AUA 63rd ANNUAL MEETING

May 19-20, 2016

HOSTED BY

University of California, San Francisco

Hilton San Francisco Union Square
San Francisco, California
Welcome to the Association of University Anesthesiologists 63rd Annual Meeting!

Welcome to the Association of University Anesthesiologists 63rd Annual Meeting, hosted by the University of California, San Francisco, in the vibrant city of San Francisco, California. The Annual Meeting Planning Committee, Drs. Charles W. Emala, Robert R. Gaiser, Michael A. Gropper, and Jeanine P. Wiener-Kronish, has developed robust content that will provide attendees with the valuable knowledge they need to advance their practice of academic anesthesia.

New this year, AUA attendees will benefit from an additional educational opportunity at the Aligned Meeting Day on Saturday, May 21 at the International Anesthesia Research Society 2016 Annual Meeting and International Science Symposium as part of their AUA registration fee. Our colleagues from the Anaesthetic Research Society in the United Kingdom will also join us this year at the AUA 63rd Annual Meeting.

Annual Meeting Highlights include:

Thursday, May 19
The Scientific Advisory Board (SAB) will highlight original research in the clinic and laboratory during two Oral Sessions and the first of two Moderated Poster Discussion Sessions during the meeting. The Host Program Session will showcase groundbreaking programs and developments that make the University of California, San Francisco unique. Take time to network and relax during the AUA Social Event Reception, from 6:30 pm to 9:30 pm, hosted by the University of California, San Francisco, at the California Academy of Sciences, one of the largest natural history museums in the world, and enjoy hearty refreshments, live music and access to the museum.

Friday, May 20
The SAB will continue the momentum with two more engaging Oral Sessions as well as the second Moderated Poster Discussion Session. The Educational Advisory Board (EAB) will focus on thought-provoking topics during two sessions on The Science of Communication and Publication of Education Research. The President’s Panel: How to Produce Successful Researchers will conclude the day with helpful tips on being an effective researcher from successful researchers currently in the field. Join us for a Lively Reception with the British Journal of Anesthesia and the Anaesthetic Research Society, from 6:00 pm to 7:30 pm, at the Hilton San Francisco Union Square.

Saturday, May 21
The Aligned Meeting Day will present a wide selection of invigorating education sessions, highlighting pioneering topics in anesthesia, celebrating advances in education, science, research and the art of anesthesiology.

Featured Sessions include:

- T.H. Seldon Memorial Lecture: Reproducible Research: Impact in Evidence-Based Decision Making with Dr. John P.A Ioannidis
- Celebration of the Science of Anesthesiology Symposium: Protective Lung Ventilation in the Operating Room
- A Dedicated Scholars’ Program
- Scholars’ Program Reception – 5:00 pm to 6:00 pm
- IARS Alignment Reception – 6:00 pm to 7:30 pm

We are confident you will find this time together meaningful and gratifying while discovering all that San Francisco has to offer. We look forward to sharing this time with you in San Francisco!

Sincerely,

Thomas J.J. Blanck, MD, PhD
President, Association of University Anesthesiologists
Welcome from the University of California, San Francisco

We are delighted to host the Association of University Anesthesiologists 63rd Annual Meeting, and are excited to share our city, department and university with you. Although San Francisco needs little introduction, we look forward to showing you parts of the city that you may not have seen. We hope that you have the opportunity to explore the art, architecture, culture and culinary delights of our unique city.

San Francisco’s unparalleled cultural diversity has underpinned the UCSF Department of Anesthesia and Perioperative Care’s storied history of innovation in anesthesia, critical care, and pain medicine since the department’s inception in 1958 by its first chair, Stuart Cullen. For ten of the last eleven years, the Department has been ranked #1 nationally in NIH-funded research. Important discoveries by the department include the first use of CPAP in premature infants, key contributions to the pharmacology of muscle relaxants and inhaled anesthetics, first demonstration of intraoperative transesophageal echocardiography, and many others. We have robust research programs, spanning the range from ion channel structure and function, to clinical and translational research.

Our trainees have become leaders across the country. We are particularly proud of our residency program, which provides unequalled diversity of experience in a major university medical center (Moffitt-Long Hospital), the San Francisco Veterans Hospital, Mount Zion Hospital, the UCSF Orthopedic Institute, and the brand new Benioff Children’s, Betty Irene Moore Women’s and Bakar Cancer (NIH-designated Cancer Center) Hospitals in the Mission Bay neighborhood. This month, the new Zuckerberg San Francisco General Hospital and Trauma Center will open. We offer ACGME fellowships in Critical Care Medicine, Pain Management, Cardiac Anesthesia, Obstetric Anesthesia, Pediatric Anesthesia, and many additional non-ACGME fellowships. The faculty is dedicated to teaching, nurturing, and mentoring the next generation of leaders.

The host program has adopted the theme of the UCSF campus, which is Precision Medicine. Although it’s tempting to think of precision medicine as a laboratory endeavor, we take a much broader view. At UCSF, we are driven by the idea that when the best research, the best teaching, and the best patient care converge, we can deliver breakthroughs that help heal the world.

The host program features four outstanding leaders of our university. Talmadge E. King, Jr., MD, is Dean of the UCSF School of Medicine, and Professor of Medicine. Aside from being one of the world’s leading authorities on interstitial lung disease, he is a visionary leader of the school, and a champion of diversity in academic medicine. Joe L. DeRisi, PhD, is Professor and Chair of the UCSF Department of Biochemistry and Biophysics. He is a Howard Hughes Investigator and recipient of a MacArthur Genius Award. DeRisi has pioneered innovative technologies using DNA micro-arrays for rapid pathogen detection. Diane Havlir, MD, is Professor of Medicine and Chief of the HIV/AIDS Division, at Zuckerberg San Francisco General Hospital. She leads the UCSF HIV programs, which have served as a model for both the United Nations and U.S. AIDS efforts. Stephen L. Hauser, MD, is Professor and Chair of the Department of Neurology at UCSF. He is internationally renowned for his work on immune mechanisms of multiple sclerosis.

We look forward to welcoming you to San Francisco, and are committed to ensuring you have an engaging and rewarding meeting.

Michael A. Gropper, MD, PhD
Professor and Chair, Department of Anesthesia and Perioperative Care, UCSF
GREETINGS FROM THE MAYOR

As Mayor of the City and County of San Francisco, it is my pleasure to join in welcoming everyone attending the Association of University Anesthesiologists (AUA) 63rd Annual Meeting, the International Anesthesia Research Society (IARS) 2016 Annual Meeting and International Science Symposium, and the Society of Critical Care Anesthesiologists (SOCCA) 29th Annual Meeting and Critical Care Update. For the first time ever, these three organizations are aligning and bringing together over 1,500 of the world’s leading anesthesia educators and investigators to San Francisco. Our City is proud to host you all.

The work that all of you have committed to – in your everyday lives and in the next few days as you share ideas – is a significant contribution to the vitality of our communities. Your many efforts have positively impacted the landscape of anesthesiology, whether your role is academic or working in clinics and laboratories. Thank you for your outstanding dedication to striving for greater knowledge and better practices for anesthesiology professionals towards the health, well-being and overall vitality of all.

San Francisco is proud to be a leader in access to world-class health care and a trailblazer in innovative breakthroughs. I commend AUA, IARS, SOCCA and all the individuals who helped to ensure these events will be a great success. Congratulations and best wishes for productive meetings and success in your future endeavors.

With warmest regards,

[Signature]

Edwin M. Lee
Mayor
Continuing Medical Education (CME) Information

Activity Overview
Findings from new research and the evolution of anesthesiology practice based on emerging evidence create an inherent gap between existing practice and new practice models. The purpose of the Association of University Anesthesiologists (AUA) 63rd Annual Meeting is to provide an evidence-based and clinically-oriented educational activity that will improve competence and performance in the anesthesiology specialty, resulting in improved patient care and outcomes.

Target Audience
The AUA 63rd Annual Meeting is designed to address the continuing medical education needs of anesthesiologists, anesthesiologists-in-training, and anesthesia investigators in academic, clinical and laboratory settings.

Educational Objectives
As a result of participating in this live CME activity, learners will be able to:

- Describe the latest developments in education research, measuring knowledge in the field of anesthesia and genomics.
- Consider recent research findings relative to anesthesiology and evaluate their application to the learner’s professional practice.
- Develop strategies for integrating new knowledge and behaviors into their professional practice.
- Evaluate gaps in their knowledge, behavior, and patient outcomes that may result in a need for additional education and training.

Accreditation Statement
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the International Anesthesia Research Society (IARS) and the AUA. The IARS is accredited by the ACCME to provide continuing medical education for physicians.

CME Credit
The International Anesthesia Research Society (IARS) designates this live activity for a maximum of 14.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Disclosure
The International Anesthesia Research Society (IARS) makes every effort to develop CME activities that are independent, objective, scientifically balanced presentations of information. The IARS has implemented mechanisms requiring everyone in a position to control content to disclose all financial relationships with commercial interests. Disclosure of any or no relationships is made available in advance of all educational activities. The IARS evaluates, and if necessary, resolves any conflicts of interest prior to the start of the activity. Individuals who refuse or fail to provide the required disclosures are disqualified from being a planning committee member, teacher, or author of CME, and cannot have control of, or responsibility for, the development, management, presentation or evaluation of the CME activity.

Disclaimer
The information provided in this CME activity is for continuing education purposes only and is not meant to substitute for the independent medical judgment of a healthcare provider relative to diagnostic and treatment options of a specific patient’s medical condition.

Commercial Support
This CME activity is supported entirely by the Association of University Anesthesiologists. There is no commercial support for this activity.
Planning Committee & Program Faculty

Planning Committee

**Thomas J.J. Blanck, MD, PhD**  
*President, Association of University Anesthesiologists*  
Professor of Anesthesiology and Neuroscience and Physiology,  
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New York, New York

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Professor and Chair, Department of Anesthesia and Perioperative Care, Professor, Physiology, Investigator, CVRI,  
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**Jeanine P. Wiener-Kronish, MD**  
*President Elect, Association of University Anesthesiologists*  
Henry Isaiah Dorr Professor of Research and Teaching in Anaesthetics and Anaesthesia,  
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Boston, Massachusetts

Program Faculty

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**Joseph L. DeRisi, PhD**  
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**Charles W. Emala, MD**  
*Chair, Scientific Advisory Board*  
Henrik H. Bendixen Professor of Anesthesiology and Vice Chair for Research,  
Columbia University,  
New York, New York
Planning Committee & Program Faculty

Program Faculty Continued

Lee A. Fleisher, MD, FACC, FAHA
Immediate Past President, Association of University Anesthesiologists
Robert D. Dripps Professor and Chair, Department of Anesthesiology and Critical Care, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

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Chair, Educational Advisory Board
Professor of Anesthesiology and Critical Care, and Program Director, Department of Anesthesiology and Critical Care, University of Pennsylvania, Philadelphia, Pennsylvania

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Assistant Professor of Anesthesiology, Columbia University, New York, New York

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Host Chair, AUA 63rd Annual Meeting
Professor and Chair, Department of Anesthesia and Perioperative Care, Professor, Physiology, Investigator, CVRRI, University of California, San Francisco, San Francisco, California

Stephen L. Hauser, MD
Robert A. Fishman Distinguished Professor and Chair, Department of Neurology, University of California, San Francisco, San Francisco, California

Diane Havlir, MD
Chief, Division of IFV, Infectious Disease and Global Medicine, San Francisco General Hospital; Professor of Medicine, University of California, San Francisco, San Francisco, California

Talmadge E. King, Jr., MD
Dean, School of Medicine, Vice-Chancellor for Medical Affairs, Professor of Medicine, University of California, San Francisco, San Francisco, California

Meghan Lane-Fall, MD, MSHP
Assistant Professor of Anesthesiology and Critical Care; Co-Director, Penn Center for Perioperative Outcomes Research and Transformation; Core Faculty, Center for Healthcare Improvement and Patient Safety; Perelman School of Medicine; Senior Fellow, Leonard Davis Institute of Health Economics, University of Pennsylvania, Philadelphia, Pennsylvania

Alex Macario, MD, MBA
Professor of Anesthesiology, Perioperative and Pain Medicine and, by courtesy, of Health Research and Policy, Stanford University, Stanford, California

Rebecca D. Minehart, MD, MSHPEd
Assistant Professor of Anaesthesia, Harvard Medical School; Assistant Program Director, Anesthesia Residency Program; Program Director, Obstetric Anesthesia Fellowship Program; Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

Mark D. Neuman, MD, MSc
Assistant Professor of Anesthesiology and Critical Care, Senior Fellow, Leonard Davis Institute for Health Economics, University of Pennsylvania; Attending Anesthesiologist, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania

Maxine Papadakis, MD
Professor, Medicine, Associate Dean for Students, Chair, Journal Oversight Committee for Academic Medicine, University of California, San Francisco, San Francisco, California

Davinder Ramasingh, MD
Associate Professor, Department of Anesthesiology, Loma Linda University School of Medicine, Loma Linda, California

Edward Sherwood, MD, PhD
Professor and Vice-Chair for Research, Department of Anesthesiology, Vanderbilt University School of Medicine, Nashville, Tennessee

Jeanine P. Wiener-Kronish, MD
President Elect, Association of University Anesthesiologists, Henry Isaiah Dorr Professor of Research and Teaching in Anaesthetics and Anaesthesia, Department of Anesthesia, Critical Care and Pain Medicine, Harvard Medical School, Anesthetist-in-Chief, Massachusetts General Hospital, Boston, Massachusetts

*As of press time and subject to change.
What to Do in San Francisco

The sights and scenery. The one-of-a-kind events and world-class culinary scene. The welcoming people, the diversity and rich history. Known for its many hills, San Francisco is one of the most interesting 7-square-miles on the planet.

Walk or ride a Cable Car up the hills that make San Francisco famous. Experience the many micro-climates in the city. Taste the wide range of culinary selections provided by the city with more restaurants per capita than any other U.S. city. Explore distinctive neighborhoods such as Chinatown, Haight-Ashbury, Mission District, and dozens of other cities within the city, an array of art and cultural institutions, theater, dance, and musical performances and absorb the magnetic, vibrant energy that makes San Francisco unique.

For more information on what to do in San Francisco, click here.
Hotel & Travel Information

Headquarters Hotel
Hilton San Francisco Union Square
333 O'Farrell Street, San Francisco, California

Special Hotel Rates for AUA Attendees End Monday, April 18!
The Hilton San Francisco Union Square is the Headquarters Hotel for the AUA 63rd Annual Meeting. All Annual Meeting education sessions will be conveniently located at the Hilton. San Francisco is a city famous for selling out of hotel rooms. We expect this hotel will sell out of rooms very quickly.

Book your hotel room today and reserve your spot at the Headquarters Hotel!
One of the largest and tallest hotels on the West Coast, the Hilton San Francisco Union Square puts you in easy proximity to the famous cable cars and makes it easy to visit attractions such as the Golden Gate Bridge, Fisherman's Wharf, Pier 39, the Marina, and Nob Hill.
The AUA has secured a limited block of rooms for meeting attendees at the Hilton San Francisco Union Square.
The special conference rates are below for either single or double occupancy:

- **Classic Room:** $249
- **Urban Contemporary Room:** $269
- **Bay View or Skyline:** $299

All room rates are quoted exclusive of state and local taxes, fees and assessments, currently 16.45%. Taxes are subject to change. Quoted rates will be offered, based on availability, to attendees three days before and three days after the meeting dates. The additional fee for every third and fourth occupant in a room is $20 per person. Children under 18 stay free if they are staying in the same room as parents and utilizing existing bedding. Rollaways are currently $25 plus tax per rollaway, subject to change.

**Hotel Reservation Cancellation Policy:** The hotel will charge one night’s deposit at the time of the reservation. Should plans change and you need to cancel the room, the deposit is refundable if the reservation is canceled prior to Monday, April 18, 2016. For cancellations made after Monday, April 18, 2016, the one night's deposit will be forfeited.

Please be sure to provide the AUA conference code of ANE to receive the special AUA rates.

Travel Information
**Airports:** The Bay Area has two airports serving the region: San Francisco International Airport (SFO) and Oakland International Airport (OAK).
The San Francisco International Airport is 14 miles away or a 25-minute drive from the Hilton San Francisco Union Square. The Oakland International Airport is 20 miles away or a 35-minute drive from the Headquarters Hotel. Both airports are connected to the region's subway system, Bay Area Rapid Transit (BART), for easy access to the city and offer multiple flights a day from a wide selection of airlines.

To learn more about available transportation options and rates to the Hilton San Francisco Union Square, [click here](#).
Special Events

Thursday, May 19
Resident, Fellow, and Junior Faculty Lunch
12:00 pm to 1:15 pm, Hilton San Francisco Union Square (333 O’Farrell Street)
Tables will be reserved for residents, fellows, junior faculty members, and their sponsoring chair. Members of the AUA Council will be present to meet with these future leaders in academic anesthesiology.

AUA Social Event Reception
6:30 pm to 9:30 pm, California Academy of Sciences (55 Music Concourse Drive)
The AUA Social Event Reception, sponsored by Host Institution, University of California, San Francisco, will take place on Thursday, May 19, from 6:30 pm to 9:30 pm, at the California Academy of Sciences, one of the largest natural history museums in the world, located in Golden Gate Park. The event includes hearty appetizers and drinks, live music and access to the museum. An additional fee is required to attend this special event, and a ticket will be provided with your badge for attendance to this reception. Please sign-up for this special event when registering if you and/or your guest will attend.

Friday, May 20
British Journal of Anesthesia & Anaesthetic Research Society Reception
6:00 pm to 7:30 pm, Hilton San Francisco Union Square (333 O’Farrell Street)
AUA attendees are invited to attend the British Journal of Anesthesia & Anaesthetic Research Society Reception on Friday, May 20, from 6:00 pm to 7:30 pm, at the Hilton San Francisco Union Square. Please sign-up for this event when registering for the Annual Meeting if you and/or your guest will attend. A ticket will be provided with your badge for attendance to this reception.

Saturday, May 21
Two Receptions during the Aligned Meeting Day at the IARS 2016 Annual Meeting
The following receptions will take place as part of the IARS 2016 Annual Meeting and International Science Symposium. AUA registered attendees are invited to attend these IARS receptions as part of their AUA registration fee.

Scholars’ Program Reception
5:00 pm to 6:00 pm, Hilton San Francisco Union Square (333 O’Farrell Street)
Network and socialize with scholars at the Scholars’ Program Reception on Saturday, May 21, from 5:00 pm to 6:00 pm, and celebrate the new knowledge gained during the Scholars’ Program. Scholars should be sure to sign up in advance for a small group mentor/scholar session at this energizing social event. This reception and mentorship opportunity is supported by FAER’s Academy of Research Mentors in Anesthesiology.

IARS Alignment Reception
6:00 pm to 7:30 pm, Hilton San Francisco Union Square (333 O’Farrell Street)
Come together and toast the educational magnetism that results when leading minds in all subspecialties of anesthesiology join forces in one location. Join your colleagues and peers for the upbeat Alignment Reception on Saturday, May 21, from 6:00 pm to 7:30 pm, and taste a little bit of the unique flavor that San Francisco has to offer.
Join the leading academic anesthesia educators and researchers at the AUA 63rd Annual Meeting, May 19-20, 2016, at the Hilton San Francisco Union Square in San Francisco, California for a robust program, featuring education sessions from the Educational Advisory Board (EAB), Scientific Advisory Board (SAB), and the Host Institution, University of California, San Francisco, focused on cutting-edge topics, and two days of Moderated Poster Discussion Sessions.

Plus, new this year, AUA attendees will benefit from a special Aligned Meeting Day at the IARS 2016 Annual Meeting and International Science Symposium on Saturday, May 21 with education sessions on thought-provoking topics in anesthesiology. AUA registrants may attend all Aligned Meeting Day sessions at the IARS 2016 Annual Meeting as part of their AUA registration fee.

Thursday, May 19

7:00 am  –  5:30 pm  Registration

8:00 am  –  8:15 am  Welcome from AUA President and Host Institution Chair
Thomas J.J. Blanck, MD, PhD
Michael A. Gropper, MD, PhD

8:15 am  –  9:15 am  Scientific Advisory Board (SAB) Oral Session I
Moderators: Nabil Alkayed, MD, PhD, Oregon Health & Science University, Portland, Oregon, and Peter Goldstein, MD, Weill Cornell Medical College, New York, New York
- Peptidyl Arginine Deiminase-4 Exacerbates Ischemic Acute Kidney Injury by Finding NEMO
  H.T. Lee, MD, PhD, Columbia University, New York, New York
- Role of the Gut-Lung Axis and IL-1b Signaling in Sterile Inflammation Following Lung Ischemia Reperfusion Injury
  Arun Prakash, MD, PhD, University of California, San Francisco, San Francisco, California
- Inhibition of Free Fatty Acid Receptor GPR40 Abolishes Cardioprotection Conferred by Intralipid in Two Rodent Models of Bupivacaine Cardiotoxicity and Ischemia Reperfusion Injury
  Soban Umar, MD, PhD, University of California, Los Angeles, Los Angeles, California

Resident Travel Award
- Low Molecular Weight Hyaluronan Mediated Inflammation And Airway Hyperresponsiveness in Acid Aspiration Induced Acute Lung Injury in Mice
  Weifeng Song, MD, PhD, University of Alabama at Birmingham, Birmingham, Alabama

9:15 am  –  9:30 am  Break

9:30 am  –  10:30 am  SAB Oral Session II
Moderators: Nabil Alkayed, MD, PhD, Oregon Health & Science University, Portland, Oregon, and Peter Goldstein, MD, Weill Cornell Medical College, New York, New York
Program Schedule

Thursday, May 19 Continued

- **Therapeutic Effects of Microvesicles Derived From A Mouse Macrophage Cell Line (RAW264.7) in Severe Pneumonia in Mice**
  Jae-Woo Lee, MD, University of California, San Francisco, San Francisco, California

- **Gating of the TREK1 Tandem Pore Potassium Channel, A Molecular Signal Integrator and Anesthetic Target**
  Paul M. Riegelhaupt, MD, PhD, Weill Cornell Medicine, New York, New York

- **Microglia Exacerbate Neuronal Death After Cardiac Arrest**
  Ines P. Koerner, MD, PhD, Oregon Health & Science University, Portland, Oregon

- **Systemic HMGB1 Impairs Synaptic Plasticity after Surgery in Aged Rats**
  Niccolo Terrando, BSc (Hons), DIC, PhD, Duke University, Durham, North Carolina

10:30 am – 12:00 pm Moderated Poster Discussion Session I

12:00 pm – 1:15 pm All Attendee Lunch

12:00 pm – 1:15 pm Resident, Fellow and Junior Faculty Lunch
  Tables will be reserved for residents, fellows, junior faculty members and their sponsoring chair. AUA Council Members will also be present.

1:15 pm – 2:30 pm Host Panel Session: Part I:
  Precision Medicine: From Molecules to Social Justice
  Moderator: Michael A. Gropper, MD, PhD
  Panelists:
  - **Genomics and Infectious Disease: Clinical Case Studies**
    Joseph L. DeRisi, PhD
  - **The Multiple Sclerosis BioScreen: A Model for Chronic Disease Management**
    Stephen L. Hauser, MD

2:30 pm – 2:45 pm Break

2:45 pm – 4:15 pm Host Panel Session: Part II:
  Precision Medicine: From Molecules to Social Justice
  Moderator: Michael A. Gropper, MD, PhD
  Panelists:
  - **Precision Medicine at UCSF: Turning the Hype into Reality**
    Talmadge E. King, Jr., MD
  - **Frontiers in HIV Medicine**
    Diane Havlir, MD
Program Schedule

4:15 pm  –  4:30 pm  Break
4:30 pm  –  5:30 pm  AUA Annual Business Meeting
6:30 pm  –  9:30 pm  AUA Social Event Reception

Hosted by University of California, San Francisco
California Academy of Sciences (55 Music Concourse Drive)

Friday, May 20

6:00 am  –  6:00 pm  Registration
8:00 am  –  9:00 am  SAB Oral Session III

Moderators: Y.S. Prakash, MD, PhD, Mayo Clinic, Rochester, Minnesota, and Zhongchong Xie, MD, PhD, Massachusetts General Hospital, Boston, Massachusetts

- Using Social Network Analysis Tools to Assess the Effect of Isoflurane Anesthesia on Gene Networks in Rat Brain
  Helen F. Galley, PhD, University of Aberdeen, Aberdeen, Aberdeenshire, United Kingdom

- The Analgesic Effects of Dopamine
  Norman E. Taylor, MD, PhD, Massachusetts General Hospital, Boston, Massachusetts

- Pharmacodynamics and Pharmacokinetics of Novel GABA-A Receptor Alpha 4 Subunit Selective Ligands that Treat Bronchoconstriction
  Gene T. Yocum, MD, Columbia University, New York, New York

- The ‘Meyer-Overton Quantum Underground’ – Where Anesthetics Act to Prevent Consciousness
  Stuart R. Hameroff, MD, The University of Arizona, Tucson, Arizona

9:00 am  –  9:15 am  Break
9:15 am  –  10:15 am  SAB Oral Session IV

Moderators: Y.S. Prakash, MD, PhD, Mayo Clinic, Rochester, Minnesota, and Zhongchong Xie, MD, PhD, Massachusetts General Hospital, Boston, Massachusetts

- Mitochondrial TRPV1 Regulates Endothelial Dysfunction in Diabetes
  Nana-Maria Wagner, MD, Stanford University, Stanford, California

- A Novel Association Between High Density Lipoprotein Levels and the Risk of Acute Kidney Injury After Cardiac Surgery
  Loren E. Smith, MD, PhD, Vanderbilt University, Nashville, Tennessee

- Impaired Relaxation of Airway Smooth Muscle in Mice Lacking the Cytoskeletal Regulatory Protein Gelsolin: A Potential Novel Target for Airway Relaxation
  Maya Mikami, MD, PhD, MPH, Columbia University, New York, New York
Program Schedule

Friday, May 20  Continued

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<th>Time</th>
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<tr>
<td>10:15 am – 11:45 am</td>
<td>Moderated Poster Discussion Session II</td>
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<tr>
<td>11:45 am – 1:00 pm</td>
<td>All Attendee Lunch</td>
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<td>Scientific Advisory Board (SAB) Lunch</td>
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| 1:00 pm – 2:30 pm    | Educational Advisory Board (EAB) Program Session I:  
|                      | The Science of Communication                                                                   |
|                      | Moderator: Robert R. Gaiser, MD                                                                  |
|                      | • The Science of Hand-off Communication                                                         |
|                      | Meghan Lane-Fall, MD, MSHP                                                                       |
|                      | • The Science of Communication Among Professionals                                              |
|                      | Rebecca D. Minehart, MD, MSHPEd                                                                  |
|                      | • An Evidence-Based, ARTful Approach to Feedback in Clinical Education                           |
|                      | Calvin Chou, MD                                                                                  |
| 2:30 pm – 4:00 pm    | EAB Program Session II:  
|                      | Publication of Education Research                                                               |
|                      | Moderator: Robert R. Gaiser, MD                                                                  |
|                      | • Education Research: How to Get Started                                                          |
|                      | Davinder Ramasingh, MD                                                                            |
|                      | • Closing the Loop in Education Research                                                          |
|                      | Alex Macario, MD, MBA                                                                            |
|                      | • How to Publish Education Research                                                               |
|                      | Maxine Papadakis, MD                                                                              |
| 4:00 pm – 4:15 pm    | Break                                                                                            |
| 4:15 pm – 5:45 pm    | President’s Panel:  
|                      | How to Produce Successful Researchers                                                            |
|                      | • Basic Science Research: Columbia University                                                     |
|                      | Charles W. Emala, MD                                                                              |
|                      | George Gallos, MD                                                                                 |
Program Schedule

Friday, May 20  Continued

- **Health Policy Research: University of Pennsylvania Health System**
  Lee A. Fleisher, MD
  Mark D. Neuman, MD

- **Clinical Research: Vanderbilt University Medical Center**
  Edward R. Sherwood, MD, PhD
  Frederic T. (Josh) Billings, MD, MSCI

- **Educational Research: Massachusetts General Hospital**
  Jeanine P. Wiener-Kronish, MD
  Rebecca D. Minehart, MD, MSHPEd

6:00 pm – 7:30 pm  *British Journal of Anesthesia & Anaesthetic Research Society Reception*
Hilton San Francisco Union Square (333 O’Farrell Street)

Saturday, May 21 — Aligned Meeting Day at the IARS 2016 Annual Meeting

The following sessions are part of the IARS 2016 Annual Meeting and International Science Symposium. AUA registered attendees are invited to attend these IARS sessions as part of their AUA registration fee.

7:30 am – 8:00 am  Welcome to the Aligned Meeting Day at the IARS 2016 Annual Meeting

8:00 am – 9:00 am  T.H. Seldon Memorial Lecture:  
  *Reproducible Research: Impact in Evidence-Based Decision Making*  
  John P.A. Ioannidis, DSc, MD, Stanford University, Stanford, California

9:00 am – 9:30 am  Break

9:30 am – 12:00 pm  Celebration of the Science of Anesthesiology Symposium:  
  *Protective Lung Ventilation in the Operating Room*  
  Co-Moderators: Brian Kavanagh, MB, BSc, MRCP(I), FRCP, University of Toronto, and Toronto Hospital for Sick Children, Toronto, Ontario, Canada, and Marcos F. Vidal Melo, MD, PhD, Massachusetts General Hospital, Boston, Massachusetts

Panelists:
- Holger Eltzschig, MD, PhD, University of Colorado School of Medicine, Aurora, Colorado
- Marcelo Gama de Abreu, MD, MSc, PhD, DESA, University Hospital Carl Gustav Carus, and Dresden University of Technology, Dresden, Germany
Program Schedule

Saturday, May 21—
Aligned Meeting Day at the IARS 2016 Annual Meeting Contined

Brian Kavanagh, MB, BSc, MRCP(I), FRCP, University of Toronto, and Toronto Hospital for Sick Children, Toronto, Ontario, Canada
Marcos F. Vidal Melo, MD, PhD, Massachusetts General Hospital, Boston, Massachusetts

12:00 pm – 1:00 pm Lunch-On-Your-Own

1:00 pm – 2:30 pm Scholars’ Program Panel:

Research in the 21st Century

Panelists:

• Choosing A Scientific Research Question That Inspires Passion and Creates Impact
  Judith Hellman, MD, University of California, San Francisco, San Francisco, California

• Opportunities on the Horizon: Current Trends in Academic Anesthesiology
  Alex Evers, MD, Washington University in St. Louis, St. Louis, Missouri

• Collaborative Research: Tapping into the CTSA Network
  Jennifer Grandis, MD, University of California, San Francisco, San Francisco, California

1:00 pm – 4:00 pm IARS, AUA, and SOCCA Science Symposium:

State of the Art Review: Endothelial Glycocalyx Practice and Critical Care Medicine

Moderator: Randal Dull, MD, PhD

Panelists:

• Endothelial and Glycocalyx Damage in Trauma – Drivers of Coagulopathy
  Sisse R. Ostrowski, MD, PhD, DMSc, Copenhagen University Hospital, Copenhagen, Denmark

• The Glycocalyx, Barrier Regulation and Resuscitation
  Randal Dull, MD, PhD, University of Illinois at Chicago, Chicago, Illinois

• Hyaluronan and Circulating Tumor Cell Metastatic Potential
  Hans Vink, PhD, Cardiovascular Research Institute Maastricht, Maastricht University, Maastricht, The Netherlands

• Glomerular Glycocalyx Degradation in Septic Kidney Injury
  Eric Schmidt, MD, University of Colorado School of Medicine, Aurora, Colorado

• The Glycocalyx in Acute Lung Injury
  Jean-François Pittet, MD, University of Alabama at Birmingham, Birmingham, Alabama
Program Schedule

Saturday, May 21—
Aligned Meeting Day at the IARS 2016 Annual Meeting

2:45 pm  –  4:15 pm  Scholars’ Program:
Dynamic and Interactive Small Group Sessions
The Scholars’ Education Program will break into small group sessions. Registrants may select the two group sessions they want to attend.

• **Mock Study Section**
  Max Kelz, MD, PhD, University of Pennsylvania, Philadelphia, Pennsylvania

• **Interactive Workshop on Designing A Clinical Trial**
  Anke Winter, MD, MSc, Washington University in St. Louis, St. Louis, Missouri

• **Independent Discussion for Scientific Manuscripts**
  Ben Julian A. Palanca, MD, PhD, MSc, Washington University in St. Louis, St. Louis, Missouri

• **Grant Writing Session**
  Laure Aurelian, MSc, PhD, University of Maryland Medical School, Baltimore, Maryland

4:15 pm  –  5:00 pm  Scholars’ Program Panel:
Showcasing Career Trajectory of Young Anesthesiology Leaders

Panelists:

• **Building A Career in Perioperative Comparative Effectiveness Research**
  Mark D. Neuman, MD, MSc, University of Pennsylvania, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania

• **How Alcohol and Hot Sauce Jump-started My Career as an Academic Anesthesiologist**
  Eric R. Gross, MD, Stanford University, Stanford, California

• **Building A Program of Research Using Secondary Data**
  May Hua, MD, Columbia University, New York, New York

5:00 pm  –  6:00 pm  Scholars’ Program Reception
*AUA Attendees Invited*
Hilton San Francisco Union Square (333 O’Farrell Street)

6:00 pm  –  7:30 pm  IARS Alignment Reception
*AUA Attendees Invited*
Hilton San Francisco Union Square (333 O’Farrell Street)

*As of press time and subject to change.*
The registration fee includes the Educational Advisory Board Program, Scientific Advisory Board Program, Host Program, meeting syllabus, coffee breaks, Thursday and Friday lunches, the *British Journal of Anesthesia & Anaesthetic Research Society* Reception on Friday, and the Aligned Meeting Day sessions taking place at the IARS 2016 Annual Meeting and International Science Symposium on Saturday, May 21 (see session options below).

The AUA Social Event Reception on Thursday, May 19, from 6:30 pm - 9:30 pm, at the California Academy of Sciences, is an additional fee. Please see below for more information on this special event for AUA attendees.

**To guarantee discounted early registration rates, register online at AUAhq.org by Monday, April 18, 2016.** Registration forms and payment (online and mailed) must be received by the AUA office by Monday, May 9, 2016 for pre-registration. After this date, you may register onsite in San Francisco.

### AUA Social Event Reception: Thursday, May 19, 6:30 pm to 9:30 pm
California Academy of Sciences, 55 Music Concourse Drive, San Francisco

The AUA Social Event Reception, presented by Host Institution, University of California, San Francisco, will take place on Thursday, May 19, from 6:30 pm to 9:30 pm, at the California Academy of Sciences, one of the largest natural history museums in the world, located in Golden Gate Park. This social event includes hearty appetizers and beverages, live music and access to the museum during the event. Please register below if you and/or your guest will attend. A ticket will be provided with your badge for attendance to this reception.

### British Journal of Anesthesia & Anaesthetic Research Society Reception: Friday, May 20, from 6:00 pm to 7:30 pm
Hilton San Francisco Union Square

AUA attendees are invited to attend the *British Journal of Anesthesia & Anaesthetic Research Society* Reception on Friday, May 20, from 6:00 pm to 7:30 pm, at the Hilton San Francisco Union Square. Please register below if you and/or your guest will attend. A ticket will be provided with your badge for attendance to this reception.
**Aligned Meeting Day: Saturday, May 21 – A Special Opportunity for AUA Attendees!**

Registered attendees to the AUA 63rd Annual Meeting are invited to attend a special Aligned Meeting Day on Saturday, May 21 at the IARS 2016 Annual Meeting and International Science Symposium at no additional cost. The Aligned Meeting Day will feature a wide selection of robust education sessions focused on pioneering topics in anesthesia, and presented by thought leaders in the field. **Pre-registration is required** for these aligned sessions as seating is limited and is based on a first-come, first-served basis. Tickets will be provided with your badge for admittance to the selected sessions. Note: If you are planning on registering for the full IARS Annual Meeting, you do not need to select the Aligned Meeting Day Sessions here. Please register for them with your IARS meeting registration.

<table>
<thead>
<tr>
<th>ALIGNED MEETING DAY SESSIONS: Saturday, May 21</th>
<th>TIME</th>
<th># OF SEATS RESERVED</th>
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**DIETARY NEEDS**

□ KOSHER MEALS □ VEGETARIAN MEALS □ Other __________________________

**TOTAL REGISTRATION FEES INCLUDED WITH THIS FORM**  

$________

**METHOD OF PAYMENT (US dollars)**

□ CHECK PAYABLE TO AUA (US funds) enclosed  
Please charge my □ VISA □ MASTERCARD □ AMERICAN EXPRESS □ DISCOVER

CARDHOLDER NAME __________________________________________

CREDIT CARD # __________________________   EXP. DATE _______   CVV ____________

SIGNATURE __________________________________________

Send completed registration form with payment by mail to AUA, 44 Montgomery Street, Ste 1605, San Francisco, CA 94104, or fax to 415-296-6901. For more information, contact AUA Member Services at 415-296-6950 or AUA@iars.org.

**MEETING REGISTRATION CANCELLATION POLICY:** Registrations canceled on or before Monday, April 18, 2016 will be refunded, less a $100 processing charge. Registration fees will not be refunded if canceled after Monday, April 18, 2016.
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TOTAL REGISTRATION FEES INCLUDED WITH THIS FORM

TOTAL

METHOD OF PAYMENT (US dollars)
☐ CHECK PAYABLE TO AUA (US funds) enclosed  Please charge my  ☐ VISA  ☐ MASTERCARD  ☐ AMERICAN EXPRESS  ☐ DISCOVER

CARDHOLDER NAME

CREDIT CARD #  EXP. DATE  CVV

SIGNATURE

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Connect with the Thought Leaders in Academic Anesthesia

1. **Day of a Dedicated Scholars’ Program** for AUA attendees at no extra cost with 2 Panels on Research in the 21st Century, and Showcasing Career Trajectories of Young Anesthesiology Leaders, and 4 Dynamic and Interactive Small Group Sessions plus mentoring opportunities for scholars.


3. **Days of Moderated Poster Discussion Sessions**, highlighting basic science and patient-oriented research in academic anesthesia.

4. Areas of precision medicine explored by the leading minds at the AUA Host Institution Panel, University of California, San Francisco, moderated by Dr. Michael A. Gropper, and presented by Drs. Joseph L. DeRisi, Diane Havlir, Stephen L. Hauser, and Talmadge E. King, Jr.

5. Award winners reveal their thought-provoking original research during the **Scientific Advisory Board Oral Sessions**.
