



American Society for
Investigative Pathology

ASIP2017

Annual Meeting at Experimental Biology

*Deciphering the Pathways of Health and Pathology: Informing
Biomarker Development, Prevention, Diagnosis, and Treatment of
Disease*



April 22 - 26, 2017 • Chicago, IL (USA)
www.asip.org/2017

GUEST SOCIETIES



American
College
of Veterinary
Pathologists
(ACVP)

APSA

American Physician Scientists Association

American
Physician
Scientists
Association
(APSA)



American
Society for
Matrix Biology
(ASMB)



Association of
Pathology
Chairs (APC)



The
Histochemical
Society (HCS)



Società Italiana
di Patologia e
Medicina
Traslazionale
(SIPMeT)



Society for
Cardiovascular
Pathology
(SCVP)



Society of
Toxicologic
Pathology
(STP)

Welcome

On behalf of the American Society for Investigative Pathology (ASIP), I am extremely pleased to invite you to the **ASIP 2017 Annual Meeting, April 22-26, in Chicago. Held in conjunction with Experimental Biology 2017, the 2017 ASIP theme will be “Deciphering the Pathways of Health and Pathology: Informing Biomarker Development, Prevention, Diagnosis, and Treatment of Disease.”**

With ideas and input from the ASIP membership, as well as our guest societies - **American Society for Matrix Biology (ASMB), American College of Veterinary Pathologists (ACVP), American Physician Scientists Association (APSA), Association of Pathology Chairs (APC), The Histochemical Society (HCS), Society for Cardiovascular Pathology (SCVP), Società Italiana di Patologia e Medicina Traslazionale (SIPMeT), and Society of Toxicologic Pathology (STP)** - the Program Committee has assembled a lively series of talks and symposia encompassing a broad diversity of topics; these not only illuminate basic biological and pathological processes, but also highlight potential targets in diagnosis, prevention, and therapy in human disease.

As in previous years, the ASIP sessions will include symposia and workshops communicating cutting edge science and translational research, commingled with educational and professional development sessions appealing to trainees and junior faculty. Reflecting the ASIP membership, there will be a strong emphasis on neoplasia, inflammation, endothelial and epithelial cell biology, hepatic pathobiology, imaging, and fundamental cell biology.

Relating to cancer, there will be a workshop on breast ductal carcinoma *in situ*, an ACVP symposium on epigenetics and cancer, the **Young Scientist Leadership Award Lecture from Chad Walesky on hepatobiliary development and cholangiocarcinoma formation, the Cotran Early Investigator Award Lecture by Katerina Politi on drug resistance in lung cancer**, a full session on cancer chemoprevention and biomarker development, and the Stowell Symposium on the role of Wnt in stem cells and cancer.

Relevant to inflammation, the meeting will feature a symposium on PAMPs and DAMPs, the SCVP symposium on cardiac inflammation, and a session looking at the role of inflammation in scarring and tissue remodeling. In the realm of endothelial and epithelial cell biology, there will be a series of talks on tissue barriers,

the Blood Vessel Club™ will look at endothelial function and permeability, and the **Gold-Headed Cane Award lecture will be given by Michael A. Gimbrone, Jr. on “Understanding Vascular Endothelium: A Pilgrim’s Progress.”** The wide world of hepatic biology and disease will include a symposium on autoimmune and non-alcoholic fatty liver disorders, the **ASIP Outstanding Investigator Award Lecture from Xiao-Ming Yin on autophagy in the liver**, and the **Presidential Symposium on liver pathobiology.**

There will also be an outstanding series of talks on the neuropathology of autonomic dysfunction, diseases of the endoplasmic reticulum, and targeting transcriptional regulation in disease. The SIPMeT symposium will focus on metabolism and disease prevention, the STP symposium will look at cardiovascular modeling for comparing *in vitro* and *in vivo* outcomes, and we will have a phenomenal session on Digital Computational Pathology. The HCS will weigh in with a series of talks about imaging *in vivo* signaling, as well as the annual Journal of Histochemistry and Cytochemistry Lecture chaired by Stephen Hewitt.

A fundamental component of the five-day program is the abstract-driven mini-symposia and poster sessions. In addition, ASIP's strong commitment to supporting young investigators and trainee members means that the program also provides special opportunities to trainees and junior faculty. On Saturday, there will be a session highlighting Graduate Student Research in Pathology, and a Pathobiology Course for Research Scientists on “NextGen Genomics for the Basic and Translational Scientist,” as well as the XVIIth Annual Workshop on Graduate Education in Pathology, discussing the various elements of the PhD workforce. On Sunday, the ASIP Committee for Career Development and Diversity will sponsor a morning workshop on “Developing Your Personal Brand for Career Success,” and the annual Mentoring Program and Lunch will continue the theme with an interactive session on “Developing Your Core Message: Crafting an Effective Elevator Speech.” The ASIP Education Committee is also sponsoring its annual “Scientific Sleuthing of Human Disease for Undergraduate Students and High School Teachers and Students,” covering topics such as emerging infectious diseases, smoking-related lung diseases, and stem cells.

An important note: **ASIP Trainee members (including undergraduate students) and Junior Faculty who submit abstracts to ASIP Topic Categories are eligible to be**

considered for travel awards. Please see details about the many award opportunities at www.asip.org/awards/.

As members of the investigative pathology community, your participation in the ASIP Annual Meeting is absolutely vital to the Society's success. Please register (and take advantage of the earl-bird rates!), and submit your abstracts to ASIP topic categories (early and often); join us in staying abreast of leading scientific research in “deciphering the pathways of health and pathology” that will lead to biomarker development, and disease prevention, diagnosis, and treatment.

Lastly, an editorial note - Besides participating in the meeting, any faculty (senior or junior) or trainee interested in becoming involved in the many ASIP-related educational, research, and leadership opportunities should feel free to contact myself or Tara Snethen at the ASIP office.

We look forward to seeing you at the ASIP 2017 Annual Meeting at Experimental Biology in Chicago.

Richard N. Mitchell, MD, PhD
ASIP Program Chair

Registration Rates

EB REGISTRATION FEES	ON OR BEFORE FEBRUARY 23 11:59PM (EST)	AFTER FEBRUARY 23
Sponsoring & Participating Guest Society Members	\$420	\$560
Non-Members	\$620	\$750
Retired Society Members	\$140	\$160
Retired Non-Members	\$170	\$190
Graduate Student Members*	\$85	\$95
Graduate Student Non-Members*	\$110	\$120
**Undergraduate Students	\$20	\$30
Postdoctoral Trainee Members***	\$335	\$435
Postdoctoral Trainee Non-Members***	\$335	\$435
1-Day Member	\$205	\$205
1-Day Non-Member	\$350	\$350
High School Students & Teachers**	Free Registration - Credentials Required	

***Graduate Student Registration** (including all Society student members): 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 nonmember rate.

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

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

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

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

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

The registration fee includes entrance to scientific sessions, exhibits, an online PDF of the program and mobile app. **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.

Important Deadlines

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

ASIP Special Events

Attendees interested in the following ASIP organized activities may sign up while registering for the EB2017 meeting. Details of these and other ASIP events will be posted at www.asip.org/meetings/2017/meeting_program.cfm
Sessions that require special registration will be noted:



XVIIth Annual Workshop on Graduate Education in Pathology: PhD Workforce
Saturday, April 22, 2017 at 11:45 AM

Committee for Career Development & Diversity



**Workshop & Breakfast:
Developing Your
Personal Brand for
Career Success**
Sunday, April 23, 2017
7:00 AM

XVIIth Annual ASIP/AAA Career Development and Mentoring Program and Lunch:



**Developing Your Core Message:
An Interactive Session on Crafting
an Effective Elevator Speech**
Sunday, April 23, 2017, 11:45 AM



Scientific Interest Group Networking Sessions and Poster Discussions

Tuesday, April 25, 2017 at (5:30 PM—7:30 PM; held concurrently)

- Biobanking
- Breast Cancer
- Club Hepatomania™ (Liver Pathobiology)
- Der Schadenklub (Cell Injury)
- Digital and Computational Pathology
- Environmental and Toxicologic Pathology
- Gene Expression
- Immunohistochemistry & Microscopy
- Inflammation/Immunopathology
- Molecular Diagnostic Pathology
- Neoplasia / Growth Regulation
- Neuropathology
- Pulmonary Pathology
- Regenerative Medicine and Stem Cells
- Tumor Microenvironment and Metastasis
- Vascular and Mucosal Pathobiology
- Veterinary and Comparative Pathobiology

ASIP Trainee Awards

Information & Deadlines

The following awards require submission of an abstract to an ASIP topic category at the Experimental Biology 2017 Meeting from an ASIP trainee member (undergraduate student, graduate/medical/veterinary student, pathology resident, postdoctoral fellow). For details on abstract submission, visit: www.asip.org/meetings/2017/abstracts.cfm

Abstract Submission Deadline: November 17, 2016

Award Application Deadline: November 17, 2016

During the abstract submission process, applicants will be given the opportunity to apply for ASIP Trainee Travel Awards. ALL APPLICANTS MUST FIRST APPLY FOR AN ASIP TRAINEE TRAVEL AWARD! Once you apply for this award you may apply for additional awards (excellence in research in the areas of cardiovascular, histochemical techniques, liver pathobiology, neoplasia; promoting diversity in science) depending on your membership category and eligibility. The ASIP membership information you provide when you submit your abstract is critically important for the online system to determine which other travel awards you can apply for. If you have any questions about your membership category status, contact membership@asip.org BEFORE YOU SUBMIT YOUR ABSTRACT. General information about awards for undergraduate students and pre- and post-doctoral trainee ASIP members can be found at <http://www.asip.org/awards>.

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 ASIP events, the American Society for Investigative Pathology offers a robust trainee travel awards program.

Trainee Travel Awards recognize excellence in research and help offset travel expenses for ASIP Trainee members (Undergraduate Students, Pre- and Post-doctoral Trainees) to attend the ASIP Annual Meeting at Experimental Biology (EB). The ASIP Scientific Review Committee for the meeting/conference selects recipients based on their scientific abstracts. Abstracts are selected for presentation in poster sessions and/or minisymposia. Please note that applicants for ASIP Trainee Travel

Awards for the ASIP Annual Meeting at EB MUST submit their abstract(s) to ASIP topic categories.

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 pathology residents and 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 (these abstracts MUST be submitted to ASIP topic categories), an extended research report (this report should not exceed 750 words nor include more than one table), 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 stipend 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 (these abstracts MUST be submitted to ASIP topic categories), an extended research report (this report should not exceed 750 words nor include more than one table), 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 stipend and complimentary meeting registration.**

Candidates for the EPIT and EPIGT Awards are also considered for **ASIP Merit Awards (\$1,250 plus complimentary registration)**. Prior recipients of the 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.

Gotlieb Undergraduate Student in Pathobiology Travel Award

In 2013, Dr. Avrum I Gotlieb, ASIP member and past President, established the **Gotlieb Family Fund for Undergraduate Education in Pathobiology** to support an undergraduate student with a \$750 travel award to attend the ASIP Annual Meeting. Like the other ASIP Trainee Travel Awards, an abstract must be submitted to ASIP topic categories at the annual meeting. Applicants must be Undergraduate Student Members of ASIP. Undergraduate students are also eligible for other ASIP Trainee travel awards.

ASIP Promoting Diversity in Science Trainee Travel Award

To promote the entry of under-represented scientists into the basic /translational/ clinical science community, the American Society for Investigative Pathology (ASIP) has developed Promoting Diversity in Science ASIP Trainee Travel Awards. These awards honor excellence in biomedical research focused on understanding mechanisms and classification of disease and provide travel awards to ASIP Trainee members (undergraduate students, pre-doctoral candidates, post-doctoral trainees) who identify with a restricted list of under-represented-in-science ethnic groups (see complete details online at <http://www.asip.org/awards/diversity.cfm>) to encourage participation in ASIP scientific meetings and conferences. Awardees are selected on the basis of merit by the conference Scientific Review Committee. The current award stipend is \$750.

ASIP International Trainee Travel Award

The ASIP International Trainee Travel Award promotes the entry of young scientists from economically under-developed countries into the mainstream of the science community and encourages the participation of young investigative pathologists in meetings and courses sponsored or supported by the American Society for Investigative Pathology. Candidates must be ASIP trainee members who reside in and are citizens of Hinari A countries (see <http://www.who.int/hinari/eligibility/en/>) and must submit their abstract to an ASIP topic category.

The ASIP-APSA Partnership Trainee Travel Award

To promote the entry of young physician-scientists into the mainstream of the basic science community and to encourage the participation of young physician-scientists in the ASIP Annual Meeting, ASIP is offering a special ASIP-APSA Partnership Trainee Travel Award of \$750 for trainee members of the American Physician-Scientists

Association (APSA) to attend the ASIP Annual Meeting at Experimental Biology. The ASIP Program Committee will select the recipient based on the submitted scientific abstract to ASIP topic categories. The abstract will be selected for presentation in either poster sessions or in minisymposia.

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 ASIP Annual Meeting at Experimental Biology, 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 submitted to ASIP topic categories, which must include data based on the use of histochemical techniques. Abstracts will be selected for presentation in either poster sessions or in minisymposia.

ASIP Junior Faculty Awards

To promote the participation of early career investigators in scientific meetings and conferences, the American Society for Investigative Pathology is pleased to announce the ASIP Junior Faculty Travel Award. The Award recognizes the outstanding research being conducted by ASIP Regular and Next Century members who are employed as Junior Faculty at institutions around the world. Must be an ASIP member in good standing at the time of application in order to be eligible for this award and meet specific criteria (see complete details online at http://www.asip.org/awards/junior_faculty.cfm).

Scientific Program

SATURDAY, APRIL 22, 2017

● Trainee Welcome Breakfast

7:30 AM - 8:30 AM

Sponsored by the ASIP Committee for Career Development and Diversity

● Highlights: Graduate Student Research in Pathology

8:30 AM - 11:30 AM

Sponsored by the ASIP Committee for Career Development and Diversity

Chairs: Titus A. Reaves, PhD

● ASIP YOUNG SCIENTIST LEADERSHIP AWARD LECTURE:

A Balancing Act: Role of α/β -Catenin Interaction in Hepatobiliary Development and Cholangiocarcinoma Formation

11:35 AM - 11:50 AM

Awardee: Chad Walesky, PhD

● Breast Cancer Workshop: Ductal Carcinoma *In Situ* - Discerning Aggressive Versus Benign Disease Using Molecular Features

8:30 AM - 11:30 AM

Sponsored by the ASIP Breast Cancer and Tumor Microenvironment & Metastasis Scientific Interest Groups

Chairs: William B. Coleman, PhD

- **Breast Ductal Carcinoma *In Situ* - Precursor to Invasive Breast Cancer**, William B. Coleman, University of North Carolina Chapel Hill School of Medicine
- **Gene Expression Patterns in Breast DCIS Predict Aggressiveness of Disease**, Lawrence J. Solin, Albert Einstein Medical Center
- **MicroRNA Expression Signatures Predict Aggressiveness of Breast DCIS**, Bethany N. Hannafon, University of Oklahoma Health Science Center
- **The Future of Molecular Testing in Breast DCIS**, Gregory J. Tsongalis, Dartmouth-Hitchcock Medical Center

● Neuropathology of Autonomic Dysfunction

8:30 AM - 11:30 AM

Sponsored by the ASIP Neuropathology Scientific Interest Group

Chairs: Warren Tourtellotte, MD, PhD, Jose Otero, MD, PhD

- **Autonomic Dysfunction in Neurodegenerative Disorders**, Thomas Montine, University of Washington

- **Epigenetics of Sleep Disorders**, Nanduri Prabhakar, University of Chicago

- **Autonomic Dysfunction in CCHS**, Debra Weese-Mayer, Northwestern University College of Medicine

- **The Pathobiology of Dysautonomia**, Nino Ramirez, University of Washington



XVIIth Annual Workshop on Graduate Education in Pathology: PhD Workforce

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 and the Association of Pathology Chairs

Chairs: Robin Lorenz, MD, PhD, Dani Zander, MD

- **Introduction and Background**, Robin G. Lorenz, University of Alabama at Birmingham Medical Center
- **PhDs in Clinical Chemistry and Molecular Diagnostics**, Gregory J. Tsongalis, Dartmouth-Hitchcock Medical Center
- **PhDs in Medical Microbiology and Laboratory Immunology**, Amanda Harrington, University of Illinois at Chicago
- **PhDs in Histocompatibility and Immunogenetics**, Michael D. Gautreaus, Wake Forest School of Medicine
- **Discussion**, Dani S. Zander, University of Cincinnati Medical Center



Course: Pathobiology for Research Scientists: Next-Generation Genomics for the Basic/Translational/Clinical Scientist

2:00 PM - 5:00 PM

Sponsored by the ASIP Education Committee

Chairs: William B. Coleman, PhD, Mark E. Sobel, MD, PhD, Gregory J. Tsongalis, PhD

- **A Primer on Genomics**, Karen Kaul, NorthShore University HealthSystem
- **Applications of Next-Generation Sequencing Technology**, Gregory J. Tsongalis, Dartmouth-Hitchcock Medical Center
- **Cancer Genomics**, William B. Coleman, University of North Carolina Chapel Hill School of Medicine
- **Genomics of Infectious Diseases**, Randall J. Olsen, Houston Methodist Hospital System

● **PAMPs and DAMPs: New Roles in Immunopathogenesis**

2:00 PM - 5:00 PM

Chairs: Asma Nusrat, MD, Andrew Neish, MD

- ***Pathogens, DAMPs and Inflammatory Disease at the Skin Barrier***, Gabriel Nunez, University of Michigan
- ***Pyroptosis Triggers Pore-Induced Intracellular Traps (PITs) that Capture Bacteria and Lead to their Clearance by Efferocytosis***, Edward Miao, University of North Carolina Chapel Hill School of Medicine
- ***Parasite-Induced Inflammasome Activation in Disease Pathogenesis***, Kris K. Chadee, University of Calgary
- ***Short invited talks selected from abstract submissions***

● **ASIP Awards Presentations and ASIP Business Meeting**

5:00 PM - 6:30 PM

Chairs: George K. Michalopoulos, MD, PhD

● **EB-Wide Welcome Reception**

7:00 pm – 8:30 pm

SUNDAY, APRIL 23, 2017

Committee for Career Development & Diversity

Workshop and Breakfast: Developing Your Personal Brand for Career Success

7:00 AM - 8:15 AM

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

Sponsored by the ASIP Committee for Career Development and Diversity

Chairs: Luisa DiPietro, DDS, PhD, Magali Saint-Geniez, PhD

- ***Meet and Greet***
- ***Introduction***, Magali J. Saint-Geniez, Schepens Eye Research Institute
- ***Parlaying Social Networks to Market Yourself Effortlessly***, Monte S. Willis, University of North Carolina Chapel Hill School of Medicine
- ***The Nuts and Bolts: CVs, Resume and Biosketches***, Michael A. Tessel, The University of Chicago

● **SCVP Symposium: New Roles for Inflammation in the Heart**

8:30 AM - 11:30 AM

Sponsored by ASIP and the Society for Cardiovascular Pathology

Chairs: James R. Stone, MD, PhD

- ***The Role of T Cell Mediated Inflammation in Non-Ischemic Heart Failure***, Pilar Alcaide, Tufts University School of Medicine Medical School

▪ ***Inflammation and Fibrosis in the Aging Heart: A Tale of Two Fibroblasts***, Mark L. Entman, Baylor College of Medicine

▪ ***Wound Healing by Macrophages in Ischemic Hearts***, Edward Thorp, Northwestern University

▪ ***Splenic Macrophages in Heart Failure***, Sumanth Prabhu, University of Alabama at Birmingham School of Medicine

● **MOLECULAR AND CELLULAR BASIS OF DISEASE: Liver Pathobiology Symposium: Novel Insights into the Mechanisms of Non-Alcoholic Fatty Liver Disease (NAFLD) and Autoimmune Liver Disease**

8:30 AM - 11:30 AM

Sponsored by the ASIP Liver Pathobiology Scientific Interest Group

Chairs: Kari Nejak-Bowen, MBA, PhD, Satdarshan Paul S. Monga, MD

▪ ***Endoplasmic Reticulum Stress and Unfolded Protein Response in Fatty Liver Disease***, Anne Henkel, Northwestern University Feinberg School of Medicine

▪ ***Genetics of Fatty Liver Disease***, Richard Green, Northwestern University Feinberg School of Medicine

▪ ***Inflammation in Cholestatic Liver Disease***, Bryan L. Copple, Michigan State University

▪ ***B-Catenin in Cholestasis***, Kari Nejak-Bowen, University of Pittsburgh

▪ ***Non-coding RNAs in Cholestasis***, Li Wang, University of Connecticut

▪ ***Role of Sortilin 1 in the Regulation of Hepatic Lipotoxicity in NAFLD***, Tiangang Li, University of Kansas Medical Center

● **Biology and Pathobiology of Tissue Barriers**

8:30 AM - 11:30 AM

Chairs: Asma Nusrat, MD, Andrei Ivanov, PhD

▪ ***Therapeutic Targeting of the Lateral Border Recycling Compartment to Control Transendothelial Migration***, William A. Muller, Northwestern University

▪ ***Metabolism and Epithelial Barrier Function***, Sean P. Colgan, University of Colorado

▪ ***Super-resolution Analysis of Tight Junction Permeability in Understanding Physiology and Pathophysiology of Renal Epithelial Barrier***, Jianghui Hou, Washington University School of Medicine

▪ ***Lung Epithelial Barriers in Health and Disease: Effects of Acute and Chronic Changes in Tight Junction Dynamics***, Michael Koval, Emory University School of Medicine

XVIIth Annual ASIP/AAA Career Development and Mentoring Program and Lunch:



Developing Your Core Message: An Interactive Session on Crafting an Effective Elevator Speech

11:45 AM - 1:45 PM

Please register for this

event when you register for the Experimental Biology Meeting

Sponsored by the ASIP Committee for Career Development and Diversity

Chairs: Diane Bielenberg, PhD, Chad Walesky, PhD

- **Introduction**, Diane Bielenberg, Harvard Medical School, Children's Hospital
- **Elevator Pitch Lesson**, John Lombardo, Medical College of Wisconsin
- **ELEVATOR PITCH EXAMPLES: Three Stages During Her Career (Student/Postdoc, Junior PI, Director of MEEI)**, Patricia A. D'Amore, Schepens Eye Research Institute/Harvard Medical School
- **ELEVATOR PITCH EXAMPLES: Three Pitches to Different Audiences (Academic, Industry, Lay-Audience)**, Charles A. Parkos, University of Michigan
- **Logistics for the Interactive Session**, Chad M. Walesky, Brigham and Women's Hospital/Harvard Medical School
- **Participants Craft Their Elevator Pitch on Index Cards**
- **Interactive Table Discussion: Elevator Pitches Sum Up**, Diane Bielenberg, Harvard Medical School, Children's Hospital

● **Cell Injury Workshop: Creating a Scar: The Roles of Inflammation in Tissue Remodeling**

2:00 PM - 5:00 PM

Sponsored by the ASIP Cell Injury Scientific Interest Group

Chairs: Cecelia C. Yates, PhD, Denuja Karunakaran, PhD

- **Inflammation: A Switch for Fibrotic Healing in Developing Fetal Skin**, Traci Wilgus, The Ohio State University
- **Macrophage-Fibroblast Crosstalk in Shaping Fibrotic Responses**, Cecelia C. Yates, University of Pittsburgh School of Nursing
- **Pericytes: Roles in the Inter-Relationship Between Inflammation and Fibrosis**, Latha Satish, University of Pittsburgh
- **Short invited talks selected from abstract submissions**

● **MOLECULAR AND CELLULAR BASIS OF DISEASE: Presidential Symposium: Liver Pathobiology: Prevention of Hepatic Disease and Regeneration**

2:00 PM - 5:00 PM

Sponsored by the ASIP Liver Pathobiology Scientific Interest Group

Chair: George K. Michalopoulos, MD, PhD

- **Coordinated Interactions Between Key Signaling Molecules Lead to Liver Carcinogenesis**, Satdarshan Paul S. Monga, University of Pittsburgh
- **Signaling Pathways Initiating, Terminating or Completely Eliminating Liver Regeneration**, George K. Michalopoulos, University of Pittsburgh
- **ASIP OUTSTANDING INVESTIGATOR AWARD LECTURE: Why Autophagy is Important to the Liver**, Xiao-Ming Yin, Indiana University School of Medicine

● **ASIP OUTSTANDING INVESTIGATOR AWARD LECTURE: Why Autophagy is Important to the Liver**

Sunday, April 23, 2017

4:00 PM - 5:00 PM

Awardee: Xiao-Ming Yin, MD, PhD

MONDAY, APRIL 24, 2017

● **ASIP Town Hall Meeting and Breakfast**

7:00 AM - 8:00 AM

Chair: Lisa McFadden

● **HCS Symposium: Imaging Signaling In Vivo From Cell Biology to Animal Models**

8:30 AM - 10:30 AM

Sponsored by the ASIP Immunohistochemistry & Microscopy Scientific Interest Group and The Histochemical Society

Chairs: Margarida Barroso, PhD, Douglas Rosene, PhD

- **Imaging Molecular Dynamics In Vivo**, Kurt Anderson, The Francis Crick Institute
- **Mechanisms of Membrane Remodeling in Live Animals by Intravital Microscopy**, Roberto Weigert, National Institutes of Health
- **Live Dynamic Optical Imaging of Reproductive and Developmental Events in Mouse Models**, Irina V. Larina, Baylor College of Medicine

● **Journal of Histochemistry & Cytochemistry Lecture**

10:30 AM - 11:30 AM

Sponsored by The Histochemical Society

Chairs: Stephen Hewitt, MD, PhD

- **Illuminating Biochemical Activity Architecture of the Cell**, Jin Zhang, University of California San Diego

● **COTRAN EARLY CAREER INVESTIGATOR AWARD**
LECTURE: Unraveling the Complexity of Drug Resistance in Lung Cancer
8:30 AM - 9:30 AM
Awardee: Katerina Politi PhD

● **MOLECULAR AND CELLULAR BASIS OF DISEASE: Cancer Chemoprevention and Biomarker Development**
8:30 AM - 11:30 AM
Chairs: William Stetler-Stevenson, MD, PhD, Kevin Gardner, MD, PhD,

- **COTRAN EARLY CAREER INVESTIGATOR AWARD LECTURE: Unraveling the Complexity of Drug Resistance in Lung Cancer**, Katerina Politi, Yale University School of Medicine
- **Exploring Molecular Linkages to Modifiable Risk in Breast Cancer**, Kevin Gardner, National Institutes of Health
- **Chemoprevention of Colitis/Pancreatitis-Induced Carcinogenesis via Targeting Soluble Epoxide Hydratase and Aldoketo-Reductase 1B10 (AKR1B10)**, Guang-Yu Yang, Northwestern University Feinberg School of Medicine
- **The Genomic Landscape of Breast Cancer in Women of African Ancestry**, Olufunmilayo I. Olopade, The University of Chicago Medicine

● **Digital Computational Pathology**
2:00 PM - 5:00 PM
Sponsored by the ASIP Digital and Computational Pathology Scientific Interest Group
Supported by an unrestricted educational grant from Renishaw
Chairs: Stanley Cohen, MD, John Tomaszewski, MD

- **Analytical WSI Quantitation & Machine Learning**, John E. Tomaszewski, University at Buffalo School of Medicine
- **MUSE and Other New Fluorescence Modalities**, Richard M. Levenson, University of California, Davis Medical Center
- **Non-Optical Imaging Based on Physical Probes**, Stanley Cohen, Rutgers-NJMS, Univ of Pennsylvania, Jefferson Univ, and Northwestern Univ
- **In Vivo Imaging; Confocal and Beyond**, Milind Rajadhyaksha, Jacobs School of Medicine and Biomedical Sciences

● **MOLECULAR AND CELLULAR BASIS OF DISEASE: ACVP Symposium: Epigenetics and Cancer**
2:00 PM - 5:00 PM
Sponsored by the ASIP Veterinary and Comparative Pathology Scientific Interest Group and the American College of Veterinary Pathologists
Chairs: Stacey Fossey, DVM, PhD, Robert Johnson, DVM, PhD

- **Linking DNA Methylation to Androgen Signaling and Prostate Proliferative Growth**, Chad Vezina, University of Wisconsin School of Medicine and Public Health
- **Polycomb, Histone Mutations and Diffuse Intrinsic Pontine Gliomas: From Drosophila to Targeted Therapeutics in Human**, Ali Shilatifard, Northwestern University Feinberg School of Medicine
- **Epigenomics - Impact for Translational Sciences**, Jonathan Moggs, Novartis Institutes for Biomedical Research
- **Epigenomics and Cancer Risk Factors**, Christoph Plass, German Cancer Research Center (DKFZ)
- **Epigenetics Mechanisms in Development and Disease**, Richard Meehan, Edinburgh University

● **GOLD-HEADED CANE AWARD LECTURE: Understanding Vascular Endothelium: A Pilgrim 's Progress**
2:00 PM - 3:00 PM
Awardee: Michael A. Gimbrone Jr., MD



Blood Vessel Club™: Endothelial Cell Mechanisms that Regulate Function and Permeability
2:00 PM - 5:00 PM

BLOOD VESSEL CLUB™
Chairs: Pilar Alcaide, PhD, Jonathon Homeister, MD, PhD

- **GOLD-HEADED CANE AWARD LECTURE: Understanding Vascular Endothelium: A Pilgrim 's Progress**, Michael A. Gimbrone, Brigham & Women's Hospital, Harvard Medical School
- **ROCK and Endothelial Function**, James Liao, University of Chicago
- **Rho GTPase Regulation of Adherens Junction Dynamics and Endothelial Permeability**, Asrar Malik, University of Illinois College of Medicine at Chicago
- **TNF Receptor Signaling in Monocyte Recruitment**, Tanya N. Mayadas, Brigham & Women's Hospital
- **Endothelial Cell Signaling that Regulates Transendothelial Migration**, William A. Muller, Northwestern University

TUESDAY, APRIL 25, 2017

● SIPMeT Symposium: Metabolism and Prevention of Disease

8:30 AM - 11:30 AM

Sponsored by ASIP and the Società Italiana di Patologia e Medicina Traslazionale /Italian Society of Pathology and Translational Medicine

Chairs: Massimiliano M. Corsi Romanelli MD PhD

- **Intestinal Microbiota: A New Effective Actor Usually Unconsidered for the Prevention of Cancer**, Vincent Castronovo, Université de Liège
- **Heart Failure: Inflammasome, Necrosome and Signalosome**, Monte S. Willis, University of North Carolina at Chapel Hill
- **Epicardial Fat: From Biomolecular Aspects to Clinical Practice**, Massimiliano M. Corsi Romanelli, University of Milan

● Stowell Symposium: Trends in Experimental Pathology: Gone with the Wnt: A Classic Tale of Stem Cells, Cancer and More

8:30 AM - 11:30 AM

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

Chairs: Satdarshan Paul S. Monga, MD, Douglas Stairs, PhD

- **Wnt Signaling in Mesenchymal Stem Cells**, Tong-Chuan He, The University of Chicago Medical Center
- **Enabling Developmental Competency to Pluripotent Stem Cells by Epigenetically Redirecting the Response to Wnt Signaling**, Brad Merrill, University of Illinois at Chicago
- **Control of T cell Development by Tcf-1 and β -Catenin**, Fotini Gounari, University of Chicago
- **Role of APC Defects and β -Catenin/TCF Dysregulation in Colon Cancer**, Eric Fearon, University of Michigan
- **Wnt/ β -Catenin Signaling in Liver Injury and Repair**, Satdarshan Paul S. Monga, University of Pittsburgh
- **Wnt Signaling in Skeletal Disease**, Bart Williams, Van Andel Research Institute

● Diseases of the Endoplasmic Reticulum

Tuesday, April 25, 2017

8:30 AM - 11:30 AM

Chairs: Jonathan Lin, MD, PhD, Fumihiko Urano, MD, PhD

- **ER Stress in Human Photoreceptor Diseases**, Jonathan H. Lin, University of California San Diego
- **ER Stress as a Driver of Neurodegeneration**, Claudio Hetz, Harvard School of Public Health
- **Podocyte ER Stress and Podocytopathies**, Ying (Maggie) Chen, Washington University School of Medicine

▪ **Insulin Gene Mutations**, Louis Philipson, The University of Chicago

▪ **Wolfram Syndrome, A Prototype of ER Stress-Mediated Beta Cell Death and Neurodegeneration**, Fumihiko Urano, Washington University School of Medicine

▪ **Progranulin: Connecting ER Stress and Lysosomal Protein Degradation in the Pathogenesis of Neurodegenerative Disease**, Aimee Kao, University of California San Francisco

● Scientific Sleuthing of Human Disease for Undergraduate Students and High School Teachers and Students

9:30 AM - 2:30 PM

Sponsored by the ASIP Education Committee

Chairs: Kari Nejak-Bown, MBA, PhD, Marth B. Furie, PhD

- **Check In**
- **Welcome and Introductions**, Kari Nejak-Bowen, University of Pittsburgh
- **Menacing Microbes: Emerging Infectious Diseases**, Martha B. Furie, Stony Brook University
- **Smoking-Related Lung Disease in 3D: Not Your Standard Lecture**, Dani S. Zander, University of Cincinnati Medical Center
- **Stem Cells: A Case of Dr. Jekyll and Mr. Hyde**, Satdarshan Paul S. Monga, University of Pittsburgh
- **Tour the Exhibits at the McCormick Place Convention Center**

● Society of Toxicologic Pathology Symposium: Challenges in Translation: Cardiovascular Modeling as an Exemplar for In Vitro to In Vivo Extrapolation

2:00 PM - 5:00 PM

Sponsored by the ASIP Environmental and Toxicologic Scientific Interest Group and the Society of Toxicologic Pathology

Chairs: Elizabeth Galbreath, PhD, DVM

- **Bridging Nonclinical and Clinical Science for Cardiovascular Safety**, Brian R. Berridge, GlaxoSmithKline plc., London
- **Biomarkers of Drug Induced Vascular Injury**, Heath C. Thomas, Experimental Pathology Laboratories, Inc. (EPL®)
- **Toxicological Pharmaceutical Mechanistic Research and Clinical Applications for Cardiac iPSC**, Paul W. Burrige, Northwestern University

continued on the following page



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ASIP2017

Annual Meeting at Experimental Biology

April 22 - 26, 2017 • Chicago, IL



Deadlines!

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

● Targeting Transcription Regulation in Disease

2:00 PM - 5:00 PM

Sponsored by the Gene Expression Scientific Interest Group

Chairs: Philip Iannaccone, MD, PhD, Yan Qin, PhD, David Williams, MD, PhD

- ***Epigenetic Regulation of Gene Expression by the Trx/COMPASS Family in Development and Cancer***, Ali Shilatifard, Northwestern University Feinberg School of Medicine
- ***lncRNA Regulation of Gene Expression in Fate Specification and Disease***, Jhumku D. Kohtz, Northwestern University
- ***Mitochondrial Gene Expression in Disease***, Gerald S. Shadel, Yale School of Medicine
- ***Exploring the Methyl-Cytosine Binding Domain Family as Potential Therapeutic Targets***, David C. Williams, University of North Carolina

Scientific Interest Group Networking Sessions and Poster Discussions

5:30 PM - 7:30 PM

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

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

- Biobanking
- Breast Cancer
- Club Hepatomania™ (Liver Pathobiology)
- Der Schadenklub (Cell Injury)
- Digital and Computational Pathology
- Environmental and Toxicologic Pathology
- Gene Expression
- Immunohistochemistry & Microscopy
- Inflammation/Immunopathology
- Molecular Diagnostic Pathology
- Neoplasia / Growth Regulation
- Neuropathology
- Pulmonary Pathology
- Regenerative Medicine and Stem Cells
- Tumor Microenvironment and Metastasis
- Vascular and Mucosal Pathobiology
- Veterinary and Comparative Pathobiology

WEDNESDAY, APRIL 26, 2017

Late-Breaking Poster Sessions