



STA ANNUAL MEETING 2009: <<< Changing Technology To Meet The Future >>





STA 19th Annual Meeting & Computers in Anesthesia Meeting

On behalf of the program committee and Board of Directors, welcome to this year's STA Annual Meeting: <u>"Changing Technology To Meet The Future".</u> I would personally like to thank Drs. Leslie Jameson and Ted Dushane for organizing this event and securing the outstanding faculty, who have generously given of their time to prepare and present their lectures and demonstrations.

The STA Annual Meeting affords an opportunity for clinicians, technicians, engineers and industry specialists at all levels to meet and exchange ideas on the future of anesthesia/healthcare related technologies. We hope that you all take advantage of this unique venue and use the take time to meet with your fellow attendees during the meeting.

With the increasing fiscal and political challenges that face healthcare and industry the Society for Technology in Anesthesia and it's Annual Meeting become more essential in understanding and shaping our future. As a Society, we look for continued growth and new input as we move forward.

Please consider taking an active role in the STA so that we may face these challenges together. The STA committees and Board of Directors encourage new members, ideas and suggestions to help meet our goals.

Thank you for joining us. We look forward to a successful meeting.

David M. Feinstein, MD STA President



The Society for Technology in Anesthesia (STA) is an international membership-bases non-profit organization. Members are physicians, engineers, students and other non-physicians who represent the users, teachers and developers of anesthesia related technologies, computing and simulators.

The Society for Technology in Anesthesia (STA) is pleased to be a Component Society of the IARS and the sponsor of the Section in *Anesthesia and Analgesia* on Technology, Computing and Simulation. *Anesthesia and Analgesia* is the STA's Official Journal.

2008 Board of Directors

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2009 Annual Meeting Program Chair Leslie Jameson, MD University of Colorado Health Center

> 2009 Abstract Chairs Kirk Shelly, MD Yale University

Ted Duschane, MD, PhD Bringham & Women's' Boston



Mission Statement

The Society's mission is to improve the quality of patient care by improving technology and its application. The Society promotes education, research, collaborates with location, national and international organizations, sponsors meetings, exhibitions, awards grants, and recognizes achievement.

Meeting Objectives

- 1. Review new developments in mechanisms of anesthetic toxicity in newborns and elderly. Topics will focus on fetal alcohol syndrome; anesthesia induced neuronal apoptosis, anesthesia and Alzheimer's disease, and postoperative cognitive dysfunction.
- 2. Discussion pharmacologic perspectives on commonly held beliefs in anesthetic dogma. Topics will include a review of benefits and potential dangers of inhalation agents, a closer look at the toxic effects of Ketamine on the injured brain, and the emerging use of Propofol by non-anesthesiologists.
- 3. Review innovations in genomics and proteomics used to describe drug effect, development of a DNA biobank, imaging metabolomics in vivo, and new horizons in biomarkers.

CME Accreditation Statement

This activity has been planned and implemented with the Essential Areas of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Society for Technology in Anesthesia (STA) and the International Anesthesia Research Society (IARS.) The IARS is an accredited by the ACCME to provide continuing medical education for physicians. The IARS designates this continuing medical educational meeting for AMA PRA Category 1 Credit(s)[™]. Physicians should claim only those hours of credit that he/she actually spent in the educational activity.

Speaker and Presenter Disclosure Statement

The International Anesthesia Research Society (IARS) adheres to ACCME standards regarding industry support of continuing education. Disclosure of faculty and commercial relationships, if any will be made known at the activity. Speakers are also expected to openly disclose inclusion or discussion pf any off-label, experimental, or investigational use of drugs or devices in their presentations.

STA 2009 Anesthesia Essentials Course: Blanco Room

<u>Wednesday Jan</u> 08:30 – 09:00	nuary 14, 2009 Introduction
09:00 – 09:30	Session 1: Mini Talks A Typical Day Anesthesia Machine for Non-Clinicians Anesthesia Basics
09:30 – 10:30	Session 2: Preoperative Evaluations/Record Keeping Introduction Topic Structured Pre-Op Evaluations Small Groups (4/5 per group) Patient Interview Discussions: Written Records v. AIMS What's Important- Why Do We Interview Review AIMS records
10:30 - 10:45	Break
10:45 – 12:00	Session 3: What is Anestheisa: General? Introduction to Topic Simulator Session Drugs: Effects on vital signs, mental status, ect. Participants Case Study with Charting
12:00 - 12:45	Lunch: Live Oak Room
12:45 – 13:45	Session 4- What is Anesthesia: Regional & MAC? Introduction to Topic Simulator Session Drugs: Effects on vital signs, mental status, ect. Participants Case Study with Charting
13:45 – 15:00	Session 5: Interesting Cases Introduction to Topic Simulator Session Drugs: Effects on vital signs, mental status, ect. Participants Case Study with Charting

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Annual Meeting 2009: Changing Technology to Change the Future Daily Program Schedule

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Wednesday Janu	uarv 14, 2009	
07:30 – 08:30 08:30 – 16:15	Blanco Foyer Blanco	Anesthesia Essentials Registration & Continental Breakfast Anesthesia Essentials Course (Formerly "Anesthesia 101")
07.00 11.00	2	
07:30 - 11:00 12:00 12:15	Pecan Live Oalt	Strategic Planning Session
12:00 - 15:15	Live Oak	Essentials Course & Board of Directors Luncheon
13:15 – 16:30	Pecan	Board of Directors Meeting
15:30 - 19:30	Los Rios Foyer	STA Annual Meeting Registration
18:00 - 20:00	Los Rios East	Welcome Reception in Exhibit Area
Thursday Janua	rv 15, 2009	
06:30 - 08:30	Los Rios Foyer	Registration & Continental Breakfast
07:00 - 14:00	Los Rios East	Exhibits Open
07:45 - 08:00	Regency East	Welcome- David Feinstein, MD: STA President
08:00 - 09:55	Regency East	Session 1: Bridging the Gap: Old Technologies in a New
		Environment
08:05 - 08:40		New Uses for Processed EEG Monitoring
		Steven Baker, MD
08:40 - 09:15		$\chi'_{\rm eff}$ What does Universal SpO2, monitoring do for patients and
		the bottom line?
		Andreas Taenzer, MD
09:15 - 09:45		Technical Challenges of Global Monitoring
		Josh Pyke
09:45 - 09:55		Panel Discussion
		Moderator: Leslie Jameson, MD
09.55-10.25	Los Pios Fast	Decel with T-1'I'
07.55-10.45	LUS NIUS EAST	Dreak with Exhibitors

Thursday January 15, 2009 (Continued)

10:25 - 12:15	Regency East	Session 2: Is Pulse Pressure Variation a New Monitoring Parameter?
10:30 - 11:05		Is Pulse Pressure Variation a New Monitoring Parameter? Jeffery Feldman, MD
11:05 – 11:40		Pulse Pressure Variation Derived from the Arterial Pressure Derek Woodrum, MD
11:40 - 12:15		Pulse Pressure Variation Derived from the Photoplethysmogram Maxime Cannesson, MD
12:15 - 14:00	Rio Grande West	Lunch with Exhibitors
14:00 - 16:30	Regency East	Session 3: Workshop: Making Equipment Better
14:00 - 15:30		Breakout Sessions Anesthesia Machines: D. John Doyle, MD, PhD
		Cardiovascular Monitors: Kirk Shelly, MD, PhD
		Infusion Pumps: Robert Loeb, MD
		SpO2 and Beyond: Michael O'Reilly, MD
15:30 – 16:30	Regency East	Panel Discussion

Dinner on Your Own

<u>Friday January 16, 2009</u>

07:00 - 08:30 07:00 - 08:00

Los Rios Foyer Los Rios

Registration Continental Breakfast & Exhibits



Friday January 16, 2009 Continued

08:00 - 10:35	Regency East	Session 4: Keynote Session: Managing Anesthesia Delivery
08:05 - 09:05		Closed-Loops in Anesthesia
09:05 - 09:45		Michael Struys, MD Simulators: Training to Delivery Wolfgang Heinrichs, MD
09:45 – 10:20		The View from the FDA: Getting Approval for Closed Loop Anesthesia Sandy Weininger
10:20 - 10:35		Panel Discussion Moderator: Hanne Storm, MD, PhD
10:35 - 11:05	Los Rios	Break with Exhibitors
11:05 – 12:05	Regency East	Session 5: Focus on the Future- Award Research Abstract Oral Presentations Moderator: Kirk Shelly, MD, PhD
12:05 - 12:50	Los Rios	View Abstracts
12:50 - 14:00	Rio Grande West	Lunch & STA Annual Business Meeting & Gravenstein Award David Feinstein, MD STA President William New, MD Gravenstein Award Winner
14:00 - 16:00	Regency East	Session 6: Show & Tell Innovative Equipment & Software Moderator: Robert Loeb, MD
16:30 - 19:00	Regency East	Session 7: Wound Care
16:30 – 17:30		Clinical Use of Negative Pressure Therapy in the Treatment of Wounds Suresh Koneru, MD
17:30 -18:30		The Theory of Negative Pressure Wound Therapy Amy McNulty, PhD
18:30 - 19:00		Panel Discussion Moderator: George Huchinson, MD

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9:30 - 22:30	Regency Center	 TEX-MEX Dinner & Indoor Rodeo Additional Dinner tickets are available for purchase: \$75
aturday Januar	v 17. 2009	
6:30 - 08:00	Pecan	STA Board of Directors Meeting #2
7:00 - 08:30	Los Rios Foyer	Registration
7:00 - 08:00	Los Rios	Continental Breakfast & Exhibits
8:00 - 10:30	Regency East	Session 8: Real World Information Systems from Infancy to Mortality
8:05 - 08:40		Installation and Integration of an AIMS into Your Hospital's Electronic Environment Michael Vigoda, MD
8:40 - 09:15		Pre- Installation Issues: The Painful 1 st Year <i>Robert Loeb, MD</i>
9:15 – 09:45		Growing Pains the First 5 Years David Feinstein, MD
9:45 – 10:30		Additional Functionality I Wish the Vendor Provided Mohamed Rehman, MD
0:30 - 10:45	Los Rios	Break with Exhibitors
0:45 – 12:30	Regency East	Session 9: Finding and Creating Useful Anesthesia Information Systems
0:45 – 12:30		Case Presentations: Current Issues and Suggested Solutions Utilizing Advances in Technology Solutions Presented By: Sachin Kheterpal, MD David Reich, MD Shermeen Vakharia, MD Michael O'Reilly, MD John Fiadjoe, MD Moderator: Mohamed Rehman, MD
2:30 - 14:00	Rio Grande West	Session 10: Box Lunch with AIMS Users & Vendors

Sponsorship Recognition

We would like to recognize our corporate members and supports for 2009. These companies have made our educational and research activities possible

<u>Platinum</u> Masimo Corporationwww.masimo.com Oribionwww.oridion.com
<u>Gold</u> Drager Medicalwww.dragermedical.com
Silver GE Healthcarewww.gehealthcare.com iMD Softwww.imdsoft.com Philipswww.philips.com
Entrepreneur- Gold Covidien
Wide
Entrepreneur- Silver Docusys Inc

Corporate Member & Sponsorship Information

Society for Technology in Anesthesia

Covidien

Positive Results for LifeTM.

Covidien is a global \$9 billion manufacturer of leading medical devices and supplies, imaging products and pharmaceuticals. Covidien employs more than 43,000 people worldwide and is dedicated to working with medical professionals to improve patient outcomes. Its portfolio of leading brands includes Nellcor, Puritan Bennett, and Mallinckrodt.

Dannemiller Memorial Foundation

The Dannemiller Foundation is exhibiting its flagship website www.Pain.com. Pain.com offers extensive resources for pain medicine professionals, including interviews, commentaries, journal abstracts, and free CME.

Docusys Inc.

DocuSys, providing comprehensive digitization of anesthetics, incorporates customizable decision support, professional fee capture, comorbid condition documentation, tracking and billing of drugs to maximize quality and financial return. The system incorporates an intravenous drug monitor, DocuJect®, which utilizes bar coding and digital imaging to digitize drug delivery data

Drager Medical

Drager Medical AG & Co. KG is one of the world's leading manufactures of medical equipment. The Company offers products, services and integrated CareArea[™] Solutions throughout the patient care processemergency Care, Perioperative Care, Critical Care, Perinatal Care and Home Care. Drager Medical employs nearly 6,000 people worldwide. Additional information is available on the company's website www.dragermedical.com

Eko Systems

Eko Systems, Inc., a healthcare information technology company, develops and provides clinical information systems for perioperative care. Its product, Frontiers is an integrated perioperative clinical information management systems solution that meets the complex electronic medical record, compliance management, and management reporting needs of various clinicians throughout the perioperative care environment, as well as provides various clinical, operational, and financial reports. The company also provides report writer, pre-op status monitor, and intra-op status monitor

Display #11

Display #1

Display #3

Display #14

Display #13

Display #10

GE is dedicated to helping you transform healthcare delivery by driving critical breakthroughs in biology and technology. Our expertise in medical imaging and information technologies, medical diagnostics, patient monitor systems, drug discovery, and biopharmaceutical manufacturing technologies is enabling healthcare professionals around the world discover new ways to predict, diagnose, and treat disease earlier.

Hospira

Hospira is a global specialty pharmaceutical and medication delivery company dedicated to Advancing Wellness[™] by developing, manufacturing and marketing products that help improve productivity, safety and efficiency of patient care. With 70 years of service to the hospital industry, Hospira's portfolio includes generic acute-care injectables, integrated medication management and infusion therapy solutions, and injectable contract manufacturing

Masimo Corporation

Masimo (NASDAQ: MASI) is a global medical technology company that develops and manufactures innovative noninvasive patient monitoring solutions, including bedside and handheld medical devices and a wide array of sensors. A key medical technology innovator, Masimo is responsible for the invention of award-winning noninvasive technologies that are revolutionizing patient monitoring, including Masimo SET® pulse oximetry, Masimo Rainbow SET® Pulse CO-Oximetry⁻, and first-ever noninvasive and continuous total hemoglobin (SpHb⁻) monitoring technology. Visit <u>www.masimo.com</u> for more information.

McKesson

McKesson provides a total anesthesia solution that gives you the power to improve your clinical and financial operations. Our revenue cycle outsourcing services help anesthesiologists optimize collections, increase revenue and manage compliance risks. McKesson's anesthesia care solution compliments the delivery of quality anesthesia care with expert documentation, streamlined workflow and improved financial position for the anesthesiologist and hospital.

Society for Technology in Anesthesia

GE Healthcare

Display #2

Display #4-5

Display #12

*i*MDsoft is a leading provider of clinical information systems dedicated to automating the critical care and perioperative continuum. The MetaVision Suite is a fully-integrated, customizable solution for data collection and presentation, order management, clinical analysis, and decision support. Major medical centers across the US, Europe, and Asia use iMDsoft technology to improve care quality, promote patient safety, enhance financial performance, support research and compliance, and achieve sustainable market leadership.

Oribion

Oridion's Microstream ® capnography: effective, proven airway management providing the earliest indication of airway compromise. Microstream capnography combines proprietary sensing technology, eliminating the need for gas compensation. Situation-specific patient interfaces, for oral, nasal, and intubated sampling provide accurate and easy to use assessment of your patient's ventilation in any clinical setting, including PCA and procedural sedation

Philips

Philips Healthcare is a worldwide provider of Diagnostic Imaging Products, Cardiac and Physiological Monitoring Systems and Information Management applications. Philips Healthcare currently offers point of care clinical information systems that automatically record, store and provide reports for a given care setting. Today Philips offers Medical IT solutions for the perioperative environment (CompuRecord), the OB environment (OB TraceVue) and the critical care environment (Intellivue Clinical Information Portfolio, Critical Care or ICIP, CC).

Rapid Sequence	Anesthesia	Solutions
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Rapid Sequence Anesthesia Solutions' robust, customizable and portable Electronic Anesthesia Record keeping System will enhance your revenue cycle. Data flows from OR to billing. Rapid, clean submissions plus aggressive follow-up equals more cash in your pocket. Pre-op through payment we are your team. Plus we answer our telephone! No more teleprompts!

Society for Technology in Anesthesia

Display #15

Display #6

Display #7

Display #8-9

iMD Soft



Speaker Disclosure Information

Steven Baker, MD No Disclosures

Maxime Cannesson, MD Masimo Consultant Covidien Consultant

D. John Doyle, MD, PhD No Disclosures

David Feinstein, MD No Disclosures

Jeffery Feldman, MD No Disclosures

John Fiadjoe, MD No Disclosures

Wolfgang Heinrichs, MD AQAI GmbH, AQAI produces model software Simulation Center Mainz for METI simulators

George Hutchison, PhD No Disclosures

Sachin Kheterpal, MD No Disclosures

Suresh Koneru, MD No Disclosures

Robert Loeb, MD No Disclosures

Amy McNulty, PhD No Disclosures

Michael O'Reilly, MD Masimo Executive GE Medical Systems Consultant Docusys Stock Options



Speaker Disclosure Information Continued

Josh Pyke . Masimo Research Support

Mohamed Rehman, MD No Disclosures

David Reich, MD No Disclosures

Kirk Shelly, MD, PhD No Disclosures

Hanne Storm, MD, PhD No Disclosures

Michael Stuys, PhD No Disclosures

Andreas Taenzer, MD No Disclosures

Shermee Vakharia, MD No Disclosures

Michael Vigoda, MD No Disclosures

Sandy Weininger No Disclosures

Derek Woodrum, MD No Disclosures

Session I: Bridging the Gap – Old Technology in a New Environment Thursday January 15, 2009 08:00-09:55 Moderator – Leslie Jameson, MD

Presentations:

New uses for processed EEG monitoring Speaker: Steven Barker, MD Objectives:

- 1. Review the history of brain function monitoring, to understand its goals and limitations.
- 2. Examine each of the current processed EEG monitors from the standpoint of how they work and how their functional mechanisms might affect their performance.
- 3. Using the information above, summarize where we are today in brain function monitoring, form the standpoint of preventing either awareness or anesthetic overdose.

What does universal SpO₂ monitoring do for patients and the bottom line?

Speaker: Andreas Taenzer, MD

Objectives:

- 1. Efficacy of oximetry based universal monitoring.
- 2. Impact of oximetry based universal monitoring 2 on significant outcome variables.
- 3. At the end of the session, the learner should understand how the use of universal SpO₂ may improve patient outcome and aid the efficacy of medical emergency teams as suggested by the "100,000 lives saved" campaign by the IHI.
- Technical Challenges of Global Monitoring

Speaker: Josh Pyke

Objectives:

- 1. Identify challenges to integrating global monitoring with clinical workflow.
- 2. Present approach for addressing those challenges as used at one institution.

Solutions: Pulse Oximetry and EtCO₂

Panel Discussion



Session II: Is Pulse Pressure Variation a new Monitoring Parameter? Thursday January 15, 2009 10:25 – 12:15 Moderator – Jeffrey Feldman, MD

Presentations:

Is Pulse Pressure Variation a new Monitoring Parameter? Speaker: Jeffrey Feldman, MD, MSE Objectives:

- 1. Review the statistical tools available to validate the clinical performance of an automated respiratory induced variation monitor
- 2. Review the scientific evidence to date documenting the clinical utility of automated monitors for extracting information about arterial pressure variation
- 3. Discuss the potential clinical utility and future studies that are needed.

Pulse Pressure Variation derived from the Arterial Pressure

Speaker: Derek Woodrum, MD

Objectives:

- 1. Review the physiology of respiratory induced arterial pressure variation.
- 1. To define the various parameters that are extracted from the arterial pressure signal to quantify the variation.
- 1. Describe the technology currently available for quantifying the variation using the arterial pressure signal.
- 1. Discuss the potential clinical application.

Pulse Pressure Variation derived from the Photoplethysmogram

Speaker: Maxime Cannesson, MD

Objectives:

- 1. To describe how respiratory variations in the plethysmographic waveform can provide information regarding respiratory variations in the arterial pressure waveform.
- 1. To describe how plethysmographic waveform can be analyzed in order to obtain this information.
- 1. To discuss potential applications of these new parameters for fluid optimization in the operating room.
- 1. To discuss the main limitations of this index and how they can be overcome.

Session III: Monitoring – Workshop – Making Equipment Better Thursday January 15, 2009 14:00 – 16:30

Presentations:

Breakout Session: Anesthesia Machines Speaker: D. John Doyle, MD, PhD Objectives:

At the end of the session, the learner should know about the many human factor problems with contemporary anesthesia machines.

Breakout Session: Cardiovascular Monitors

Speaker: Kirk Shelley, MD, PhD Objectives:

At the end of the session, the learner should know the basic role of cardiovascular monitors and the implication of newly emerging technology. This session will review the indications for cardiovascular monitoring. There will be an emphasis on the newest technologies being introduced. There'll be a focus on obtaining information that drives clinical decisions as oppose to "knowing for the sake of knowing."

Breakout Session: Infusion Pumps

Speaker: Robert Loeb, MD

Objectives:

After attending this presentation, the learner will:

- 1. Understand the challenges during the first year after AIMS installation.
- 2. Know how to design a training program for new AIMS users.
- 3. Realize that ongoing clinical support is vital to the successful introduction of an AIMS.

Breakout Session: SpO₂ and Beyond Speaker: Michael O'Reilly, MD Objectives:

- 1. Describe the parameters available from the pulse oximeter.
- 2. Apply continuous non-invasive hemoglobin to clinical situations.



Session IV: Managing Anesthesia Delivery Friday January 16, 2009 08:00 – 10:35 Moderator – Hanne Storm, MD

Presentations:

Closed-Loops in Anesthesia Delivery Keynote Speaker: Michel Struys, MD Objectives:

This lecture focuses on the most recent developed and tested feedback systems in anesthesia. Various new approaches for controlling the administration of intravenous and inhaled hypnotic-anesthetic drugs are published recently. For the analgesics, a framework for further research has been presented in the literature. For the other drugs like muscle relaxants and hemodynamics, a short review will be presented. At the end of this session, the leaner should know about newly developed automated drug delivery systems in anesthesia.

Simulators: Training to Delivery

Speaker: Wolfgang Heinrichs, MD Objectives:

The audience should learn about:

- 1. How to use patient simulators for training closed loop anesthesia.
- 2. How to implement special models on simulators in order to generate anesthesia depth information.
- 3. How to implement drug interactions common in anesthesia (e.g. Propofol + Remifentanil) in the pharmacology models of human patient simulators.

The View from the FDA. Getting Approval for Closed-Loop Anesthesia Speaker: Sandy Weininger Objectives:

Understand the regulations and their intent Determine the anesthesiologist's role in device safety

New Concept Equipment. What takes so long? *Panel Discussion*

Computers in Anesthesia Show and Tell Session Moderator: Butch Loeb

Interesting Hardware/Software

This session is an opportunity for conference attendees to demonstrate interesting computer programs, devices, and gadgets that they have developed or used in the past year.

Brian Rothman Vanderbilt University Integration Of Apple Computer Into Microsoft Enterprise Environment To Use Platform Specific Programs

Frank Block University of Arkansas Wiki for Collaborative Writing of the Manual of OR Design

Paul St. Jacques Vanderbilt University Leveraging technology to improve quality and decrease cost in providing anesthesia care

Engineering Competition

<u>The clinical problem</u>: Apnea and/or respiratory obstruction during patient transport can result in death or permanent morbidity. Most patients are not monitored during transport from the OR due to the cost and intrusiveness of current technology. Most ICU patients do not have respiratory monitoring during transport (aside from pulse oximetry, but desaturation of is a late sign of respiratory problems in patients breathing supplemental oxygen). Respiratory monitoring currently consists of a vigilant practitioner observing the patient for signs of apnea or obstruction.

<u>The task</u>: Consider available monitoring technologies and design a portable, inexpensive, reliable, and convenient device that that detects patient apnea/obstruction during transport.

John Doyle

Cleveland Clinic Lerner College of Medicine of Case Western Reserve University Preliminary Design of Respiratory Transport Monitor Based on Color Spectrographic Analysis of Breathing Sounds

Brian Rothman and James Berry Vanderbilt University Acoustic Apnea Detector Bryce Hill, Joseph Orr, Ken Johnson, Dwayne Westenskow University of Utah A Precordial Stethoscope to Detect Airway Obstruction and Apnea during Moderate Sedation

Jeff Mandel University of Pennsylvania <Title to be determined>

Relevant Emerging Technology

Steve Barker University of Arizona Work-in-Progress: The Masimo ARM Monitor



Session VII: Wound Care Friday January 16, 2009 16:30 – 19:00 Moderator – George Hutchinson, MD

<u>Presentations:</u> Advanced Concepts in Wound Care: Lessons Learned Using the Wound V.A.C. Over The Past 12 Years Speaker: Suresh Koneru, MD

Mechanisms of Action of Negative Pressure Wound Therapy Speaker: Amy McNulty, MD



Session VIII: Real World Information Systems from Infancy to Maturity Saturday January 17, 2009 08:00 – 10:30 Moderator – Mohamed Rehman, MD

Presentations:

Installation and Integration of an AIMS into your Hospital's Electronic Environment *Speaker: Michael Vigoda, MD*

Peri-Installation Issues. The Painful First Year Speaker: Robert Loeb, MD Objectives:

After attending this presentation, the learner will:

- 1. Understand the challenges during the first year after AIMS installation.
- 2. Know how to design a training program for new AIMS users.
- 3. Realize that ongoing clinical support is vital to the successful introduction of an AIMS.

Growing Pains the First Five Years Speaker: David Feinstein, MD

Additional Functionality I Wish the Vendor had Provided Speaker: Mohamed Rehman, MD Objectives:

- 1. Understanding problems of a mature AIMS system.
- 2. Think of data mining and data elements during set up of AIMS.
- 3. Problems associated with interfacing with new software.

Session IX: Finding and Creating a Useful Anesthesia Information System Saturday January 17, 2009 10:45 – 12:30 Moderator – Mohamed Rehman, MD

<u>Case Presentations:</u> Current Issues and Suggested Solutions Utilizing Advances in Technology Solutions

Case Discussion Participant Speaker: Sachin Kheteral, MD Objectives:

- 1. To understand the goals of the multicenter perioperative outcomes group (MPOG).
- 2. List the different data sources that can be used for large dataset research.
- 3. Describe some of the opportunities and challenges associated with large dataset research.

Case Discussion Participant

Speaker: David Reich, MD

Objectives:

At the end of the session, the learner should know the data elements that are extracted from AIMS for the purposes of creating an electronic professional charges voucher. The learner should also know the means of assuring the quality of the data and feedback mechanisms for data correction.

Case Discussion Participant

Speaker: Shermeen Vakharia, MD

Objectives:

The goal of this session is to demonstrate to the audience the role of Anesthesia Information Management System (AIMS) in documenting and monitoring compliance.

Case Discussion Participant Speaker: John Fiadjoe, MD

STA 2009 Annual Meeting Abstract Disclosures

Aymen	Alian	MD	No Disclosures
Shang	Allan	MD	No Disclosures
John	Chandler	MB BCh	No Disclosures
Yehoshua	Colman	MS	Oridion
Maryam	Dosani	BSc	No Disclosures
D. John	Doyle	MD, PhD	No Disclosures
Chad	Epps	MD	Oridion
Richard	Epstein	MD	No Disclosures
John	Fiadjoe	MD	No Disclosures
Yaacov	Gozal	MD	Oridion, Jerusalem, Israel
Thomas	Hemmerling	MD, DEAA	No Disclosures
Yoshinori	Iwase	MD, Ph.D	No Disclosures
David	Jamison	BSEE, MBA	Datascope Patient Monitoring
Scott	Kelley	MD	Aspect Medical Systems
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Paul	Nuccio	RRT,FAARC	Oridion
John	Pawlowski	MD,PhD	No Disclosures
Alfred	Pinchak	MD	No Disclosures
Paul	Reynolds	MD	No Disclosures
Brian	Rothman	MD	No Disclosures
Thiruvenkadam	Selvaraj	MD, DNB	No Disclosures
Harsha	Setty	MD	AI Medical Devices
Shashank	Singh	MD	No Disclosures
Joan	Spiegel	MD	No Disclosures
Paul	St. Jacques	MD	Co-Inventor of technology being presented
Arthur	Taft	PhD	Oridion Capnography, Inc.
Richard	Wales	BS	No Disclosures
Carl	Wallroth	PhD	Draeger Medical
Christopher	Ward	MD	No Disclosures
Dwayne	Westenskow	PhD	Anecare Laboratories Inc.
Gozal	Yaacov	MD	Oridion

# Title	Submitting Author	Pg(s)
The Role of Transthoracic Echocardiography as a Real Time Hemodynamic Monitoring Tool 1 During Induction of Anesthesia	Thiruvenkadam Salvaraj, MD, DNB, MNAMS	1
The Integrated Pulmonary Index: Validity and 2 Application in the Pediatric Population	Yaacov Gozal, MD	2
Reliability of the Integrated Pulmonary Index 3 Postoperatively	Yaacov Gozal, MD	3
Capnography Filter Lines Adapted for Pressure (PTAF) to Detect Apnea and Hypopnea as a Possible Method for Sleep Disorder Breathing 4 Pattern Recognition	Richard Wales, BS, RRT	4
Postural Changes And End-Tidal Carbon Dioxide In The Black Rhinoceros (DICEROS BICORNIS) 5 And Its Importance To Field Anesthesia 6 Video RIFL (Rigid Flexible Larvngoscope)	Arthur Taft, PhD Harsha Setty, MD	5
Evaluation of Rapid Response Team Flag-Alert 7 Parameters	Aymen Alian, MD	7
Auxiliary Gas Mixing Integrated in an 8 Anesthesia Machine - A New Safety Feature	David Jamison, BSEE, MBA	8
Cross Service Analysis of the Surgical 9 Apgar Score	Paul St. Jacques, MD	9
Preliminary Design of Respiratory Monitor Transport Monitor Based on Color 10 Spectrographic Analysis of Breathing Sounds	D. John Doyle, MD, PhD	10
Work and Power Characteristics of Rapid Shallow Breathing Created by Inhalational Agents can be Displayed Using Dynamic 3-Dimensional 11 Respiratory Loops	Raj Modak, MD	11 & 12
The Easy-Cuff: A New Pressure Measuring 12 Syringe	Joan Spiegel, MD	13
Clinical Evaluation of a Method for Producing Probability Ramp Sedation with Propofol and 13 Remifentanil During Colonoscopy	Jeff Mandel, MD, MS	14
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