

SHOCK SOCIETY
THIRTY-SECOND ANNUAL CONFERENCE ON SHOCK
The Westin La Cantera Resort – San Antonio, Texas
June 6 – 9, 2009

Saturday, June 6, 2009

- 8:00 AM - 2:00 PM Council Meeting** - Mark Clemens, Ph.D., President
San Miguel University of North Carolina at Charlotte, Charlotte, NC
- 12:00 - 6:00 PM Registration**
Foyer – Level Three
- 1:30 - 1:40 PM Welcome and Introductions**
San Antonio DEF Ernest E. Moore, M.D., University of Colorado,
Denver, CO
- 1:45 - 3:45 PM Workshop 1: Stem Cell Rescue**
San Antonio DEF Daniel Meldrum, M.D., Indiana University Medical Center,
Indianapolis, IN

Irshad Chaudry, Ph.D., University of Alabama at Birmingham,
Birmingham, AL
- 1:45 – 1:50 PM Overview – Daniel Meldrum, M.D.**
- 1:50 - 2:10 PM Stem Cell Delivery Systems**
Laura Suggs, Ph.D., University of Texas, Austin, TX
- 2:10 - 2:30 PM Stem Cell Therapy in Trauma**
Charles Cox, M.D., University of Texas Health Science Center,
Houston, TX
- 2:30 – 2:50 PM Anti-inflammatory Effects of Stem Cells**
David Hackam, M.D., Children’s Hospital of Pittsburgh, Pittsburgh, PA
- 2:50 - 3:10 PM Stem Cell Mechanisms of Protection**
Muhammad Ashraf, Ph.D., University of Cincinnati, Cincinnati, OH
- 3:10 - 3:30 PM Panel Discussion**
- 3:30 - 3:45 PM Refreshment Break**
- 3:45 - 5:15 PM Workshop 2: Epigenetics in Inflammation**
San Antonio DEF Anirban Banerjee, Ph.D., University of Colorado,
Denver, CO

Edward Abraham, M.D., University of Alabama at Birmingham,
Birmingham, AL

- 3:45 - 4:00 PM** **Overview:** Anirban Banerjee, Ph.D., University of Colorado, Denver, Colorado
- 4:00 - 4:40 PM** **Genome-Wide Exploration of Allele-Specific Gene Regulation**
Andrew Chess, M.D., Harvard Medical School, Boston, MA
- 4:40 - 4:55 PM** **miRNA in Shock**
Edward Abraham, M.D., University of Alabama at Birmingham, Birmingham, AL
- 4:55 - 5:05 PM** **PPAR γ Modulation of NF- κ B**
Basilia Zingarelli, M.D., Ph.D., Children's Hospital Medical Center, Cincinnati, OH
- 5:05 - 5:15 PM** **Panel Discussion:**
- 6:00 - 7:00 PM** **Presidential Address:**
San Antonio DEF **Setting Goals to Get What We Want**
Daniel Remick, M.D., Boston University, Boston, MA
- 7:00 - 8:00 PM** **Presidential Reception**
Plaza San Saba
- 8:00 PM** **DINNER - ON YOUR OWN**

Sunday, June 7, 2009

- 7:00 - 8:00 AM** **Continental Breakfast**
Ballroom Foyer
- 7:00 - 9:00 AM** **Editorial Board Breakfast (*Invitation only*)**
San Miquel
- 7:00 - 9:30 AM** **Poster Session I: (Abstracts P1 – P71)**
San Antonio ABC
- 9:30 - 12:00 Noon** **Symposium I: Virtually Virchow: Inflammation Meets Coagulation**
San Antonio DEF Daniel Remick, M.D., Boston University, Boston, MA

Deborah Stearns-Kurosawa, Ph.D.
Oklahoma Medical Research Foundation, Oklahoma City, OK
- 9:30 - 9:35 AM** **Introduction**
Daniel Remick, M.D., Boston University, Boston, MA
- 9:35 - 10:20 AM** **The Ashwell-Morell Receptor Mitigates the Lethal Coagulopathy of Sepsis**
Jamey Marth, Ph.D., University of California at San Diego, San Diego, CA

- 10:20 - 10:40 AM** **Prehospital Treatment of Uncontrolled Hemorrhage with rFVIIa: Experience in Animal Models**
Jill Sondeen, Ph.D., US Army Institute of Surgical Research, San Antonio, TX
- 10:40 - 11:00 AM** **Complement and Coagulation: Accomplices during the Early Trauma Response**
Markus Huber-Lang, M.D., University of Ulm, Ulm, Germany
- 11:00 - 11:20 AM** **Toll-like Receptors 2 Pathways in Sepsis-Induced Endothelial Activation and Coagulopathy**
Judith Hellman, M.D., University of California, San Francisco, CA
- 11:20 - 12:00 Noon** **Novel Roles of Coagulation Factors in Neutrophil Activation and Clearance**
Edward Abraham, M.D., University of Alabama at Birmingham, Birmingham, AL
- 12:00 - 1:30 PM** **Luncheon Session: Promoting Diversity in Research**
San Antonio DEF Scott Somers, Ph.D.
The National Institute of General Medical Sciences, Bethesda, MD
- 1:45 - 3:00 PM** **New Investigator Competition**
San Antonio DEF Robert Cooney, M.D., Milton S. Hershey Medical Center, Hershey, PA
Jean Nemzek, D.V.M., University of Michigan, Ann Arbor, MI
- 1:45 - 2:00 PM** **Sphinganine-1 Phosphate Ameliorates Acute Liver Failure and Acute Kidney Injury Induced by Hepatic Ischemia and Reperfusion in Mice (Abstract 1)**
Sang Won Park, Ph.D., Columbia University, New York, NY
- 2:00 - 2:15 PM** **Polymicrobial Sepsis Activates TH1 and Protects Against Listeria Infection (Abstract 2)**
Sofia Gabrilovich, B.S., University of Florida, Gainesville, FL
- 2:15 - 2:30 PM** **Mechanism of the Anti-Inflammatory Effect of 17 β -Estradiol on Brain Following Trauma-Hemorrhage (Abstract 3)**
Hiroya Akabori, M.D., University of Alabama at Birmingham, Birmingham, AL
- 2:30 - 2:45 PM** **Mitochondrial DNA Activates Neutrophils via TLR9 and p38 MAP-Kinase (Abstract 4)**
Qin Zhang, M.D., Beth Israel Deaconess Medical Center, Boston, MA
- 2:45 - 3:00 PM** **Transforming Growth Factor-Alpha Preconditioning Improves Mesenchymal Stem Cell-Mediated Cardioprotection During Ischemia (Abstract 5)**
Jeremy Herrmann, M.D., Indiana University School of Medicine, Indianapolis, IN

- 3:00 – 3:30 PM** **Poster Workshop**
Daniel Remick, M.D., Boston University, Boston, MA
- Basilia Zingarelli, M.D., Ph.D., Children’s Hospital Medical Center, Cincinnati, OH
- 3:30 - 3:45 PM** **Break**
- 3:45 - 4:40 PM** **Mini-Symposium I: Reviewers’ Favorites**
San Antonio DEF Mark Clemens, Ph.D., University of North Carolina at Charlotte, Charlotte, NC
- Carol Miller-Graziano, Ph.D., University of Rochester Medical Center, Rochester, NY
- 3:50 - 4:00 PM** **Discovery of a Natural Noncognate Ligand Antagonist of Macrophage Migration Inhibitory Factor (MIF): Correlation in Patients with Sepsis (Abstract 6)**
Yousef Al-Abed, Ph.D., The Feinstein Institute for Medical Research, Manhasset, NY
- 4:00 - 4:10 PM** **Regulatory T Cells Demonstrate An Injury-Specific Recall Response (Abstract 7)**
Goro Tajima, M.D., BWH/Harvard Medical School, Boston, MA
- 4:10 - 4:20 PM** **Sepsis-Induced Suppression of TH1 Phenotype is not Due to the Rise in TH2 Cells (Abstract 8)**
Eizo Watanabe, M.D., Washington University School of Medicine, St. Louis, MO
- 4:20 - 4:30 PM** **Type I Interferon in the Hematopoietic System is Necessary for Host Defense During Sepsis (Abstract 9)**
Kindra Kelly-Scumpia, Ph.D., University of Florida, Gainesville, FL
- 4:30 - 4:40 PM** **Spermine Protects Mice Against Lethal Sepsis by Enhancing "Early" But Attenuating "Late" Cytokine Responses (Abstract 10)**
Shu Zhu, Ph.D., North Shore University Hospital, Manhasset, NY
- 4:45 - 5:50 PM** **Mini-Symposium II: (Parallel Session) Gene Regulation**
San Antonio DEF Antonio De Maio, Ph.D., University of California San Diego, La Jolla, CA
- David Herndon, M.D., University of Texas Medical Branch Shriners Burns Hospital, Galveston, TX
- 4:50 - 5:00 PM** **Gene-and Protein Expression Profiling in Liver in a Sepsis-Baboon Model (Abstract 11)**
Gudrun Schmidt-Gann, Ph.D., Ludwig Boltzmann Institute for Experimental & Clinical Traumatology, Vienna, Austria

- 5:00 - 5:10 PM** **Calculation of Pathway Genetic Load Allows Simultaneous Evaluation of Multiple Loci** (*Abstract 12*)
Ryan Huebinger, Ph.D., UT Southwestern Medical Center, Dallas, TX
- 5:10 - 5:20 PM** **Small Interfering RNA (siRNA) Mediated Poly (ADP-Ribose) Polymerase (PARP)-1 Inhibition Upregulates The Heat Shock Response** (*Abstract 13*)
Rajesh Aneja, M.D., University of Pittsburgh, Pittsburgh, PA
- 5:20 - 5:30 PM** **Trauma/Hemorrhage-Induced Inflammation in Mice: Insights from Data-Driven Models** (*Abstract 14*)
Rajaie Namas, M.D., University of Pittsburgh, Pittsburgh, PA
- 5:30 - 5:40 PM** **Nitrogen Metabolism by the Liver After Injury is Influenced by Transcriptional Changes in Common with the Acute Phase Response** (*Abstract 15*)
Glenn P. Miller, M.D., Boston Medical Center, Boston, MA
- 5:40 - 5:50 PM** **Discussion**
- 4:45 - 5:50 PM** **Mini-Symposium III: (Parallel Session) Growth Factors**
San Antonio GHI
Ranjit Chima, M.D., Cincinnati Children's Hospital Medical Center, Cincinnati, OH

Paul Wishmeyer, M.D., University of Colorado Health Sciences Center, Aurora, CO
- 4:50 - 5:00 PM** **ER Stress in Liver Tissue of Burned Rats is Attenuated by Insulin Treatment** (*Abstract 16*)
Robert Kraft, M.D., Shriners Hospital For Children, University of Texas Medical Branch, Galveston, TX
- 5:00 - 5:10 PM** **Local IGF-I Prevents Sepsis-Induced Muscle Atrophy** (*Abstract 17*)
Gerald Nystrom, M.S., Penn State College of Medicine, Hershey, PA
- 5:10 - 5:20 PM** **The Separate Effects of TNF- α and Reactive Oxygen Species (ROS) on Acute Insulin Resistance Following Trauma and Hemorrhage** (*Abstract 18*)
Lidong Zhai, B.S., University of Alabama at Birmingham, Birmingham, AL
- 5:20 - 5:30 PM** **Estrogen-Derived Upregulation of Insulin-Like Growth Factor-1 Receptor Mediates Hepatic Protection Following Trauma-Hemorrhage (T-H)** (*Abstract 19*)
Chung-Kun Hui, M.D., University of Alabama at Birmingham, Birmingham, AL
- 5:30 - 5:40 PM** **The Effect of Beta Blockade on Progenitor Cell Growth and Mobilization** (*Abstract 20*)
Keith Beiermeister, M.D., UMDNJ New Jersey Medical School, Newark, NJ

5:40 – 5:50 PM Discussion

6:30 - 7:30 P Reception

Ballroom Terrace/Foyer

7:30 - 9:30 PM New Investigator Competition and Travel Awards Ceremony

San Antonio GHI

Monday, June 8, 2009

6:00 - 7:00 AM Annual Presidential Fun Run

Organized by: Mark Clemens, Ph.D.
University of North Carolina at Charlotte, Charlotte, NC

7:00 - 9:00 AM Continental Breakfast

Ballroom Foyer

7:00 - 9:00 AM Poster Session II (Abstracts P72 – P140)

San Antonio ABC

9:00 - 12:00 Noon Symposium II: Innate/Adaptive Counterpoise

San Antonio DEF

James Lederer, Ph.D., Brigham and Women's Hospital,
Harvard Medical School, Boston, MA

Eugen Faist, M.D., Ludwig Maximilians University,
Munich, Germany

Immune Consequences of Trauma

Eugen Faist, M.D., Ludwig Maximilians University,
Munich, Germany

Alarmins and the Injury Response

De Yang, M.D., Ph.D., National Cancer Institute at Frederick,
Frederick, MD

Endogenous Response to Injury

Timothy Billiar, M.D., University of Pittsburgh, Pittsburgh, PA

Cellular Immune Response to Sepsis

Edward Sherwood, M.D., University of Texas Medical Branch,
Galveston, TX

Costimulatory Receptors and Sepsis

Alfred Ayala, Ph.D., Rhode Island Hospital, Providence, RI

Immune System Control of the Injury Response

James Lederer, Ph.D.
Brigham And Women's Hospital, Harvard Medical School,
Boston, MA

12:00 - 1:15 PM **Shock Society Business Meeting**
San Antonio DEF

1:15 PM **Free Afternoon – Lunch & Dinner on your own**

Tuesday, June 9, 2009

7:00 - 9:00 AM **Continental Breakfast**
Ballroom Foyer

7:00 – 9:00 AM **Poster Session III (Abstracts P141 – P208)**
San Antonio ABC

9:00 – 11:30 AM **Symposium III: Inflammation and the Host Response**
Ronald Maier, M.D., University of Washington, Harborview
Medical Center, Seattle, WA

Lyle Moldawer, Ph.D., University of Florida College of Medicine,
Gainesville, FL

9:00 – 9:10 AM **Introduction**
Ronald Maier, M.D., University of Washington, Harborview
Medical Center, Seattle, WA

9:10 – 9:30 AM **Genomics of Acute Injury**
Wenzhong Xiao, Ph.D., Stanford University, Stanford, CA

9:30 – 9:50 AM **Mass Spectroscopy Proteomics**
David Camp, II, Ph.D., Pacific Northwest National Laboratory,
Richland, WA

9:50 – 10:10 AM **Proteomics of the Innate Immune System**
Carol Miller-Graziano, Ph.D., University of Rochester Medical Center,
Rochester, NY

10:10 – 10:30 AM **Microfluidics for Cell Subpopulations**
Mehmet Toner, Ph.D., Massachusetts General Hospital,
Harvard Medical School, Boston, MA

10:30 – 10:50 AM **Genomic Prediction of VAP**
J. Perren Cobb, M.D., Washington University School of Medicine,
St. Louis, MO

10:50 – 11:20 AM **Panel Discussion**

11:20 – 11:30 AM **Future of Glue Grant Consortium**
Ron Tompkins, M.D., Massachusetts General Hospital,
Harvard Medical School, Boston, MA

- 11:30 – 1:00 PM Boxed Lunch Available**
Ballroom Foyer/Terrace
- 11:30 - 1:00 PM Oral Presentations by and for New Investigators**
San Antonio DEF
Cynthia Otto, D.V.M., Ph.D., University of Pennsylvania, Philadelphia, PA

Brenda Smith, Ph.D, Oklahoma State University, Stillwater, OK
- 1:00 - 2:40 PM Mini-symposium IV: (Parallel Session) Intercellular Signaling**
San Antonio DEF
Jonathan McDunn, Ph.D., Washington University School of Medicine, St. Louis, MO

Charles Caldwell, Ph.D., University of Cincinnati College of Medicine, Cincinnati, OH
- 1:00 - 1:10 PM Myeloid Derived Suppressor Cell Expansion Requires CXCL 12 Induced Progenitor Cell Development and is Necessary for Survival (Abstract 21)**
Matthew Delano, M.D., University of Florida, Gainesville, FL
- 1:10 - 1:20 PM Increased Local Neutrophil Recruitment Improves Sepsis Survival & Bacteria Clearance (Abstract 22)**
Florin Craciun, M.D., Boston University School of Medicine, Boston, MA
- 1:20 - 1:30 PM The Effects of Beta-Glucan on Endotoxemia and Sepsis (Abstract 23)**
Courtney Newsome, B.S., Brown University/Rhode Island Hospital, Providence, RI
- 1:30 - 1:40 PM The Relationship between Arginase, NOS, and ADMA to Acute Lung Injury in Sepsis (Abstract 24)**
Linda E. Sousse, B.S., University of Texas Medical Branch, Galveston, TX
- 1:40 - 1:50 PM Adipocyte Response to S. Aureus-Induced Pulmonary Inflammation (Abstract 25)**
Helena M. Linge, Ph.D., The Feinstein Institute for Medical Research, Manhasset, NY
- 1:50 - 2:00 PM Sialidase Treatment Sensitizes Cells for TLR Ligands (Abstract 26)**
Lesley Doughty, M.D., Cincinnati Children's Hospital, Cincinnati, OH
- 2:00 - 2:10 PM Apolipoprotein E Regulates Septic Mortality in Mice (Abstract 27)**
Kelley Chuang, M.D., University of California San Francisco, San Francisco, CA
- 2:10 - 2:20 PM The Role of VAV Guanine Nucleotide Exchange Factor in Dectin-1 Mediated Phagocytosis (Abstract 28)**
Jill K. Johnstone, M.D., Rhode Island Hospital, Providence, RI

- 2:20 - 2:30 PM** **Blockade of IP-10 Inhibits Adjuvant-Induced Protection During Neonatal Sepsis** (*Abstract 29*)
Alex Cuenca, M.D., University of Florida College of Medicine, Gainesville, FL
- 2:30 - 2:40 PM** **Discussion**
- 1:00 - 2:40 PM** **Mini-Symposium V: (Parallel Session) Apoptosis**
San Antonio GHI
Craig Coopersmith, M.D., Washington University School of Medicine, St. Louis, MO

Saman Arbabi, M.D., University of Washington, Seattle, WA
- 1:00 - 1:10 PM** **IL-15 Prevents Apoptosis of CD8+ T Cells, NK Cells and Dendritic Cells and Improves Survival in Sepsis** (*Abstract 30*)
Shigeaki Inoue, M.D., Washington University School of Medicine, St. Louis, MO
- 1:10 - 1:20 PM** **Release of Apoptotic Factors in Multiple Injured Patients - Does C5A Regulate PMN Apoptosis?** (*Abstract 31*)
Marcus Huber-Lang, M.D., University of Ulm, Ulm, Germany
- 1:20 - 1:30 PM** **Prevention of Alveolar Epithelial Cell (AEC) Apoptosis by IL-6-Activated Stat3 in Trauma/Hemorrhagic Shock (T-HS): Role of AEC Intrinsic and Extrinsic Pathways** (*Abstract 32*)
Ana Moran, M.D., Baylor College of Medicine, Houston, TX
- 1:30 - 1:40 PM** **Scavenger Receptor-A (SR-A) Plays a Critical Role in Mediating the Pathophysiology of Myocardial Ischemia/Reperfusion Injury** (*Abstract 33*)
Chuanfu Li, M.D., East Tennessee State University, Johnson City, TN
- 1:40 - 1:50 PM** **IL-7 Increases BCL-2 Decreases Apoptosis, Prevents Loss of Immunity, and Improves Survival in Sepsis** (*Abstract 34*)
Jacqueline Unsinger, Ph.D., Washington University School of Medicine, St. Louis, MO
- 1:50 - 2:00 PM** **Cardiac Specific Expression of PI3K P110 α Attenuates Sepsis Induced Cytokine Expression and Lung Neutrophil Infiltration, but not Splenocyte Apoptosis** (*Abstract 35*)
David L. Williams, Ph.D., East Tennessee State University, Johnson City, TN
- 2:00 - 2:10 PM** **The Hypoxia Inducible Factor 1A Decreases T Cell IFN-Gamma Production and Apoptosis During Sepsis** (*Abstract 36*)
Charles Caldwell, M.D., University of Cincinnati College of Medicine, Cincinnati, OH

- 2:10 - 2:20 PM** **The Endogenous Bacteria Mediate Sepsis-Induced Increases in Gut Epithelial Apoptosis** (*Abstract 37*)
Amy C. Fox, M.D., Washington University, St. Louis, MO
- 2:20 - 2:30 PM** **Reduced Myeloid Dendritic Cells After Trauma is Associated with Increased Apoptosis** (*Abstract 38*)
Marcus Maier, M.D., Hospital of the J.W. Goethe-University, Frankfurt, Germany
- 2:30 - 2:40 PM** **Discussion**
- 2:40 - 3:00 PM** **Break**
- 3:00 - 5:00 PM** **Mini-Symposium VI: (Parallel Session) Intracellular Signaling**
San Antonio DEF
Basilia Zingarelli, M.D., Ph.D., Children's Hospital Medical Center, Cincinnati, OH

Marc Jeschke, M.D., UTMB/Shriners Burns Hospital, Galveston, TX
- 3:05 - 3:15 PM** **Role of Endothelial Specific NF- κ B Signaling in Endotoxemic Coagulation in the Mice 217** (*Abstract 39*)
Xiaobing Ye, B.M., The Feinstein Institute for Medical Research, Long Island Jewish Medical Center, Manhasset, NY
- 3:15 - 3:25 PM** **NRF2 is Essential in Innate Immune Cells for Survival in Sepsis** (*Abstract 40*)
Xiaoni Kong, Ph.D., Johns Hopkins University, Baltimore, MD
- 3:25 - 3:35 PM** **Ghrelin's Inhibitory Effect on Pro-Inflammatory Cytokines in Sepsis is Mediated by Mitogen Activated Protein Kinase Phosphatase-1 (MKP-1)** (*Abstract 41*)
Asha Jacob, Ph.D., North Shore University Hospital and Long Island Jewish Medical Center, Manhasset, NY
- 3:35 - 3:45 PM** **Sepsis-Induced Inflammation is Negatively Regulated by G α_{i2} Protein Coupled Signaling Pathways** (*Abstract 42*)
Hongquan Fan, Ph.D., Medical University of South Carolina, Charleston, SC
- 3:45 - 3:55 PM** **Caveolin-1 (CAV-1) is Required for Expression of Hepatic Vascular Inflammatory Response in Endotoxemia** (*Abstract 43*)
Shang Ho Lee, Ph.D., University of North Carolina at Charlotte, Charlotte, NC
- 3:55 - 4:05 PM** **Severe Burn is Associated with Alterations in the EF2K/EEF2 Pathway** (*Abstract 44*)
Juquan Song, M.D., Shriners Hospital for Children, University of Texas Medical Branch, Galveston, TX

- 4:05 - 4:15 PM** **A High Fat Diet Increases the Inflammatory Response in Sepsis** (*Abstract 45*)
Jennifer Kaplan, M.D., Cincinnati Children's Hospital Medical Center, Cincinnati, OH
- 4:15 - 4:25 PM** **Hemorrhagic Shock Increases Vascular Smooth Muscle Tone Preferentially at Low Pressures via Heme Oxygenase Activity** (*Abstract 46*)
Robert A. Johnson, Ph.D., University of Texas Health Science Center at San Antonio, San Antonio, TX
- 4:25 - 4:35 PM** **Cyclic AMP Activates AKT/Protein Kinase B in Hepatocytes Through a Guanine Nucleotide Exchange Factor** (*Abstract 47*)
Brian Harbrecht, M.D., University of Louisville, Louisville, KY
- 4:35 - 4:45 PM** **PPAR γ Plays a Role in Producing the Salutary Effects of Bicalutamide on Kupffer Cell Cytokine Production Following Trauma-Hemorrhage** (*Abstract 48*)
Takao Suzuki, M.D., University of Alabama at Birmingham, Birmingham, AL
- 4:45 - 5:00 PM** **Discussion**
- 3:00 - 5:00 PM** **Mini-symposium VII: (Parallel Session) Immunomodulation**
San Antonio GHI
Rosemary Kozar, M.D., University of Texas Health Science Center, Houston, TX
Frederick Moore, M.D., The Methodist Hospital, Houston, TX
- 3:05 - 3:15 PM** **The Function of Regulatory T Cells on Macrophage Activity is Dysregulated Following Trauma-Hemorrhage** (*Abstract 49*)
Chi-Hsun Hsieh, M.D., University of Alabama at Birmingham, Birmingham, AL
- 3:15 - 3:25 PM** **Role of SOCS-1 and SOCS-3 Proteins in Cardiac Inflammation after Shock** (*Abstract 50*)
Chun Shiang Chung, Ph.D., Rhode Island Hospital, Providence, RI
- 3:25 - 3:35 PM** **HMGB1 in Trauma Patients: Mortality, Organ Damage, and Inflammation** (*Abstract 51*)
Rajaie Namas, M.D., University of Pittsburgh, Pittsburgh, PA
- 3:35 - 3:45 PM** **TLR4-Dependent Myocardial Chemokine Response to Ischemia/Reperfusion: Role of Extracellular HSC70** (*Abstract 52*)
Lihua Ao, B.A., University of Colorado, Denver, CO
- 3:45 - 3:55 PM** **GR1+ Macrophages Contribute to the Development of the Two-Hit Response Following Burn Injury** (*Abstract 53*)
Fionnuala O'Leary, M.B., Harvard Medical School, Boston, MA

- 3:55 - 4:05 PM** **C-Peptide Reduces the Inflammatory Response Following Severe Hemorrhage** (*Abstract 54*)
Ranjit Chima, M.D., Cincinnati Children's Hospital Medical Center, Cincinnati, OH
- 4:05 - 4:15 PM** **Invariant NKT Cells are Protective in Mice During Hemorrhagic Shock** (*Abstract 55*)
Michael P. Chapman, B.S., University of Pittsburgh, Pittsburgh, PA
- 4:15 - 4:25 PM** **Sympathetic Modulation of the Host Defense Response to Infectious Challenge During Recovery from Hemorrhage** (*Abstract 56*)
Annie Whitaker, B.S., Louisiana State University Health Science Center, New Orleans, LA
- 4:25 - 4:35 PM** **High-Dose Intravenous Antithrombin III Reduces Pulmonary Vascular Permeability and Neutrophil Count in the Lymph after Combined Burn and Smoke Inhalation Injury** (*Abstract 57*)
Sebastian Rehberg, M.D., University of Texas Medical Branch, Galveston, TX
- 4:35 - 4:45 PM** **Effects of Neutrophil and Macrophage Depletion on Lung Injury Following T/HS Lymph Injection** (*Abstract 58*)
David Palange, B.S., UMDNJ New Jersey Medical School, Newark, NJ
- 4:45 - 5:00 PM** **Discussion**
- 6:30 - 7:00 PM** **Reception**
Ballroom Terrace/Foyer
- 7:00 - 9:00 PM** **Dinner**
San Antonio ABC **Scientific Achievements and Service Awards Ceremony**