



Featuring a Joint  
Session with the  
**Foundation for  
Anesthesia  
Education and  
Research**

**Society for Technology in Anesthesia**

**2013 Annual Meeting  
January 9-12, 2013  
Phoenix, Arizona**

**Royal Palms Resort & Spa**

5200 East Camelback Road, Phoenix, Arizona 85018

Reservations: 800.672.6011 Phone: 602.840.3610

\$239.00 STA Group Rate Available  
Through December 14, 2012



# Schedule of Events

## Wednesday, January 9, 2013

- 0700 – 0800 **Challenges and Opportunities  
Registration & Continental Breakfast**
- 0800 – 1200 **Challenges and Opportunities in Developing  
Anesthesia Products**  
(for industry)  
*Jeffrey Feldman, MD, MSE*  
*David Feinstein, MD*
- 0800 – 1700 **Exhibitor Registration & Set-up**
- 1200 – 1315 **Challenges and Opportunities &  
STA Board of Directors Lunch**
- 1315 – 1700 **A.I.M.S. Workshop**  
(additional registration required)  
*David L. Reich, MD*
- 1800 – 1930 **Registration & Opening Reception**

## Thursday, January 10, 2013

- 0700 – 0800 **Registration & Continental Breakfast**
- 0800 – 0815 **Welcome Address**  
*George Blike, MD*  
*Jesse Ehrenfeld, MD, PhD*

### Session 1: Keynote Address

- 0815 – 0930 **Using IT to Control Variability in Medical  
Practice & Improve Medical Outcomes**  
*Bill Stead, MD*
- 0930 – 1000 **Break with Exhibitors & Posters**

### Session 2: Patient Safety in the Post-Operative General Care Setting

*George Blike, MD – Moderator*

- 1000 – 1030 **Automated Remote Triage, Military and Civil-  
ian Models & Potential Impact on “Failure to  
Rescue” Events**  
*Susan McGrath, PhD*
- 1030 – 1100 **Sensor Technologies that might Support  
Early Detection Today & Tomorrow**  
*Patrick Tighe, MD, MS*
- 1100 – 1130 **From Respiratory Depression to  
Circulatory Failure, What Can We Do Now?**  
*Andreas Taenzer, MS, MD, FAAP*
- 1130 – 1200 **Panel Discussion**
- 1200 – 1330 **Luncheon**  
**Personalized Medicine Technology Trends:  
Impact on Anesthesiology**  
*Kenneth Holroyd, MD*

### Session 3: JOINT SESSION



FOUNDATION FOR ANESTHESIA  
EDUCATION AND RESEARCH

### Regulate or Innovate: Can We Do Both?

*Moderator: Jeffrey Feldman, MD, MSE*

- 1330 – 1400 **The View From the FDA**  
*Speaker Invited*
- 1400 – 1430 **Medical Devices & the World Market**  
*Kai Kueck*
- 1430 – 1500 **International Regulatory Approaches:  
More Innovative or Less Safe?**  
*Julian Goldman, MD*
- 1500 – 1530 **Panel Discussion**
- 1530 – 1545 **Break with Exhibits & Posters**

### Session 4: Research Awards & Presentations

*Thomas Hemmerling, MD – Moderator*

- 1545 – 1700 **Research Awards & Presentations**

## Friday, January 11, 2013

- 0715 – 0815 **Registration & Continental Breakfast**

### Session 5: Visualizing Complex Data

*Matt B. Weinger, MD – Moderator*

- 0815 – 0845 **Perils & Pitfalls of  
Anesthesiology Displays**  
*Matt B. Weinger, MD*
- 0845 – 0915 **Touch Your Patient -  
A Tactile Display of Information**  
*Mark Ansermino, MBCh, MMED,  
MSc (Informatics), FFA (SA), FRCPC*
- 0915 – 0945 **Visualizing Complex Data**  
*Heike Hofmann, PhD*
- 0945 – 1000 **Panel Discussion**
- 1000 – 1030 **Break with Exhibitors & Posters**

### Session 6: Monitoring Technology Advances

*Maxime Cannesson, MD – Moderator*

- 1030 – 1100 **Early Warning Scores & Predicting  
Patient Deterioration**  
*Michael O'Reilly, MD*
- 1100 – 1130 **From Identification to Prediction  
Health & Safety**  
*Andreas Taenzer, MS, MD, FAAP*

# Schedule of Events Continued

1130 – 1200 **Use of Complexity Modeling of Physiological Signals to Predict in Real Time Cardio-respiratory Instability**  
*Michael Pinsky, MD, CM, Drhc, FCCP, FCCM*

1200 – 1215 **Panel Discussion**

1215 – 1330 **STA Business Luncheon & Awards**  
*George Blike, MD*

## Session 7: Concurrent Workshops

1330 – 1530

### 1) Closed Loop Controllers

*Maxime Cannesson, MD  
Joseph Rinehart, MD*

### 2) Anesthesia Machines

*Speaker Invited*

### 3) Mobile Applications

*Brian Rothman, MD*

## Session 8: Concurrent Workshops

1530 – 1700

### 1) Industry/Engineering Session

*Christina DeMur  
Greg Spratt, BS, RRT, CPFT*

### 2) Engineering Contest

*Jeff Mandel, MD*

### 3) MPOG

*Sachin Kheterpal, MD*

1800 – 2130 **Dinner Event**  
*(included in attendee registration fee)*

## Saturday, January 12, 2013

0730 – 0830 **Registration & Continental Breakfast**

**Session 9: Decision Support: Today & Tomorrow**  
*Mohamed Rehman, MD - Moderator*

0830 – 0900 **What Can be Done Today?**  
*Jonathan Wanderer, MD*

0900 – 0930 **What Does the Future Have for Us?**  
*Mark Ansermino, MBBCh, MMED, MSc (Informatics), FFA (SA), FRCPC*

0930 – 1000 **Enterprise Level Data Driven Decision Support**  
*Bimal Desai, MD, MBI, FAAP*

1000 – 1015 **Panel Discussion**

1015 – 1030 **Break**

## Session 10: Cutting Edge Technologies

*John Doyle, MD, PhD & Kirk Shelley, MD - Moderators*

1030 – 1100 **Nanotechnology and the Future of Anesthesia**  
*John Doyle, MD, PhD*

1100 – 1130 **Non-invasive Venous/Arterial Compliance Ratio Determination**  
*Kirk Shelley, MD*

1130 – 1200 **Using the Pulse Oximeter & Peripheral Venous Pressure Waveforms to Guide IV Fluid Replacement**  
*Aymen Alian, MBBCh, MD, MSc*

1200 – 1215 **Panel Discussion**

1215 **Adjourn**

## Invited Faculty

**Aymen Alian, MBBCh, MD, MSc**  
Yale University

**Mark Ansermino, MBBCh, MMED, MSc (Informatics), FFA (SA), FRCPC**  
University of British Columbia

**George Blike, MD**  
Dartmouth-Hitchcock Medical Center

**Maxime Cannesson, MD**  
School of Medicine, University of California-Irvine

**Christina Demur**  
 Draeger Medical

**Bimal Desai, MD, MBI, FAAP**  
Perelman School of Medicine,  
University of Pennsylvania School of Medicine

**John Doyle, MD, PhD**  
Cleveland Clinic

**Jesse Ehrenfeld, MD, PhD**  
Vanderbilt University

**David Feinstein, MD**  
Beth Israel Deaconess Medical Center

**Jeffrey Feldman, MD, MSE**  
The Children's Hospital of Philadelphia

**Julian Goldman, MD**  
Harvard Medical School

**Thomas Hemmerling, MD**  
McGill University

**Heike Hofmann, PhD**  
Iowa State University

**Kenneth Holroyd, MD**  
Vanderbilt University Medical Center

**Sachin Kheterpal, MD**  
University of Michigan

**Jeff Mandel, MD**  
The Hospital of the University of Pennsylvania

**Susan McGrath, PhD**  
Dartmouth-Hitchcock Medical Center

**Michael O'Reilly, MD**  
Masimo

**Michael Pinsky, MD, CM, Drhc, FCCP, FCCM**  
University of Pittsburgh

**Mohamed Rehman, MD, FAAP**  
The Children's Hospital of Philadelphia

**David L. Reich, MD**  
Mount Sinai School of Medicine

**Joseph Rinehart, MD**  
University of California-Irvine

**Brian Rothman, MD**  
Vanderbilt University Medical Center

**Kirk Shelley, MD**  
Yale University

**Greg Spratt, BS, RRT, CPFT**  
Spratt Healthcare Consulting

**Bill Stead, MD**  
Vanderbilt University Medical Center

**Andreas Taenzer, MS, MD, FAAP**  
Dartmouth-Hitchcock Medical Center

**Patrick Tighe, MD, MS**  
University of Florida

**Jonathan Wanderer, MD**  
Vanderbilt University Medical Center

**Matthew B. Weinger, MD**  
Vanderbilt University School of Medicine

**Michael Wilkening**  
Draeger Medical GmbH

# Meeting Accreditation Information

## Program Objectives

1. Examine and identify problems and potential solutions in the anesthesia work space with a special emphasis on exploring new developments in drug delivery, information management and patient monitoring.
2. Identify and explore key factors required for effective translational medical research, including management of conflict of interest issues and implementation of successful strategies to develop technologies.
3. Examine and identify barriers and potential solutions in order to bring new and safe technologies to the clinical practice with a special emphasis on patient monitoring, information management, and patient safety.
4. Explore opportunities to advance and enhance environmentally responsible practices within anesthesia care.
5. Explore opportunities to advance safe automated anesthesia systems in order to improve patients safety.

## Target Audience

This program is designed for physicians, engineers or other practitioners in the field of anesthesia seeking an update on the current state of anesthesia technology.

## Practice Gaps

The 2013 STA Annual Meeting will address the following practice gaps:

- The implementation of the new technology in rapidly changing work environments to include electronic medical records, new monitoring equipment and devices.
- The use of new non invasive technologies for hemodynamic monitoring and management in order to decrease the incidence of complications related to invasive technologies.
- Lower the impact of medical industry and of anesthesiology practice on the environment.
- Understand how automated anesthesia can improve outcomes and patient safety.

## Barriers to Change

1. Understanding changing landscape of medical technology.
2. Incorporating scientific evidence into everyday clinic practice when using technology.

## Accreditation Information

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the International Anesthesia Research Society (IARS) and the Society for Technology in Anesthesia (STA). The International Anesthesia Research Society (IARS) is an accredited body of the Accreditation Council for Continuing Medical Education (ACCME). The International Anesthesia Research Society (IARS) designates this educational activity for AMA PRA Category 1 Credits.™ Physicians should only claim credit commensurate with the extent of their participation in the activity.

## Overall Goal Statement

The goal of this program is to provide theoretical and practical information on various technologies within the field of clinical anesthesia.

## DISCLOSURE

It is the policy of the IARS to comply with the ACCME standards for commercial support of CME. Planning Committee members and related staff disclosures must be on file annually with disclosures made available on program materials. Faculty participating in sponsored or jointly sponsored programs by IARS are required to disclose to the program audience any real or apparent financial relationships with commercial interests related to the content of their presentation(s). Faculty also are responsible for disclosing any discussion of off-label or investigational use of a product.

# Pre-Conference Sessions

## Anesthesia Information Management System Workshop (A.I.M.S.)

Wednesday, January 9, 2013

### 0800 - 1200 **Challenges and Opportunities in Developing Anesthesia Products (for industry)**

This half day course is planned for industry by the scientist and researcher members of STA involved in designing, testing, and marketing new developments and products to anesthesiologists. Talks will provide participants with a basic understanding of the practice of anesthesiology and how to recognize opportunities for new products. Mini-lectures and group discussions on key aspects of the clinical specialty including anesthesia 'work', behaviors driving equipment usage, the state of anesthesia-induced unconsciousness, and machine function. Simulator sessions using patient mannequins will allow course participants to actually become 'anesthesiologists' for routine and emergent cases presenting common clinical conundrums, demonstrating interactivity with operating room teams, and complications of record keeping. Work groups of anesthesiologists and participants will address what challenges are faced in the design process and how these can be overcome to market a successful product. This will be a highly interactive and stimulating workshop. **OPEN TO INDUSTRY PARTICIPANTS ONLY**

1300 – 1345 **The Ideal A.I.M.S. System** *David Reich, MD*

1345 – 1630 **Interactive Session with A.I.M.S. Users**

Session will feature clinicians and system users that have experience with a specific system. The clinicians will speak to the process of system implementation, integration and modifications.

**COST TO ATTEND AIMS SESSION  
ONLY \$225.00  
ADD ON TO FULL CONFERENCE  
REGISTRATION \$75.00**



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Hearing Impaired Assistance - TTY Toll Free 877.314.7081

**\$239.00 STA Group Rate Available Through  
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All reservations made individually through  
the hotel's reservation department by calling  
**800.672.6011.**

**Society for Technology in Anesthesia**  
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