

STA 2001:
**Society for Technology
in Anesthesia**

An Information Odyssey



January 10-14, 2001

Scottsdale, Arizona

Plus

**2001 International Meeting on
Medical Simulation**

Society for Technology in Anesthesia

The Society for Technology in Anesthesia (STA) is an international membership-based 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. STA has two official Component Sections, a Section on Computing and a Section on Simulation each of which is responsible for a scientific meeting, plus several less formal Special Interest Groups.

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

2000 STA Board of Directors

President

Matthew Weinger *University of California SD*

President-elect

Dan Raemer *Harvard Medical School*

Secretary

Charlotte Bell *Yale University*

Treasurer

Robert Loeb *University of Arizona*

At Large Members

Gordon Gibby *University of Florida*

Mike Jopling *Columbus University*

Fritz Stawitcke *Agilent Technologies*

STA Program Activities

Annual Scientific meeting (January)*

with general and hands-on workshop

*sessions, technology exhibits, abstract posters and demonstrations,
scientific presentations and the STA annual debate*

International Meeting on Medical Simulation *

With Rochester Simulation Group

STA @ ASA Events

Breakfast Panel

Dinner and Lecture

Computers in Anesthesia Meeting (October)*

Immediately following the ASA

Annual J.S. Gravenstein Technology Award

Interface: STA's electronic newsletter

- STA is accredited by the ACCME to provide continuing medical education Category 1 Credits. These meetings offer Category 1 Credit.

Society for Technology in Anesthesia Office

PMB 193 2743 S. Veterans Parkway Springfield IL 62704
217-787-3281 FAX 217-787-3285 SocTecAnes@aol.com

STA 2001: Information Odyssey At a Glance

Wednesday, January 10

- 0800-1700 STA Board of Director's meetings
- 1730-2000 Registration
- 1800-2100 Welcome reception with Exhibitors

Thursday, January 11

- 0700 Registration desk open
- 700 Technology showcase & Research Abstract Presentations
- 0700 Continental breakfast
- 0800 Opening remarks and course overview
- 0815 Session I – Information Technology on the Horizon: *George W. Blike, MD, Dartmouth*
- 1000 Technology Showcase
- 1030 Session 2: Who is the Information Consumer? *David Lubarsky, MD, MBA, Duke University*
- 1230 Luncheon and Technology Showcase
- 1330 Workshops
- 1700 Focus Group Session

Friday, January 12

- 0700 Technology Showcase, Poster/Demonstrations
- 0700 Continental breakfast
- 0800 Session 3: Don't Make an Expensive Mistake. Should I Buy an AIS Now? *Kevin Tremper, MD, PhD, University of Michigan School of Medicine*
- 1000 Research Poster Discussion
- 1030 Technology Showcase
- 1130 Lunch & STA annual meeting
(*STA meeting registrants only*)
- 1200 STA Abstracts and Exhibitors take-down
- 1300 Local Enrichment Tours
- 1315 Session 4 New Methods of Simulation: *Richard Rowe, MD, MPH, Oakland Children's Hospital*
- 1430 Simulator Workshops
- 1830 Friday's Harley Happening

Saturday, January 13

- 0700 Technology Showcase, Poster/Demonstrations
- 0700 Continental breakfast
- 0800 Session 5 The Future is NOW *Albert Perino, MD, Yale University*
- 1020 Annual STA Debate A Computerized Anesthesia Information System is Necessary for a Successful Anesthesia Practice.
David Seitman, Moderator
Pro: Jeffrey Feldman, MD,
Con: Franklin Scamman, MD, University of Iowa
- 1230 Optional Sedona Red Rocks Trip

Int'l Simulation Meeting At a Glance

Friday, January 12

- 1300 Welcome and Opening Remarks
- 1315 Panel: *New Methods of Simulation*
Richard Rowe, MD, Oakland Children's
- 1430 Simulation Workshops
- 1900 Friday's Harley Happening

Saturday, January 13

- 0700 Continental Breakfast with Exhibitors/Posters
- 0800 Panel: *Performance Evaluation Using Simulation*
Barry McGaghie, PhD, Northwestern
- 1030 Panel: *Psycho-motor Simulation*
Chris Wiley, MD, Dartmouth
- 1200 Luncheon Keynote *The Future of Simulation in Medicine*
Thomas Krummel, M.D., Chief of Surgery, Stanford
- 1400 Panel: *Educational Challenges for Simulation*
Ronnie Glavin, MD, Scottish Clinical Simulation Centre
- 1400 Simulation Workshops
- 1530 Panel: *Simulation's Relationship to Safety in Medicine*: *Jeffrey Cooper, PhD, Harvard*
- 1700 Simulation Abstracts and Exhibitors take down

Sunday, January 14

- 0700 Continental Breakfast with Exhibitors and Posters
- 0800 Panel: *Writing Educational Objectives for a Simulator* *Indsey Henson, MD, Rochester*
- 1030 Panel: *Simulation Center Operations*
Mike Olympio, MD, Wake Forest
- 1200 Wrap-up and adjourn

Wear your nametag
Nametags are color coded according
to the meeting for which you have
registered

RED: Both Information Odyssey
& Simulation

BLUE: Information Odyssey *only*

GREEN: Simulation *only*

We would like to recognize our corporate members for 2001. These companies have made STA's educational and research activities possible.

Platinum Level

Medical Education Technologies Inc.

Pyxis Corporation

Gold Level

Drager Medical

Silver Level

Agilent Technologies

Datex-Ohmeda

DocuSys

FluidSense

GE Medical Systems Information Technologies

LifeCare Technologies, Inc.

Masimo Corp.

Medical Plastics Laboratory

Nellcor, A Business Unit of Tyco Healthcare

PICIS

Spacelabs Medical

New Friends of STA

Advanced Medical Simulation

Arrow International

EKO Systems, Inc.

HT Medical

Novamatrix Medical Systems Inc.

Optovent, Inc.

STA 2001 Information Odyssey & International Meeting on Medical Simulation

Exhibitor Information

- 7 Advanced Medical Simulations, Inc.**
Advanced Medical Simulations, Inc. produces quality simulation-based training systems that address the educational and training needs of the medical and health care community. The company intends to regularly develop and introduce new training products targeting different segments of the medical community. The company's initial product focus is in perinatal medicine.
- 17 Agilent Technologies**
Agilent Technologies will feature the CompuRecord Anesthesia Information Management System, the most successful suite of solutions for the Anesthesia Department in the U.S. Numerous software modules offer improved vigilance, a vehicle for process re-engineering with savings in documentation, time, drugs and supplies. JCAHO compliance is enhanced; the system also has an accessible database for clinical research
- 14 Arrow International**
Arrow International develops, manufactures, and markets a broad range of clinically advanced disposable catheters and related products. The HemoSonic 100 is a real-time, non-invasive, comprehensive hemodynamic monitor utilizing echo-Doppler technology. In anticipation of the national needle-safety laws, Arrow brings you a time-saving safety device - the Arrow Staple Device.
- 2 Datex-Ohmeda**
Datex-Ohmeda's new product family, System 5, provides care in five dimensions: Patient, Professionals, Investment, Integration and Process. Visit us to see how System 5 can benefit your clinical environment.
- 6 DocuSys**
DocuSys provides an Information System for Anesthesia requiring no keyboard entry. Unique is the ability to automatically document, bill and deliver injectable medications (in one motion) as a by-product of current clinical care, including the capability to warn clinicians of impending medication errors and other contraindications before administering medications
- 19 Drager Medical**
North American Drager has been a supporter of the Society for Technology in Anesthesia for many years and most recently participated in the ASA Breakfast panel presenting their newest technologies in a "Meet the Press" format.
- 15 EKO Systems, Inc.**
*Frontiers*TM, eko's flagship product suite, is an end-to-end perioperative electronic medical record information system. It leverages the latest advances in network, database, internet technology, security, and hardware to implement a comprehensive, flexible, reliable and easy-to-use system. The value derived is a more complete and compliant record, enabling rapid billing, real time error checks and faster quality turnaround.
- 23 FluidSense**
FluidSense offers a unique combination of products and services which improve the intravenous infusion therapy process, making it more efficient, clinically effective, and satisfying to patients. This important procedure is improved with a dramatically smaller, lighter, simpler, and more versatile IV pump, invented from the input of hundreds of nurses.
- 20 GE Medical Systems Information Technologies**
GE Medical Systems has continuously supported STA by exhibiting at annual meetings and as a corporate member. 800 W. Tower Ave. Milwaukee, WIO 53223

3 Harcourt Health Sciences

Harcourt Health Sciences is a leader in the publishing of medical text and journals of special interest to physicians and caregivers

10 HT Medical

HT Medical Systems, located in Gaithersburg Maryland, is the world leader in the development of virtual reality medical technology. The company's products include medical training simulators that allow realistic rehearsal without risk to patients. Three product lines cover intravenous therapies, endoscopic procedures and endovascular interventions. www.ht.com

5 LifeCare Technologies, Inc.

AIMCare™ Perioperative Suite is the industry leader in point-of-care software solutions and the vital link between you and the regulatory requirements of today's anesthesiology environment. AIMCare™ is a suite of modular software applications, designed for developing a computer-based patient record for anesthesia. Functioning on a Windows-NT platform AIMCare™ features dynamic electronic data capture, bar coding, charge capture, CPT-4 and ICD-9 coding, multiple time stamping and economical analysis of surgical procedures, patient and staff tracking, preoperative assessment, and an outcomes based risk-adjusted quality indicator reporting function.

21 Masimo Corp.

Masimo Corporation designs, develops, manufactures, and licenses advanced signal processing and sensor technologies for the noninvasive monitoring of vital signs. New from Masimo, Radical, is three pulse oximeters in one: a standalone device for bedside monitoring, a detachable handheld unit for easy portable monitoring and a monitor interface to upgrade existing multiparameter monitors to Masimo SET technology. With Radical, users can provide continuous and reliable SpO2 monitoring anywhere throughout the continuum of care. Radical not only delivers the unsurpassed accuracy and reliability of Masimo SET technology, but with multi-functionality, ease of use and true sensor standardization.

11-12 Medical Education Technologies Inc.

The METI Human Patient Simulator (HPS™) represents the latest in the state of the art simulation technology for training clinicians at all levels of medical education. Sophisticated mathematical models of human physiology and pharmacology determine automatically the patient's response to user actions and interventions. With dynamic coupling of the cardiovascular, pulmonary and pharmacological models along with the physical embodiment of the mannequin, the simulator allows for the complete characterization of the real patient.

8-9 Medical Plastics Laboratory

MPL and Laerdal have combined manufacturing experience to bring to life the world's first Universal Patient Simulator. This simulator will incorporate ACLS, ATLS, acute patient management and anesthesia by integrating MPL's innovative manikin features and the Laerdal Heartsim control interface. SimMan is an affordable and portable solution to previously lab-based patient simulation.

13 Nellcor: A Business Unit of Tyco Healthcare

The Respiratory Group develops, manufactures and markets products that help diagnose, monitor, and treat respiratory and anesthesiology patients across the continuum of care. We are a world leader in pulse oximeters and sensors, airway management products, ventilators and alternate care products.

16 Novamatrix Medical Systems Inc.

Novamatrix Medical Systems, Inc. is a leading designer, manufacturer and marketer of non-invasive cardiac output monitors, hand-held and bedside pulse oximeters and mainstream capnographs, transcutaneous and respiratory profile monitors. For information call, 800-234-3444 or 203-265-7701 or visit us at our web site at www.novamatrix.com

24 Optovent, Inc.

This is the second year that Optivent has provided support for STA through exhibiting at the STA Annual Conference. Steve Heim, Optovent, Inc. 849 St. Andrews Lane, Louisville, CO 80027

4 PICIS

Picis provides care automation and clinical performance tools that help better manage care throughout the entire perioperative environment. Picis solutions automate the pre-anesthesia evaluation, the intraoperative anesthesia record and postoperative recovery. Picis tools allow caregivers to implement best practices, capture the essential patient data, and realize better patient outcomes.

25 Pyxis Corporation

Pyxis Anesthesia System™ is a unique automated mobile medication and supply dispensing workstation. Designed and built in collaboration with leading anesthesiologists nationwide, the product closely complements the clinician's workflow. Placed inside operating rooms, the Pyxis Anesthesia System is intended to replace traditionally manually operated work carts used by anesthesia professionals. All typical anesthesia supplies and medications, including controlled substances, are immediately available at the clinician's fingertips. The system is the ideal solution that addresses anesthesia's need for convenience and accessibility, and the organizational concern for patient safety.

1 Spacelabs Medical

Spacelabs Medical will demonstrate a complete perioperative clinical information system designed to help anesthesia practitioners manage patient care. You will see our Anesthesia Delivery System, Bispectral Index module, OR Chart information and documentation system and 5-agent Multigas Analyzer. Our Ultra Care Network Monitors allow you to review and control patient vital signs and other information at point of care.

This information was provided by the exhibitor and received by December 31, 2000.

STA 2001

Information Odyssey

Agenda as of 1/1/01

WEDNESDAY, JANUARY 10

0800-1700 STA Board of Director's meetings
1730-2000 Registration
1800-2000 Welcome reception with Exhibitors

THURSDAY, JANUARY 11

0700-1600 Registration desk open
0700-1200 Technology showcase
0700-1200 Research Abstract Presentations
0700-0800 Continental breakfast
0800-0815 Opening remarks and course overview
0815-1000 **Session I – The Futre, Now, for Information Technology:** Glimpse the future of the impact of information technology on anesthesia practice including wireless and handheld devices, the Web and data mining.
Moderator: *George W. Blike, MD, Dartmouth Hitchcock Medical Center*
The Promise of Wireless Technology: *Dr. Kirk Thompson, Quincy Street Corporation*
From Teenagers to Extraterrestrials: Lessons in Distributed Computing: *Christopher Wiley, MD, Dartmouth-Hitchcock Medical Center*
Postcards from the eEdge: Turning eCommerce Metrics into Patient Indicators: *Gerard Torenvliet, MASc, Cognos, Inc*

1000-1030 Poster/Demonstration and Technology Showcase

1030-1230 **Session 2: Who is the Information Consumer?** There are many consumers of anesthesia information. This session will explore the manner in which anesthesia information can be used by clinicians, administrators, third party payors and government representatives.
Moderator: *David Lubarsky, MD, MBA, Duke University Medical Center*
Clinical, Medicolegal and other Administrative Uses of Information Systems: *David Lubarsky*
The Value of an Information System to Operating Room Management: *Franklin Dexter, MD, University of Iowa*
Third Parties as Users of Information Systems: *Carlos Nunez, MD, Medical Director, PICIS*
The Compliance Officer as an Information Consumer: *Jerry Stonemetz, MD: VP Lifecare Technologies*

1230-1330 Luncheon - Patio buffet - tickets required

1330-1700 **Technology Showcase & Workshops:** each workshop will be 45 minutes with 15 minute break between each. The Technology Showcase will run concurrently

**Workshop 1
North Forum**

Pre-Operative Systems:
*Gordon Gibby, MD,
University of Florida*

SEC, Inc
*Michael O'Reilly, MD,
Univ. of Michigan*

**Intraoperative Coding
and Charge Capture**
Jerry Stonemetz, MD

**Workshop 2
San Carlos**

**CompuRecord:
Record Keeping:**
*Kenneth Abrams MD
Mt. Sinai Hospital*
EKO Systems
*Frank Koch, MD,
Fairfax Anesthesia*

PICIS: Tentative

**Workshop 3
Rio Verde**

Drager Saturn System:
*Ian Sanderson, MD,
Duke University*

Pre-Operative Systems:
*Richard Gillerman, MD,
Rhode Island Hospital*

1700-1800 Focus Sessions with wine and cheese. Rio Verde Room

FRIDAY, JANUARY 12

0700-0800 Continental Breakfast in Exhibit area

0700-0800 Technology Showcase and Research Posters and Demonstrations

0800-1000 **Session 3: Don't Make an Expensive Mistake. Should I Buy an AIS Now?**
Examples from both academic and private practice will be used to illustrate the challenges and pitfalls in the process of acquiring an anesthesia information system.

Moderator: *Kevin Tremper, MD, PhD, University of Michigan School of Medicine*

The Michigan System: *Michael O'Reilly, MD, MS, University of Michigan School of Medicine*

Implementing an AIS at an Academic Medical Center: *Gilbert Ritchie, PhD, University of Alabama School of Medicine*

How to Get the Most Out of Your Electronic Medical Record System: *James Koch, MD, Fairfax Hospital, VA*

1000-1100 **Research Poster Discussion:** Selected research abstracts will be presented by the authors.

Michael Jopling, MD, Scientific Chair, Fritz Stawitcke, PhD, STA Research Chair; Kirk Shelly, MD

1030-1130 Technology Showcase

- 1130-1300 **Lunch & STA annual meeting** (*STA meeting registrants only*)
Grab your lunch in the exhibit area and return to the General Session room
 Daniel Raemer, STA 2001 BOD President
 Fritz Stawitcke, STA Research/Abstract Award presentations
 J. S. Gravenstein Technology Award presentation
 John Severinghaus, MD, 2000 Award Recipient
 This award generously supported by METI
- 1200-1400 **Simulator Meeting registration.** If you have not registered for the 2001 International Meeting on Medical Simulation, *please do so before attending any Simulation Meeting only activities or sessions.*
- 1300-1430 **Session 4: New Methods of Simulation:** Uses of simulation from the "think tank" and the biotech company viewpoint of the wider world of medicine.
Session open to both STA 2001 and Simulation registrants.
Moderator: Richard Rowe, MD, MPH, Oakland Children's Hospital
From the Think Tank Kevin Montgomery, Ph.D. at NASA Ames/Stanford Biocomp.
How Biotech Companies are Envisioning the Future and How to Get There.
 Joe Tasto, MD, HT Medical
- 1430 **Simulator Workshops**
- 1300-1700 **Local Enrichment tours** - optional for STA Information Odyssey Registrants.
Please sign up for your choice of ASU East or Taliesin West at the registration desk. Space limited. Tickets required
- 1830-2230 **Friday's Harley Happening:** Registrants and guests of both Information Odyssey and Int'l Meeting on Medical Simulation. *This event is funded in-part by a generous grant from METI.*

SATURDAY, JANUARY 13

- 0700-1200 Registration desk open
 Simulation Technology exhibits and posters
- 0700-0800 Continental breakfast
- 0800-1000 **Session 5 - The Future is NOW** A panel discussion of technologies in use today and which have been proven to address important issues in medical practice through information technologies
Moderator: Albert Perrino, MD, Yale University School of Medicine
When is Delayed and Erroneous Charting Accepted Practice and When is it a Medical Error?: Reed Gardner, PhD, University of Utah School of Medicine
Towards A Comprehensive Electronic Medical Record: The VA Experience: Clayton Curtis, MD, PhD, VA New England
Failure and Success in the Not Com World Dan Pettus, Pettus Consulting Group

1000-1020 Break in exhibit area

1020-1130 **Annual STA Debate**

A Computerized Anesthesia Information System is Necessary for a Successful Anesthesia Practice.

Moderator: David Siteman, MD

Pro: *Jeffrey Feldman, MD, Virtua Memorial Hospital, Mt. Laurel, NJ*

Con: *Franklin Scamman, MD, University of Iowa*

1230 **Optional Sedona Red Rocks Trip** *Please make your reservation at the registration desk. Tickets required*

STA 2001 Information Odyssey

Research Abstract First Authors & Titles

* indicates demonstration

- | | | |
|------|--|---|
| ✓ 1 | Agutter March James
<i>University of Utah Salt Lake City</i> | <i>Usability Testing Protocol for Anesthesia Displays</i> |
| ✓ 2 | Barker PhD, MD Steven J.
<i>University of Arizona Tucson</i> | <i>The Effect of Motion on the Accuracy of Six "Motion-Resistant" Pulse Oximeters</i> |
| ✓ 3 | Bekker MD PhD Alex
<i>NYU Medical Center New York City</i> | <i>Hemodynamic Effect of Cerebral Vasospasm: A Computer Simulation</i> |
| ✓ 4 | Carter MA, MSP Thomas
<i>Charles Drew Univ. Newbury Park</i> | <i>12 Months Utilization of an Electronic Spreadsheet for Residents' 4-Year Scheduling System for ACGME Requirements</i> |
| ✓ 5* | Evans DO Robert
<i>DOCUYS Mobile</i> | <i>Digitizing Injectable Medications for a Computerized Record</i> |
| ✓ 6* | Gillerman MD, PhD Richard
<i>Rhode Island Hospital/Brown University Providence</i> | <i>A New Intelligent Anesthesia Preoperative Assessment Application</i> |
| ✓ 7 | Glassenberg MD Raymond
<i>Wilmette</i> | <i>Formant Measurement as a Method for Differentiating Easy from Difficult-to-Intubate Airways</i> |
| ✓ 28 | Husband, BECh/E/BME Michael
<i>Metasensors, Rockville</i> | <i>Pneumotachometers Independent of Physical Properties</i> |
| ✓ 8* | Lampotang PhD Sem
<i>University of Florida Gainesville</i> | <i>Preliminary Experience with a Web-Based, educational Simulatiuon of an Anesthesia Maching</i> |
| ✓ 9* | Liem MD Edwin
<i>University of Florida Gainesville</i> | <i>A Model Based Computer Simulation of Gas Flows Inside the Anesthesia Machine</i> |
| ✓ 26 | Jopling MD Michael
<i>Ohio State University, Columbus</i> | <i>Methodology of Generating Motion Artifact Affects Measures of Pulse Oximetry Experimental Performance</i> |
| ✓ 27 | Jopling MD Michael
<i>Ohio State University, Columbus</i> | <i>An Algorithm for Detecting Pulmonary Artery Catheter Occlusion in Patients with Mitral Valve Insufficiency. A Method to Reduce the Risk of Pulmonary Artery Rupture?</i> |
| ✓ 10 | Lutter MD Norbert
<i>University of Erlangen-Nuremberg Erlangen GERMANY</i> | <i>Failure Rate of Three Different Pulse Oximeters in the Intensive Care Unit</i> |
| ✓ 11 | Lutter MD OA Dr.med. Norb
<i>University of Erlangen-Nuremberg Erlangen GERMANY</i> | <i>Reliability of Third Generation Pulse Oximeters in the PACU with Respect to Motion and Low Perfusion</i> |
| ✓ 12 | Patterson PhD Duane
<i>Medical College of Georgia Augusta</i> | <i>Paperless Record Keeping in a Nursing Anesthesia Program</i> |
| ✓ 13 | Reddy Swapna
<i>Univ of CA SD San Diego</i> | <i>Physiological, Psychological, and Procedural Measures of Workload</i> |

- ✓ 14 **Salgar MD Veena**
*Yale University School of Medicine
New Haven* *Manual Analysis of 110 Consecutive Automated Anesthesia
Records-A Pilot Study to Determine the Incidence of Non-
Continual Blood Pressure Monitoring*
- ✓ 15 **Scamman MD Franklin**
University of Iowa Iowa City *A Method of Electronically Distributing Hand-Written Documents*
- ✓ 16* **Schwab PhD Wilhelm**
University of Florida Gainesville *Versatile Pen-Operated Intraoperative RecordKeeper with Secure
National Medical Records Availability*
- ✓ 17 **Schwab PhD Wilhelm**
U of Florida Gainesville *Intrinsic Resolution of Ball Point Pen on Paper Measured Using
Digital Image Processing Techniques*
- 18 **Shelley MD, PhD Kirk**
Yale University New Haven *Blood Pressure Determination Using the Pulse Oximeter Waveform*
- ✓ 19 **Slagle MS Jason**
UCSD San Diego *Task Analysis of Anesthesia Residents' Clinical Performance at
Different Stages of Residency Training*
- ✓ 20 **Sowb Yasser**
*Veterans Affairs Palo Alto Health
Care System Palo Alto* *Clinicians' Management of Patient's Minute Ventilation During
Anesthesia*
- ✓ 21 **Syroid MS Noah**
University of Utah Salt Lake City *Development and Evaluation of a Graphical Anesthesia Drug
Display*
- ✓ 22 **Wallroth PhD Carl**
*Drager Medizintechnik GmbH
Lubeck GERMANY* *Safety Requirements for Anesthetic Systems When Used in Offices
and at Emergency and Remote Sites*
- ✓ 23 **Waterman MD Cleve**
LSUMC Shreveport *QuickStart Anesthesiology CD-ROM: A Student's Introduction to
Anesthesia Theory, Practice and Procedures*
- ✓ 24 **Weinger MD Matthew B.**
VA Medical Center San Diego *Training New Residents: A Task Analysis of the First Three Weeks*
- ✓ 25 **Yennam MD S. R.**
*Yale University School of Medicine
New Haven* *Air Eliminator Performance of the New Level 1 F11 Air Eliminator
vs the Old Level F10*

Society for Technology in Anesthesia International Meeting on Medical Simulation

In cooperation with the Rochester Simulation Group

Friday January 12

- 1300 **Welcome and Introductions**
W. Bosseau Murrar, MD, Meeting Chair
Steve Farnsworth, MD, Research Chair
Randy Steadman, MD, Simulator Workshop Chair
- 1315-1430 **New Methods of Simulation:** Uses of simulation from the "think tank" and the biotech company viewpoint of the wider world of medicine
Richard Rowe, MD, Oakland Children's Hospital
From the Think Tank *Kevin Montgomery, Ph.D NASA Ames/Stanford Biocomp.*
How Biotech Companies are Envisioning the Future and How to Get There.
Joe Tasto, MD, HT Medical,
- 1430 **Simulation Workshops**
- 1830 **Harley Happening - an evening of food and entertainment with support from METI(Tickets required)**

Saturday January 13

- 0700-0800 Continental Breakfast
0700-1200 Exhibits open; Abstract viewing
- 0800-0930 **Performance Evaluation Using Simulation:** Discussions on using simulators in the area of performance evaluation and certification
William McGaghie, PhD, *Northwestern University, Moderator*
Harvey/UMedic Cardiology Patient Simulator *Donald Brown, M.D., University of Iowa College of Medicine*
Use of Accounting Case Problems for Certification Testing *Jylan Khalil, CA., Canadian Institute of Chartered Accountants*
Psychometric Issues in the Use of Simulations for Performance Assessment
John Norcini, Ph.D., Vice President, American Board of Internal Medicine
The Acquisition and Maintenance of Medical Expertise from Deliberate Practice Using Simulation Technology: *W.C. McGaghie, Ph.D., Northwestern University Medical School*
- 0930-1030 Exhibits open; Abstract viewing

- 1030-1200 **Psycho-motor Simulation:** Simulation as a teaching tool for psycho-motor skills
Chris Wiley, MD, Dartmouth Hitchcock Medical Center, Moderator
How to Design and Implement a Task Simulator with Haptic Feedback *Roger Webster, PhD, Millersville U. of PA*
Using a Task Simulator with Haptic Feedback as a Surgical Resident Training Tool *Charles Edmond, MD, Puyallup, WA*
Bringing a Simulator to the Marketplace *Jerry Greenberg, RN, HT Medical*
- 1200 **Luncheon** *Grab your lunch and beverage and return to the meeting room*
Research Abstract Awards: *Steve Farnsworth*
Luncheon Address: The Future of Simulation in Medicine: *Thomas Krummel, MD, Chair, Department of Surgery, Stanford University School of Medicine*
- 1300-1400 **Exhibits open; Abstract viewing**
- 1400 **Simulator Workshops**
- 1400-1530 **Educational Challenges for Simulation:** An international viewpoint of educational uses and challenges of simulation
Ronnie Glavin, MD Educational Co-director Scottish Clinical Simulation Centre, Moderator
Simulation and the Curriculum - the Contribution to Anaesthetic Training Programmes *Ronnie Glavin, MD*
Development of Behavioral Markers for Non-technical Skills and Their Use in Simulation *Georgina Fletcher, Psychology Research Fellow University of Aberdeen, Scotland,*
Transplanting ACRM training into the UK *Mark Bloch, MD, Consultant Anaesthetist, Chelsea and Westminster Hospital, London, England*
- 1530-1700 **Simulation's Relationship to Safety** Using simulation to evaluate patient and workplace safety
Jeffrey B. Cooper, Ph.D., Harvard Medical School, Director, Center for Medical Simulation, Moderator
Choosing Paths To Safety: Understanding The Natures Of Hazard And Opportunity *Richard I. Cook, M.D., University of Chicago*
How Simulators Can Be Used To Improve Patient Safety: *David M. Gaba, M.D. Stanford University*
Practical Issues In Using Simulators To Improve Patient Safety: *Jeffrey B. Cooper, Ph.D.*

Sunday January 14

(note there are no exhibits this morning)

- 0700-0800 Continental Breakfast
- 0800-0930 **Writing Educational Objectives for a Simulator:** How to write educational learning objectives for use in medical training
Lindsey Henson, MD, University of Rochester, Moderator
Role of Simulation in Experiential Learning *Lindsey Henson, MD*,
Surgical Simulation Part-task Trainers *Dan Jones, Center for Surgical Simulation*
Human Patient Simulator (HPS) Learning Objectives *Randy Steadman, MD, University of Rochester*
- 1000-1030 Break
- 1030-1200 **Simulation Center Operations** Issues surrounding the organization and management of a simulation center
Mike Olympio, MD, Wake Forest University School of Medicine Simulation Center Operations, Moderator
Operations of a Departmentally Funded Simulation Center *Randy Steadman, MD*
Operations of an Institutionally Funded Simulation Center *Michael A. Olympio, M.D., Wake Forest University*
Aggressive Recruitment of Internal Financial Contracts *Mimi Hotchkiss MCV, Richmond, Allied Health Center*,
Boston operations *David Feinstein, MD, Deaconess Medical Center*

CONFLICT OF INTEREST: STA encourages the interaction between the practicing physician and the anesthesia, computer and simulator technology industry. Many of the faculty and abstract presentors for this conference have disclosed that they have relationships with commercial entities. They have been advised to make this known prior to their presentations. If you perceive an undisclosed conflict of interest, please note so on your evaluation form.

Agenda as of January 1, 2001

2001 International Meeting on Medical Simulation

Research Abstract First Authors and Titles

* Indicates demonstration

- | | | |
|-----|---|---|
| ✓1 | Bermann MD Morbechai
Rob. Wood Johnson Med. School
New Brunswick | <i>The Human Patient Simulator: A New Communication Tool?</i> |
| 2 | Dunn MD William
Mayo Graduate School of Medicine
Rochester | <i>The Mayo Multidisciplinary Simulation Center: A Work in Progress</i> |
| ✓3 | Flanagan FANZCA Brendan
Monash Medical Centre East
Bentleigh AUSTRALIA | <i>Simulation Training for Rural Health Practitioners</i> |
| ✓4 | Flanagan FANZCA Brendan
Monash Medical Centre East
Bentleigh AUSTRALIA | <i>Interns' Perceptions of Performance in Managing Simulated and Real Cardiac Arrest Situations</i> |
| ✓5 | Forrest Frances
Bristol Medical Simulation Centre
Bristol UK | <i>Bristol Medical Simulation Centre</i> |
| ✓5a | Forrest Frances
Bristol Medical Simulation Centre
Bristol UK | <i>Training UK Novice Anaesthetists on a High Fidelity Simulator</i> |
| ✓6 | Gee Mei Mmed Tan
National University Hospital
Singapore | <i>Human Patient Simulator is an Effective Way of Teaching Physiology to First Year Medical Students</i> |
| ✓7 | Gordon MD, MPA James
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