactant and gas exchange
1214-APS......Lung physiology: development and plasticity
1215-APS......Lung physiology: endothelial cell biology
1216-APS......Lung physiology: fluid balance
1217-APS......Lung physiology: pulmonary hypertension
1218-APS......Lung physiology: vascular smooth muscle cell biology and vascular regulation

Teaching of Physiology Section

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

1219-APS......Innovative Use of Technology for Teaching and Student Assessment in Physiology (Gopalan)

POSTERS:
EB-wide Teaching Topic Categories

8100-EB......Computers in research and teaching
8200-EB......Teaching, learning and testing in the biological and biomedical sciences

Translational Physiology Group

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

1220-APS......Translational Physiology

Water & Electrolyte Homeostasis Section

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

1221-APS......Hypertension: Mechanisms and Consequences (Moreno-Quinn)
1222-APS......Immune Cells and Their Role in the Regulation of Blood Pressure and Sodium Homeostasis (TBD)
1223-APS......Origins of Impaired Cardiovascular-Renal Function and Body Fluid Balance (Nishimura)
1224-APS......Sodium Water Homeostasis: Genetic and Comparative Models (Pannebecker/Hyndman)

POSTERS:
1225-APS......Blood pressure and fluid volume regulation in pregnancy and developmental programming
1226-APS......Developmental programming and cardio-renal function in adults
1227-APS......Cardiovascular and renal mechanisms in obesity and diabetes
1228-APS......Inflammatory mediators in regulation of blood pressure and renal function
1229-APS......Neurohumoral mechanisms of blood pressure regulation
1230-APS......Renin-angiotensin-aldosterone system in regulation of blood pressure and renal function
1231-APS......Sex differences in blood pressure and fluid volume homeostasis
1232-APS......Novel regulatory mechanisms in blood pressure control
1233-APS......Water and electrolyte homeostasis: pathophysiology and physiology

For more information on member benefits, award opportunities, abstract submissions, publications, committee activities and special events at EB 2012, visit our website at www.the-aps.org.
ASBMB topic categories are grouped by the program’s scientific themes. Bolded topics following any of the twelve “Theme” headers represent platform sessions with the same title.

Short talks will be selected from the volunteered abstracts.

ASBMB abstracts will be judged for Thematic Best Poster honors with cash prizes.

Applying for an ASBMB travel award? Your abstract must be submitted to an ASBMB topic category (2000-2432) to qualify. A complete set of guidelines is available at www.asbmb.org/meeting2012

Genome Dynamics

GENE REGULATION THEME
2000 ...... Fundamental Mechanisms in Gene Regulation
2001 ...... Gene Regulation During Growth and Development
2002 ...... Histone Modifications and their Recognition
2003 ...... Interplay Between Chromatin Structure and the Transcription Machinery
2004 ...... Changes in Chromatin during Gene Activation
2005 ...... Chromatin Architecture and Assembly
2006 ...... Chromatin Changes in Development
2007 ...... Chromatin Remodeling
2008 ...... Crosstalk among Various Histone and DNA Modifications
2009 ...... Dynamics of Transcription
2010 ...... Dysregulation of Gene Expression in Disease
2011 ...... Genomic Approaches to Studying Chromatin Structure and Gene Regulation
2012 ...... Higher Order and Alternative Chromatin Structures
2013 ...... Histone Variants and Their Roles
2014 ...... Imaging Gene Expression In Vivo
2015 ...... Mechanisms of Inheritance of Histone Modifications
2016 ...... Methyloes (Methylation of Histones and Non-histone Proteins Involved in Gene Expression)
2017 ...... Molecular and Structural Basis for the Recognition of Combinatorial Histone Modifications
2018 ...... Non-coding RNAs in Gene Regulation and Chromosome Structure
2019 ...... Nucleosome Structure and Dynamics
2020 ...... Regulation and Modification of Transcription Factors
2021 ...... Regulation of Transcription by Signal Transduction
2022 ...... RNA Polymerase Pausing and Elongation
2023 ...... RNA Polymerase Structure
2024 ...... Signaling to the Nucleus
2025 ...... Transcriptional Assemblies and Mechanisms
2026 ...... Transcriptional Initiation
2027 ...... Transcriptional Regulation
2028 ...... Transcriptional Regulation and Epigenetics

DNA REPLICATION, RECOMBINATION, REPAIR THEME
2030 ...... Coupling of DNA Repair and Replication
2031 ...... Mechanism and Regulation of DNA Repair
2032 ...... Mechanism of DNA Replication
2033 ...... Telomeres and Telomerases
2034 ...... Cell Cycle Regulation
2035 ...... Chromosome End Protection
2036 ...... Chromosome Segregation
2037 ...... DNA Damage Response
2038 ...... DNA Damage Signaling Pathways
2039 ...... DNA Protein Interactions
2040 ...... DNA Repair Mechanisms
2041 ...... DNA Replication Mechanisms
2042 ...... DNA Replication Origins
2043 ...... Genome Rearrangements /Chromosomal Instability
2044 ...... Homologous Recombination
2045 ...... Meiosis
2046 ...... Mutagenesis
2047 ...... Replicases and Repilosomes
2048 ...... Replication Fork Dynamics
2049 ...... Replication Initiation and Termination
2050 ...... Site Specific Recombination/Transposases
2051 ...... Telomerase
2052 ...... Telomere Length Regulation
2053 ...... Telomere Structure
2054 ...... Translesion Synthesis
2055 ...... Transposition

2060 ...... DNA
2061 ...... DNA Structure
2062 ...... Probes of DNA Conformation

RNA THEME
2070 ...... Ribosomes: Regulation of Access to mRNA
2071 ...... RNA-Based Regulation: A Diversity of Mechanisms
2072 ...... RNA Dynamics: Function Follows Folding
2073 ...... The Spliceosome: Fitting the Pieces Together
2074 ...... 3’ End Formation
2075 ...... Catalytic RNA
2076 ...... Coordinating Transcription with RNA Processing
2077 ...... Molecular Recognition and Enzymology of RNA
2078 ...... Molecular Recognition of RNA
2079 ...... Non-coding RNAs
2080 ...... Ribonucleoproteins

www.experimentalbiology.org
2081 ......Riboregulation
2082 ......Riboswitches
2083 ......RNA and Disease
2084 ......RNA Editing and Modification
2085 ......RNA Folding
2086 ......RNA Modification: Mechanism and Function
2087 ......RNA Processing
2088 ......RNA Splicing
2089 ......RNA Structure and Dynamics
2090 ......RNA Structure and Translation
2091 ......RNA Structure, Function and Regulation
2092 ......RNA Transport and Localization
2093 ......RNA Turnover
2094 ......RNA-Based Gene Regulation
2095 ......Small RNAs

Molecular Structure and Dynamics

PROTEIN SYNTHESIS, TARGETING AND QUALITY CONTROL THEME
2100 ......Factors Modulating Protein Quality Control
2101 ......Protein Quality Control and Disease
2102 ......Protein Targeting and Translocation
2103 ......The Ribosome and Early Folding Decisions
2104 ......ADAMS and Other Proteases
2105 ......Autophagy Pathway
2106 ......Genetic Studies of Protein Synthesis
2107 ......Mechanisms of Protein Synthesis
2108 ......Molecular Chaperones: Mechanism and Function
2109 ......Protease: Structure and Regulation
2110 ......Proteases in Disease
2111 ......Proteasomes: Structure and Regulation
2112 ......Protein Aggregation and Amyloid Diseases
2113 ......Protein Folding and Misfolding
2114 ......Protein Synthesis in Organelles
2115 ......Co- and Post-translational Protein Targeting
2116 ......Protein Turnover and Quality Control
2117 ......Protein Turnover in Cell Regulation
2118 ......Protectolytic Enzymes and Inhibitors (Protein Synthesis)
2119 ......Regulation of Protein Synthesis
2120 ......Ribosome and Translation
2121 ......tRNA Synthetases: Structure, Mechanism and Evolution
2122 ......Ubiquitin Pathway and Proteasome Targeting
2123 ......Ubiquitination in Clearance of Protein Aggregates

CHEMICAL BIOLOGY AND CATALYSIS THEME
2130 ......Chemistry in the Service of Medicine
2131 ......Frontiers in Mechanistic Enzymology
2132 ......Metabolic Engineering: From Antibiotics to Biofuels
2133 ......Metabolomics
2134 ......Biosynthesis of Complex Molecules
2135 ......Chemical Biology of Cell Death
2136 ......Chemical Perspectives in Neurobiology
2137 ......Energetics and Design
2138 ......Enzyme Inhibitors
2139 ......Enzyme Kinetics
2140 ......Enzyme Mechanism
2141 ......Enzymes as Drug Targets
2142 ......Macromolecular Folding and Fluctuations
2143 ......Multienzyme Complexes
2144 ......Nucleic Acid- Small Molecule Interactions
2145 ......Photochemical Sensors
2146 ......Protein Interactions in Catalysis
2147 ......Protectolytic Enzymes and Inhibitors (Chemical Biology)
2148 ......Regulation and Allostereism
2149 ......Role of Dynamics in Enzyme Catalysis
2150 ......Small Molecule Control of Protein Folding and Assembly
2151 ......Small Molecule Tools for Biology
2152 ......Structural Enzymology
2153 ......Structural Enzymology of Membrane Proteins

Cell Systems and Metabolism

METABOLISM AND DISEASE THEME
2160 ......Aging Metabolism
2161 ......Cancer Cell Metabolism
2162 ......Organismal Metabolism
2163 ......Signaling and Metabolism
2164 ......Genetic and Metabolic Approaches to Obesity
2165 ......Metabolic Networks
2166 ......Metabolic Regulation
2167 ......Metabolism and Cancer
2168 ......Metabolism and Diabetes
2169 ......Metabolism and Neurodegeneration
2170 ......Metabolism and Nutrition
2171 ......Mitochondria in Health and Disease
2172 ......Nuclear Receptors in Metabolic Syndromes

OBESITY
2180 ......OBESITY
2181 ......Enzymes, Hormones and Obesity
2182 ......Frontiers in Obesity Research
2183 ......Treatment, Prevention and Complications of Obesity
2184 ......Disparities in Obesity
2185 ......Obesity and the Metabolic Syndrome

SYSTEMS BIOLOGY THEME
2190 ......Constructing Networks
2191 ......Networks and Noise
2192 ......Networks and Space
2193 ......Networks and Time
2194 ......Biophysics
2195 ......Genomics
2196 ......High-Content Microscopy
2197 ......Proteomics
2198 ......Quantitative Biology
2199 ......Synthetic Biology

PROTEOMICS AND BIOINFORMATIC
2200 ......PROTEOMICS AND BIOINFORMATIC
2201 ......Global Analysis of Protein Function
2202 ......Protein Profiling in Normal and Disease States
2203 ......Genomics
2204 ......Proteomics and Bioinformatics
2205 ......Toxicogenomics
2206 ......Computational Approaches in Systems Biology
2207 ......Surface Plasmon Resonance
2208 ......Functional Proteomic Studies

METHODS
2210 ......METHODS
2211 ......Biophysical Methods
2212 ......Mass Spectroscopy
2213 ......Nanotechnology
2214 ......Protein Chemistry
2215 ......Electrophoresis
2216 ......New Molecular and Cellular Imaging Agents
2217 ......Recombinant DNA Technology

ORGANELLE DYNAMICS THEME
2220 ......Endomembrane System Dynamics
2221 ......Mitochondrial Dynamics
2222 ......Organelle Quality Control
2223 ......Organization of the Secretory Pathway
2224 ......Cargo Sorting and Vesicle Targeting
2225 ......Cell Division
2226 ......Cell Migration
2227 ......Diseases of Organelle Misfunction
2228 ..... Golgi Structure and Biogenesis
2229 ..... Intracellular Dynamics
2230 ..... Membrane Biogenesis
2231 ..... Membrane Transport
2232 ..... Mitochondrial Genetic Diseases
2233 ..... Mitochondrial Toxicity
2234 ..... Nuclear Dynamics
2235 ..... Organelle Biogenesis
2236 ..... Organelle Evolution

2240 ..... BIOENERGETICS
2241 ..... Cytochrome P450
2242 ..... Flavoproteins
2243 ..... Oxidative Phosphorylation

2250 ..... CELL CYCLE
2251 ..... Cell Cycle and Growth Control
2252 ..... Checkpoint Mechanisms
2253 ..... Cyclins and Cyclin-Dependent Kinases

2260 ..... CHROMOSOMES
2261 ..... Centromeres and Kinetochores
2262 ..... Chromosome Segregation and Aneuploidy
2263 ..... Cohesion/Chromosome Condensation
2264 ..... Mitotic Spindle
2265 ..... Spindle Checkpoint

Signaling

LIPID AND LIPID SIGNALING THEME
2270 ..... Lipid Droplets: A Dynamic Subcellular Compartment
2271 ..... Lipid Regulation of Protein Function
2272 ..... Lipid Signaling, Infection and Atherosclerosis
2273 ..... Metabolic Branchpoints/Lipid Channeling
2274 ..... Chemical Probes of Lipid Systems
2275 ..... Endocannabinoid Metabolism and Signaling
2276 ..... Enzymes of Lipid Metabolism
2277 ..... Genetic Models of Lipid Metabolism
2278 ..... Lipid Droplet Dynamics
2279 ..... Lipid Mobilization, Lipases and Lipid Transport Proteins
2280 ..... Lipid Second Messengers
2281 ..... Lipid Signaling
2282 ..... Lipid Storage
2283 ..... Lipid Trafficking
2284 ..... Lipidomics
2285 ..... Lipids and Control of Gene Expression
2286 ..... Lipids and Inflammation
2287 ..... Lipids in Pathogenic Processes
2288 ..... Nuclear Lipid Signaling
2289 ..... Pharmacological Targets in Lipid Metabolism
2290 ..... Phosphatidylinositol Signaling
2291 ..... Protein-Lipid Interactions
2292 ..... Regulation of Lipid Metabolism
2293 ..... Structural Biology and Mechanisms of Membrane Lipid Assembly
2294 ..... Tissue-Specific Regulation of Lipid Metabolism

GLYCIOBIOLOGY THEME
2300 ..... Glycoconjugates in Pathogen Invasion and Virulence
2301 ..... Novel Metabolic Routes of Glycoconjugate Assembly
2302 ..... Roles of Glycoconjugates in Metabolism and Disease
2303 ..... Role of Glycoconjugates in Signaling and Development
2304 ..... Extracellular Matrix Glycobiology
2305 ..... Glycans in Pathogenic Protozoa
2306 ..... Glycomics
2307 ..... Immune System Glycobiology
2308 ..... Nervous System Glycobiology
2309 ..... Plant and Fungal Cell Wall Glycoconjugates
2310 ..... Protein-Carbohydrate Recognition
2311 ..... Structural Analysis of Glycoconjugates

2320 ..... STRUCTURE, FUNCTION and BIOGENESIS OF CELL MEMBRANES
2321 ..... Lipid Domains and Lipid Rafts
2322 ..... Membrane Protein Synthesis, Insertion and Assembly
2323 ..... Protein-Lipid Interactions As Determinants of Function
2324 ..... Structure and Function of Transport Proteins and Channels
2325 ..... Vesicular Trafficking

2330 ..... SIGNAL TRANSDUCTION
2331 ..... Apoptosis and Cell Stress
2332 ..... Biochemical Pharmacology
2333 ..... Caspases
2334 ..... Cell Proliferation
2335 ..... Cytokine and Growth Factor Signaling
2336 ..... DNA Damage Signaling
2337 ..... G Proteins and Protein Kinases
2338 ..... GTPases
2339 ..... Hormone Receptors
2340 ..... Integration and Organization of Signaling Pathways
2341 ..... Neurobiology
2342 ..... Peptide Hormones
2343 ..... Signaling in Bacterial Receptor Systems
2344 ..... Signaling in Disease and Therapy
2345 ..... Signaling to the Cytoskeleton
2346 ..... Toxins

2350 ..... PROTEIN PHOSPHORYLATION AND DEPHOSPHORYLATION
2351 ..... Adapter Proteins
2352 ..... Kinase Cascades
2353 ..... MAP Kinases
2354 ..... Phosphatases
2355 ..... Receptor Tyrosine Kinase Signaling to Nucleus
2356 ..... Serine/Threonine Kinase
2357 ..... Small GTPases
2358 ..... Tyrosine Kinases

2360 ..... SECOND MESSENGERS
2361 ..... Calcium
2362 ..... Cyclasses
2363 ..... Cyclic AMP
2364 ..... Cyclic GMP
2365 ..... Inositol Phosphates and Phosphoinositides
2366 ..... Nitric Oxide
2367 ..... Other Lipid Second Messengers
2368 ..... Phosphodiesterases
2369 ..... Signaling Crosstalk

Chemical Biology

DRUG DEVELOPMENT THEME
2370 ..... Drug Development and Apoptosis: Linking Tumor Regression to Cell Death
2371 ..... New Methodologies for Target Discovery and Target Validation
2372 ..... Targeted Cancer Drug Development: Defining Molecular Profiles of Sensitivity
2373 ..... Chemical Probes and Their Use in Identifying New Therapeutic Targets
2374 ..... Chemistry and Cell Biology of Natural Products
2375 ..... High Content Approaches
2376 ..... Membrane Proteins as Drug Targets
2377 ..... Mode of Action of Bioactive Natural Products
2378 ..... New Targets for Drug Discovery: Antibacterials
2379 ...... New Targets for Drug Discovery: Nuclear Hormone Receptors
2380 ...... Pharmacogenomics
2381 ...... Polypharmacology and Drug Repurposing
2382 ...... Protein-Small Molecule Interactions
2383 ...... Target Identification and Pathway Mining
2384 ...... Molecular Parasitology
2390 ...... PLANT BIOCHEMISTRY

TUBERCULOSIS THEME
2400 ...... Biochemical Mediators of the Host-Pathogen Interaction
2401 ...... In vivo Biochemistry of the Pathogen
2402 ...... Relationship of Host and Pathogen
2403 ...... Biosynthesis of Organic Cofactors in Mycobacteria
2404 ...... Characterization of Mycobacterial Membranes
2405 ...... Drug Design and New Targets for M. tuberculosis
2406 ...... Enzymology of M. tuberculosis Target Proteins
2407 ...... Enzymology of Nucleic Acid Biosynthesis, Modification and Repair
2408 ...... Identification and Characterization of Novel Mycobacterial Lipids
2409 ...... Identification, Characterization, and Biosynthesis of Novel Glycans from Mycobacteria
2410 ...... Metabolism of Mycobacteria

2411 ...... Metabolite Profiling in Mycobacteria
2412 ...... Mycobacterial Fatty Acid Biosynthesis and Metabolism
2413 ...... Structural Biology of Macromolecules from M. tuberculosis
2414 ...... Systems Biology of Mycobacteria
2415 ...... The Cell Biology of Mycobacteria

PREPARING FOR THE FUTURE: MAXIMIZING COMPETITIVENESS DURING CHALLENGING ECONOMIC TIMES THEME
2420 ...... Advantages and Disadvantages of the MD/PhD
2421 ...... Maximizing Institutional Effectiveness
2422 ...... Maximizing Teaching Effectiveness
2423 ...... Maximizing Your Global Outreach
2424 ...... Maximizing Your Marketability
2425 ...... Engaging K-12 Students in Science
2426 ...... Enhancing Undergraduate Research Experiences
2427 ...... Innovative Approaches to STEM Education
2428 ...... Integrating Globalism into the Classroom
2429 ...... Novel Applications of Social Networking to Science Education
2430 ...... Performance Assessment for Teachers and Students
2431 ...... Strategies for Community Outreach and Engagement
2432 ...... Working with Students of Culturally Diverse Backgrounds

For more information on member benefits, award opportunities, abstract submissions, publications, committee activities and special events at EB 2012, visit our website at www.asbmb.org/meeting2012.
TOPIC CATEGORIES – PATHOLOGY

4000-ASIP..PATHOBIOLOGY of AGING
4001-ASIP..... Cell senescence
4002-ASIP..... Biolongevity
4003-ASIP..... Novel genetic and molecular markers of biolongevity
4004-ASIP..... Novel targets in mitochondrial diseases

4005-ASIP..BIOINFORMATICS AND IMAGING
4006-ASIP..... Genome bioinformatics
4007-ASIP..... Computational biology
4008-ASIP..... Bioinformatics for diseases
4009-ASIP..... Imaging Informatics
4100-ASIP..... Advanced cellular imaging in pathology

4011-ASIP..BIOBANKING/BIOREPOSITORIES
4012-ASIP..... QA and QC in repositories
4013-ASIP..... Biobanking Informatics
4014-ASIP..... Legal and ethical challenges in biobanking
4015-ASIP..... Patient advocacy in biobanking
4016-ASIP..... Biospecimen/biomarker science

4017-ASIP..GENETIC DISEASES AND GENE EXPRESSION
4018-ASIP..... Transcription factors in pathobiology
4019-ASIP..... miRNA expression in health and disease
4020-ASIP..... Gene expression studies
4021-ASIP..... Protein translation in disease
4022-ASIP..... Organismal phenotypes of gene alterations

4023-ASIP..CELL ADHESION and CELL SIGNALING
4024-ASIP..... Cell surface receptors and signaling pathways
4025-ASIP..... Chemokines and cytokines

4026-ASIP..EXTRACELLULAR MATRIX IN PATHOLOGY
4027-ASIP..... Extracellular matrix – proteases and remodeling
4028-ASIP..... Extracellular matrix and cell adhesion
4029-ASIP..... Extracellular matrix, integrins and cell signaling pathways

4030-ASIP..CELL DEATH, TISSUE INJURY AND REPAIR
4031-ASIP..... Apoptosis/Necrosis
4032-ASIP..... Autophagy, mechanisms and the role in diseases
4033-ASIP..... Ubiquitin proteasome system and Ubiquitin-like proteins (SUMO, Nedd, others) in disease
4034-ASIP..... Oxidant, genotoxic, metabolic and other types of stress
4035-ASIP..... ER stress in cell death and survival
4036-ASIP..... Role of MMPs, TIMPs, and ECM repair in wound healing
4037-ASIP..... Cellular responses to shear stress, stretch, and mechanical injury

4038-ASIP..... Mitochondrial responses to cellular injury
4039-ASIP..... Ischemia/reperfusion injury
4040-ASIP..... Heat shock proteins in disease
4041-ASIP..... Environmental pathology and toxicology
4042-ASIP..... Exogenous pathogen-associated molecular patterns (PAMPs), Endogenous danger-associated molecular patterns (DAMPs), and their role in local tissue response

4043-ASIP..MUCOSAL INFLAMMATION, EPITHELIAL-LEUKOCYTE INTERACTIONS AND EPITHELIAL PATHOBIOLOGY
4044-ASIP..... Mucosal inflammation and inflammatory mediators
4045-ASIP..... Mucosal-microbial interactions
4046-ASIP..... Microbiota and systemic disease
4047-ASIP..... Regulation of the epithelial barrier and intercellular junctions
4048-ASIP..... Epithelial to mesenchymal transition

4049-ASIP..INFLAMMATION and IMMUNOPATHOLOGY
4050-ASIP..... Allergic diseases
4051-ASIP..... Autoimmune diseases
4052-ASIP..... Microbial pathogenesis
4053-ASIP..... Innate immunity
4054-ASIP..... Innate immunity, TLRs, and pathogen recognition receptors
4055-ASIP..... TLRs, pathogen recognition receptors
4056-ASIP..... Leukocye-endothelial cell interactions
4057-ASIP..... Inflammation and inflammatory mediators
4058-ASIP..... Endothelial-microbial interactions
4059-ASIP..... Sepsis and endotoxin
4060-ASIP..... Transplantation
4061-ASIP..... Inflammation, infection and chronic fatigue/pain syndromes

4062-ASIP..CARDIAC PATHOLOGY
4063-ASIP..... Animal models of heart disease
4064-ASIP..... Cardiac hypertrophy/heart failure
4065-ASIP..... Genetic basis of cardiac disease and development
4066-ASIP..... Cardiac metabolism in health and disease
4067-ASIP..... Pathophysiology of cardiac valve diseases
4068-ASIP..... Ischemic heart disease and cardiac ischemia reperfusion injury
4069-ASIP..... Adenosine monophosphate-activated protein kinase (AMPK) signaling in cardiac disease
4070-ASIP..... Mitochondrial function in the heart
4071-ASIP..... Stem/progenitor cells in cardiac pathology
4072-ASIP.. LIVER PATHOLOGY
4073-ASIP..... Animal models of liver disease
4074-ASIP..... Liver injury
4075-ASIP..... Hepatitis, liver fibrosis and cirrhosis
4076-ASIP..... Liver development
4077-ASIP..... Stem cells and cancer
4078-ASIP..... Liver growth and regeneration
4079-ASIP..... Liver tissue engineering and transplantation
4080-ASIP..... Liver metabolism in health and disease
4081-ASIP..... Signaling in liver health and disease

4082-ASIP.. LUNG PATHOLOGY
4083-ASIP..... Animal models of lung disease
4084-ASIP..... Lung – acute lung injury
4085-ASIP..... Lung – cancer
4086-ASIP..... Lung – infections
4087-ASIP..... Lung – inflammatory, immunologic and fibrosing lung diseases (non-infectious)
4088-ASIP..... Lung – normal development and developmental diseases
4089-ASIP..... Lung – obstructive airway diseases
4090-ASIP..... Lung – pulmonary vascular biology and disorders
4091-ASIP..... Pulmonary stem cells, repair, and regeneration
4092-ASIP..... Lung – environmental diseases
4093-ASIP..... Pleural diseases

4094-ASIP.. NEUROPATHOLOGY
4095-ASIP..... Animal models of neuropathology
4096-ASIP..... Alzheimer’s disease/Parkinson’s disease
4097-ASIP..... Demyelinating diseases
4098-ASIP..... Developmental and other pediatric neuropathology
4099-ASIP..... Disease of peripheral nerve and skeletal muscle
4100-ASIP..... Infectious diseases/neuroinflammation
4101-ASIP..... Neurodegenerative diseases – frontotemporal and Lewy body disorders
4102-ASIP..... Neurodegenerative diseases – other
4103-ASIP..... Neuronal neurogenesis, regeneration, injury and repair; trauma
4104-ASIP..... Stroke/vascular diseases
4105-ASIP..... Toxic/metabolic diseases
4106-ASIP..... Tumors – glial
4107-ASIP..... Tumors -nonglial
4108-ASIP..... Macrophage/microglia

4109-ASIP.. MISCELLANEOUS NON-NEOPLASTIC TISSUE and ORGAN PATHO BIOLOGY
4110-ASIP..... Molecular pathogenesis of genetic disease
4111-ASIP..... Molecular pathogenesis of infectious disease
4112-ASIP..... Stem cells: biology, development and applied
4113-ASIP..... Molecular and bio-markers in non-neoplastic diseases
4114-ASIP..... Diabetes
4115-ASIP..... Endocrine/GU/Gynecologic pathology
4116-ASIP..... Hematopathology
4117-ASIP..... Renal pathology
4118-ASIP..... Skeletal and bone pathology

4119-ASIP..... Miscellaneous tissue and organ pathology
4120-ASIP..... Veterinary pathology
4121-ASIP..... Toxico logic pathology

4122-ASIP.. TRANSLATIONAL RESEARCH
4123-ASIP..... Gene therapy
4124-ASIP..... Cell therapy
4125-ASIP..... New technologies for research and diagnosis
4126-ASIP..... Proteomics
4127-ASIP..... SNPs and genotyping

4128-ASIP.. NEOPLASIA
4129-ASIP..... Dietary and environmental factors in cancer
4130-ASIP..... Epigenetics of cancer
4131-ASIP..... Genetics of cancer
4132-ASIP..... Aberrant signaling in cancer
4133-ASIP..... Developmental pathways in cancer
4134-ASIP..... Cancer stem cells
4135-ASIP..... Biomarkers
4136-ASIP..... Lymphomas/Leukemias
4137-ASIP..... Breast cancer
4138-ASIP..... Cancer biology
4139-ASIP..... Colon cancer
4140-ASIP..... Prostate cancer
4141-ASIP..... Animal cancer models
4142-ASIP..... Molecular targeting for cancer therapeutics
4143-ASIP..... Tumor angiogenesis
4144-ASIP..... Tumor immunology
4145-ASIP..... Genomics
4146-ASIP..... Epigenomics

4147-ASIP.. VASCULAR BIOLOGY AND PATHOLOGY
4148-ASIP..... Angiogenesis and vascular development
4149-ASIP..... Animal models of vascular diseases
4150-ASIP..... Atherosclerosis and restenosis
4151-ASIP..... Endothelial function and response to injury
4152-ASIP..... Extracellular matrix & proteases in vascular biology
4153-ASIP..... Genomics/proteomics in vascular biology and pathology
4154-ASIP..... Hemostasis
4155-ASIP..... Immune system in vascular disease(s)
4156-ASIP..... Lipid mediators and lipoproteins
4157-ASIP..... Mechanosensing and signal transduction in the vessel wall
4158-ASIP..... Neurovascular connections/interactions
4159-ASIP..... Regulation of endothelial junctions
4160-ASIP..... Stem/progenitor cells in vascular biology
4161-ASIP..... Thrombosis and platelets
4162-ASIP..... Vascular calcification
4163-ASIP..... Vascular cell biology & dysfunction in disease
4164-ASIP..... Vascular disease and genetic disorders
4165-ASIP..... Vascular signal transduction
4166-ASIP..... Vascular tissue engineering
4167-ASIP..... Vasoactive molecules

For more information on member benefits, award opportunities, abstract submissions, publications, committee activities and special events at EB 2012, visit our website at www.asip.org.
TOPIC CATEGORIES – NUTRITION

Aging & Chronic Disease
5000 ...... Nutrition and Cognitive and Mental Health in Older Adults
5001 ...... Community Nutrition Programs and Policies for Older Adults
5002 ...... Nutrition Interventions for Risk Factor Modification in Chronic Disease
5003 ...... Nutritional Assessment and Status in Older Populations
5004 ...... Nutrition, Sarcopenia and Physical Performance in Older Adults
5005 ...... Correlates, Consequences and Treatment of Obesity in Older Adults
5006 ...... Osteoporosis and Bone Metabolism in Aging

Community and Public Health Nutrition
5020 ...... Diet, Food Security and Health Promotion in Diverse Communities
5021 ...... Community and Public Health Nutrition Interventions
5022 ...... Community and Public Health Nutrition
5023 ...... Behavioral Economics and Nutrition
5024 ...... The Role of the Food Industry in Community Nutrition Research
5025 ...... Social Equity and Nutrition
5026 ...... Food Safety and Community Food Interventions

CARIG
5030 ...... Carotenoids and Health
5031 ...... Molecular Mechanism of Action
5032 ...... Bioavailability and Metabolism
5033 ...... Eye and Brain Health

Diet and Cancer
5040 ...... Diet and Cancer – Molecular Targets
5041 ...... Diet and Cancer – Animal Studies
5042 ...... Diet and Cancer – Translational, Clinical and Survivorship
5043 ...... Diet and Cancer – Stem Cells
5044 ...... Diet and Cancer – Proteomic Technologies and the Detection of Molecular Targets for Bioactive Food Components

Dietary Bioactive Components
5060 ...... Epidemiologic Associations Between Dietary Bioactive Components and Health
5061 ...... Bioavailability, Metabolism and Biomarkers of Dietary Bioactive Components
5062 ...... Mechanisms of Action and Molecular Targets of Dietary Bioactive Components
5063 ...... Effects of Dietary Bioactive Components on Experimental Models of Chronic Disease Risk
5064 ...... Antioxidant and Anti-inflammatory Effects of Dietary Bioactive Components
5065 ...... Cardiovascular Effects of Dietary Bioactive Components
5066 ...... Systems Biology Approaches to Study Dietary Bioactive Components
5067 ...... Dietary Bioactive Components of Medicinal, Functional and Whole Foods including Probiotics and Fermented Foods.

Energy and Macronutrient Metabolism
5080 ...... Energy Balance, Macronutrients and Weight Management (Co-sponsored with Obesity)
5081 ...... Obesity and the Metabolic Syndrome
5082 ...... Protein and Amino acid Metabolism
5083 ...... Lipid and Fatty Acid Metabolism and Transport
5084 ...... Dietary Factors Affecting Lipid Metabolism
5085 ...... Polysaturated Fatty Acids and Health
5086 ...... Metabolic Phenotyping, Metabolomics and Biomarkers
5087 ...... Carbohydrate Metabolism
5088 ...... Regulation of Food Intake (Co-sponsored with Obesity)

Experimental Animal Nutrition
5100 ...... Companion Animal Nutrition and Physiology
5101 ...... Animal Research Models for Macronutrient Metabolism
5102 ...... Animal Research Models for Nutrient Digestion and Absorption
5103 ...... Animal Research Models for Gut Development and Health
5104 ...... Animal Research Models Investigating Nutrition and Inflammation
5105 ...... Animal Research Models in Nutrition and Musculoskeletal Development

Lactation
5120 ...... Lactation: Biology of Milk Production and Secretion
5121 ...... Milk Bioactive Compounds
5122 ...... Breastfeeding: Determinants of Initiation, Duration and Other Lactation Success Outcomes
5123 ...... Breastfeeding and Human Milk: Effects on the Recipient Infant and/or Lactating Mother

International Nutrition
5140 ...... International Nutrition

Medical Nutrition
5200 ...... Diet-Gene Interactions in the Etiology of Obesity and Weight-Related Comorbidities
5201 ...... Nutrition and the Microbiome
5202 ...... Interventions for the Treatment and Prevention of Nutrition-Related Diseases
5203 ...... Nutrition and Inflammation
Nutrition Immunology
5240 ...... Nutritional Immunology
5240 ...... Immune Modulating Nutraceuticals and Functional Foods

Nutrition Translation
5250 ...... The Use of Consumer Research Insights to Guide Scientific Research
5251 ...... Nutrition Science Translation for Policy, Practice and Consumers
5252 ...... Understanding and Communicating Benefits/Risks of Natural-State Foods (e.g., minimally processed, natural, organic)
5253 ...... Nutrition and Sustainability
5254 ...... Food Related Behaviors – Critical for Food Policy
5255 ...... Nutrition Science Applied Through Food Science for Health
5256 ...... Clinical Support for Novel Food Ingredients
5257 ...... Translation of Nutrition Science to Public Health

Obesity
5260 ...... Redefine Obesity: Body Weight vs. Adiposity
5261 ...... Neuroscience of Food Intake and Obesity: Food Addiction?
5262 ...... Childhood Obesity: When Should We Intervene?
5263 ...... Metabolic Communication and Obesity: Adipokins
5264 ...... Obesity, Inflammation and Chronic Diseases: Modulation by Dietary Phytonutrients
5265 ...... Activity and Obesity: Sitting Disease: Obesity’s True Culprit
5266 ...... Nutrigenomics: Population, Racial/Ethnic Differences

Vitamins and Minerals
5280 ...... Iron, Copper and Chronic Disease
5281 ...... Vitamin D and Obesity – From Cellular to Clinical Trials
5282 ...... Fat Soluble Vitamins and Chronic Disease
5283 ...... Micronutrient Bioavailability
5284 ...... Antioxidant Micronutrients
5285 ...... Water Soluble Vitamins
5286 ...... B Vitamins and One-Carbon Metabolism
5287 ...... Micronutrient Interventions
**TOPIC CATEGORIES – PHARMACOLOGY**

**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** ...... CVP: General
- **3001-ASPET** ...... CVP: Injury/Protection/Remodeling
- **3002-ASPET** ...... CVP: Thrombosis
- **3003-ASPET** ...... Vascular Pharmacology – General
- **3004-ASPET** ...... Vascular Pharmacology – Cerebral/Coronary/Pulmonary
- **3005-ASPET** ...... Vascular Pharmacology – Endothelium
- **3006-ASPET** ...... Vascular Pharmacology – Ion Channels/Exchangers

**Cellular and Molecular Pharmacology**
- **3007-ASPET** ...... Chemotherapy
- **3008-ASPET** ...... Gene Expression/Regulation
- **3009-ASPET** ...... Genomics/Proteomics
- **3010-ASPET** ...... Signal Transduction – General
- **3011-ASPET** ...... Signal Transduction – Cell Surface Receptors
- **3012-ASPET** ...... Signal Transduction – G Proteins/GPCRs
- **3013-ASPET** ...... Signal Transduction – Ion Channels
- **3014-ASPET** ...... Signal Transduction – Kinases/Phosphatases
- **3015-ASPET** ...... Signal Transduction – Second Messenger Systems
- **3016-ASPET** ...... Mechanisms of Cell Injury/Death

**Central Nervous System Pharmacology**
- **3017-ASPET** ...... Behavioral Pharmacology – General
- **3018-ASPET** ...... Drugs of Abuse
- **3019-ASPET** ...... Memory/Cognition/Learning
- **3020-ASPET** ...... Neuropsychopharmacology – General
- **3021-ASPET** ...... Neuropsychiatric Disorders
- **3022-ASPET** ...... Neurotoxicology – General
- **3023-ASPET** ...... Neurotoxicology – Neuroprotective Agents
- **3024-ASPET** ...... Neurotransmission
- **3025-ASPET** ...... Neurotransmitter Receptors

**Drug Metabolism and Disposition (DMD)**
- **3026-ASPET**...... DMD – Biotransformation/Chemistry
- **3027-ASPET**...... DMD – Gene Expression and Regulation
- **3028-ASPET**...... DMD – Pharmacokinetics/Toxicokinetics
- **3029-ASPET**...... DMD – Phase I Enzymes
- **3030-ASPET**...... DMD – Phase II Enzymes
- **3031-ASPET**...... DMD – Reactive Metabolites and Toxicity
- **3032-ASPET**...... DMD – Transporters

**Systems Pharmacology and Toxicology**
- **3033-ASPET** ...... Mechanisms of Toxicity
- **3034-ASPET** ...... Genotoxicity/Mutagenesis
- **3035-ASPET** ...... Developmental Pharmacology/Toxicology
- **3036-ASPET** ...... Targets of Toxicant Sensitivity in Aging
- **3037-ASPET** ...... Gastrointestinal Pharmacology/Toxicology
- **3038-ASPET** ...... General Pharmacology/Toxicology
- **3039-ASPET** ...... Hormones and Hormone Receptors
- **3040-ASPET** ...... Immunopharmacology/Toxicology
- **3041-ASPET** ...... Pulmonary Pharmacology/Toxicology
- **3042-ASPET** ...... Renal Pharmacology/Toxicology
- **3043-ASPET** ...... Skeletal Muscle Pharmacology/Toxicology
- **3044-ASPET** ...... Smooth Muscle Pharmacology/Toxicology
- **3045-ASPET** ...... Pharmacology and Women’s Health
- **3046-ASPET** ...... Integrative Organ Systems Pharmacology
- **3047-ASPET** ...... Regenerative Pharmacology/Stem Cells

**Pharmacogenomics and Translational Pharmacology**
- **3045-ASPET** ...... Pharmacogenomics/Proteomics
- **3046-ASPET** ...... Clinical Pharmacology/Clinical Toxicology
- **3047-ASPET** ...... Drug Discovery, Development and Regulatory Affairs

**Pharmacology – Other**
- **3048-ASPET** ...... Pharmacology – All Other

* For topic categories 8100 and 8200 see page 31.
** Abstracts submitted to this category may be eligible for presentation at the Drug Metabolism Platform Session as well as inclusion in a poster session.

For more information on member benefits, award opportunities, abstract submissions, publications, committee activities and special events at EB 2012, visit our website at www.aspet.org.
REGISTRATION

New this year! Badges will not be mailed in advance. All badges will be distributed on-site.

Register by February 23, 2012 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 only be published online as part of The FASEB Journal. Paper copies will not be available. Registration fees do not include abstract submission fees or membership dues.

You can register as follows:

- **Online at** [www.experimentalbiology.org](http://www.experimentalbiology.org)

- **Mail the PDF form and payment to:**
  - EB 2012 Registration Office
  - 9650 Rockville Pike
  - Bethesda, MD 20814

- **Fax the form to:**
  - 301-634-7008
  - (credit card payments only).

Mailed and faxed registration forms will only be accepted until February 23. Several societies have planned special activities that require a fee in addition to the Experimental Biology 2012 registration fee. Details on the activities and how to register for these activities are included on page 49.

**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 and must pay the full member or nonmember fee.

**Undergraduate Students, High School Students and High School Teachers:** Registration will not be accepted 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 EB 2012. Pre-registration for members of the media and freelance writers is encouraged. A letter of assignment is necessary. Please visit [http://experimentalbiology.org](http://experimentalbiology.org) to view our full press credentials policy. Send your completed request to media@faseb.org.

**U.S. and International Registrants:** You may pick up your badge and Program at the meeting. No materials will be mailed in advance.

**On-site Registration:** On-site registration will be available at the San Diego Convention Center beginning Friday, April 20, continuing through Wednesday, April 25.

**Cancellation and Refunds:** The receipt and a letter requesting a refund of the registration fee must be received by March 23, 2012. A $50 non-refundable processing fee will be deducted from the refund. After March 23 no refunds will be issued. Mail to: EB 2012 Registration Office, 9650 Rockville Pike, Bethesda, MD 20814-3998.

---

### Important Dates

- **November 8, 2011** Abstract Submission Deadline
- **February 23, 2012** Early Registration Deadline
- **March 23, 2012** Hotel Reservations Deadline
- **March 23, 2012** Registration Cancellation Deadline

### EB Registration Fees

<table>
<thead>
<tr>
<th>EB Registration Fees</th>
<th>On or Before February 23</th>
<th>After February 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsoring/Participating Society Members</td>
<td>$325</td>
<td>$425</td>
</tr>
<tr>
<td>Nonmembers</td>
<td>$475</td>
<td>$575</td>
</tr>
<tr>
<td>Retired Society Members</td>
<td>$120</td>
<td>$135</td>
</tr>
<tr>
<td>*Graduate Student Members</td>
<td>$75</td>
<td>$85</td>
</tr>
<tr>
<td>*Graduate Student Nonmembers</td>
<td>$95</td>
<td>$105</td>
</tr>
<tr>
<td><strong>Undergraduate Students, High School Students and Teachers</strong></td>
<td>On-site registration only – Free</td>
<td></td>
</tr>
</tbody>
</table>

### HOTEL INFORMATION

Deadline for hotel reservations: March 23, 2012

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.

The San Diego Convention Center Corporation and Experient Inc. are the only official housing providers for the Experimental Biology meeting.
SOCIETY TICKETED EVENTS

The following special Society activities have been planned and require a fee in addition to the Experimental Biology 2012 registration fee. If you plan to attend any of these activities, please note where and how to register.

20th Annual AAA Awards Banquet & Reception – Tuesday, April 24, 2012

The American Association of Anatomists cordially requests the pleasure of your company at the 20th Annual AAA Awards Banquet on Tuesday, April 24, 2012. The Banquet—from 7:00 p.m. to 10:00 p.m. at the Marriott Hotel—will feature a cocktail reception, dinner, & presentation of AAA awards. Tickets are $66 and will be available for purchase online via the AAA Website (www.anatomy.org). Tickets will not be sold on-site at the meeting.

APS Social Events:

The American Physiological Society will be celebrating its 125th Anniversary during the Experimental Biology 2012 meeting. As part of the celebration, APS will be holding a number of social events in conjunction with the meeting. APS registrants are encouraged to participate in these social events. EB attendees expressing interest in physiology are also invited to attend.

The Opening Ceremony and Walter B. Cannon Lecture on Saturday, April 21 at 5:30 pm is free of charge. However, there is a charge for the following events: (1) APS 125th Anniversary Beach Party on the North Embarcadero on Saturday, April 21 from 7:00 p.m. – 10:00 pm and (2) APS 125th Anniversary Closing Party on Wednesday, April 25 from 6:30 p.m. – 10:00 pm.

Please sign up for these events when registering for the meeting by checking the boxes on the registration form. The charge for each event will be $15.00 in advance/$25.00 on site.

Luncheon for ASN Fellows and 50-Year Members

Join ASN in celebrating the accomplishments and achievements of our past and present Fellows and 50-Year members over lunch at the Annual Meeting. This luncheon will follow a presentation honoring the newly inducted 2012 ASN Fellows. All members are invited to attend; guests are permitted. Ticket fees are as follows: $45.00 for Members and $35.00 for Non-Members. All newly inducted Fellows will receive free registration. Additional details will be posted at www.nutrition.org.

ASBMB Events

Attendees interested in the following ASBMB organized activities may sign up while registering for the EB2012 meeting. Fees are noted below and event registration will close when fully subscribed. Details of these and other ASBMB events will be posted at www.asbmb.org/meeting2012.

ASBMB Graduate/Postdoctoral Professional Development Program – Saturday, April 21

This program will be held on Saturday, April 21, 9:00 a.m. - 3:30 p.m. Event registration includes lunch: $25 ASBMB members; $35 all other EB registrants. ASBMB Travel Award recipients do not have to register for this event.

Professional Development Workshop for Students, Postdocs and Junior Faculty, sponsored by the ASBMB – Tuesday, April 24

This workshop will be held on Tuesday, April 24, 12:30 p.m.- 1:30 p.m. Event registration includes lunch: no cost for ASBMB members; $20 all other EB registrants.

ASBMB 5K Fun Run and Walk – Sunday, April 22

Fun Run/Walk will be held rain or shine on Sunday, April 22 at 7:00 a.m. The entry fee includes a T-shirt: $25 for ASBMB members; $35 for all other EB registrants.
Welcome to

Come visit San Diego, CA and experience California’s second largest city along with 70 miles of pristine beaches!

San Diego, CA—Restaurants, Dining and then some...

While visiting San Diego, CA, let the Convention and Visitors Bureau connect you with the hottest tables and top chefs during the Experimental Biology meeting. 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.

Hotels:

Discounted hotel reservations can be made online through the Experimental Biology website. SDCC Housing Services/Experient are the official housing providers for the Experimental Biology meeting. View housing options online including rates, type of room, hotel amenities and distance to the San Diego Convention Center.
San Diego

San Diego International Airport is conveniently located just ten minutes from downtown San Diego. It is serviced by 22 major and commuter airlines and receives more than 16 million passengers a year.

San Diego offers many modes of economical and earth-friendly public transportation. Relax and enjoy the scenery of the city while getting around via bus, train or the famous San Diego trolley.

For more information on San Diego, CA activities visit the website at www.sandiego.org.
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

AS SOON AS POSSIBLE:

- Submit your abstract
- Register for the meeting
- Make hotel reservations
- Make airline reservations

November 8, 2011
- Deadline to submit abstract and $65 non-refundable abstract processing fee
- Deadline to withdraw or make changes to a submitted abstract

February 23, 2012
- Deadline for early registration. You may register online after this date. However, your registration will be at the higher fee.

March 23, 2012
- Deadline for hotel reservations. Rates and availability cannot be guaranteed after this date.

March 23, 2012
- Deadline to request a refund of advance registration.

April 21 – 25, 2012
- Attend Experimental Biology meeting in San Diego, CA!

FOLLOW EB AND THE SOCIETIES ON FACEBOOK AND TWITTER FOR MEETING UPDATES!
- **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 Upgrades**
  Increase your exposure and ROI by upgrading your booth in our virtual floor plan. Several options include adding your URL, company logo, product promotion and company video. Please contact jkearney@faseb.org for additional information.

**EXHIBITION AND SPONSORSHIP**

- **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 10, 2012. 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 domestic, Canadian or foreign 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 on our website.

- **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.

  www.experimentalbiology.org
Important Dates

November 8, 2011
Abstract Submission Deadline

February 23, 2012
Early Registration Deadline

March 23, 2012
Hotel Reservations Deadline

www.experimentalbiology.org