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Technology Connections

STA 2002:

Society for Technology in Anesthesia

January 9-12, 2002

Santa Clara Marriott, Santa Clara California

Plus

International Meeting on Medical Simulation

January 10-13, 2002 *at same location*

Society for Technology in Anesthesia

STA 2002: Technology Connections &
2002 International Meeting on Medical Simulation

Santa Clara Marriott, Santa Clara CA

On behalf of the program committee and the Board of Directors, welcome to this year's STA meetings. We would personally like to thank the outstanding faculty who have generously given their time to prepare and present their lectures, workshops and demonstrations.

Please make every opportunity to network with our exhibitors, faculty and members during the meeting. This type of learning is important and beneficial to everyone. STA is a unique organization whose members represent the practice of anesthesiology as well as industry involved in development and production of technologies used by anesthesiologists in education and medical care. Interaction between the members is a strength of STA. If you are interested in becoming more active in STA and its educational programs, please contact one of the Board members. We welcome participation and involvement at all levels.

Accreditation: This activity has been jointly planned and implemented in accordance with the Essentials and Standards of the Accreditation for Continuing Medical Education. The Society for Technology in Anesthesia is accredited by the ACCME and takes responsibility for the content, quality and scientific integrity of this CME activity.
STA designates this activity for a maximum of 30 CME hours in Category 1 Credit towards the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity. STA offsite workshops may be included if you participated.

Evaluation: It is extremely important that you complete the evaluation form so that we might improve our educational programs and provide you with education that meets your needs. We are especially interested in any conflict of interest you may perceive that has not been appropriately disclosed.

CME certificate: Your CME certificate is enclosed with your on-site registration packet. *Keep for your records*.

Meal functions and special events: Please be sure to wear your name tag and present a ticket for all conference functions.

Inside this syllabus:

- Schedule at a Glance - STA Technology Connections & Medical Simulation
- Location of events
- Meeting agenda
- Faculty list and disclosure information
- Abstract list and submitted abstracts
- Exhibitors and Supporters
- Map of hotel
- About STA and 2001 Board of Directors

STA 2002: Technology Connections
Michael Jopling, Chair
Kirk Shelley, Research Committee Chair
David Feinstein, Scientific Chair
Fritz Stawitcke & Richard Rowe, Local Hosts

Int'l Meeting on Medical Simulation
Francis Forrest, Chair
Stefan Moenk, Research Chair
Francis Forrest, Simulation Workshop Chair

STA 2002: Technology Connections
2002 International Meeting on Medical Simulation

What's Where When

Date/Time	Event	Location	Notes to remember
Wednesday 1/9			
9:00 am	STA Board Meeting	Newport Beach	
4:00 pm	Meeting Registration	Registration Desk	*Continues through Sunday am*
Thursday 1/10			
7:00 – 8:00 am	Continental Breakfast	Ballroom Hall	
8:00 am	STA General Sessions	Salons 6-9	
9:00 am	STA Poster exhibits up	Salons 6-9	*Take down Friday 12 noon*
12:30 pm	STA Annual Meeting & Awards Luncheon	Salon 5	*Tickets required*
1:45 pm	Busses Leave for STA off-site Workshop	Ballroom entrance	*Must be signed up*
6:00 – 8:00 pm	Welcome Reception	Salons 1-4 Exhibit Area	*Cash bar and great appetizers*
Friday 1/11			
7:00 – 8:00 am	Continental Breakfast	Salons 1-4	
8:00 am	Joint STA/IMMS session	Salons 6-9	
11:30 – 1:30	Lunch on your own		
1:00 pm	IMMS Posters up		*Takedown Saturday at 5:00 pm*
1:30 pm	STA Enrichment Tour	Ballroom entrance	*Must be signed up. $25 per person charge0*
1:30 pm	IMMS Opening Session	Salon 1-4	
3:00 – 5:00 pm	IMMS Workshops	See schedule	*Sign up for workshop in advance*
7:00 0 11:00	Culinary Connections Banquet	Salon 5	*Remember to bring your tickets and drink ticket; extra banquet tickets $60 each*
Saturday, 1/12			
7:00 – 8:00	Continental Breakfast	Salons 1-4	
8:00 – noon	STA General Session	Salon 7-9	
8:00 - noon	IMMS General Session	Salon 6	
11:30 am	IMMS Box lunch	Salon 5	*Bring your ticket*
12:30 – 2:00	IMMS General Session	Salon 6	
2:00 – 5:00 pm	IMMS Workshops	See schedule	
5:00 pm	IMMS General Session	Salon 6	
Sunday, 1/13			
7:00 – 8:00 am	Continental Breakfast	Ballroom Hall	
8:00 – 12 noon	IMMS General Session	Salon 6	

Check the Registration Desk Bulletin Board for any daily changes

STA 2002: Technology Connections
At a Glance

Wednesday, January 9
0900-1700 STA Board of Directors meetings
1200-1700 Special Interest Group meetings
1600 Registration - continues through Friday

Thursday, January 10
0700 Continental Breakfast
0750 Welcome and Introductions
0800 **Session I: What's Wrong With Current IV Drug Delivery Processes?**
0930 **Oral Poster Presentations:**
10:30 Break and poster viewing with authors present
11:00 **Session II: Patient Safety and Anesthesia Information Systems:**
1230 STA Business meeting and awards luncheon
1330 **Off-site Workshops**
1800 Welcome Reception with Exhibitors

Friday, January 11
0700 Continental Breakfast with Exhibitors and Posters
0800 **Session III: Joint Keynote Session with IMMS**
Robotics & TeleMedicine: Challenging the Connections: Research, Education & Patient Care
Keynote faculty:
Simon Bann, FRCS, Imperial College, London, UK
William Wilkerson, MD, FACEP, University of Michigan, Ann Arbor, MI
1030 Technology Showcase and poster viewing
1130 Luncheon on your own
1300 **Off-site Enrichment Tours** *or participate in IMMS Meeting. IMMS registration required.*
1900 **Culinary Connections Banquet**

Saturday, January 12
0700 Continental Breakfast with Exhibitors
0800 **Session IV: Anesthesia<>Handheld Devices and Wireless Networking Connections:**
0930 Technology Showcase
1030 **Session V: STA Debate: Is There a Future in Academic Anesthesia**
1200 Adjourn meeting

Int'l Simulation Meeting
At a Glance

Thursday, January 10
1800 Welcome Reception for both STA 2002 and 2002 IMMS

Friday, January 11
0700 Continental Breakfast with Exhibits and Poster viewing
0700 **Joint Session: STA 2002 and 2002 IMMS**
Robotics & TeleMedicine: Challenging the Connections: Research, Education & Patient Care
Keynote Faculty
Simon Bann, FRCS, Imperial College, London, UK
William Wilkerson, MD, FACEP, University of Michigan, Ann Arbor, MI
1030 Technology Showcase in Exhibit Area
1200 Lunch on your own
1330 Welcome/Introductions:
1345 **General Session I:** *Can or Should we use Simulators for Re-Certification of Clinical Practitioners?*
1500 **Workshops**: Registrants will be able to rotate through their choice of four workshops. .

Saturday, January 12
0700 Continental Breakfast with Exhibitors and Poster Viewing
0800 **Themed Poster Presentations I** followed by at-poster viewing
0930 **Themed Poster Presentations II** followed by at-poster viewing
1030 **Workshops**: Registrants will be able to rotate through their choice of four workshops.
1130 Box lunch
1230 **General Session II**: *The Role of Psychology in Medical Simulation I*
Guest Faculty: *Professor Niclas Schaper*
1400 **Workshops**: Registrants will be able to rotate through their choice of workshops.
1700 **Session III** *The Role of Psychology in Medical Simulation*
Guest Faculty: *Key Dismukes, PhD*

Sunday, January 13
0700 Continental Breakfast
0800 **General Session IV:** *Uses and Development of Non-Model Driven Simulators and Simulation Aids into the Teaching Curriculum*
1200 Adjourn meeting

Wear your nametag

Nametags are color coded according to the meeting for which you have registered. You are welcome to pay the supplemental fee and join the other meeting. Just stop by the registration desk

BLUE: Both STA 2002 & IMMS

RED: STA 2002 *only*

GREEN: IMMS *only*

STA 2002: Technology Connections
Schedule as of 1/3/02

Wednesday, January 9, 2002
0900-1700 STA Board of Directors meetings
1200-1700 Special Interest Group meetings
1700 Registration - continues through Friday

Thursday, January 10, 2002
0700 Continental Breakfast
0750 Welcome and Introductions
0800 **Session I: What's Wrong With Current IV Drug Delivery Processes?**
Moderator: *Matthew Weinger, MD, UCSD San Diego VA, San Diego, CA*
Visualizing and Controlling IV Drug Delivery in the OR:
Dwayne Westenskow, PhD, University of Utah, Salt Lake City, UT
Information Management of IV Drug Delivery Throughout the Hospital:
Jeffery Carlisle, FluidSense Corp, Boston, MA
Getting the Intravenous Out of IV Drug Delivery:
John Zelcer, InJet Digital Aerosols, San Diego, CA
0930 **Oral Poster Presentations:** Kirk Shelley, MD, PhD, Yale University, New Haven, CT
10:30 Break and poster viewing with authors present
11:00 **Session II: Patient Safety and Anesthesia Information Systems:**
Terrorist Informatics Exploitation: *Gordon Gibby, MD, University of Florida, Gainesville, FL*
Practical Informatics Error Reduction: *Ken Farbstein, Melior Consulting Group, Needham, MA*
Real World Medical Informatics Data Mining: *Iain Sanderson, MD, Duke University*
1230 STA Business meeting and awards luncheon
1345 **Off-site Workshops**
1800 Welcome Reception with Exhibitors

Friday, January 11, 2002
0700 Continental Breakfast with Exhibitors and Posters
0800 **Session III: Joint Keynote Session with International Meeting on Medical Simulation**
Robotics & TeleMedicine: Challenging the Connections: Research, Education & Patient Care
Moderators: *Michael Jopling, MD, STA 2002 Chair, Columbus, OH and Francis Forest, MD, IMMS 2002 Chair, & Mark Tooley, MD, Bristol Simulation Center, Bristol, UK*
Keynote faculty:
Simon Bann, FRCS, Imperial College, London, UK
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1030 Technology Showcase and poster viewing
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1300 **Off-site Enrichment Tours** *or participate in IMMS Meeting. IMMS registration required.*
1900 **Culinary Connections Banquet** for meeting participants and guests
700 Continental Breakfast with Exhibitors
0800 **Session IV: Anesthesia<>Handheld Devices and Wireless Networking Connections:**
Moderator, Paul Ting, MD, University of Richmond, Richmond, VA
Value of Point of Care References in Clinical Anesthesia: *Keith Ruskin, MD, Yale University, New Haven*
Wireless Medicine in the Future: *Rosemary Wong, Sr. Health Care Analyst, WR Hambrecht & Co. San Francisco*
Practical Experience with Handheld Wirless in Medicine *Carlos Nunex, MD Picis, Inc.*
0930 Technology Showcase
1030 **Session V: STA Debate: Is There a Future in Academic Anesthesia?** *Steve Barker, PhD MD, University of Arizona, Tucson, AZ, Moderator*
PRO: *Alan Grogono, MD, Professor Emeritis, Tulane University School of Medicine, New Orleans, LA*
CON: *Richard Bartkowski MD, Jefferson University, Philadelphia, PA*
1200 Adjourn meeting

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We would like to recognize our corporate members for 2002. These companies have made STA's educational and research activities possible throughout the year.

Platinum

Medical Education Technologies Inc.
Nellcor, A Business of Tyko Healthcare

Gold

Draeger Medical
G E Medical Systems
Laerdal
Philips Medical Systems**

Silver

Aspect Medical Systems *
Baxter Medical
Datex-Ohmeda Inc.
DocuSys Inc *
EKO Systems
Masimo *
Novametrix Medical Systems, Inc.
Optovent Inc.
Pyxis Corporation
Spacelabs Medical

Friends of STA

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Airway Cam Technologies
Alaris * **
Andros
GasNet **
Dolphin Medical
Immersion Medical
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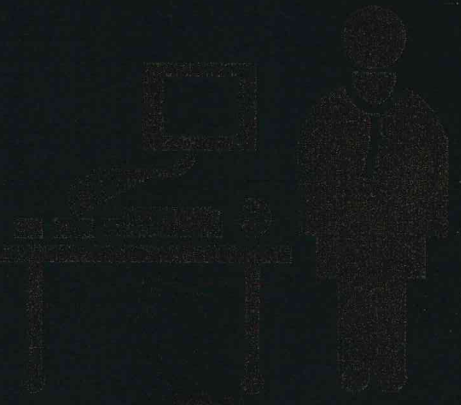

International Meeting on Medical Simulation

2002

Sponsored by the Society for
Technology in Anesthesia

Santa Clara Marriott
Santa Clara, CA

January 10-13, 2002

STA 2002: Technology Connections
January 9-12, 2002 at same location
Santa Clara, CA

Society for Technology in Anesthesia

STA 2002: Technology Connections &
2002 International Meeting on Medical Simulation

Santa Clara Marriott, Santa Clara CA

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STA 2002: Technology Connections
At a Glance

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Int'l Simulation Meeting
At a Glance

Thursday, January 10

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1500	**Workshops**: Registrants will be able to rotate through their choice of four workshops. .

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Sunday, January 13

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0800	**General Session IV:** *Uses and Development of Non-Model Driven Simulators and Simulation Aids into the Teaching Curriculum*
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International Meeting on Medical Simulation

Agenda as of 1/2/02

Thursday, January 10

1800 Welcome Reception for both STA 2002 and 2002 IMMS

Friday, January 11

0700 Continental Breakfast with Exhibits and IMMS Poster viewing

0700 **Joint Session: STA 2002 and 2002 IMMS: Robotics & TeleMedicine: Challenging the Connections: Research, Education & Patient Care**
Moderators: *Mark Tooley, PhD, CEng and Michael Jopling, MD*
Simon Bann, FRCS, Imperial College, London, UK
William Wilkerson, MD, FACEP, University of Michigan, Ann Arbor, MI

1030 Technology Showcase in Exhibit Area

1200 Lunch on your own

1330 Welcome/Introductions: Frances Forrest, FRCA, Bristol Simulation Centre, UK

1345 **General Session I: Can or Should we use Simulators for Re-Certification of Clinical Practitioners?**
Moderators: *Bosseau Murray, MD Milton Hershey Medical Center, USA &*
Kathleen Rosen, MD, West Virginia University, USA
Panel: *E. Bruce Johnson, MD, University Medical College of Virginia, USA*
Willem Van Meurs, PhD, University of Aporto, Portugal
Aidan Byrne, FRCA, The Morriston Hospital, Swansea, UK
Simon Bann, FRCS, Imperial College, London, UK

1500 **Workshops**: Registrants will be able to rotate through their choice of four workshops.

Saturday, January 12

0700 Continental Breakfast with Exhibitors and Poster Viewing

0800 **Themed Poster Presentations I** followed by at-poster viewing
Chair: *Stefan Moenk, MD, Mainz University, Germany*

0930 **Themed Poster Presentations II** followed by at-poster viewing

1100 **Workshops**: Registrants will be able to rotate through their choice of four workshops.

1130 Box lunch

1230 **General Session II: The Role of Psychology in Medical Simulation I**
Moderators:*Georgina Fletcher, Aberdeen, UK & Christophe Grube, MD, Heidelberg, Germany*
Guest Speaker: *Professor Niclas Schaper, Professor of Psychology, University of Heidelberg,*

1400 **Workshops**: Registrants will be able to rotate through their choice of four workshops.

1700 **Session III The Role of Psychology in Medical Simulation II**
Moderator: *Georgiana Fletcher, Aberdeen, UK & David Gaba, MD, Stanford, CA*
Guest Speaker: **Skilled Performance and All-Too Human Error**
Key Dismukes, PhD: NASA AMES Psychologist

Sunday, January 13

0700 Continental Breakfast

0800 **General Session IV: Uses and Development of Non-Model Driven Simulators and Simulation Aids into the Teaching Curriculum**

Moderator: *Brendan Flanagan, FANZCA, Monash Medical Centre, Melbourne, Australia*
Jim Philip, MD, Brigham & Women's Hospital, Boston MA

Panel: **Simulation: An Integrated Approach**
Ronnie Galvin, FRCA, Scottish Clinical Simulation Center, UK

Introduction of PC-based Simulation into Medical Student Curriculum
Kathleen Rosen, MD, West Virginia University, USA

Teaching Using Small Simulators: One is NOT Enough!
Harry Owen, FANZCA, Flinders University Medical Centre, Australia

Difficult Airway Management Training with Simulation
Jon Schaeffer, MD, University of Pittsburgh, USA

Development and Use of Direct Laryngoscopy Imaging System
Richard Levitan, MD, Emergency Medicine, University of Pennsylvania

The Development and Use of the ACCESS Simulator
Aidan Byrne, FRCA, The Morriston Hospital, Swansea, UK

1200 **Adjourn**

We regret that there may be substitutions due to travel restrictions and other emergencies.

IMMS Workshop Chairs

Francis Forrest, Chair

We would like to express our thanks to the workshop chairs and their team members who generously gave their time to present these learning sessions and the companies who made the equipment available.

Access to PediaSim	**Gillian Lauder** Bristol Simulation Center, Bristol UK
ACLS Training & Evaluation	**Richard Botney** Oregon Health Sciences Center, Portland, OR
Assessing Anaesthetists	**Georgina Fletcher** University of Aberdeen, Abeerdeen, UK
Beyond Full Scale Sim	**Stefan Moenk** Uniklinik Mainz, Mainz, Germany
CHF Modeling	**Mike Olympio** Wake Forrest University, Winston Salem, NC
Debriefing	**David Feinstein** Beth Israel Deaconess Hospital, Boston, MD
Difficult Airway Management Training	**Jon Schaefer** University of Pittsburgh, Pittsburgh, PA
EAMC	**Brannan Flanagan** Monash Medical Centre, East Bentleigh Australia
GasMan	**Jim Philip** Brigham & Women's, Boston, MA
How to Use Laerdal SimMan	**Allison Budd** Barts & the Medical Simulation Center, London, UK
Med Students	**David Feinstein & John Pawlowski** Beth Israel Deaconess Hospital, Boston, MA
Nursing & EMS Education	**Thomas Doyle** Columbus State Community College, Columbus, OH
Psychology	**Christof Grube** University of Heidelberg, Heidelberg, Germany
Simulation as an Abstract Teaching Method of Prepositional Knowledge	**David Greaves** Royal Victoria Infirmary, Newcastle Upon Tyne, UK
Training the Trainers	**Hal Doerr** Baylor Medical Center, Houston, TX
Transportation of the Critically Ill	**Siobhan Grimes** Bristol Simulation Center, Bristol, UK
The UCSF Program	**Manuel Pardo** University of California SF, San Francisco, CA
The Flinders Program	**Harry Owen** Flinders University Medical Centre, Bedford Park, Australia

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Platinum

Medical Education Technologies Inc.
Nellcor, A Business of Tyko Healthcare

Gold

Draeger Medical
G E Medical Systems
Laerdal
Philips Medical Systems**

Silver

Aspect Medical Systems *
Baxter Medical
Datex-Ohmeda Inc.
DocuSys Inc *
EKO Systems
Masimo *
Novametrix Medical Systems, Inc.
Optovent Inc.
Pyxis Corporation
Spacelabs Medical

Friends of STA

Agilent Technologies **
Airway Cam Technologies
Alaris * **
Andros
GasNet **
Dolphin Medical
Immersion Medical
Lippencott, Williams & Wilkins
Overhead Camera Systems, Inc.

* These companies also supported STA @ the ASA or Computers in Anesthesia XXII
** These companies are Corporate Members who are not exhibiting

STA 2002 Technology Connections & International Meeting on Medical Simulation

Exhibitor Information

Airway Cam Technologies

The Airway Cam direct laryngoscopy video system displays images of laryngoscopy and intubation for educational and research applications. Our patented technology captures the unique perspective of the laryngoscopist. The dynamic images can be viewed during the procedure and/or recorded for future reference, which permits targeted feedback and supervision of novice intubators.

Andros

Andros is a technical and scientific instrumentation company specializing in medical, automotive, and environmental process automation applications of precision gas analyzers and associated sensors. Located in Richmond, CA, the company is a recognized world leader in the development of gas analyzers based on DIR and ⓘ NDIR technology.

Aspect Medical Systens

Aspect Medical Systems (NASDAQ: ASPM) was founded in 1987 to develop a technology to measure an unknown element of patient status: the effects of drugs and disease on the brain. In 1996 Aspect Medical Systems launched Bispectral Index (BIS®) technology – the first FDA cleared measure of anesthetic effects on the brain. Aspect Medical Systems has rapidly established itself as the global market leader. BIS technology has been used to assess more than 4 million patients and has been the subject of nearly 800 published articles and abstracts. It is currently in use in the ORs and ICUs of more than 50% of the world's best-ranked hospitals *(US News & World Report*) and is in more than 160 countries. Aspect Medical Systems has most recently secured OEM agreements with the six largest manufacturers of patient monitoring systems and partnerships with six of the largest group purchasing organizations in the US.

Baxter

Baxter offers an entire portfolio of anesthesia delivery devices featuring the PSA 4000 Patient State Analyzer. The PSA 4000 monitor draws on advanced EEG technology to give a clearer view of brain wave response to anesthetic concentrations.

Datex-Ohmeda

Datex-Ohmeda is a leading manufacturer of patient monitors, anesthesia delivery systems and supplies and accessories for anesthesia and critical care. Datex-Ohmeda will feature their System 5 product line. Datex-Ohmeda's vision is to help our customers improve the patient care management process through clinically superior and cost-efficient medical products and services. We are devoted to caring for life

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

Dolphin Medical, Inc.

Dolphin Medical brings together the best from numerous companies such as OSI Systems, TFT Medical, UDT, and Aristo by consolidating all the medical products under the name of Dolphin Medical. Dolphin Medical is the world's largest OEM supplier of oximetry products in the world, manufacturing products for many of the top names in oximetry. Dolphin introduces their newly patented Noise Elimination Oximetry (NEO) system, the first platform to use a digital sensor.

Draeger Medical

Draeger Medical 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.

EKO Systems

Frontiers™, eko systems' advanced electronic anesthesia record system, captures data transduced from medical devices, such as physiologic monitors and anesthesia machines, to facilitates the creation of electronic anesthesia records. Frontiers'™ clinician-friendly electronic charting and data mining functionality represents the next generation in clinical information and record management tools for anesthesia.

GE Medical Systems Information Technologies

GE Medical Systems *Information Technologies* provides healthcare systems with advanced software and technologies to improve their clinical performance. The Company's expertise spans the areas of cardiology, patient monitoring, image management, clinical communications, clinical information systems and Six Sigma-based management tools to enable a real-time, integrated electronic medical record. The recent acquisition of Data Critical further extends wireless and mobile patient monitoring capabilities. GE Medical Systems is an $8 billion global leader in medical imaging and technology.

Immersion Medical

Immersion Medical, based in Gaithersburg, Maryland, designs, manufacturers and markets computer-based medical simulators that allow healthcare personnel to practice minimally invasive procedures without placing patients at risk. Three product lines cover intravenous therapies, endoscopic procedures, and endovascular interventions. More information is available at www.immersion.com.

Lippincott Williams & Wilkins

LWW is a leader in the publishing of medical text and journals of special interest to physicians and caregivers.

Laerdal Medical Corporation

Dedicated to helping save lives, Laerdal provided products, services and system solutions for COR, BLS, and ACLS Training as well as a full line of Pre-Hospital products including Airway Management, Suction, Spinal Motion Restriction and Defibrillation.

Masimo Corporation

Masimo Corporation designs, develops, manufactures, and licenses advanced signal processing and sensor technologies for the noninvasive monitoring of vital signs. Masimo manufacturers pulse oximeters, which can be used to upgrade existing multiparameter monitors to Masimo SET technology. The company also offers a full line of disposable and reusable sensors..

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. METI is a workshop supporter and provides generous support for the Gravenstein Technology Award and luncheon and the annual STA banquet.

Nellcor: A Business Unit of Tyco Healthcare

Nellcor, a business of Tyco Healthcare, develops, manufactures and markets products that help diagnose, monitor, and treat respiratory and anesthesiology patients across the continuum of care. Nellcor is the world leader in pulse oximetry, and also offers a wide range of temperature and airway management solutions from names such as Shiley, DAR and Mallincrodt.

Novametrix Medical Systems Inc.

Novametrix Medical Systems, Inc. is a leading designer, manufacturer and marketer of non-invasive cardiac output monitors, hand-held and bedside pulse oximeters and mainstreat 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.novametrix.com .

Optovent, Inc.

Optovent is displaying their RESPONS monitor, which combines traditional pulse oximetry with Optovent's patented Fiber Optic Respirometry technology (FORE). Fiber Optic Respirometry overcomes the numerous problems associated with capnometry and EKG transthoracic impedance, and therefore is well suited for Procedural Sedation and patient transport monitoring.

Overhead Camera Systems, Inc.

The overhead SKY-EYE® Camera system is an excellent medical educational tool consisting of a remote control video camera suspended on telescoping boom arm and includes a video recorder. The medical student's performance can be videotaped and then reviewed and critiqued. Multiple vide monitors can allow clases to view live performances.

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.

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 or taken from their website and received by January 3, 2002.

2002 International Meeting on Medical Simulation

Abstracts by submitting author

1	**Yogen Amin** Imperial College, London	*Simulator-Based Course: Conscious Sedation/Analgesia*
2	**Mordechai Bermann** Rob. Wood Johnson Med. School	*Simulation Environment for Evaluation of Critical Care Rotation*
3	**Christian Beyer** Johannes Gutenberg Univ. of Mainz	*Does Simulator Training Influence the Participant's Attitude?*
4	**Joanne Chung** Hong Kong Polytechnic University	*An Evaluation on the Effectiveness of Three Different Teaching Strategies in the Teaching of Clinical Psysiology: Use of PatientSim, Web-Based Teaching and Conventional Method*
5	**Ignacio Del Moral** Santander Simulation Center	*New Software for Debriefing*
6		*Using a Full Patient Simulator for Teaching Physiology*
7	**Christopher Elser** Pennsylvania State Univ. College of Medicine	*A Practicum to Enhance Understanding of the Physiologic Basis of Capnography*
8	**Charles Fatta** Univ of NM & Tech Voc Inst	*The Use of a Whole Body Simulator to Train Respiratory Therapy Students Advanced Application Skills*
9 ok	**David Feinstein** Beth Israel Deaconess Medical Center	*Development of a Simulation Course on Chemical Warefare Agent Management*
10	**Georgina Fletcher** University of Aberdeen	*Measuring Non-Technical Skills in Anasthesia*
11	**John Forestner** UT Southwestern	*Evaluation of a Difficult Airway Simulator for Teaching Obstetric Anesthesia*
12	**Frances Forrest** Bristol Medical Simulation Centre	*The Human Patient Simulator for Assessment of Operating Department Practitioners*
13	**Duncan Gillies** Imperial College of Science Technology & Medicine	*Realistic Deformable Models for Simulating the Procedure of Laryngoscopy*
14	**James Gordon** Massachusetts General Hospital	*Education "On Demand." The Development of a Simulator-Based Medical Education Service*
15		*Effects of a Single Exposure to High-Fidelity Patient Simulation in the Pre-Clinical Curriculum: A Pilot Study*
16	**Christian Grass**	*Dantrolene: Difficulties in Preparation*
17	**Julia Harrison** Southern Health Simulation & Skills Training Center	*The Use of a High Fidelity Simulator in Final-Year Medical Student Teaching*
18	**Wolfgang Heinrichs** Johannes Gutenberg Univ.	*Apnoea Testing in Brain Death: A Field for Simulation?*
19	**E. Bruce Johnson** MCU/VCU	*A Comparative Study of Simulator Technology Around the World*
20	**Alan Jones** Bristol Simulation Centre	*An International Survey of Simulation Centers*
21	**Yoshiroh Kaminoh** Hyogo College of Medicine	*Noninvasive Cardiac Output Monitoring (NICO) and Human Patient Simulator*

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2002 International Meeting on Medical Simulation

Abstracts by submitting author

22	**Richard Kyle** Uniformed Services University Health Sciences	*A Multiple Disciplinary App0roach to Teach Weapons of Mass Destruction and Terrorist Crises Management Using Patient Simulation*
35	**Nicola Lewis** Chelses & Westminister Hospital	*Running a Compulsory Course in Obstetric Anaesthesia for Trainees*
23	**Anna Lukaszewska** Simulation Training Center Cancer Ctr	*Hormonal Crisis During General Anesthesia-Simulation Training Programmes for Anaesthesiologists*
24	**William McIvor** Univ of Pittsburgh School of Medicine	*Using Mannequin-Based Human Simulation During the Third-Year Medical Student Clerkship in Perioperative Medicine*
25	**Michael A. Olympio** Wake Forest Univ. School of Med	*Modeling Congestive Heart Failure and Its Treatment Using a Full Scale Human Patient Simulator*
26		*Changes in Technical Management of Esophageal Intubation Following Simulation Training*
27	**Daniel Raemer** Center for Medical Simulation *Philips Medical Systems*	*Novices to Medical Simulation Demonstrate Clinical Concepts in a Scientific Symposium via Teleconference at an Intensive Care Medicine Conference*
28	**Marcus Rall** Univ Tueiblgan	*MDs and Psychologists: Potentials and Pitfalls of Interdisciplinary Cooperation in a Medical Simulation Research Center*
29	**Patricia Ravert** Brigham Young Univ; College of Nursing	*Critical Thinking of Nursing Students: Pre & Post Use of Human Patient Simulator*
30	**Brian Robinson** Natl Patient Sim Training Center	*Effective Management of Anaesthetic Crises. A Course Utilizing Simulation as a Requirement for Specialist Anaesthetist Training*
31		*Popular Music as a Cue for Initiating Crisis Management Responses*
32	**Shann Sieg** Chelsea & Westminister Hospital Sim. Center	*"Total Simulation Failure": A Short-Term Back-up Contingency Plan*
33	**Kathryn Stringer** Chelsea & Westminster Hospital Med. Sim Center	*Development of a Simulator-Based Difficult Airway Course*
34	**Rebecca Skartwed** University of NM School of Medicine	*Training Program Designed to Prepare Educators from Multiple Disciplines to Use Simulation as an Educational Tool*
37	**Noah Syroid** University of Utah	*Adding Physiologic Responses to Pain, Analgesia, and Sedation to the METI Simulator*
38	**Jeffrey Taekman** Duke University Medical Center	*MedicalSim-L: An Internet Discussion List for Human Simulation*
39	**Kitoji Takuhiro** Nippon Med. School Chiba Hokuso Hospital	*Use of a High Fidelity Simulator for Training Japanese Doctor Helicopter Crews as a Method to Improve Patient Safety*
40	**Tak Fai Tong** Hong Kong Polytechnic University	*A Comparison Study on the Clinical Performance of Nursing Students Between the Use of a Human Actor and a Patient Simulator*
36	**Janet Wyner** Chelsea & Westminister Hospital	*Application of High Fidelity Simulation in UK: a Seven Year Cirriculum*
41	**Thomas Wong** Hong Kong Polytechnic University	*Disgnostic Reasoning Process Using Patient Simulator in Different Learning Environments*

Companies listed in Italics following the name of an institution indicate that the author disclosed a relationship with the named company.

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 be 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.

2001 STA Board of Directors

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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 (January)*
with abstract presentations, simulation workshops, education sessions
STA @ ASA Events
ASA Breakfast Panel
STA Dinner and N. Ty Smith 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 www.AnesTech.org