

ASIP 2014 Annual Meeting

at Experimental Biology
April 26-30, 2014 - San Diego, CA
www.asip.org/2014



GUEST SOCIETIES

American College
of Veterinary
Pathologists
(ACVP)



American Society for
Matrix Biology
(ASMB)



Association of
Pathology Chairs
(APC)

Affiliate Member of ASIP



The Histochemical
Society (HCS)



International Society
for Biological and
Environmental
Repositories
(ISBER)



Società Italiana di
Patologia e Medicina
Traslazionale (SIPMeT)

Affiliate Member of ASIP



Society for
Cardiovascular
Pathology (SCVP)



Mark Your Calendars!

The Annual 2014 Meeting of the American Society for Investigative Pathology (ASIP) will be held April 26-30, 2014, in conjunction with Experimental Biology 2014 at the San Diego Convention Center, San Diego, CA and the San Diego Marriott Marquis & Marina. The Program Committee has assembled a vibrant scientific program encompassing diverse topics relevant to basic biology and the pathobiology of human disease.

It has been our pleasure as members of the Program Committee to garner ideas from the ASIP membership, and to incorporate these into the design of the final program. The program has been developed in conjunction with ASIP guest societies, including the **American Society for Matrix Biology, American College of Veterinary Pathologists, Association of Pathology Chairs, The Histochemical Society, International Society for Biological and Environmental Repositories, Society for Cardiovascular Pathology, and the Italian Society of Pathology and Translational Medicine.**

This year's scientific program will include ASIP member interests in pathobiology of diseases and will highlight exciting new emerging research topics. Presentation formats will encompass symposia and workshops in addition to educational and training sessions. Symposia by leading scientists will cover topics that include **Stem Cells for Cardiac Repair, Lessons from the Canine Genome for Human Cancer Therapy, Pathogen Interactions with Cellular Junctions, Mechanistic Basis of Neuronal Susceptibility to Toxicants: New Avenues for Drug Discovery, Novel Mechanisms of Oncogenesis, Intracellular Escapades of Human Pathogens, Personalized Medicine Therapies for Lung Cancer, Genomic-Scale Analysis of Single Cells, and Cellular Survival: Tumors and Wounds.** Given the increased interest and importance of advanced imaging techniques, there will be three **Histological Image Analysis** sessions, including Advanced Imaging Techniques and Systems for Live Cell Microscopy, Structural Mapping of Force Transmission During Directed Cell Migration: Imaging One Cell at a Time, and Unlocking New Tools for Experimental Pathology: Advances in Immunohistochemistry and *In Situ* Hybridization.

Another exciting aspect of the 2014 meeting will be two thematic one-day sessions. **The Blood Vessel Club™** Program this year has been expanded to a full one-day program. The morning will be devoted to New Players and Concepts in Leukocyte Trafficking During Inflammation and the afternoon will focus on Vascular Permeability in Health and Disease. In addition, this year's one-day thematic **Molecular and Cellular Basis of Disease Program** will be based on Immunopathology. The morning session will focus on Inflammation and the Tissue Microenvironment and the afternoon will be devoted to Inflammation and Disease, including this year's Cotran Early Investigator Award Lecture by Timothy Denning on Intestinal Antigen Presenting Cells During Homeostasis and Inflammation.

ASIP's Scientific Interest Groups (SIGs) have cooperatively programmed the Blood Vessel Club™ and Molecular and Cellular Basis of Disease programs. In addition, The Liver Pathobiology SIG (Club Hepatomania) has programmed sessions on hepatocellular cancer and liver regeneration, the Breast Cancer SIG has programmed a session on personalized medicine and breast cancer, the Biobanking SIG has programmed the Stowell Symposium on the Role of Biospecimens in Precision Medicine, and the Neuropathology SIG has programmed a session on neuronal susceptibility to toxicants. Six SIGs will host a joint poster session and networking event on Tuesday evening.

A fundamental component of the program will include abstract-driven mini-symposia and poster sessions. Given ASIP's strong commitment to supporting young investigators and trainee members, the program will also include special workshops on career development and presentation skills, and will offer opportunities for trainee members to share their research and receive awards, including the **ASIP Experimental Pathologist-in-Training Award (EPIT), Experimental Pathologist-in-**

Graduate Training Award (EPIGT) and Trainee Travel Awards. As members of the investigative pathology community, your participation in the ASIP Annual Meeting is not only vital to the Society's success but will help to grow the excellent scientific program that we have assembled. Please register, submit abstracts to ASIP topic categories and join us in staying abreast of leading scientific research pertaining to pathophysiology of disease. Furthermore, any faculty (senior or junior) or trainees interested in becoming involved in the many ASIP-related activities should feel free to contact us or the ASIP office (asip@asip.org). **We look forward to your participation in ASIP's Annual Meeting at EB 2014.**

Francis W. Luscinikas, PhD
Satdarshan (Paul) S. Monga, MD
ASIP Program Co-Chairs

Important Deadlines!

November 8, 2013

- Abstract submission deadline

November 15, 2013

- Deadline for ASIP, HCS, and ICPI award applications

February 21, 2014

- Deadline for early (reduced) registration. You may register online after this date, however your registration will be at the higher fee.

March 21, 2014

- Deadline for hotel reservations

Registration Rates

EB Registration Fees

| | By Feb 21 | After Feb 21 |
|---|-----------|--------------|
| Sponsoring/Participating Society Members (including ASIP Guest Societies) | \$375 | \$495 |
| Non-members | \$550 | \$665 |
| Retired Society Members | \$135 | \$155 |
| Graduate Student Members* | \$85 | \$95 |
| Graduate Student Non-members* | \$105 | \$115 |
| Postdoctoral Trainee** | \$360 | \$475 |
| Undergraduate Student, High School Students & Teachers*** | FREE | FREE |

***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 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 non-member rate.

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

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

*****High School Teacher:** You must be a certified High School Teacher currently teaching High School students. You do not qualify for this category if you are currently teaching at a university or a hospital. Credentials or a letter from the school principal will need to be provided on-site to receive your badge.

Register online at www.asip.org/2014

The registration fee includes entrance to scientific sessions, exhibits, and a copy of the *Program*. **Abstracts will be published online in *The FASEB Journal*.** Fees do not include admission to the separate ticketed events.

Badges and programs will **NOT** be mailed in advance of the meeting. All registrants will need to bring a copy of their email confirmation to the on-site registration area at the Convention Center and pick up their badge, program and briefcase. Registration kiosks will also be available to print your badge upon your arrival at the meeting.

ASIP Special Events

Attendees interested in the following ASIP organized activities may sign up while registering for the EB2014 meeting. Details of these and other ASIP events will be posted at http://www.asip.org/meetings/2014/meeting_program.cfm Sessions that require special registration will be marked with the symbol: 

F TROOP! Roadmap to Fellowship Grant Applications
Saturday, April 26, 2014

14th Annual Workshop on Education in Pathology: Pathology Curricula in Graduate Programs: How to Succeed in the Business of Training Tomorrow's Medical Researchers
Co-Sponsored by The Association of Pathology Chairs
Saturday, April 26, 2014

ASIP Trainee Welcome Reception
Saturday, April 26, 2014

Career Development Workshop and Breakfast: Beyond the Job Offer: Exploring the Art of Effective Negotiation
Sunday, April 27, 2014

14th Annual ASIP/AAA Career Development & Mentoring Program and Lunch: GUILTY until proven INNOCENT: Scientific Integrity and Getting Published!
Sunday, April 27, 2014

Lunch and Learn: Necessary Evils: The Responsibility and Process to Protect Human and Animal Subjects in Research
Tuesday, April 29, 2014

ASIP Scientific Interest Group Networking Events and Poster Sessions

Tuesday, April 29, 2014 (5:30 PM - 7:30 PM, held concurrently)

- **Breast Cancer Scientific Interest Group Networking Event and Poster Session**
- **Club Hepatomania™ (Liver Pathobiology Scientific Interest Group Networking Event and Poster Session)**
- **Der Schadenklub - Cell Injury Scientific Interest Group Networking Reception/Poster Session**
- **Neuropathology Scientific Interest Group Networking Event and Poster Session**
- **Veterinary Pathology Scientific Interest Group Networking Event and Poster Session**
- **Vascular and Mucosal Pathobiology (VAMP) Scientific Interest Group Networking Event and Poster Session**

Please sign up for these events when registering for the meeting by checking the boxes on the EB registration form.

Sponsors

ASIP wishes to express its appreciation to the following for their generous support. The ASIP 2014 Annual Meeting is supported by unrestricted educational grants from:

The A. D. Sobel – ASIP Education Fund

FASEB Maximizing Access to Research Careers (MARC)



Robert E. Stowell Endowment Fund

ASIP Award Information

Information & Deadlines

The following awards require submission of an abstract to the 2014 Experimental Biology Meeting. For details on abstract submission, visit: www.asip.org/2014/

Abstract Submission Deadline: November 8, 2013

Award Application Deadline: November 15, 2013 - To apply, go to: www.asip.org/awards

■ ASIP Experimental Pathologist-in-Training (EPIT) Award and ASIP Experimental Pathologist-in-Graduate Training Award (EPIGT)

The EPIT is a prestigious award presented to an ASIP trainee member who is a postdoctoral fellow (including research and clinical fellows) and who has excelled in investigative efforts in studying mechanisms of disease, as evidenced by an abstract submission to the ASIP annual meeting, an extended research report, and a letter of recommendation attesting to the candidate's role in the work and potential as a biomedical research investigator. The award includes: **a certificate of achievement for the winning abstract presented at the ASIP Annual Meeting Awards Presentation at the Experimental Biology Meeting, a \$1,500 honorarium and complimentary meeting registration.**

The EPIGT is a prestigious award presented to an ASIP trainee member who is a graduate student in a PhD training program, MD/PhD training program or MD training program who has excelled in investigative efforts in studying mechanisms of disease, as evidenced by an abstract submission to the ASIP annual meeting, an extended research report, and a letter of recommendation attesting to the candidate's role in the work and potential as a biomedical research investigator. The award includes: **a certificate of achievement for the winning abstract presented at the ASIP Annual Meeting Awards Presentation at the Experimental Biology Meeting, a \$1,500 honorarium and complimentary meeting registration.**

Candidates for the EPIT and EPIGT Awards are also considered for **ASIP Merit Awards (\$1,250 plus complimentary registration)**, which will be awarded to the best postdoctoral fellow/resident

abstract and the best graduate/medical student abstract. Each applicant must be a trainee member of ASIP. Prior recipients of the EPIT, EPIGT, and Merit Awards may reapply if the work submitted is clearly distinct from the work previously submitted for their winning application (not just a continuation of the same project). In such cases, the applicants should submit a copy of the previous winning application along with the new application.

Award Application Deadline: November 15, 2013

Apply online at: www.asip.org/awards/epit.cfm (EPIT)

Apply online at: www.asip.org/awards/epigt.cfm (EPIGT)

■ **ASIP Trainee Travel Awards**

To promote the entry of young scientists into the mainstream of the basic science community and to encourage the participation of young investigative pathologists in the Annual Meeting, the American Society for Investigative Pathology is offering a limited number of Trainee Travel Awards of \$750 each to offset travel expenses for ASIP Trainee members **to attend the Experimental Biology Meeting**. The ASIP Program Committee will select the recipients based on the scientific abstracts. Abstracts will be selected for presentation in either poster sessions or in minisymposia. These abstracts need not be submitted strictly to ASIP categories. A select few of the applicants for the ASIP Trainee Travel Award will be identified as **A.D. Sobel - ASIP Education Fund Scholars**, a special distinction for the best abstract submissions by trainees for the ASIP Annual Meeting.

Award Application Deadline: November 15, 2013

Apply online at: www.asip.org/awards/trainee.cfm

■ **Marcos Rojkind – ASIP Trainee Travel Award**

The Marcos Rojkind - ASIP Trainee Travel Award honors the memory of Dr. Marcos J. Rojkind, a loyal member of ASIP for forty years. Educated in Mexico, Dr. Rojkind was the recipient in 1985 of Mexico's highest scientific honor, the National Service Award. He joined the faculty at George Washington University in 2002. Dr. Rojkind conducted seminal research in many aspects of hepatic pathobiology in areas of liver fibrosis, injury and stellate cell biology. He was passionate about teaching and trained many students and postdoctoral fellows.

After Dr. Rojkind's death in 2011, a special ASIP fund was established by Dr. Satdarshan (Paul) S. Monga to support travel to the ASIP Annual Meeting of an ASIP trainee member who submits an abstract that includes data relevant to studies in liver pathobiology. Candidates for the Marcos Rojkind - ASIP Trainee Travel Award should submit an application for the **ASIP Trainee Travel Award** and will be considered along with all other candidates for the ASIP Trainee Travel Award. The Marcos Rojkind - ASIP Trainee Travel Award is presented to the trainee who submits the best abstract in **Liver Pathobiology**, as judged by the Trainee Travel Award Review Committee.

More Information at: www.asip.org/awards/rojkind.cfm

■ **Minority Trainee Travel Awards**

The FASEB Maximizing Access to Research Careers (MARC) Program has awarded ASIP funding to promote the entry of under-represented minority scientists and minority-serving institutions into the mainstream of the basic science community and to encourage the participation of young investigative pathologists in meetings and

courses sponsored by ASIP. Successful applicants will be **reimbursed up to \$1,850 in travel costs associated with conference attendance and participation**. These funds are intended to defray lodging, air, ground transportation, and meeting registration. The ASIP Minority Trainee Travel Awards are funded by a grant from the National Institute of General Medical Sciences, National Institutes of Health [FASEB MARC Program: T36-GM08059-30].

Award Application Deadline: November 15, 2013

Apply online at: www.asip.org/awards/minority_eb.cfm

■ **The Histochemical Society (HCS) Sponsored Trainee Travel Award**

To promote the entry of young scientists who use histochemical techniques into the mainstream of the basic science community and to encourage the participation of young investigative pathologists in the Annual Meeting, The Histochemical Society is offering a limited number of Trainee Travel Awards of \$750 each to offset travel expenses for trainee members of The Histochemical Society and/or ASIP to attend the Experimental Biology Meeting. The ASIP Program Committee will select the recipients based on the scientific abstracts, which must include data based on the use of histochemical techniques. Abstracts will be selected for presentation in either poster sessions or in minisymposia. These abstracts **MUST** be submitted to ASIP topic categories.

Apply online at: www.asip.org/awards/histochem_trainee_eb.cfm

■ **Intersociety Council for Pathology Information (ICPI) Trainee Travel Awards**

ASIP Trainees are eligible to apply to the Intersociety Council for Pathology Information (ICPI) for \$500 travel awards to attend certain ASIP events. Trainees who submit an abstract to the meeting are eligible for a \$750 travel award.

Apply online at: www.pathologytraining.org

Did you know?

Not currently a member of ASIP and want to attend the ASIP 2014 Annual Meeting?

Apply for membership (application on page 11, or apply online at www.asip.org/apply) and **save up to \$175** on your ASIP 2014 Annual Meeting Registration!

Non-Member Meeting Registration **\$550***
"Regular" Member Meeting Registration **\$375!***

Not an ASIP member and want to apply for an ASIP Trainee Travel Award?

Apply for membership (application on page 11 or apply online at www.asip.org/apply) **no later than November 8, 2013** to be eligible to apply for an ASIP Trainee Travel Award!

Want to network with other ASIP members in your area of scientific research?

Sign up for an ASIP Scientific Interest Group at www.asip.org/SIGs. Then **plan to participate** in the SIG events at the ASIP 2014 Annual Meeting.**

* If registering for the meeting by February 21, 2014.

**Not all SIG's have programmed sessions at the Annual Meeting. Participation in the ASIP SIGs is available for ASIP members only.

Scientific Program

Saturday, April 26, 2014

Course: Pathobiology for Basic Scientists: After the (Inflammatory) Deluge: Resolution of Inflammation, Wound Healing and Fibrosis

8:30 AM - 11:30 AM

Sponsored by the ASIP Education Committee

Chairs: Wendy Mars, Richard Mitchell

- **Cutaneous Inflammation: More Than Just Skin Deep**, Wendy Havran, The Scripps Research Institute
- **It Takes Two to Tango: Epithelium and Mesenchyme Mix and Match to Repair the Breach During Wound Healing**, Alan Wells, University of Pittsburgh
- **Hepatic Fibrosis: Building it Up and Tearing it Down**, David Brenner, University of California, San Diego



F TROOP! Roadmap to Fellowship Grant Applications

8:30 AM - 11:30 AM

Please register for this event when you register for the Experimental Biology Meeting.

Sponsored by the ASIP Committee for Career Development, Women & Minorities

Chairs: Linda McManus, Cecelia Yates

F TROOP! Roadmap to Fellowship Grant Applications is a hands-on workshop targeted to pre- and postdoctoral trainees who are working to prepare an application for an individual NRSA Fellowship (F Awards, including F30, F31, or F32) for submission to the NIH. Equivalent fellowship applications to other funding agencies are also encompassed by this program.

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

Blood Vessel Club™: New Players and Concepts in Leukocyte Trafficking During Inflammation

8:30 AM - 11:30 AM

Chairs: Martha Furie, Dietmar Vestweber

- **Dynamic Regulation of Vascular Cell Adhesion**, Mark H. Ginsberg, University of California, San Diego School of Medicine
- **Differential Role of Talin-1 and Kindlin-3 in β 2 Integrin Activation**, Klaus Ley, La Jolla Institute for Allergy & Immunology
- **Platelets: New Biology in Inflammation, Pathogen Sensing, and Hemostasis**, Guy A. Zimmerman, University of Utah School of Medicine
- **Regulation of T Cell Trafficking by CD47, a β 2 Integrin Associated Molecule**, Francis Lusinskas, Brigham and Women's Hospital
- **Leukocyte Transmigration *In Vivo*: Mechanisms, Dynamics And Novel Concepts**, Sussan Nourshargh, William Harvey Research Institute



Breast Cancer Workshop: Pathology, Pathogenesis, and Pathophysiology of Triple-Negative Breast Cancer

8:30 AM - 11:30 AM

Sponsored by the ASIP Breast Cancer Scientific Interest Group

Chair: William Coleman

- **Triple-Negative Breast Cancer – Pathologic Classification and Clinical Characteristics**, Celina G. Kleer, University of Michigan
- **Molecular Signatures of Triple-Negative Breast Cancer**, William Coleman, University of North Carolina-Chapel Hill School of Medicine
- **Mechanisms of Breast Cancer Metastasis and Opportunities for Interruption**, Brunhilde Felding-Habermann, The Scripps Research Institute
- **Innate Immune Cell PI3Kgamma as a Target For Triple-Negative Breast Cancer**, Judith Varner, University of California at San Diego

ASMB Lecture

11:45 AM - 12:45 PM

Sponsored by ASIP and the American Society for Matrix Biology

- **Ankrd1, A Modulator Of Tissue Repair, Cell-Matrix Interactions, And Matrix Metabolism**, Jeffrey M. Davidson, Vanderbilt University School of Medicine



14th Annual Workshop on Education in Pathology: Pathology Curricula in Graduate Programs: How to Succeed in the Business of Training Tomorrow's Medical Researchers

11:45 AM - 1:45 PM

Please register for this event when you register for the Experimental Biology Meeting.

Co-Sponsored by the ASIP Education Committee and The Association of Pathology Chairs

Chairs: Kari Nejak-Bowen, Wendy Mars

Panel Discussion: Kari Nejak-Bowen, University of Pittsburgh; Diane L. M. Hickson-Bick, University of Texas Health Science Center – Houston; Dwayne Stupack, The Scripps Research Institute; Wendy Mars, University of Pittsburgh Medical School

Highlights: Graduate Student Research in Pathology

1:30 PM - 4:00 PM

Sponsored by the ASIP Committee for Career Development, Women & Minorities

Chairs: Monte Willis, Kari Nejak-Bowen

Stowell Symposium: Trends in Experimental Pathology: The Role of Biospecimens in Precision Medicine

2:00 PM - 5:00 PM

Supported by an unrestricted educational grant from the Robert E. Stowell Endowment Fund

Chairs: Mark Sobel, Gregory Tsongalis

- **Introduction/Overview of Biobanking and Precision Medicine**, Gregory Tsongalis, Dartmouth-Hitchcock Medical Center, Geisel School of Medicine at Dartmouth
- **Organizing and Setting Up a Biorepository**, Timothy Sheehy, Promega Corporation
- **Is the Anonymized Sample In Research an Endangered Species**, Mark Sobel, ASIP
- **The Transition of Biobank Utility from Study to Clinic**, Christopher Amos, Dartmouth-Hitchcock Medical Center, Geisel School of Medicine at Dartmouth

Blood Vessel Club & Vascular Permeability in Health and Disease

2:00 PM - 5:00 PM

Chairs: Francis W. Lusinskas, Donald McDonald



BLOOD VESSEL CLUB

- **Mechanisms that Regulate Endothelial Junctions**, Dietmar Vestweber, University of Munster
- **From Molecular Mechanisms to Functional Vascular Exchange: Linking Investigations Using Cellular, Single Vessel, and Whole Organ Approaches**, Fitz-Roy E. Curry, University of California, Davis Medical Center
- **The Angiopoietin – Tie2 Vascular Signaling Axis in Severe Infections**, Samir Parikh, Beth-Israel Deaconess Medical Center
- **Dynamics of Endothelial Cell Permeability in Health and Disease**, Donald McDonald, University of California, San Francisco School of Medicine

Meritorious Award Lecture**Young Scientist Leadership Award Lecture**

3:35 PM - 3:50 PM

Sponsored by an unrestricted educational grant from the A.D. Sobel – ASIP Education Fund

Targeting Beta-catenin Reveals Novel Roles in Hepatocyte Survival and Bile Acid Metabolism

Kari Nejak-Bowen, University of Pittsburgh

ASIP Trainee Welcome Reception

4:00 PM – 5:00 PM



Please register for this event when you register for the Experimental Biology Meeting.

Sponsored by the ASIP Committee for Career Development, Women & Minorities

Meritorious Award Lecture**Outstanding Investigator Award Lecture**

5:00 PM - 6:00 PM

Beta-catenin in Liver Pathobiology: You Wnt Some, You Lose Some!

Satdarshan P. S. Monga, University of Pittsburgh

Sunday, April 27, 2014**Career Development Workshop and Breakfast: Beyond the Job Offer: Exploring the Art of Effective Negotiation**

7:00 AM - 10:00 AM

Please register for this event when you register for the Experimental Biology Meeting.

Sponsored by the ASIP Committee for Career Development, Women & Minorities

Supported by an unrestricted educational grant from the FASEB Maximizing Access to Research Careers (MARC) Office
Chairs: Christi L. Kolarcik, Edward Medina

Negotiation skills are critical to your success. Whether it is your first job or your next job, asking for what you want allows you to be effective and productive. But how do you ask for the things

you need (and get them)? When and what should you negotiate? Why is this skill so important? And what strategies can you use to be a more effective negotiator?

After a brief introduction, this session will begin with a mock negotiation portraying a common but ineffective exchange. Three different speakers will then offer advice and a framework for discussion. Negotiation basics, the cost of failing to negotiate and some approaches to effective negotiation will be addressed. Strategies and information from the speakers will then be used in a second mock negotiation to provide an example of a productive negotiation. The last part of the session will be reserved for questions and a lively discussion on how we can all develop our inner negotiator.

- **Negotiation Basics: A Practical Discussion on Getting What You Want, When You Want It**, Monte Willis, University of North Carolina
- **The Cost of Ineffective Negotiation: You Only Get What You Negotiate**, Jayne Reuben, University of South Carolina – Greenville
- **Specific Tactics and Strategies for Successful Negotiation**, Laurie McCauley, University of Michigan
- **Mock Interviews: Interviewer** (Mark E. Sobel, American Society for Investigative Pathology) **and Interviewee** (Cecelia Yates, University of Pittsburgh)

Neurobiology of Disease: From Model Organisms to Humans

8:30 AM - 11:30 AM

Sponsored by the ASIP Neuropathology Scientific Interest Group

Chairs: Warren Tourtellotte, Jeffrey Golden

- **Insights and Applications Based on Pathologies of Forebrain Patterning**, Edwin Monuki, University of California, Irvine College of Medicine
- **Amyotrophic Lateral Sclerosis: Lessons from Mouse Models and Human Disease**, Eric Huang, University of California, San Francisco
- **Elp1 Function in Family Dysautonomia**, Warren Tourtellotte, Northwestern University
- **Cell Migration in Brain Form and Function**, Jeffrey Golden, Brigham and Women's Hospital

Regenerative Medicine

8:30 AM - 11:30 AM

Chair: Themis Kyriakides

- **Clinical Outcomes of Bioengineered Blood Vessels**, Laura E. Niklason, Yale University School of Medicine
- **3-D Cell Bioprinting For Vascular and Liver Applications**, Ben Shepherd, Organovo, San Diego
- **Cardiac Regeneration and Engineering Strategies to Prevent Fibrosis**, Tejal Desai, University of California, San Francisco
- **The Role of Mechanical Forces in Cardiomyogenic-Endothelial Lineage Switch, a Roadway to Controlled Cardiac Repair**, Andre Levchenko, Johns Hopkins University

HCS Symposium: Advanced Imaging Techniques and Systems for Live Cell Microscopy

8:30 AM - 11:30 AM

Sponsored by ASIP and The Histochemical Society

Chairs: Eduardo Rosa-Molinar, Paul Goodwin

- **Advances in High-Resolution Imaging of Complex Biological Systems**, Scott E. Fraser, University of Southern California
- **Sharper and Faster: New 4D Imaging Technologies for Use in Biology**, Hari Shroff, NIBIB, NIH
- **Visualizing Gold Nanoparticle Uptake in Live Cells with Liquid Scanning Transmission Electron Microscopy**, Niels de Jonge, INM-Leibniz Institute for New Materials, Saarbrücken, Germany

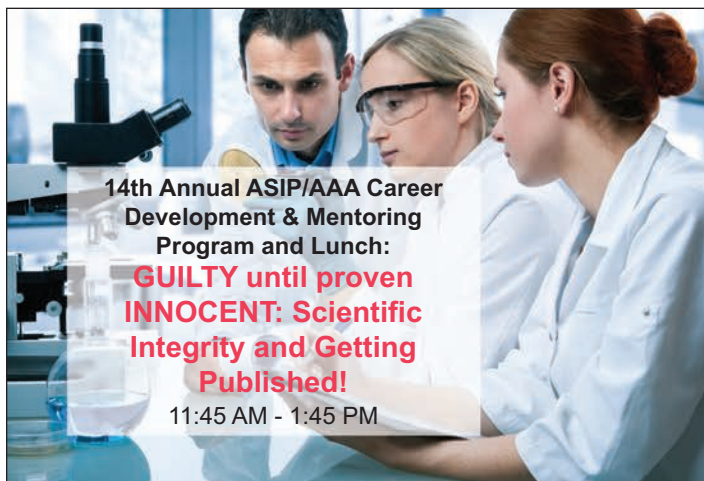
The Journal of Histochemistry and Cytochemistry Lecture

10:30 AM - 11:30 AM

Sponsored by ASIP and The Histochemical Society

Chair: John R. Couchman

- **Structural Mapping of Force Transmission During Directed Cell Migration; Imaging One Cell at a Time**, Dorit Hanein, Sanford-Burnham Medical Research Institute



14th Annual ASIP/AAA Career
Development & Mentoring
Program and Lunch:

**GUILTY until proven
INNOCENT: Scientific
Integrity and Getting
Published!**

11:45 AM - 1:45 PM

**SIGN
UP!**

Please register for this event when you register
for the Experimental Biology Meeting.

Sponsored by the ASIP Committee for Career Development,
Women & Minorities and the
American Association of Anatomists

Supported by an unrestricted educational grant from the
FASEB Maximizing Access to Research
Careers (MARC) Office

Chairs: Jayne S. Reuben, Titus Reaves, Jacqueline Jones-Triche

Do you know what to do if you suspect someone of scientific dishonesty? Not sure about which image enhancements are acceptable? Need clarification on the rules of authorship? Did you know that even unintentional, inadequate documentation can lead to a charge of plagiarism and ruin the most promising career? These and other questions will be answered at the ASIP luncheon workshop entitled: "GUILTY until proven INNOCENT: Scientific Integrity and Getting Published!" In the style of a courtroom drama, this program will offer an opportunity for trainees and scientists at all levels to learn about best practices and ethical issues involved when publishing scientific research. So before you submit your next paper, come meet the experts who will review your articles and participate in an informative learning session that will help prevent your publications from being rejected!

- **Welcome**, Jayne S. Reuben, University of South Carolina – Greenville
- **Case Introduction**, Jacqueline Jones-Triche, University of Michigan

The Expert Witnesses:

- **Citation Bias and Plagiarism**, Audra Cox, *The American Journal of Pathology*
- **Image Acquisition and Manipulation**, Eduardo Rosa-Molinar, University of Puerto Rico
- **Authorship, Conflict of Interest, Intellectual Property**, Lynne Opperman, Texas A&M Health Science Center

The Verdict

- **Panel Discussion**
- **Wrap-Up**, Titus Reaves, Medical University of South Carolina

HCS Symposium: Unlocking New Tools for Experimental Pathology: Advances in Immunohistochemistry and *In Situ* Hybridization

2:00 PM - 5:00 PM

Sponsored by ASIP and The Histochemical Society

Chairs: Charles W. Frevert, Stephen Hewitt

- **Exploration of the Human Proteome Using Antibody-Based Proteomics – Updates on the Human Protein Atlas**, Fredrik Ponten, Uppsala University
- **Unlocking the Relationships Between Genes, the Brain, Behavior and Disease: Updates from the Allen Institute of Brain Science**, Amy Bernard, Allen Institute for Brain Science
- **Synapse Discrimination and Classification by Array Tomography: The Synaptome Meets the Connectome**, Stephen Smith, Stanford University
- **Highly Multiplexed Immunohistochemistry on Individual Cells in Tissues: The Example of Hodgkin Lymphoma**, Lawrence M. Weiss, Clariant Diagnostics Services

SCVP Symposium: Stem Cells for Cardiac Repair

2:00 PM - 5:00 PM

Sponsored by ASIP and the Society for Cardiovascular Pathology

Chairs: James R. Stone, Monte Willis

- **Down But Not Out - Cardiac Progenitor Cells in Postnatal Development and Regeneration**, Sean M. Wu, Stanford University School of Medicine
- **Restoring Myocardial Healing to the Aged Heart**, Mark Sussman, SDSU Heart Institute
- **p53 Mediated Mesenchymal-Endothelial-Transition Contributes to De Novo Blood Vessel Formation After Acute Cardiac Injury**, Arjun Deb, UCLA Molecular Biology Institute

Liver Workshop: Liver Regeneration

2:00 PM - 5:00 PM

Supported by the ASIP Liver Pathobiology Scientific Interest Group

Chairs: Udayan M. Apte, George K. Michalopoulos

- **Aneuploidy, Polyploidy and Ploidy Reversal in the Liver**, Andrew Duncan, University of Pittsburgh
- **Developmental Morphogens and Adult Liver Repair**, Anna Mae Diehl, Duke University Medical Center
- **Role of Chemokines in Liver Repair and Regeneration**, Alex B. Lentsch, University of Cincinnati Medical Center
- **Role of Computational Modeling in Understanding Mechanisms of Liver Regeneration**, Rajanikanth Vadigepalli, Thomas Jefferson University
- **Mechanisms of Termination of Liver Regeneration**, George Michalopoulos, University of Pittsburgh
- **Mechanisms of Liver Regeneration After Acute Liver Failure**, Udayan M. Apte, University of Kansas Medical Center

Meritorious Award Lecture**Rous-Whipple Award Lecture**

5:00 PM - 6:00 PM

The Mast Cell-IgE Paradox: From Homeostasis to Anaphylaxis

Stephen Galli, Stanford University Medical Center

The Histochemical Society (HCS) Member Awards Presentation, Business Meeting and Reception

6:00 PM – 8:00 PM

Monday, April 28, 2014

ACVP Symposium: Lessons from the Canine Genome for Human Cancer Therapy

8:30 AM - 11:30 AM

Sponsored by ASIP and the American College of Veterinary Pathologists

Chairs: Tim LaBranche, Melissa Schutten

- **Molecular Basis of Inherited Blindness in Dogs and Humans**, Gustavo Aquirre, University of Pennsylvania, School of Veterinary Medicine
- **Comparative Canine Genomics**, Matthew Breen, North Carolina State University, College of Veterinary Medicine
- **Domestication of the Dog and Correlation with Pathological Phenotypes**, Phillip Sponenberg, Virginia-Maryland Regional College of Veterinary Medicine, Virginia Tech
- **Canine Cancer Immunology and Immunotherapy**, Jaime Modiano, University of Minnesota, College of Veterinary Medicine

Cell Injury Workshop: Cellular Survival: Tumors and Wounds

8:30 AM - 11:30 AM

Sponsored by the ASIP Cell Injury Scientific Interest Group

Chairs: Alan Wells, Cecelia Yates

- **It Takes Two to Tango: Epithelium and Mesenchyme Mix and Match to Repair the Breach During Wound Healing**, Alan Wells, University of Pittsburgh
- **Inflammation: A Common Thread between Cancer and Repair Outcomes**, Traci A. Wilgus, The Ohio State University
- **From Trigger to Cure: The Missing Link between Inflammation and Matrix Remodeling in Fibrosis**, Cecelia Yates, University of Pittsburgh

Pathogen Interactions with Cellular Junctions

8:30 AM - 11:30 AM

Chairs: Andrei Ivanov, Asma Nusrat

- **Novel Roles of Adherens Junction Protein Nectin-4 in Epithelial Viral Entry and Tumorigenesis**, Christopher Richardson, Dalhousie University
- **Tissue Specific Mechanisms of *Staphylococcus Aureus* Invasion Across Epithelial Barriers**, Alice Prince, Columbia University
- **The Influence of Cell Polarity and Tight Junctions on Host Cell Entry of the Hepatitis C Virus**, Matthew Evans, Icahn School of Medicine at Mount Sinai
- **Colonizing the Junctions: How *Helicobacter Pylori* Turns the Host Epithelial Surface Into Specialized Niche for Bacterial Growth**, Manuel Amieva, Stanford University School of Medicine

Liver Symposium: Liver Pathobiology

8:30 AM - 11:30 AM

Sponsored by the ASIP Liver Pathobiology Scientific Interest Group

Chairs: Satdarshan P. S. Monga, Arlin Rogers

- **miRNA in Cholesterol and Bile Acid Metabolism**, John Chiang, Northeast Ohio Medical University (NEOMED)
- **CAR Signaling**, Joseph D. Locker, Albert Einstein College of Medicine
- **Hnf4a**, Frances Sladek, University of California, Riverside
- **Sexual Differences**, David Waxman, Boston University
- **FXR Signaling**, Grace Guo, Rutgers University, Ernest Mario School of Pharmacy

President's Symposium: Investigative Pathology in the New Century

2:00 PM - 5:00 PM

Chair: James M. Musser

- **Whole-Genome Sequencing in Patients: Pathology In the Post-Genomics Era**, Richard Gibbs, Baylor College of Medicine Human Genome Sequencing Center
- **Inflammation and Mucosal Homeostasis: New Paradigms, New Challenges**, Charles Parkos, Emory University
- **Understanding Vascular Endothelium in the Post-Genomic Era: New Insights and Challenges**, Michael A. Gimbrone, Brigham & Women's Hospital, Harvard Medical School

ASIP Membership Business Meeting and Awards Presentation

5:00 PM - 6:00 PM

Chair: James M. Musser

ASIP Awards Reception

6:00 PM - 8:00 PM

Open to all EB2014 attendees

Beverages and light refreshments will be served.

Tuesday, April 29, 2014

MOLECULAR AND CELLULAR BASIS OF DISEASE

Molecular and Cellular Basis of Disease: Inflammation and the Tissue Microenvironment

8:30 AM - 11:30 AM

Chairs: Andrew S. Neish, Sean P. Colgan

- **Paneth Cell Biology and the Intestine**, Thaddeus Stappenbeck, Washington University, School of Medicine
- **ROS, Wound Healing and Inflammation In Zebrafish**, Philipp Niethammer, Memorial Sloan Kettering Cancer Center
- **Adenosine and Inflammation**, Joel Linden, La Jolla Institute for Allergy & Immunology



High School Teacher Session: Scientific Sleuthing of Human Disease for High School Teachers

10:00 AM - 1:15 PM

Sponsored by the ASIP Education Committee

Chairs: Kari Nejak-Bowen, Martha Furie

- **Introduction**, Kari Nejak-Bowen, University of Pittsburgh
- **Smoking-Related Lung Disease in 3D: Not Your Standard Lecture**, Dani Zander, Pennsylvania State College of Medicine
- **Stem Cells: A Case of Dr. Jekyll and Mr. Hyde**, Satdarshan P. S. Monga, University of Pittsburgh
- **Menacing Microbes: The Threat of Bioterrorism**, Martha Furie, SUNY at Stony Brook

Mechanistic Basis of Neuronal Susceptibility to Toxicants: New Avenues for Drug Discovery

8:30 AM - 11:30 AM

Sponsored by the ASIP Neuropathology Scientific Interest Group
Chairs: Elizabeth Whitley, Arthi Kanthasamy

- **Plant-Derived Neurotoxins and Neurodegenerative Tauopathies**, Peter Spencer, Oregon Health and Science University
- **Methamphetamine Neurotoxicity Mediated by the Proteasome System and Autophagy**, Arthi Kanthasamy, Iowa State University
- **Nanoparticle-Mediated Toxicities and Neurologic Disease**, Martin Philbert, University of Michigan
- **Metallic Nanoparticles Effects on Neuronal Protein Degradation and Neurotoxicity**, Anumantha Kanthasamy, Iowa State University

SIGN UP! **LUNCH AND LEARN**

Necessary Evils: The Responsibility and Process to Protect Human and Animal Subjects in Research
11:45 AM - 1:45 PM

Please register for this event when you register for the Experimental Biology Meeting.

Sponsored by the ASIP Education Committee
Chairs: Richard Mitchell, Monte Willis

- **Research Exceptionalism: What's So Special About Human Subjects Research?**
Michael Caligirui, University of California, San Diego
- **Care and Use Committee: Marquis de Sade or BFF**
Mark McArthur, University of Texas MD Anderson Cancer Center



Novel Mechanisms of Oncogenesis

2:00 PM - 5:00 PM

Chair: Jayanta Debnath

- **Autophagy and Cancer Progression**, Jayanta Debnath, University of California, San Francisco
- **Stress-Dependent Protein Translation During Cancer Progression**, Davide Ruggero, University of California, San Francisco
- **Metabolic Reprogramming by the p62 Pathway in Cancer**, Jorge Moscat, Sanford-Burnham Medical Research Institute
- **Stress Pathways in Tumor Cell Dormancy**, Julio Aguirre-Ghiso, Tisch Cancer Institute, Mount Sinai School of Medicine

Meritorious Award Lecture

Cotran Early Career Investigator Award Lecture

2:00 PM - 3:00 PM

The ASIP Cotran Early Career Investigator Award is partially supported by an unrestricted educational grant from Elsevier

Intestinal Antigen Presenting Cells During Homeostasis and Inflammation

Timothy Denning, Emory University

MOLECULAR AND CELLULAR BASIS OF DISEASE

Molecular and Cellular Basis of Disease: Inflammation and Disease

3:00 PM - 5:00 PM

Sponsored by ASIP and the Società Italiana di Patologia e Medicina Traslazionale

Chairs: Angela Santoni, Charles Parkos

- **Advances in Neutrophil Biology and Immunity**, Marco Cassatella, University of Verona
- **IL-1 as the Gatekeeper of Inflammation**, Charles Dinarello, University of Colorado



SIGN UP!

ASIP Scientific Interest Group Networking Events and Poster Sessions

5:30 PM - 7:30 PM

Please register for this event when you register for the Experimental Biology Meeting.

The session is open to all. All of the ASIP Scientific Interest Group Poster Sessions will be held at the same time in the same location. Select posters from each Scientific Interest Group will be on display for informal discussions.

- **Breast Cancer**
- **Der Schadenklub (Cell Injury)**
- **Club Hepatomania™ (Liver Pathobiology)**
- **Neuropathology**
- **Vascular and Mucosal Pathobiology**
- **Veterinary Pathobiology**

Wednesday, April 30, 2014

Intracellular Escapades of Human Pathogens

8:30 AM - 11:30 AM

Chairs: David Russell, Sarah Fortune

- **Leishmania**, Christine Petersen, Iowa State University
- **Mycobacterium**, Sarah Fortune, Harvard School of Public Health
- **Macrophage Biology**, David Russell, Cornell University
- **Plasmodium**, Manoj Duraisingh, Harvard School of Public Health
- **Red Cell Biology**, Mohandas Narla, New York Blood Center

Personalized Medicine Therapies for Lung Cancer

8:30 AM - 11:30 AM

Chairs: Mary E. Sunday, Dani Zander

- **Pharmacogenomics and Targeted Therapies for Lung Cancer: Perspectives**, Raju Kucherlapati, Harvard, Brigham and Women's Hospital
- **Targeting Genetic Drivers in Premalignancy and Cancer**, Scott Lippman, University of California, San Diego Moores Cancer Center
- **Front Lines in the BATTLE Trial**, Kathryn Gold, The University of Texas MD Anderson Cancer Center
- **Circulating Tumor Cells: Making Personalized Medicine a Reality**, Peter Kuhn, The Scripps Research Institute
- **Real-World Application of Personalized Medicine in Lung Cancer**, Steffan Ho, Pfizer

Decoding Cancer by Single-Cell Genomics

8:30 AM - 11:30 AM

Chairs: Jonathan Pollack, Nick Navin

- **Introduction: Decoding Cancer by Single-Cell Genomics**, Jonathan Pollack, Stanford University
- **Clonal Heterogeneity Evolution During Therapy**, Elaine Mardis, Washington University School of Medicine
- **Investigating Clonal Diversity and Evolution in Cancer by Single-Cell Sequencing**, Nickolas Navin, University of Texas MD Anderson Cancer Center
- **Single Cell Genomics**, Stephen Quake, Stanford University
- **Single-Cell Genomics of Circulating Tumor Cells**, Xiaoliang Sunney Xie, Harvard University



Trainees...

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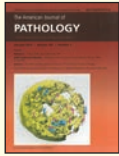




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Please print or type:

Candidate Name _____

Position _____

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Degrees:
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Gender (Optional Information):
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Scientific Interest Groups

Please check all that apply:

- Biobanking
- Biophysical Pathology
- Breast Cancer
- Cell Injury
- Gene Expression
- Immunohistochemistry and Microscopy
- Inflammation/Immunopathology
- Informatics
- Liver Pathobiology
- Molecular Markers of Disease
- Neoplasia/Growth Regulation
- Neuropathology
- Pulmonary Pathobiology
- Vascular and Mucosal Pathobiology
- Veterinary Pathology

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9650 Rockville Pike, Suite E133, Bethesda, MD 20814-3993 (USA), Phone: (301) 634-7130, Fax: (301) 634-7990,

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Applications are reviewed and subject to approval in accordance with the ASIP Bylaws. ASIP 2013 membership benefits will be valid January 1, 2013 through December 31, 2013. Have questions about this application? Email membership@asip.org



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