AUA 2018 Annual Meeting
April 26 – 27, 2018
Hyatt Regency Chicago, Chicago, Illinois

Hosted by Northwestern University Feinberg School of Medicine
and The University of Chicago School of Medicine
Welcome to the AUA 2018 Annual Meeting!

Welcome to the AUA 2018 Annual Meeting, co-hosted by Northwestern University Feinberg School of Medicine and The University of Chicago Medicine, in Chicago, Illinois. The Education Advisory Board (EAB), Scientific Advisory Board (SAB), and the Host Institution Chairs, Drs. Robert R. Gaiser, Y.S. Prakash, Jeffrey L. Apfelbaum, Peter Nagele and Charles W. Hogue, have organized a thought-provoking program addressing the latest breakthroughs and trends in academic anesthesia and the practice as a whole.

Here are some of the highlights of this year’s Annual Meeting:

Thursday, April 26
The EAB Program Session I: Motivation, Metacognition, and Self-Regulation will discuss the scientific applications of motivation, metacognition, and self-regulation in academic anesthesia. Scientific Advisory Board (SAB) Oral Sessions I and II will cover original research findings in the clinic and laboratory. Be present for the first of two Moderated Poster Discussion Sessions to discuss and exchange ideas with the leading experts in anesthesia education and research. The President’s Panel will address sepsis with Sepsis Revisited — Important Updates. Remember to sign-up to attend the Social Event Reception, hosted by Northwestern University Feinberg School of Medicine and The University of Chicago Medicine, at The Art Institute of Chicago.

Friday, April 27
Host Program Panels I and II will highlight pioneering programs offered at Northwestern University Feinberg School of Medicine and The University of Chicago Medicine. Topics for the EAB Program Panel II: The Science of Longitudinal Assessment will include Knowledge Over the Continuum, Information as a Pedagogical Tool, and The Effect of Time on Technical Skills. Join your colleagues for the second Moderated Poster Discussion Session and learn about the latest research shaping the future of anesthesiology at the SAB Oral Sessions III and IV.

Saturday, April 28 – Aligned Meeting Day at the IARS Annual Meeting
I encourage you to stay an additional day to attend the education sessions at the 2018 Aligned Meeting Day, available complimentary with your AUA registration fee.

Aligned Meeting Day Sessions include:

• T.H. Seldon Memorial Lecture: Personalizing Health Care in the Era of Big Data with Dr. Jeffrey R. Balser – 7:30 am – 9:00 am
• Alignment Symposium: Mitochondria and Bioenergetics in Health and Disease: It’s Not Just A Power Failure – 9:30 am – 12:00 pm
• IARS Scholars’ Program – 9:30 am – 6:10 pm – Requires an additional $50 fee
• Problem-Based Learning Discussion: AUA: Why Study Time Doesn’t Always Lead to Learning: How Do We Help the Struggling Trainee? – 12:00 pm - 1:00 pm
• Problem-Based Learning Discussion: AUA: Getting to the Heart of the Matter: Perioperative-Focused Cardiac and Pulmonary Ultrasound, and The Hemodynamically Unstable Patient – 4:00 pm – 5:00 pm
• IARS, AUA, and SOCCA Alignment Reception – 6:00 pm – 7:30 pm

This stimulating program offers opportunities to connect with your colleagues in anesthesiology. I am confident that you will find this meeting to be a rewarding experience. Make sure to explore and enjoy your time in the beautiful city of Chicago!

Sincerely,

Jeanine P. Wiener-Kronish, MD
President, Association of University Anesthesiologists (AUA)
Welcome from Northwestern University Feinberg School of Medicine and The University of Chicago Medicine

Dear Colleagues:

The Northwestern University Feinberg School of Medicine and The University of Chicago Medicine are delighted to host the AUA 2018 Annual Meeting. The Host Committee and AUA Leadership have assembled a dynamic program, and certainly hope you will find the meeting impactful and rewarding, and make the most out of your visit to Chicago, Illinois.

Chicago, the third-most populous city in the U.S., is an incubator for innovation, education, and cultural diversity. Home of some of the world’s largest skyscrapers, art institutions, colorful neighborhoods, and cuisine, there are endless attractions to see. Take a tour of the historic 110–story Willis Tower and visit the Field Museum, Museum of Contemporary Art, or the Adler Planetarium. Entice your taste buds and treat yourself by dining at the best restaurants in Chicago. Feel welcome to explore and learn from the wonderful city of Chicago.

As a world-class research institution and a neighborhood health care provider, The University of Chicago serves as a leader in addressing the world’s most pressing medical, ethical, political, and economic challenges. This year, Drs. Laurie Zoloth and Wendy L. Freedman will speak during the Host Program Panel, and will provide valuable insight into their experiences at The University of Chicago. Dr. Zoloth is an internationally recognized leader in religious studies, spanning research specialties in bioethics and Jewish studies. Dr. Freedman is a world-renowned astronomer and cosmologist who has served as co-leader of the Hubble Space Telescope Key Project and initiated the Giant Magellan Telescope Project.

The Northwestern University Feinberg School of Medicine is a leader in research initiatives and global outlook, committed to improving human health through education and discovery. At this year’s meeting, the Host Program Panel speakers, Drs. A. Vania Apkarian and John Rogers, will share their knowledge from the Northwestern University Feinberg School of Medicine, presenting on Brain Mechanisms of Chronic Pain and Novel Therapeutic Opportunities and Wireless Skin-Like Sensors of Physiological Status. Dr. Apkarian has studied pain over twenty years becoming one of the most highly funded researches in this field. His work addresses important neuroscience concerns including cortical dynamics of pain as well as brain plasticity. Dr. Rogers’ research seeks to discover the fundamental characteristics of “soft” materials and aims to control and induce novel electronic and photonic responses in these materials.

Thank you for your attendance at this important meeting. We look forward to seeing you in Chicago, Illinois!

Sincerely,

Peter Nagele, MD, MSc
Professor of Anesthesia
& Critical Care, Chair,
Department of Anesthesia &
Critical Care, The University
of Chicago Medicine; Co-Chair,
Host Institution, AUA 2018
Annual Meeting

Jeffrey L. Apfelbaum, MD
Professor of Anesthesia &
Critical Care; The University
of Chicago Medicine; Co-
Chair, Host Institution, AUA
2018 Annual Meeting

Charles W. Hogue, MD
Chair, Department of
Anesthesiology; James E.
Eckenhoff, Professor of
Anesthesiology, Northwestern
University Feinberg School
of Medicine, Co-Chair, Host
Institution, AUA 2018
Annual Meeting

Charles W. Hogue, MD
Chair, Department of
Anesthesiology; James E.
Eckenhoff, Professor of
Anesthesiology, Northwestern
University Feinberg School
of Medicine, Co-Chair, Host
Institution, AUA 2018
Annual Meeting
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) 2018 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 2018 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.
- 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 Association of University Anesthesiologists (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.

Claiming CME Credit
The IARS will provide online program evaluation and session tracking to support claiming CME credit immediately following the close of the live activity. Meeting participants will have 45 days post-meeting to claim CME credit.

Disclosure
The International Anesthesia Research Society (IARS) makes every effort to develop CME activities that are independent, objective, and 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 (AUA). There is no commercial support for this activity.
Planning Committee

Jeffrey L. Apfelbaum, MD
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Professor of Anesthesia and Critical Care;
The University of Chicago Medicine, Chicago, Illinois

Thomas A. Cooper
Executive Director, IARS
San Francisco, California

Robert R. Gaiser, MD
Chair, Educational Advisory Board
Professor and Chair, Anesthesiology,
University of Kentucky Health Care, Lexington, Kentucky

Charles W. Hogue, MD
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Chair, Department of Anesthesiology, and
James E. Eckenhoff Professor of Anesthesiology,
Northwestern University Feinberg School of Medicine,
Chicago, Illinois

Program Faculty

John C. Alverdy, MD, FACS
Sarah and Harold Lincoln Thompson Professor of Surgery,
Executive Vice Chair, Department of Surgery,
The University of Chicago Medicine, Chicago, Illinois

Jeffrey L. Apfelbaum, MD
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Professor of Anesthesia and Critical Care; Chair,
Department of Anesthesia and Critical Care,
The University of Chicago Medicine, Chicago, Illinois

A. Vania Apkarian, PhD
Professor of Physiology, Anesthesiology and Physical Medicine and Rehabilitation, Northwestern University Feinberg School of Medicine, Chicago, Illinois

Keith H. Baker, MD, PhD
Associate Professor, Anaesthesia, Harvard Medical School, Vice Chair for Education, Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

Wendy L. Freedman, PhD
John & Marion Sullivan University Professor of Astronomy and Astrophysics, Department of Astronomy and Astrophysics, The University of Chicago Medicine, Chicago, Illinois

Robert R. Gaiser, MD
Chair, Educational Advisory Board
Professor and Chair, Anesthesiology,
University of Kentucky Health Care, Lexington, Kentucky

Ann Harman, PhD
Chief Assessment Officer,
The American Board of Anesthesiology,
Raleigh-Durham, North Carolina

Judith Hellman, MD
Professor and Vice Chair for Research, Department of Anesthesia and Perioperative Care,
University of California, San Francisco School of Medicine, San Francisco, California

Peter Nagele, MD, MSc
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Professor of Anesthesia and Critical Care; Chair,
Department of Anesthesia and Critical Care,
The University of Chicago Medicine, Chicago, Illinois

Y.S. Prakash, MD, PhD
Chair, Scientific Advisory Board
Professor of Anesthesiology and Physiology; Chair,
Department of Physiology and Biomedical Engineering,
Department of Anesthesiology and Perioperative Medicine, Mayo Clinic College of Medicine and Science, Rochester, Minnesota

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

Charles W. Hogue, MD
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Chair, Department of Anesthesiology, and
James E. Eckenhoff Professor of Anesthesiology,
Northwestern University Feinberg School of Medicine,
Chicago, Illinois

William C. McGaghie, PhD
Professor of Medical Education and Preventive Medicine,
Northwestern University Feinberg School of Medicine,
Chicago, Illinois

Peter Nagele, MD, MSc
Co-Chair, Host Institution, AUA 2018 Annual Meeting
Professor of Anesthesia and Critical Care; Chair,
Department of Anesthesia and Critical Care,
The University of Chicago Medicine, Chicago, Illinois

Y.S. Prakash, MD, PhD
Chair, Scientific Advisory Board
Professor of Anesthesiology and Physiology, Department
of Anesthesiology and Perioperative Medicine, Chair,
Department of Physiology and Biomedical Engineering
Mayo Clinic, Rochester, Minnesota

John Rogers, PhD
Louis Simpson and Kimberly Querrey Professor
of Materials Science and Engineering, Biomedical
Engineering and Neurological Surgery, Northwestern
University Feinberg School of Medicine, Chicago, Illinois

Mervyn Singer, MBBS, MD, FRCP (Lon),
FRCP (Edin), FFICM
Professor of Intensive Care Medicine, Head,
Research Department of Clinical Physiology,
University College London, London, England

Avery Tung, MD, FCCM
Professor of Anesthesia and Critical Care Quality,
Chief for Anesthesia, The University of Chicago
Medicine, Chicago, Illinois

Jonathan Wanderer, MD
Assistant Professor of Anesthesiology and
Biomedical Informatics, Medical Director of Vanderbilt
Anesthesiology and Perioperative Informatics Research,
Medical Director of Vanderbilt Perioperative
Evaluation Clinic, Vanderbilt University School of
Medicine, Nashville, Tennessee

Jeanine P. Wiener-Kronish, MD
President, 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

Laurie Zoloth, PhD
Margaret E. Burton Professor and Dean of the
Divinity School, The University of Chicago Medicine,
Chicago, Illinois

Special Opportunity for Early-Stage Anesthesiologists and Trainees!
Register to Attend the Scholars’ Program
Friday, April 27 - Saturday, April 28!

Online Registration Deadline: Thursday, April 12, 2018
What to Do in Chicago, Illinois

Explore the city of Chicago, Illinois, and experience the rich culture and historical attractions. As a leader in the arts, Chicago is widely known for its state-of-the-art museums and thrives on the diversity of its neighborhoods and visitors.

Historical sites range from those honoring U.S. veterans, including the National Veterans Art Museum and the John Alexander Logan Monument, to the second largest collection of fine arts at The Art Institute of Chicago. While in the birthplace of the modern skyscraper, come visit the 1,450-foot Sears Tower, completed in 1974, the second tallest building in North America and the 17th tallest in the world.

For the more adventurous, stop by Willis Tower for Skydeck Chicago, and view the city at 1,300 feet, suspended from The Ledge, a clear glass box. Spark your curiosity and visit The Field Museum, home of Sue, the largest and most complete T. rex. Indulge in the many museums, comedy shows, and live music Chicago has to offer plus so much more.

For more information on what to do in Chicago, including cultural events, historic sites, places to eat, and landmarks, please visit choosechicago.com.

Travel Information

Chicago, Illinois Regional Airports

Airports: In the Chicago area, there are two major airports: O'Hare International Airport (airport code: ORD) and Midway International Airport (airport code: MDW). Both airports offer U.S. and international flights daily.

O'Hare International Airport is 18 miles from airport to hotel or a 45-minute drive. Midway International Airport is 12 miles from airport to hotel or a 35-minute drive.

Both airports offer a variety of options for cabs, airport shuttles, and car rentals. Plus, O'Hare International Airport and Midway International Airport are both accessible via the Chicago Transit Authority (CTA) “L” train. The CTA Blue Line connects directly to O'Hare International Airport and the CTA Orange Line connects directly to Midway International Airport.

Visit choosechicago.com/plan-your-trip/transportation/ for more information on fare, train schedules, and routes.
Hotel Information

Headquarters Hotel
Hyatt Regency Chicago
151 East Wacker Drive, Chicago, Illinois, 60601

The Hyatt Regency Chicago offers a chic, downtown retreat, located steps from the Magnificent Mile and iconic Chicago destinations. Slip away for an afternoon at The Art Institute of Chicago, ride on the Chicago Architectural Foundation’s boat tour, or snap a photo in front of Cloud Gate, locally known as the Bean. Plus, savor the unparalleled views of downtown and Navy Pier from the hotel.

Special Hotel Rates for AUA Attendees end Thursday, March 29, 2018!
All education sessions take place at the Hyatt Regency Chicago. The AUA Social Event Reception will be held at The Art Institute of Chicago.

Hotel Reservations
AUA has secured a limited block of rooms for meeting attendees at the Hyatt Regency Chicago. Housing will open in December 2017.

Deadlines
Chicago, Illinois is a popular travel destination in April and hotel rooms sellout rapidly! Special hotel rates for AUA Attendees end Thursday, March 29, 2018. Rooms are limited and available on a first-come, first-served basis. We highly recommend you book early to guarantee a room reservation at the Headquarters Hotel.

Room Rates
The special conference rate for either single or double occupancy is $219.

Room rates are quoted exclusive of state and local taxes, fees and assessments, currently 16.4%. Taxes are subject to change. Quoted rate will be offered based on availability. The additional fee for every third occupant in a room is an additional $25 and an additional $50 for a fourth occupant.

Hotel Reservation Cancellation Policy
To avoid a one-night room and tax charge, reservations must be cancelled within 72 hours of arrival.
Special Events

Thursday, April 26
AUA Social Event Reception
7:00 pm — 10:00 pm, Chicago Stock Exchange Trading Room, The Art Institute of Chicago (111 S. Michigan Avenue)
The AUA Social Event Reception, presented by the Host Institutions Northwestern University Feinberg School of Medicine and The University of Chicago Medicine, will take place at The Art Institute of Chicago, the second largest art museum in the United States with nearly 300,000 works in its permanent collection. The event includes dinner and beverages, as well as access to the museum and docents.

Reception Schedule:
7:00 pm — 8:20 pm: Reception and Dinner
8:20 pm — 8:40 pm: Welcome from Host Institutions and Docent Presentation on Chicago Stock Exchange Trading Room, Modern Wing and American Art Collections
8:40 pm — 10:00 pm: Access to Modern and American Art Wings and Docents

Pre-registration and an additional fee is required to attend this special event. Sign up when registering, and a ticket will be provided with your badge.

Friday, April 27
IARS, AUA, SOCCA & eSAS Scholars’ Program Mentor-Trainee Reception
6:00 pm – 7:00 pm, Hyatt Regency Chicago (151 E. Wacker Drive)
The Scholars’ Program Mentor-Trainee Reception offers trainees opportunities to be paired with mentors and network with leaders in anesthesiology.

This reception is part of the Scholars’ Program, which requires pre-registration and a $50 registration fee.

Saturday, April 28
IARS, AUA & SOCCA Alignment Reception
6:00 pm – 7:30 pm, Hyatt Regency Chicago (151 E. Wacker Drive)
Celebrate the convergence of the IARS, AUA, and SOCCA Annual Meetings and meet pioneers in all subspecialties shaping the future of anesthesiology during the Aligned Meeting Day at the IARS 2018 Annual Meeting and International Science Symposium!

This reception is part of the Aligned Meeting Day and available to AUA registrants complimentary. Pre-registration is required.
Schedule-at-a-Glance

Thursday, April 26

6:00 am  —  6:00 pm  Registration

8:30 am  —  9:00 am  Welcome from AUA President and Host Institution Chairs

Jeanine P. Wiener-Kronish, MD
President, Association of University Anesthesiologists (AUA)

Jeffrey L. Apfelbaum, MD, Co-Chair
Host Institution, The University of Chicago Medicine

Peter Nagele, MD, MSc, Co-Chair,
Host Institution, The University of Chicago Medicine

Charles W. Hogue, MD, Co-Chair
Host Institution, Northwestern University Feinberg School of Medicine

9:00 am  —  10:30 am  Educational Advisory Board (EAB) Program Panel I:
Motivation, Metacognition, and Self-Regulation
Moderator: Robert R. Gaiser, MD

• Science of Motivation
  Daniel Saddawi-Konefka, MD, MBA

• Science of Metacognition
  Avery Tung, MD, FCCM

• Science of Self-Regulation
  William C. McGaghie, PhD

10:30 am  —  10:45 am  Break

10:45 am  —  11:45 am  Scientific Advisory Board (SAB) Oral Session I
Moderator: Y.S. Prakash, MD, PhD

11:45 am  —  12:45 pm  All Attendee Lunch

11:45 am  —  12:45 pm  President’s Lunch – Invite Only

12:45 pm  —  2:15 pm  Moderated Poster Discussion Session I

2:15 pm  —  2:30 pm  Break

2:30 pm  —  3:30 pm  SAB Oral Session II
Moderator: Y.S. Prakash, MD, PhD

3:30 pm  —  4:00 pm  Break
Schedule-at-a-Glance

Thursday, April 26, continued

4:00 pm — 6:00 pm  President’s Panel: *Sepsis Revisited – Important Updates*
Moderator: Jeanine P. Wiener-Kronish, MD
Panelists:

- **Controversies in Sepsis Management**
  Mervyn Singer, MBBS, MD, FRCP (Lon), FRCP (Edin), FFICM

- **Collapse of the Microbiome, Emergence of the Pathobiome and the Immunopathology of Sepsis**
  John C. Alverdy, MD, FACS

- **Modulation of Sepsis and Acute Inflammation by Non-Leukocyte Cell Populations**
  Judith Hellman, MD

7:00 pm — 10:00 pm  AUA Social Event Reception
Hosted by Northwestern University Feinberg School of Medicine and The University of Chicago Medicine
Chicago Stock Exchange Trading Room, The Art Institute of Chicago
(111 S. Michigan Avenue)

Reception Schedule:
7:00 pm – 8:20 pm: Reception and Dinner
8:20 pm – 8:40 pm: Welcome from Host Institutions and Docent Presentation on Chicago Stock Exchange Trading Room, Modern Wing and American Art Collections
8:40 pm – 10:00 pm: Access to Modern and American Art Wings and Docents

Friday, April 27

6:00 am — 6:00 pm  Registration

8:00 am — 9:15 am  Host Program Panel I
Moderators: Jeffrey L. Apfelbaum, MD, Peter Nagele, MD, MSc, and Charles W. Hogue, MD

Presenters:

- **Our Unexpected Universe**
  Wendy L. Freedman, PhD

9:15 am — 9:30 am  Break
Schedule-at-a-Glance

Friday, April 27, continued

9:30 am — 10:45 am Host Program Panel II
Moderators: Jeffrey L. Apfelbaum, MD, Peter Nagele, MD, MSc, and Charles W. Hogue, MD
Presenters:
• Brain Mechanisms of Chronic Pain and Novel Therapeutic Opportunities
  A. Vania Apkarian, PhD
• Wireless Skin-Like Sensors of Physiological Status
  John Rogers, PhD

10:45 am — 11:00 am Break

11:00 am — 12:30 pm EAB Program Panel II: The Science of Longitudinal Assessment
Moderator: Robert R. Gaiser, MD
Panelists:
• Knowledge Over the Continuum
  Ann Harman, PhD
• Information as a Pedagogical Tool
  Jonathan Wanderer, MD
• The Effect of Time on Technical Skills
  Keith H. Baker, MD, PhD

12:30 pm — 1:30 pm Lunches:
• All Attendee Lunch
• Early-Stage Faculty, Fellow, Resident, and Medical Student Lunch
• Educational Advisory Board Lunch – Invite Only
• Scientific Advisory Board Lunch – Invite Only

1:30 pm — 3:00 pm Moderated Poster Discussion Session II

3:00 pm — 3:15 pm Break

3:15 pm — 4:15 pm SAB Oral Session III
Moderator: Y.S. Prakash, MD, PhD

4:15 pm — 4:30 pm Break

4:30 pm — 5:30 pm SAB Oral Session IV
Moderator: Y.S. Prakash, MD, PhD

5:30 pm — 6:00 pm AUA Annual Business Meeting

6:00 pm — 7:00 pm IARS, AUA, SOCCA and eSAS Scholars’ Program Mentor-Trainee Reception
*The Scholars’ Program requires a separate $50 non-refundable fee and pre-registration. This fee includes education sessions, reception, breakfast and lunch. Seating is limited.*
Aligned Meeting Day at the IARS 2018 Annual Meeting and International Science Symposium
Saturday, April 28

7:30 am — 9:00 am  Opening General Session and T.H. Seldon Memorial Lecture:
*Personalizing Health Care in the Era of Big Data*
Presenter: Jeffrey R. Balser, MD, PhD, Dean of Vanderbilt University School of Medicine; President and CEO, Vanderbilt University Medical Center, Nashville, Tennessee

9:30 am — 12:00 pm  Symposium: *AUA: Mitochondria and Bioenergetics in Health and Disease: It’s Not Just A Power Failure!*
Moderator: Y.S. Prakash, MD, PhD, Chair, Scientific Advisory Board, AUA, Professor of Anesthesiology and Physiology, Department of Anesthesiology and Perioperative Medicine, Mayo Clinic College of Medicine and Science, Rochester, Minnesota

Panelists:
- **Anesthetic Preconditioning and Mitochondria**
  Paul S. Brookes, PhD, Professor, Department of Anesthesiology & Perioperative Medicine, Research (SMD), Professor, Department of Pharmacology and Physiology (SMD), University of Rochester Medical Center, Rochester, New York

- **Brain Bioenergetics: Watch that Oxygen Level**
  Elizabeth A. Jonas, MD, Professor of Internal Medicine and Neuroscience, Division of Endocrinology, Yale University; Co-Chair, Bioenergetics Biophysical Society; Co-Chair, Status of Women in Medicine; Associate Editor, The FASEB Journal, New Haven, Connecticut

- **Taking a Closer Look at Mitochondria**
  Douglas L. Rothman, PhD, Professor of Biomedical Engineering and Radiology and Biomedical Imaging, Director, Magnetic Resonance Research Center (MRRC), Yale School of Engineering and Applied Sciences, New Haven, Connecticut

- **Mitochondria From Evolution to Disease: It’s in the Genes**
  Douglas C. Wallace, PhD, Director, Center for Mitochondrial and Epigenomic Medicine (CMEM), Michael and Charles Barnett Endowed Chair of Pediatric Mitochondrial Medicine and Metabolic Diseases, Children’s Hospital of Philadelphia Research Institute; Professor, Department of Pathology and Laboratory Medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania
Aligned Meeting Day

Saturday, April 28, continued

12:00 pm  –  1:00 pm  Problem-Based Learning Discussion-05: AUA: Why Study Time Doesn’t Always Lead to Learning: How Do We Help the Struggling Trainee?

Presenters:
Ersne Eromo, MD, MBA, Instructor in Anaesthesia, Clerkship Director for Harvard Medical Students, Harvard Medical School, Simulation Fellow, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

Daniel Saddawi-Konefka, MD, MBA, Assistant Professor in Anaesthesia, Harvard Medical School; Anesthesia Residency Program Director, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

4:00 pm  –  5:00 pm  Problem-Based Learning Discussion-10: AUA: Getting to the Heart of the Matter: Perioperative-Focused Cardiac and Pulmonary Ultrasound, and The Hemodynamically Unstable Patient

Presenters:
Alexander S. Kuo, MD, Instructor in Anaesthesia, Harvard Medical School; Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

Abraham Sonny, MD, MBBS, Faculty, Anaesthesia, Harvard Medical School; Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

6:00 pm  –  7:30 pm  IARS, AUA & SOCCA Alignment Reception

AUA Attendees Invited to Attend
Hyatt Regency Chicago

The Scholars’ Program will have a broad appeal, particularly to early-stage scholars in anesthesiology who are looking for best practices in adapting to the rapidly changing world of academic anesthesia and medicine. Through innovative teaching approaches, scholars will receive the much-needed skills they desire while interacting with peers and mentors. Sign up for a mentor or volunteer to be a mentor of a scholar (early-stage anesthesiologist, post-doc, fellow, resident, medical student) during registration.

The Scholars’ Program requires a separate $50 non-refundable fee and pre-registration. This fee includes education sessions, reception, breakfast and lunch. Seating is limited.
Scholars’ Program
Friday, April 27 – Saturday, April 28

Friday, April 27
6:00 am – 7:00 pm IARS, AUA, SOCCA & eSAS Scholars’ Program Mentor-Trainee Reception

Based on rigorous evaluation of both mentors’ expertise and trainees’ needs, goal-focused interactions will be catalyzed. Trainees will be matched with a mentor and have an opportunity to interact during this reception. Sign-up to be mentored or serve as a mentor during registration.

Saturday, April 28
6:15 am – 7:15 am Scholars’ Program Breakfast with IARS, AUA, & SOCCA Leadership and Mentors

9:30 am – 9:40 am Scholar-01: Introduction to Scholars’ Program and eSAS

Presenters:
Vivianne Tawfik, MD, PhD, Assistant Professor, Department of Anesthesiology, Perioperative and Pain Medicine (Adult Pain), Assistant Director, Fellowship in Anesthesia Research & Medicine Program (FARM), Stanford University School of Medicine, Stanford, California; Co-President, eSAS
Elizabeth L. Whitlock, MD, MSc, Clinical Instructor and T32 Fellow, Department of Anesthesia and Perioperative Care, University of California, San Francisco School of Medicine, San Francisco, California; Co-President, eSAS

9:40 am – 10:30 am Scholar-02: Moving from Insight to Research Program and What This is All About

Moderator:
Katie J. Schenning, MD, MPH, Assistant Professor of Anesthesiology and Perioperative Medicine, School of Medicine, Oregon Health & Sciences University, Portland, Oregon; Co-Chair Membership, eSAS

Presenter:
Max B. Kelz, MD, PhD, David E. Longnecker Associate Professor of Anesthesiology and Critical Care, Chair of Admissions, Department of Neuroscience MD PhD Program, MSTP Program Advisor, Director for Research Education, Department of Anesthesiology and Critical Care, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania
Scholars’ Program

Saturday, April 28, continued

10:45 am — 12:15 pm Scholar-03: Shine Like A Rockstar: Different Paths to Success

Moderators:
Boris D. Heifets, MD, PhD, Clinical Assistant Professor, Anesthesiology, Perioperative and Pain Medicine, Stanford University School of Medicine, Stanford, California
Manoj M. Lalu, MD, PhD, FRCPC, Vice Chairman for Clinical Research and Faculty Development, Clinical Scholar, Department of Anesthesiology and Pain Medicine, The Ottawa Hospital; Associate Scientist, Clinical Epidemiology Program, Ottawa Hospital Research Institute, Ottawa, Ontario, Canada; Co-Chair Membership, eSAS

Panelists:
• Academic Leadership Path
  Peter Nagele, MD, MSc, Professor of Anesthesia & Critical Care, Chair, Department of Anesthesia & Critical Care, The University of Chicago Medicine; Co-Chair, Host Institution, AUA 2018 Annual Meeting

• Organizational Leadership Path
  Laureen Hill, MD, MBA, SVP COO, New York Presbyterian Hospital-Columbia; Past Chair, Department of Anesthesiology, Emory Healthcare; Past Co-Chair, Perioperative Governance Committee; Past Vice Chair and Professor of Anesthesiology and Cardiothoracic Surgery, Department of Anesthesiology, Washington University School of Medicine, New York, New York

• Educational Leadership Path
  Paloma Toledo, MD, MPH, Assistant Professor of Anesthesiology, Department of Anesthesiology, Northwestern University Feinberg School of Medicine, Chicago, Illinois; Associate Editor, Anesthesia & Analgesia
Scholars’ Program

Saturday, April 28, continued

12:30 pm – 2:00 pm Scholar-04: Lunch Session: Resilience Personified: Transitioning from Trainee to Junior Faculty and Beyond

Moderator:
Elizabeth L. Whitlock, MD, MSc, Clinical Instructor and T32 Fellow, Department of Anesthesia and Perioperative Care, University of California, San Francisco School of Medicine, San Francisco, California; Co-President, eSAS

Panelists:
• Junior Investigator Perspective
  Julie K. Freed, MD, PhD, Assistant Professor of Anesthesiology, Medical College of Wisconsin; Reviewer, American Heart Association (AHA); Founder; Executive Council Member, Early-Stage Anesthesia Scholars (eSAS), Milwaukee, Wisconsin

• Senior Investigator Perspective
  Ken Solt, MD, Associate Professor, Anaesthesia, Harvard Medical School; Associate Anesthetist, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital, Boston, Massachusetts

2:15 pm – 3:45 pm Scholar-05: Moving Fluidly Across the Translational Spectrum: Current Opioid Crisis

Moderators:
Catherine Chen, MD, MPH, Assistant Professor, Department of Anesthesia and Perioperative Care, University of California, San Francisco School of Medicine, San Francisco, California
Michael R. Mathis, MD, Assistant Professor, Anesthesiology, University of Michigan Medicine, Ann Arbor, Michigan; Co-Chair Events, eSAS

Panelists:
• The Role of Acute Care Prescribing in the Opioid Epidemic
  Jennifer F. Waljee, MD, MPH, MS, Associate Professor, Section of Plastic and Reconstructive Surgery, Member, Early Career Faculty Advisory Council (ECFAC), Institute for Healthcare Policy & Innovation, University of Michigan Medicine, Ann Arbor, Michigan

• Caffeine Alleviates the Increase in Postoperative Pain Sensitivity Induced by Previous Sleep Loss in Rats: An Alternative to Opioids for Pain Relief?
  Giancarlo Vanini, MD, Research Assistant, Professor of Anesthesiology, University of Michigan Medicine, Ann Arbor, Michigan
Scholars’ Program

Saturday, April 28, continued

- **Tapping into Patient Resilience: The Use of Innovative Self-Management Strategies to Reduce Anxiety and Pain in the Perioperative Setting**
  Afton Hassett, PsyD, Associate Research Scientist and Psychologist, University of Michigan Medicine, Ann Arbor, Michigan

4:00 pm — 5:00 pm  Scholar-06: Priorities for Developing Researchers: Perspectives from the NIH and IARS

**Moderator:**
Julie K. Freed MD, PhD, Assistant Professor, Department of Anesthesiology, Medical College of Wisconsin, Milwaukee, Wisconsin; Co-Chair Events, eSAS

**Panelists:**
- **NIH Perspective**
  Alison Cole, PhD, Branch Chief, Pharmacological and Physiological Sciences Branch, Division of Pharmacology, Physiology, and Biological Chemistry, National Institute of General Medical Sciences, Bethesda, Maryland

- **IARS Perspective**
  Emery N. Brown, MD, PhD, Warren M. Zapol Professor of Anaesthesia, Harvard Medical School, Department of Anesthesia, Critical Care and Pain Medicine, Massachusetts General Hospital; Edward Hood Taplin Professor of Medical Engineering, Institute for Medical Engineering and Science; Professor of Computational Neuroscience, Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology, Boston, Massachusetts; Treasurer, IARS
Scholars’ Program

Saturday, April 28, continued

5:10 pm — 6:10 pm Scholar-07: From the Editor’s Desk: A No-Nonsense Guide to Successful Publication
Moderator:
Jamie R. Privratsky, MD, PhD, Assistant Professor of Anesthesiology, Duke University School of Medicine, Durham, North Carolina

Panelists:
• From the Editor’s Desk to Publication
  Hilary P. Grocott, MD, FRCPC, Professor of Anesthesia & Perioperative Medicine; Professor, Department of Surgery; Director, Cardiac Anesthesia Fellowship Program, University of Manitoba, Winnipeg, Manitoba; Adjunct Professor, Anesthesiology, Duke University; Editor-in-Chief, Canadian Journal of Anesthesia

• How to Successfully Publish in Anesthesia & Analgesia
  Kate Leslie, MD, Head of Research for the Department of Anaesthesia and Pain Management, Royal Melbourne Hospital, Melbourne, Australia; Honorary Professional Fellow, University of Melbourne and Monash, Australia; Former President of the Australian and New Zealand College of Anaesthetists; Editorial Board Member, British Journal of Anaesthesia, Anesthesiology, and Anesthesia & Analgesia

Take Advantage of the Special AUA Housing Rates at the Headquarters Hotel!

Deadline: Thursday, March 29, 2018
The AUA Social Event Reception on Thursday, April 26, from 7:00 pm – 10:00 pm, is an additional fee. Please see below for more information on this special event for AUA attendees. For Guest registrants who will only attend the AUA Social Event Reception, please see Reception section below.

**REGISTRATION FEES**

<table>
<thead>
<tr>
<th>Member Registration Fees</th>
<th>Early Rec’d by 2/22</th>
<th>Regular Rec’d by 2/23 – 4/12</th>
<th>Onsite Rec’d by 4/26 – 5/1</th>
<th>Amount Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Member General Registration</td>
<td>$400</td>
<td>$425</td>
<td>$450</td>
<td></td>
</tr>
</tbody>
</table>

| Non-Member Registration Fees | | | |
|-------------------------------| | | |
| □ Non-Member General Registration | $450 | $475 | $500 | |

<table>
<thead>
<tr>
<th>Scholar (please check level)</th>
<th>Fellow</th>
<th>Resident</th>
<th>Student</th>
<th>Other (specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Scholar</td>
<td>□ Fellow</td>
<td>□ Resident</td>
<td>□ Student</td>
<td>□ Other (specify)</td>
</tr>
</tbody>
</table>

**AUA Social Event Reception: Thursday, April 26, 7:00 pm – 10:00 pm**

The AUA Social Event Reception, presented by the Host Institutions, Northwestern University Feinberg School of Medicine and The University of Chicago Medicine, will take place at The Art Institute of Chicago, the second largest art museum in the United States with nearly 300,000 works in its permanent collection. The event includes dinner and beverages, as well as access to the museum and docents.

Seating is limited. The AUA Social Event Reception requires pre-registration and an additional fee. Please register below if you and/or your guest will attend. A ticket will be provided with your badge for attendance to this reception. For Guest registrants who will only attend the AUA Social Event Reception, please select guest option below.

<table>
<thead>
<tr>
<th>AUA Social Event Reception Registration (Select all that apply)</th>
<th>Fee</th>
<th>Amount Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Member □ Non-Member □ Guest # of tickets __________________</td>
<td>$50 each</td>
<td></td>
</tr>
<tr>
<td>□ Scholar # of tickets ____________________________</td>
<td>$25 each</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal AUA Social Event Registration Fees
**Aligned Meeting Day Sessions: Saturday, April 28**

Seating is limited. The IARS Aligned Meeting Sessions require pre-registration and is included with the AUA meeting fee. 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, April 28</th>
<th>Time</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Opening General Session and T.H. Seldon Memorial Lecture: <em>Personalizing Health Care in the Era of Big Data</em></td>
<td>7:30 am – 9:00 am</td>
<td>$0</td>
</tr>
<tr>
<td>[ ] AUA Symposium: <em>Mitochondria and Bioenergetics in Health and Disease: It’s Not Just A Power Failure!</em></td>
<td>9:30 am – 12:00 pm</td>
<td>$0</td>
</tr>
<tr>
<td>[ ] AUA Problem-Based Learning Discussion-05: <em>Why Study Time Doesn’t Always Lead to Learning: How Do We Help the Struggling Trainee?</em></td>
<td>12:00 pm – 1:00 pm</td>
<td>$0</td>
</tr>
<tr>
<td>[ ] AUA Problem-Based Learning Discussion-10: <em>Getting to the Heart of the Matter: Perioperative Focused Cardiac and Pulmonary Ultrasound, and The Hemodynamically Unstable Patient</em></td>
<td>4:00 pm – 5:00 pm</td>
<td>$0</td>
</tr>
</tbody>
</table>

**Scholars’ Program: Friday, April 27 and Saturday, April 28**

[ ] Scholars’ Program

Seating is limited. Pre-registration and a non-refundable $50.00 fee is required. All sessions, reception, breakfast and lunch are included with the fee.

Select all sessions you will attend during the Scholars’ Program below:

- [ ] Friday, April 27: IARS, AUA, SOCCA & eSAS Scholars’ Program Mentor-Trainee Reception | 6:00 pm – 7:00 pm
- [ ] Saturday, April 28: Scholars’ Program Breakfast with IARS, AUA & SOCCA Leadership and Mentors | 6:15 am – 7:15 am
- [ ] Saturday, April 28: Scholars’ Program Education Sessions | 9:30 am – 6:10 pm
- [ ] Saturday, April 28: Scholars’ Program Lunch Session: *Resilience Personified: Transitioning from Trainee to Junior Faculty and Beyond* | 12:30 pm – 2:00 pm
- [ ] IARS, AUA & SOCCA Alignment Reception | 6:00 pm – 7:30 pm

Subtotal Aligned Meeting Day Fees

Total Registration Fees Included with this Form

Method of Payment (U.S. dollars)

- [ ] Check payable to AUA (U.S. funds) enclosed
- [ ] Please charge my [ ] Visa [ ] MasterCard [ ] American Express [ ] Discover

Cardholder Name

Credit Card #: Exp. Date CVV

Signature

To receive the discounted early registration rate, your registration form and payment must be received by the AUA by Thursday, February 22, 2018. Pre-registration ends on Thursday, April 12, 2018. After this date, you may register onsite in Chicago, Illinois.

Register online at [auahq.org](http://auahq.org) or mail completed form with your payment in U.S. funds to the following address:

**Orchid.Events, 175 S West Temple, Suite 30, Salt Lake City UT, 84101 | 888-665-1371 | fax 801-355-0250 | iarsmeetings@orchid.events**

**Annual Meeting Registration Cancellation Policy:** All cancellations to meeting registrations must be submitted in writing by email to iarsmeeting@orchid.events or fax: 801-355-0250. Registrations cancelled on or before Thursday, April 12, 2018 will be refunded, less a $50 processing charge. Workshops, sessions and social events are non-refundable. Registration fees will not be refunded if canceled after Thursday, April 12, 2018.
AUA 2018 Annual Meeting
April 26 – 27, 2018
Hyatt Regency Chicago, Chicago, Illinois

ONLINE REGISTRATION ENDS THURSDAY, APRIL 12, 2018

IMPORTANT DEADLINES:

• Special Housing Rates end Thursday, March 29, 2018!
• Online Registration Closes Thursday, April 12, 2018!
• Onsite Registration Available, Thursday, April 26 - Friday, April 27!

For more information, visit auahq.org/aua-annual-meeting