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Experimental Biology 2012 programming at a glance

BETHESDA, Md., March 6, 2012 – Six scientific societies will hold their joint scientific sessions and annual meetings, known as Experimental Biology (EB), from April 21-25, 2012, in San Diego. This meeting, EB 2012, brings together the leading researchers from dozens of life-science disciplines. The societies represented at the meeting will be: the American Association of Anatomists ([AAA](#)), the American Physiological Society ([APS](#)), the American Society for Biochemistry and Molecular Biology ([ASBMB](#)), the American Society for Investigative Pathology ([ASIP](#)), the American Society for Nutrition ([ASN](#)) and the American Society for Pharmacology and Experimental Therapeutics ([ASPET](#)).

Below are some programming highlights:

Role of Pharmacogenetics in Oncology (ASPET)

This symposium addresses the roles of personalized medicine and genetic polymorphisms in drug-metabolizing enzymes and other pathways that affect a patient's response to drugs, in particular with respect to chemotherapeutic drugs. Having a better understanding of these pathways will lead to selection of the most effective and least toxic therapies. **(Sun., 4/22)**

Molecular and Cellular Basis of Disease (ASIP)

Illness and disease start at the most basic biological levels when molecular genetic changes affect the development of cells and the way they interact. The Molecular and Cellular Basis of Disease sessions are designed to provide a community-within-a-community environment for researchers working on similar problems to explore their science using a variety of presentation modalities throughout the day. In the Liver Pathobiology sessions, molecular and cellular changes in liver disease (including cancer) and dysfunction will be highlighted. In a second set of sessions, the role of host-microbe interactions in inflammatory/autoimmune disease and vascular biology will be examined. **(Sun., 4/22, and Tues., 4/24)**

Communicating Science: The Roles of Researchers and Media (ASBMB)

For researchers who wish to share their scientific stories with the public, this symposium features Nobel laureate Paul Berg, National Public Radio science correspondent Joe Palca, science communicator Megan J. Palmer and Huffington Post science correspondent Cara Santa Maria. Moderated by ASBMB President-elect Jeremy Berg, former director of the National Institute of

General Medical Sciences, the panel will discuss what scientists should be doing to get through to challenging audiences and make the best case for long-term federal investments. **(Mon. 4/23)**

Sustainable Food Systems: An Integrated Approach for a Healthy Population and a Healthy Planet (ASN)

Americans today are increasingly thinking about the environmental impact of their food choices. An integrated approach for a sustainable food system for future generations is needed. This session brings together leading experts to discuss environmental, agricultural, economic and dietary considerations. A life cycle approach that measures environmental and social impacts of foods from farm to table and helps identify innovative opportunities for improvement will be examined. A model that takes a whole diet approach to estimate regional land requirements to feed populations will be presented, and an approach for optimized food plans that meet dietary guidelines while considering human behavior in food selection will round out the session. **(Sun., 4/22)**

The Exquisite Little Brains of Big Insects (AAA)

A long tradition of comparative research on the nervous systems of invertebrates has contributed greatly to our understanding of the functional organization, development and evolution of nervous systems and neural mechanisms underlying behavior. Insects in particular offer powerful experimental model systems. Today, the most prominent example is the fruit fly, whose genetic and genomic advantages attract many researchers, but whose small size is limiting for some kinds of studies. This session focuses on much larger insects with beautiful and experimentally tractable nervous systems that permit investigations that complement and extend those accomplished with diminutive species. **(Mon., 4/23)**

Bioengineering and Regenerative Medicine (APS)

With a constantly aging population, regenerative medicine approaches to treating human disease are becoming increasingly more important. Currently, a number of interdisciplinary strategies involving a combination of biomaterial science, bioengineering, stem cell biology, and clinical sciences are being pursued with the common aim to apply living cells or functional tissues to repair, replace, or restore tissue or organ function loss caused by congenital defects, trauma, disease, or aging. This symposium will showcase several state-of-the-art bioengineering approaches that involve the manipulation of biochemical, biophysical and geometrical environmental signals to include cell survival, proliferation, and differentiation, and enable the creation of 3-dimensional tissue organoids for unique experimental studies and potential therapeutic applications. **(Wed., 4/25)**

Media Registration

Free registration is available to credentialed representatives of the press, and an onsite newsroom will be available for media. Detailed instructions for individuals who wish to request press passes [are available on the website](#).