



# ACADEMY OF SURGICAL RESEARCH

## 22nd Annual Meeting

September 21-23, 2006

Scottsdale Marriott at McDowell Mountains  
Scottsdale, AZ

### Thursday, September 21, 2006

10:00 – 6:00 Registration open

1:00 – 5:00 SRS, SRA and SRT exams  
*Seville II, III*

1:00 – 4:00 Board of Directors meeting  
*Seville I*

5:30 – 7:00 Opening Reception with Exhibitors  
*Valencia III-VI*

### Friday, September 22, 2006

7:00 – 8:00 Continental Breakfast with Exhibitors  
*Valencia III-VI*

8:00- 8:15 Opening Remarks: President: Ham Benghuzzi  
Program Chair: Michelle Tucci  
Program Vice-Chair Jonathan Schantz  
*Valencia I-II-VII*

8:15-8:45 **Workshop #1: Pain Management**  
**“Surgery, Art and Pain: The life and times of Frida Kahlo”**  
Presented By:  
Luis H. Toledo-Pereyra, MD and JIS Editor-in-Chief  
Michigan State University  
Kalamazoo, MI  
*Valencia I-II-VII*

8:45 – 9:45 **Workshop #2: Pain Management**  
**“Pharmacological aspects and practical management of pain”**  
Presented By:  
Michelle Tucci, PhD  
Linda Fulton, DVM  
University of Mississippi Medical Center  
Jackson, MS  
Organized and sponsored by GlaxoSmithKline to provide a tutorial in the use of analgesic in small animals  
*Valencia I-II-VII*

9:45-10:30 Morning Break with Exhibitors  
*Valencia III-VI*

10:30-12:00

Scientific Session #1:

**Basic Science Hypothesis Driven Research**  
*Valencia I-II-VII*

Time	Presenter	Title
10:30	<b>Fernando López-Neblina</b> MD, MS Borgess Research Institute Kalamazoo, MI	Ryanodine Receptor Modulates The Inflammatory Phosphorylation Signaling Profile In Hepatic Ischemia-Reperfusion
10:50	<b>Tereze Laing</b> RCSI Research Institute Beaumont, Dublin	Pravastatin (HMG-CO A Reductase inhibitor) enhances wound healing in an Experimental Diabetic Wound Healing Model
11:10	<b>John Szivek</b> University of AZ Tucson, AZ	Stem Cells Can Be Extracted From Adipose Tissue And Converted To Chondrocytes For Tissue Engineering
11:30	<b>Srirangam “Kumar” Kumaresan</b> Biomechanics Institute Santa Barbara, CA	Biomechanical Trauma Analysis Of Spinal Cord Neurological Injury Due To Fracture-Dislocation Of Posterior Elements In The Cervical Region

12:00-1:30

Lunch with Exhibitors

*Valencia III-VI*

1:30-3:30

Surgical Techniques Session #1

**Surgical Techniques (from abstracts)**  
*Valencia I-II-VII*

Time	Presenter	Title
1:30	<b>D. S. Margolis</b> University of AZ Tucson, AZ	Novel Method to Measure in vivo bone strain in mice
1:50	<b>Jennifer Arends</b> Boston Scientific Corporation Fremont, CA	Surgical Creation Of Aneurysms In An In Vivo Carotid Siphon Model To Test Neurovascular Devices
2:10	<b>David Warnock</b> Boston Scientific Corporation Natick, MA	Model Development For Evaluation Of A Dialysis Access Graft
2:30	<b>Scott Wingerter</b> University of Mississippi Medical Center Jackson, MS	The Effects Of Sustained Administration Of Corticosteroid On A Traumatized Disc Using The Adult Male Rat As A Model
2:50	<b>Colleen Norton &amp; Glenn Edwards</b> University of Melbourne Werribee, Australia	An ovine model to study atrial electrical and structural changes associated with Chronic Blood Pressure Elevation
3:10	<b>Tim Edwards</b>	Fluid Percussion: Surgical Model of Traumatic Brain Injury in the Rat

# 22nd Annual Academy of Surgical Research Meeting

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1:30-3:30	<b>Wet Lab #1:</b> <b>"Surgical Techniques for Large Animal Cardio Vascular Telemetry Applications"</b> Sponsored and presented by Data Sciences International <i>Granada I-II</i>	<i>"Prospective Evaluation of Femoral Vein and Artery Catheterization in the Rat"</i> A.K. Alderfer, L. Daneker, H. Haley, J. McLane, J. Kissinger, R.W. Coatney, GlaxoSmithKline, Upper Providence, PA
3:30-3:45	Break	<i>"Bacterial Colonization in Arterial and Venous Catheters Implanted in the Rat"</i> D.J. Posavec, T.K. Alderfer, L. Daneker, H. Haley, J. McLane, J. Kissinger, R. W. Coatney, C.T. Hawk, GlaxoSmithKline, King of Prussia, PA
3:45-4:30	<b>Workshop #3: Gas Anesthesia</b> Presented By: Kathy White VetEquip, Inc. Pleasanton, CA <i>Valencia I-II-VII</i>	<i>"Surface Micro Patterning and Cell Loading Can Lead to Cartilage Tissue Stratification"</i> JA Szivek, A. Schnepf, WA Grana, Univeristy of Arizona, Tucson, AZ
4:30-6:00	Poster Judging <i>Valencia III-VI</i>	<i>"Comparison of Bolus Administration of L-Dopa with Sustained Delivery of L-Dopa on dopaminergic neurons"</i> Tina Martin, Hamed Benghuzzi and Michelle Tucci, University of Mississippi Medical Center, Jackson, MS
	<i>"Intraoperative Evaluation of Femoral Head Vascularity during Opened Reduction and Internal Fixation of Acetabular Fractures"</i> James Woodall MD, Barnaby Dedmond MD, Scott Wingerter MD PhD, Robert Reddix MD, Ben Jackson BS, Steven Flores BS, Brenda Kulp RN BSN, Lawrence Webb, MD, Wake Forest University Baptist Medical Center Winston-Salem, NC, University of Mississippi Medical Center Jackson, MS	<i>"The Clamshell Osteotomy: A Simple Technique To Correct Multiplanar Diaphyseal Malunions"</i> George V. Russell, Jr., MD; Matt Graves; and Andy Brien , University of Mississippi Medical Center, Jackson, MS
	<i>"Performance Improvements For Biological Research Services"</i> F. David Salazar, CST, DOA, Sgt Angela Deluze-McCoy, LAT, USA, Major William Snyder, DVM, USA, William Beaumont Army Medical Center, El Paso, TX	<i>"Effects of Ambulation With Standard Walker And/Or Rolling Walker With Platforms On Cardiopulmonary Functions And Biochemical Stress Markers In Non-Weight Bearing Individuals"</i> Veronica Taylor, Jim Garrett, Jason Reeves, Leann Staton, Hunter Stark, Ameze Adah, and Derick Huang, Hamed Benghuzzi, and Felix Adah*, University of Mississippi Medical Center, Jackson, MS
	<i>"Effects of Dual Delivery of Statin and Vancomycin on the Healing of a Surgically Created Femoral Defect in an Animal Model"</i> Felix Adah, Hamed Benghuzzi, Michelle Tucci, George Russell, and Barry England University of Mississippi Medical Center, Jackson, MS and University of Michigan Medical School, Ann Arbor, MI	<i>"The Effects Of Growth Factors On The Production Of Bone Matrix Proteins"</i> Joel Davis, Michelle Tucci, Laura Franklin, George Russell, and Hamed Benghuzzi, University of Mississippi Medical Center, Jackson, MS
	<i>"Laparoscopic Surgery in Surgical Curriculum Academic Competency Assessment vs. Real Time Experience"</i> Hyder Z, Coughlin PA, Banerjee D, Dewar EP, Airedale General Hospital, West Yorkshire, UK	<i>"Displaced Acetabular Fractures In Pregnant Patients: Is Operative Management Safe?"</i> George V. Russell, MD, Matt Graves, MD, Elloit Nipper, MD, Zhen Qin, MD, University of Mississippi Medical Center, Jackson, MS
	<i>"Comparison of Two Different Fixation Techniques for a Segmental Defect in a Rat Femur Model"</i> Scott Wingerter, Graham Calvert, Michelle Tucci, Audrey Tsao, George Russell and Hamed Benghuzzi	<i>"The Effects Of Growth Factors On Cellular Phospholipids"</i> Laura Franklin, ShaDonna Jefferson, Michelle Tucci, Hamed Benghuzzi, and Rodney Baker, University of Mississippi Medical Center, Jackson, MS
	<i>"In Vivo Load Measurements Collected Using a Scaffold Predicts Bone Ingrowth"</i> Geffre CP, Szivek JA, Bliss CL, Margolis DS, Ruth JT, DeYoung DW, University of Arizona, Tucson, AZ	<i>"The Effects Of Sustained Delivery Of IGF-1 On Kidney And Testicular Tissues Using Adult Male Rats As A Model"</i> <sup>1</sup> Phatia Well, <sup>2</sup> Michelle Tucci, <sup>2</sup> Ham Benghuzzi, and <sup>1</sup> Joseph A. Cameron <sup>1</sup> Jackson State University, Jackson, MS and <sup>2</sup> The University of Mississippi Medical Center, Jackson, MS
	<i>"Permanent Tracheostomy for Long-Term Respiratory Studies in Canines"</i> Carlo R.G. Bartoli B.S., Ichiro Akiyama M.D., Kazunori Okabe M.D., John J. Godleski M.D., Harvard School of Public Health, Boston, MA	<i>"Possible role of ependymal proliferation in improving experimental allergic encephalomyelitis in Lewis rats"</i> Mohamed A, Yunus M, Hamadain E, and Benghuzzi H, University of Saskatchewan, Saskatoon, Canada
	<i>"The Effects of Sustained Administration of Corticosteroid on a Traumatized Disc Using the Adult Male Rat as a Model"</i> Scott Wingerter, Adam Fosnaugh, Joel Davis, Laura Franklin, Michelle Tucci, Ashraf Ragab, and Hamed Benghuzzi, University of Mississippi Medical Center, Jackson, MS	

*"Comparison of the amelioration effects of two enzyme inducers on the inflammatory process of experimental allergic encephalitis (EAE) using immunohistochemical technique."*

El-Ghouhary, Mohamed A, Suleiman S, and Benghuzzi H,  
University of Saskatchewan, Saskatoon, Canada

*"Comparison Between Mevinolin and PTH on MG63 cells"*

Joyce Belcher, Ham Benghuzzi, Michelle Tucci and Joseph A. Cameron

<sup>1</sup>Jackson State University, Jackson, MS and <sup>2</sup>The University of Mississippi Medical Center, Jackson, MS

*"Comparative Effects of Cortisol on Kidney Tubule Epithelial Cells from an in vitro and an in vivo model."*

Ham Benghuzzi, Stacy Vance and Michelle Tucci  
University of Mississippi Medical Center, Jackson, MS

6:00-8:00 Southwestern Fiesta Pool Party  
Splash Patio

**Saturday, September 23, 2006**

7:00 - 8:00 Continental Breakfast  
Granada I-II

8:00- 8:15 **Opening Remarks:**  
President: Ham Benghuzzi  
Program Chair: Michelle Tucci  
Program Vice-Chair: Jonathan Schantz  
Valencia I-II

8:15-9:00 **Douglas Cromeens Memorial Lecture**  
*"Disaster Planning: A veterinarian nightmare"*  
Presented By:  
Dr. James Blanchard, DVM, PhD, DACLAM  
Tulane National Primate Research Center  
Covington, LA  
Valencia I-II-VII

9:00-11:00 Scientific Session #2:  
*Animals models for avascular necrosis mini symposium*  
Valencia I-II-VII

Time	Presenter	Title
9:00	<b>Audrey K. Tsao, M.D.</b> University of Mississippi Medical Center, Jackson, MS	Osteonecrosis: Overview of the Human Disease
9:20	<b>Michelle Tucci, Ph.D.</b> University of Mississippi Medical Center, Jackson, MS	Exploring Potential Pathogenetic Mechanisms for Osteonecrosis at the Cellular Level
9:40	<b>Lynne Jones, Ph.D.</b> Johns Hopkins University, Baltimore Maryland	Animal Models of Osteonecrosis
10:00	<b>Howard Winet, Ph.D.</b> Orthopaedic Hospital/UCLA Dept. Orthopaedic Surgery	Reperfusion Injury as a Mechanism for Limb Ischemia and Osteonecrosis
10:20	<b>Panel Discussion</b>	

11:00-11:15 Break

11:15-12:00 **"Re-do Surgical Procedures - An Interactive Discussion on the How's, the Whys and the What-fore's"**

Presented By: David Moddrelle, SRS  
MPI Research  
Mattawan, MI  
Valencia I-II-VII

12:00- 1:45 **ASR Awards Luncheon and Annual Meeting**

**"Surgery in Space"**  
Guest Speaker: Dr. Richard Boyle  
NASA  
Moffett Field, CA  
Valencia III-VI

2:00-4:00 **Wet Lab #2:**  
**"Overview in Techniques in Suturing and New Techniques for Skin Closures"**  
Presented By: Alfredo Matute and Mike Talcott  
**Sponsored by Ethicon Products**  
Granada I-II

2:00-4:00 Scientific Session #3  
Valencia I-II-VII

Time	Presenter	Title
2:00	<b>Joseph A. Cameron, Jackson State University, Jackson, MS</b>	Significance of Laboratory Science in Academic and Research Training at an HBCU Institution....
2:20	<b>Vivek Nandakumar,</b> Orthopaedic Surgery, University of Arizona, Tucson, AZ	Portable Knee Joint Pressure Measurement System Using A PDA
2:40	<b>Oscar Chiesa, DVM</b> USDA, Washington, DC	Serial Tissue Sampling Techniques in Support of Pharmacokinetic Studies in Bovine
3:00	<b>Connie Norton and Glenn Edwards</b> University of Melbourne Werribee, Australia	Indium-111 platelets imaging for detection of platelets deposition in an anti-platelet coated EPTFE vascular prosthesis
3:20	<b>Ateegh Al-Arabi , Ph.D.</b> Department of Life Sciences, Johnson County Community College, Overland Park, KS	The Effect of TRH and Norepinephrine on the Triglyceride Droplets in Brown Adipose Tissue in Cold-Acclimated Rats
3:40	<b>Bob Roache</b> GlaxoSmithKline, King of Prussia, PA	Indocyanine Green Clearance to Evaluate Liver Regeneration in the Partially Hepatectomized Cynomolgus Monkey (Macaca Fascicularis)

4:00 - 5:30 Board of Directors Meeting  
Seville I-II