



# ACADEMY OF SURGICAL RESEARCH

## 20th Annual Meeting

October 7 - 9, 2004

Radisson Plaza Hotel  
Minneapolis, Minnesota

### *About the Academy:*

In 1982, forward thinking scientists concerned about incomplete communication across the disciplines of surgical investigation founded the Academy of Surgical Research. The society fosters interdisciplinary transfer of ideas and theories by offering a common platform through which the reporting of valid surgical research efforts is a reality.

The Academy of Surgical Research was founded to:

- Encourage, foster, promote and advance professional and academic standards, education, research and development in the arts and sciences of experimental surgery.
- Promote, initiate, support, and accomplish academic and practical educational programs, cooperative research, and development in experimental surgery in the public interest.
- Promote humane use and treatment of experimental animals and prevent their use when other means can bring about the same scientific results.
- Cooperate with medial organizations, other scientific organizations, governmental agencies, and other interested parties in establishing, reviewing, and evaluating ethics, theories, practices and research and promotion of the product of surgical research for clinical application.
- Encourage the advancement of the field of surgery in all aspects, including research, education and critical promotion of research products for clinical applications.

Academy of Surgical Research  
7500 Flying Cloud Drive, Suite 900  
Eden Prairie, MN 55344  
952.253.6240 telephone  
952.835.4774 fax  
[www.surgicalresearch.org](http://www.surgicalresearch.org)

# 20th Annual Academy of Surgical Research Meeting

Radisson Plaza Hotel • Minneapolis, MN • October 7th - October 9th, 2004

## Thursday, October 7

- 8:00 - 6:00 Registration - *Denmark Commons*
- 1:00 - 5:00 SRS Exam - *Stockholm Room*
- 1:00 - 5:00 Board of Directors Meeting - *Oslo Boardroom*
- 1:00 - 5:00 Exhibitor Set Up - *Scandinavian East*
- 6:00 - 8:00 Welcome Reception: Sponsored by Data Sciences International, A Division of Transoma Medical, St. Paul, MN - *Scandinavian East*

## Friday, October 8

- 7:00 - 6:00 Registration - *Denmark Commons*
- 7:00 - 8:00 Exhibits open with Continental Breakfast - *Scandinavian East*
- 8:00 - 8:10 Opening of Meeting and Presidential Welcome: Program Co-Chair Steve Vore and President Bob Coatney - *Scandinavian West*
- 8:10 - 9:30 Scientific Paper Presentations - *Scandinavian West*  
Moderator: Kim Bayer, SRS
- 8:10 - 8:30 "Unique Insight into the Growth of Autotransplanted Uterine Tissue in a Rat Model of Endometriosis using Magnetic Resonance Imaging (MRI)" R. Haimbach, S. Lenhard, T. Schaeffer, B. Jucker, P. Hieble, R. Willette and A. Sulpizio. Cardiovascular and Urogenital Center of Excellence in Drug Discovery, GlaxoSmithKline, King of Prussia, PA
- 8:30 - 8:50 "Delivery of Statin and Vancomycin by Means of a Tricalcium Phosphate Lysine (TCPL) Ceramic Delivery System in a Rat Femoral Defect Model" Felix Adah, Hamed Benghuzzi, Michelle Tucci, George Russell, Audrey Tsao and Barry England. The University of Mississippi Medical Center, Jackson, MS and University of Michigan Medical School, Ann Arbor, MI.
- 8:50 - 9:10 "Effects of Sustained and Conventional Delivery of Estrogen on the Effects of Insulin-Like Growth Factor-1 on a MG63 (Osteosarcoma) Cell Line" Michelle Tucci, Hamed Benghuzzi, George Russell, Ashraf Ragab, Laura Franklin and Audrey Tsao. The University of Mississippi Medical Center, Jackson, MS
- 9:10 - 9:30 "The Effects of Sustained Delivery of Glucocorticoids on the Kidney of Female Rats" Hamed A. Benghuzzi, Russell Lyon, Stevie Adams and Michelle A. Tucci. The University of Mississippi Medical Center, Jackson, MS
- 9:30 - 9:50 Break - *Scandinavian East*
- 9:50 - 10:50 Scientific Paper Presentations - *Scandinavian West*  
Moderator: David Moddrelle, SRS
- 9:50 - 10:10 "Long Term Portal Vein and Intestinal Access Port Outcomes in the Cynomolgous Monkey (*Macaca fascicularis*)" R. F. Roache, E. L. Jenkins, V. R. Vaden, J. T. Kissinger and R. W. Coatney, DVM. Laboratory Animal Sciences - Animal Models & Investigative Support. GlaxoSmithKline Pharmaceuticals, King of Prussia, PA

10:10 - 10:30 "Development of a Novel Image Guided Technique for the Assessment of Osteogenesis Using a Rat Model with Induced Bone Trauma in Pre-Clinical Mode" Rishi Roy, Michelle Tucci, Ramesh Patel, Ashraf Ragab, George Russell and Hamed Benghuzzi. The University of Mississippi Medical Center, Jackson, MS

10:30 - 10:50 "Iliotibial Band Lengthening for Recalcitrant Bursitis and Tendonitis" Audrey Tsao, MD and Charity Peacock, R.H.I.A. The University of Mississippi Medical Center, Jackson, MS

10:50 - 11:10 Break - *Scandinavian East*

11:10 - 12:00 Douglas M. Cromeens Memorial Keynote Address - *Scandinavian West*  
Introduction: Stephen Vore, DVM  
"Acid-Base Balance and Anesthetic Management in Cardiovascular Surgery". H. Vincent Mendenhall, DVM, PhD. Charles River Industries, Worcester, MA

12:00 - 1:30 Exhibits open with lunch sandwich bar - *Scandinavian East*

1:30 - 4:30 Special Topics Presentation: Sponsored by the **Pfizer Corporation**, Kalamazoo, MI  
Moderator: Steven Kuhlman, DVM - *Scandinavian West*

### Canine Post-Surgical Pain: Recognition, Alleviation and Prevention

#### "Alleviation and Prevention of Pain in Canine Surgical Models"

Alicia Z. Karas DVM, Dipl ACVA  
Assistant Professor of Clinical Sciences  
Tufts University School of Veterinary Medicine  
North Grafton, MA

#### "How do we know if they hurt? - Canine Pain Assessment"

Sheilah A. Robertson BVMS, PhD, Dipl ACVA, Dipl ECVA  
Professor of Anesthesiology  
University of Florida College of Veterinary Medicine  
Gainesville, FL

**Pain Assessment Video Wet Lab:** Sheilah A. Robertson and Alicia Z. Karas

6:00 - 9:00 **Poster Presentations and Judging - *Scandinavian East & West* Awards Banquet and Markowitz Awardee Lecture and Presentation**

Introduction of 2004 Markowitz Award recipient by Philip Sawyer, MD, Brooklyn, NY  
Markowitz Honoree: Andreas F. von Recum, DVM, Dr. of Med. Vet., PhD  
"An Interdisciplinary Perspective of Surgical Research"  
**C.W. Hall Award and Paper Presentation**  
Presentation of the 2004 Sauer, Michael DeLeo Outstanding Poster, and von Recum Awards

## Saturday, October 9

7:00 - 1:00 Registration - *Denmark Commons*

8:00 - 9:40 Special Topics Roundtable: "Telemetry and Telemetric Methods in Biomedical Research & Surgery"  
Moderator: Robert Coatney, DVM - *Scandinavian East*

8:00 – 8:20	<b>The Historical Development of Wireless Physiological Monitoring in Laboratory Animal Research</b> <u>Steven Hachtman</u> , Vice President of Business Development, Data Sciences International, St. Paul, MN	12:00 – 12:45	<b>Working Luncheon and Annual ASR Business Meeting - Scandinavian West</b>
8:20 – 8:40	<b>Ferret DSI Telemetry: The Reason and the Procedure</b> <u>Matthew Flegal</u> , SRS, Pfizer Inc., Kalamazoo, MI	1:00 – 3:30	<b>Special Topics Presentation - Minnesota Room</b> “Plasma Vapor Sterilization Technology and Surgery” Sponsored by STERRAD Advanced Sterilization Products, a Johnson & Johnson Company. Moderator: Lennie K. Fox, LVT
8:40 – 9:00	<b>Implantation of the DSI Left Ventricular and Direct Arterial Pressure Telemetry</b> <u>Vincent Mendenhall</u> , DVM, Charles River Industries, Worcester, MA		1. “STERRAD Low-Temperature Plasma Sterilization” Presenters: <u>Mr. Mike Valentine</u> and <u>Mr. Brian Johnson</u> , Advanced Sterilization Products, Inc.
9:00 – 9:20	<b>A Swine Surgical Model for Long Term Telemetric Monitoring of Aortic Blood Flow, Left Ventricular Pressure, Systemic Blood Pressure, Intracardiac EKG and Core Body Temperature</b> <u>David Moddrelle</u> , SRS, MPI Research, Mattawan, MI	1:00 – 3:00	2. “CLORDISYS Chlorine Dioxide Sterilization” Presenter: <u>Mr. Paul Lorcheim</u> , Clordisys, Inc.
9:20 – 9:40	<b>Surgical Implantation of Telemetry Devices: Optimizing Outcomes From Mice to Minipigs</b> <u>Dan Huetteman</u> , Data Sciences International, St. Paul, MN	1:00 – 1:20	<b>Scientific Paper Presentations - Scandinavian East</b> Moderator: Jacob Kissinger, SRS
9:40 – 10:00	<b>Break - Denmark Commons</b>		<b>“An Animal Model for Evaluating and Developing the Performance Characteristics of the VENTRASSIST® Left Ventricular Assist Device”</b> <u>G. Edwards</u> , DVM, J. Cooper, DVM, P. Ayre, DVM, N. James, DVM, C. Wilkinson, DVM, D. Mason, DVM, S. Snelling, DVM, D. Murphy, MD and R. Salmonson, MD. VentrAssist Division, Ventracor Ltd, Sydney, Australia, The Department of Veterinary Sciences, University of Melbourne, Melbourne, Australia, and the Alfred Hospital, Victoria, Australia
10:00 – 12:00	<b>SRS Sponsored Technicians Break-out Session - Minnesota Room</b> Co-chaired by Matt Flegal, SRS and Kim Bayer, SRS		
10:00-10:20	<b>Tips and Tricks of Anesthesia Monitoring</b> , <u>Lennie K. Fox</u> , LVT, Pfizer Corporation	1:20 – 1:40	<b>“A Porcine Wound Model to Study Wound-Vac (Vac®) Therapy Effects on Systemic Inflammatory Cytokine Levels”</b> <u>Ronald Mageau</u> , MD, James Johnson, MD, Nelson Jenkins, MD, Stephen Vore, DVM, Jose Bowen, MD, William Wooden, MD, You Su Sun, MD and L. Wiley Nifong, MD. Department of Surgery and Department of Comparative Medicine, The Brody School of Medicine at East Carolina University, Greenville, NC
10:20-10:30	<b>Open Discussion: Current Anesthesia and Analgesia Practices</b>		
10:30-10:50	<b>Instrument and Equipment Care and Sterilization</b> , <u>Kimberly Bayer</u> , SRS, Charles River Laboratories		
10:50-11:00	<b>Open Discussion: Sterilization Technologies and Practices</b>		
11:00-11:20	<b>Practices for Successful Radiotelemetry Device Implantation</b> , <u>Matthew Flegal</u> , SRS, Pfizer Corporation		
11:20-11:30	<b>Open Discussion: New Techniques and Technologies for Cardiovascular Monitoring Devices</b>	1:40 – 2:00	<b>“Evaluating the Capabilities of the da Vinci® Robotic Surgical System in Microvascular Anastomoses of the Rat Femoral Artery”</b> <u>M. R. Paszek</u> , D. B. Chapman, Y. S. Sun, MD, C. E. Bower, MD, R. S. Zeri, MD, W. A. Wooden, MD, L. W. Nifong, MD and W. R. Chitwood Jr., MD. Department of Surgery, The Brody School of Medicine at East Carolina University, Greenville, NC
11:30-11:50	<b>Principals for Selection and Use of Common Suture Materials</b> <u>Randy Pielemier</u> , SRS, MPI Research		
11:50-12:00	<b>Open Discussion: Closure Materials and Technologies</b>		
10:00 – 10:50	<b>“Anesthesia and Analgesia in Swine in the Research Setting”</b> Introduction: Stephen Vore, DVM, <u>M. Michael Swindle</u> , DVM Dipl. ACLAM, Dipl. ECLAM, Professor and Chairman, Department of Comparative Medicine, Medical University of South Carolina, Charleston, SC	2:00 – 2:10	<b>Break - Denmark Commons</b>
11:00 – 12:00	<b>Scientific Paper Presentations - Scandinavian East</b> Moderator: Tom Long	2:10 – 2:30	<b>“An in vitro and in vivo Study to Compare a New Intramedullary Pin with Current Methods of Diaphyseal Fracture Fixation”</b> C. A. Goode, DVM, J. F. Williams, I. Griggs, <u>G. A. Edwards</u> , DVM and W. M. Albert. Department of Veterinary Science and Department of Mechanical Engineering, University of Melbourne, Melbourne, Australia, Echidna Pins, Victoria, Australia and Consulting Engineers, Victoria, Australia
11:00 – 11:20	<b>“An Acute Anesthetized Model for Evaluation of Cardiac Effects of Compounds in the Dog”</b> <u>Randall Pielemeier</u> , LVT, BS, LATG, SRS, David Moddrelle, SRS, Tracie Rindfield, LAT, SRS, Jenifer Robles, BS, Scott Adrian, DVM and Mark Johnson, MS. MPI Research, Mattawan, MI	2:30 – 2:50	<b>“The Effect of All-Trans Retinoic Acid on Intestinal Healing”</b> <u>T. Kurt</u> , MD, A. Tatar, MD, F. Vladimir, MD, M. Wayne, MD, M. Cioroiu, MD, R. Grossi, MD and A. Barbul, MD. Department of Surgical Research, Sinai Hospital of Baltimore, MD and Department of Surgery, Cabrini Medical Center, Mount Sinai School of Medicine, New York, NY
11:20 – 11:40	<b>“Acute Intestinal Ischemia Associated with Stapled Intestinal Anastomoses Reinforced by Lembert’s Sutures or Nitinol Clips”</b> <u>James Johnson</u> , MD, Ronald Mageau, MD, Nelson Jenkins, MD, You Su Sun, MD, J. Scott Roth, MD, L. Wiley Nifong, MD and W. Randolph Chitwood Jr., MD. Department of Surgery, The Brody School of Medicine at East Carolina University, Greenville, NC	2:50 – 3:00	<b>Announcement of ASR Scholarship Awards Program Winners, Concluding Remarks and Official Closing of the 20<sup>th</sup> Annual Meeting - Scandinavian East</b>
11:40 – 12:00	<b>“Evaluation of a Small-Diameter EPTFE Vascular Prosthesis Containing an Anti-Platelet Coating in a Dog Model”</b> <u>C. Norton</u> , DVM, J. A. Charles, DVM and G. A. Edwards, DVM. Department of Veterinary Sciences, University of Melbourne, Melbourne, Australia	4:00 – 6:00	<b>Post-Conference Board of Directors Meeting - Oslo Boardroom</b>

## Exhibition

Enhance your conference educational and networking opportunities by visiting the industry's premier product and service providers in the Exhibition Hall.

Exhibitors:	Booth #
Access Technologies .....	04
Advanced Sterilization Products.....	06
Colonial Medical Supply Company....	02
Instech Solomon .....	05
Lomir Biomedical Inc. ....	03
Marshall Bioresources .....	08
Smith Medical MD, Inc. ....	01
Toshiba Ultrasound .....	07

## Exhibit Hours

Thursday, October 7, 2004

Grand Opening: 6:00 pm - 8:00 pm

Friday, October 8, 2004

Breakfast: 7:00 am - 8:00 am

Break: 9:30 am - 9:50 am

Break: 10:50 am - 11:10 am

Lunch: 12:00 pm - 1:30 pm

## ASR Corporate Partner

The Academy expresses its appreciation to the following corporate partners for their support of ASR in 2004:

## Corporate Partners

Charles River Laboratories

Glaxo Smith Kline

Merck & Company, Inc

MPI Research

Pfizer Incorporated

## CEU Credit

Surgical Research Specialists (SRS) can earn 1½ CEU credits per hour of lecture attendance at the 20th Annual Meeting. CEU Report Forms will be available at the registration desk or may be obtained by contacting the ASR office at 952.253.6240.

## Program Goals

At the conclusion of the program, the participants will be able to discuss:

- Proposed and current research efforts in the arena of experimental cardiac, vascular, transplantation, orthopedic and minimally invasive surgery;
- The advantages of required certification of research specialists working in the surgical arena;
- New and updated methods and materials used in human and clinical surgical investigation;
- New procedures that will enhance their own fields of scientific research.

## Program Committee

Steve Vore, DVM - East Carolina University

Steve Kuhlman - Pfizer Incorporated

Matt Flegal - Pfizer Incorporated

## Registration Hours

Thursday, October 7 8 am - 6 pm

Friday, October 8 7 am - 5 pm

Saturday, October 9 8 am - 12 noon

## 2004 Sponsors

Data Sciences International

*Opening Reception*

Smith Medical MD, Inc.

*Awards Banquet*