



SURGICAL INFECTION SOCIETY

23rd Annual Meeting
April 10th – 12th, 2003

The Westin Riverwalk
San Antonio, Texas

Preliminary
Program

SURGICAL INFECTION SOCIETY 23rd ANNUAL MEETING

SAN ANTONIO, TEXAS, 10 –12 APRIL 2003

Program

THURSDAY, 10 APRIL 2002

0645-0745 Sunrise Symposium 1 **Location: Navarro Ballroom**
Hospital Acquired and Ventilator Associated Pneumonia: Prevention and Treatment

0800-1100 Plenary Presentations 1 **Location: Navarro Ballroom**
OPENING PLENARY SESSION
Moderators: Ronald V. Maier & Robert G. Sawyer

1. Lung Injury Caused by Cytomegalovirus Reactivation in Immunocompetent Hosts Prevented by Ganciclovir
CH Cook, Ohio State University
Discussant: T Pruett, Charlottesville, VA
2. Candidemia: The Impact of Antifungal Prophylaxis
SM Swoboda, Johns Hopkins Medical Institutions
Discussant: EP Dellinger, Seattle, WA
3. Characteristics and Consequences of Fever in Critically Ill Surgical Patients
PS Barie, Weill Medical College of Cornell
Discussant: J Marshall, Toronto, CA
4. Nature of GNR Antibiotic Resistance in Antibiotic Rotation
HL Evans, University of Virginia Health System
Discussant: A Nathens, Seattle, WA
5. Antimicrobial Therapy for Suspected Nosocomial ICU Infection: Aggressive Empiric Therapy Does Not Improve Outcome
M Aarts, University of Toronto
Discussant: M Croce, Memphis, TN
6. Mice Depleted of CD8+T and Natural Killer Cells are Resistant to Lethal Intraabdominal Sepsis
ER Sherwood, University of Texas Medical Branch
Discussant: E Deitch, Newark, NJ
7. Education Alters Behaviour and Impacts Catheter-Related Bloodstream Infection Rates in the Surgical ICU
CM Coopersmith, Washington University
Discussant: Y Carrillo, Nashville, TN
8. A (Gram) Positive Wrinkle on Endotoxin Tolerance
MA West, Northwestern University
Discussant: S Calvano, New Brunswick, NJ
9. P13 Kinase-Dependent Expression of the Inhibitor of Apoptosis Proteins (IAP's) Survivin and NAIP in Neutrophils (PMN) From Septic Patients
S Jia, University of Toronto
Discussant: A Oberholzer, Berlin

1100-1230 **Location: Hidalgo, Madero, Carranza**
POSTER SESSION #1 (Posters #1-19)
Moderators: Cora K. Ogle & Craig M. Coopersmith
Mark A. Malangoni & Walter L. Biffi

1230-1330

LUNCHEON

Location: Navarro Prefunction

1330-1550 Parallel Session-Bench Research

Location: Navarro A

IN VIVO MODELS OF INFECTION

Moderators: Irshad H. Chaudry & Jan K. Horn

10. Role of GD T-Cells in Immunoregulatory Effects in Sepsis
C Chung, Rhode Island Hospital
Discussant: C Coopersmith, St. Louis, MO
11. Nitrosative Stress in an Animal Model of Necrotizing Enterocolitis (NEC)
R Zamora, University of Pittsburgh
Discussant: A May, Nashville, TN
12. Life and Death Changes in Adaptive Immune Reactivity Following Burn Injury
Y Zang, Harvard Medical School
Discussant: A McManus, Ft. Sam Houston, TX
13. Polymicrobial Sepsis Induces Divergent Effects on Dendritic Cell Function in Mice
Y Ding, Rhode Island Hospital
Discussant: R. Khadaroo, Toronto, Canada
14. Inhibition of Poly (ADP-Ribose) Polymerase (PARP) Attenuates Septic Lung Following Smoke Inhalation and Pneumonia
K Murakami, University of Texas Medical Branch and Shriners's Burn Hospital
Discussant: J Mazuski, St. Louis, MO
15. L-Selectin and Alpha4Beta7 Integrin, But not ICAM-1, Regulate Lymphocyte Distribution in Mucosal Associated Lymphoid Tissue (MALT) in vivo
TI Shigeo, University of Wisconsin
Discussant: F Nwariaku, Dallas, TX
16. Identification of a Novel Orally-Active Diterpene Derived from Acanthopanax Plant that Suppresses TNFA Production
AL Oberholzer, Trauma Center, Berlin
Discussant: E Bulger, Seattle, WA

1330-1550 Parallel Session-Clinical Research

Location: Navarro B

INFECTIONS AND CRITICAL ILLNESS

Moderators: William G. Cheadle & Robert G. Sawyer

17. Use of Drotrecogin Alfa (Activated) in Intra-abdominal Surgical Patients from Prowess®
SB Johnson, University of Maryland
Discussant: J Bailey, St. Louis, MO
18. Risk Factors for Severe Sepsis in Peritonitis
DA Anaya, Harborview Medical Center, Seattle
Discussant: D Mercer, Houston, TX
19. Chronologic Empiric Therapy of VAP in Trauma Patients: Application of a Clinical Pathway
MA Croce, University of Tennessee- Memphis
Discussant: T Genuit, Baltimore, MD
20. Multiple Sites of Infection: Predictor of Mortality or Just Another Indicator of Illness Severity
RL Smith, II, University of Virginia
Discussant: J Bohnen, Toronto, CA
21. Alveolar Production of Interleukin-18 Correlates with Post-Traumatic Pulmonary Dysfunction
JJ Hoth, University of Louisville
Discussant: P Bankey, Rochester, NY
22. Combined Assessment of Beta-D-Glucan and Degree of Candida Colonization to Start Empirical Therapy for

Suspected Candidiasis in Surgical Patients

Y Takesue, Hiroshima University

Discussant: P Lipsett, Baltimore, MD

23. Comparison of Disease Severity and Biomarkers in Surgical and Non-Surgical Patients with Severe Sepsis from Prowess®

SF Lowry, UMDNJ- Robert Wood Johnson

Discussant: S. Eachempati, New York

1600-1730

Location: Hidalgo, Madero, Carranza

POSTER SESSION #2 (Posters #20-38)

Moderators: Cora K. Ogle & Craig M. Coopersmith

David L. Williams & Walter L. Biffl

1730-1830

Annual Business Meeting

Location: Navarro A

Ronald V. Maier, Presiding

1900-2100

Reception

Location: McNay Museum

FRIDAY, 11 APRIL 2002

0700-0800

Sunrise Symposium 2

Location: Navarro A

Using Evidence-Based Medicine: Treatment of Severe Sepsis

1. Steroids- Samir S. Awad
2. Recombinant human activated protein C- Phil S. Barie
3. Cutting-edge interventions- Gregory J. Beilman

0815-1035 Parallel Session-Bench Research

Location: Navarro A

INTERCELLULAR AND SUBCELLULAR SIGNALING

Moderators: David L. Dunn & Lyle L. Moldawer

24. Myocardial Inflammatory Responses to Sepsis Complicated by Previous Burn Injury
JW Horton, University of Texas- Southwestern Medical Center
Discussant: J Mannick, Boston, MA
25. Trauma-Hemorrhagic Shock-Induced Upregulation of Endothelial Cell Adhesion Molecules is Blunted by Mesenteric Lymph Duct Ligation
D Xu, UMDNJ-New Jersey Medical School
Discussant: K Davis, Maywood, IL
26. Leukotriene B4 Governs PMN Influx Into the Peritoneum But Not the Lung and Liver During Surgical Peritonitis
MJ Scott, University of Louisville
Discussant: J Chipman, Eagan, MN
27. Cerivastatin Attenuates LPS-Induced Inflammatory Response Via Downregulation of Surface TLR4 Expression and Suppression of TLR4-MYD88 Complex Formation
J Wang, Cork University Hospital
Discussant: S Lowry, New Brunswick, NJ
28. Endotoxin Inhibits Enterocyte Migration In Vitro by Activating Rho-GTPASE in a P13-Kinase Dependent Manner
D. Hackam, University of Pittsburgh
Discussant: M. West, Chicago, IL
29. Injury Induces CTLA4 Gene Expression

J Lederer, Brigham and Women's Hospital

Discussant: C. Godshall, Louisville, KY

30. TNF Receptor (TNFR) Regulation of Bone Marrow (BM) Cell Apoptosis During Systemic Inflammation

J Kotani, UMDNJ-Robert Wood Johnson Medical School

Discussant: S Tennenberg, Detroit, MI

0815-1035 Parallel Session- Clinical Research

Location: Navarro B

HUMAN HOST RESPONSE AND CLINICAL PATHOGENS

Moderators: Basil A. Pruitt & Addison K. May

31. Divergent Apoptotic Responses of Exudate Neutrophils

LM Barnes, Wayne State University School of Medicine

Discussant: J Johnson, Denver, CO

32. Modulation of Toll-Like Receptor 4 (TLR4) on Monocytes and Granulocytes After LPS Challenge in Normal Humans

SE Calvano, UMDNJ-Robert Wood Johnson School of Medicine

Discussant: E Sherwood, Galveston, TX

33. Risk of Postoperative Infection in Patients with Bactibilia Undergoing Surgery for Obstructive Jaundice

N Namias, University of Miami School of Medicine

Discussant: R Jeyarajah, Dallas, TX

34. Chylomicron-Bound LPS Selectively Inhibits the Hepatocellular Response to Proinflammatory Cytokines

D Lee, University of California-San Francisco

Discussant: JJ Hoth, Louisville, KY

35. Lipopolysaccharide Modulates Staphylococcus Aureus Interactions with Intestinal Epithelium

DJ Hess, University of Minnesota

Discussant: W. Heagy, Chicago, IL

36. Streptococcus Pneumoniae Infection in Mice: Apoptosis and Survival

KD Husain, Washington University School of Medicine

Discussant: W. Biffel, Rhode Island

37. General Surgeons Perceive a Need for Better Access to Specialized Resources for Critical Care Surgery: Results of the OAGS Survey

G Papia, University of Toronto

Discussant: A Mohr, Newark, NJ

1100-1200 Plenary Session

Location: Navarro A

PRESIDENTIAL ADDRESS

Michael A. West

1100-1200

Presidential Address.

Knowledge & Truth: Answers or Questions?

Michael A. West

1200-1300

LUNCHEON

Location: Navarro Prefunction

1300-1400 Plenary Session

Location: Navarro A

SIS AWARDS/ALTEMEIER LECTURE

Richard L. Simmons

1300-1315

Fellowship Awards

Carl J. Hauser

1315-1400

Altemeier Lecture

Friendly Fire, and Other Tales of Patient Safety
Richard L. Simmons

1400-1545 Plenary Session **Location: Navarro A**
SCIENTIFIC STUDIES COMMITTEE SYMPOSIUM:
Modulating the Response to Trauma and Sepsis: From the Mundane to the Provocative
Chair: Avery B. Nathens

1. The Effects of Blood Transfusions and Blood Substitutes on the Inflammatory Response Following Trauma and Sepsis- George W. Machiedo
2. Modulating the inflammatory response after Trauma and Sepsis Through the Choice of Volume Resuscitation- Eileen M. Bulger
3. The Effect of Tight Glucose Control on Sepsis and the Inflammatory Response- Avery B. Nathens

1600-1730 Plenary Session **Location: Navarro A**
THERAPEUTIC AGENTS COMMITTEE SYMPOSIUM:
Gender and Infections
Chair: Martin A. Croce

1. The basic science of gender outcomes differences- Irshad H. Chaudry
2. Gender *does* influence outcome in surgical patients- Robert G. Sawyer
3. Gender *does not* influence outcome in surgical patients- Martin A. Croce

1900-2000 Cocktails **Location: Navarro Prefunction**

2000-2200 Dinner and Presentation of Awards **Location: Navarro Ballroom**

SATURDAY, 12 APRIL 2002

0645-0745 Sunrise Symposium 3 **Location: Navarro Ballroom**
Fungal Infections in Surgical Patients and the ICU

0800-0930 Plenary Session **Location: Navarro A**
PROGRAM COMMITTEE SYMPOSIUM: Infection Control and the Surgeon-
A Joint SHEA and SIS Symposium
Chair: Robert Sawyer

1. Hand Hygiene and the Surgical Prep- James T. Lee
2. Preventing Resistance through Improved Antibiotic Use- E. Patchen Dellinger
3. Procedures Outside of the OR, Including Central Venous Catheter Insertion- Nicholas Namias
4. Unusual Sources of Surgical Infections- Steven M. Gordon

0945-1230 Plenary Presentations 2 **Location: Navarro A**
THE FUTURE: NOVEL MEDIATORS AND INTERVENTIONS IN SEPSIS AND INJURY
Moderators: Michael A. West & Philip S. Barie

38. Upregulation of Cardiovascular Ghrelin Receptor is Involved in Hyperdynamic Responses in Early Sepsis
R Wu, North Shore-Long Island Jewish Medical Center
Discussant: C Schinkel, Bochum, Germany
39. NOR NOHA: A Novel Arginase Inhibitor That Improves Liver I/R Injury

KM Reid, University of Pittsburgh
Discussant: R Chari, Nashville, TN

40. Epinephrine Modulates Innate Immunity
KL Staudenmayer, University of Washington
Discussant: W. Cheadle, Louisville, KY
41. Lipoprotein-Bound Endotoxin Exerts an Immunomodulatory Effect on Hepatocytes Through the Lipid A Domain of LPS
F Kasravi, University of California-San Francisco
Discussant: D Fry, Albuquerque, NM
42. Cyclization of a Peptide Based on the LPS-Binding Domain of LALF Reduces LPS Neutralization and Bactericidal Activity
DB Leslie, University of Minnesota
Discussant: C Ogle, Cincinnati, OH
43. Estrogens Protect Red Blood Cells From Shock and Burn-Induced Deformability and Shape Changes
SB Zaets, UMDNJ-New Jersey Medical School
Discussant: H Evans, Charlottesville, VA
44. The Beneficial Role of Statins (Cerivastatin) in Sepsis
MZ Chaudhry, Cork University Hospital
Discussant: C Miller-Graziano, Rochester, NY
45. Safety Profile of Drotrecogin Alfa (Activated) in Surgical Patients Enrolled in Prowess®
DE Fry, University of New Mexico
Discussant: R Sawyer, Charlottesville, VA

POSTER PRESENTATIONS

Location: Hidalgo, Madero, Carranza

- P1. Rate of Elective Cholecystectomy and Incidence of Severe Complications of Gallbladder Disease in Ontario, 1988-2000
DR Urbach, University Health Network, Toronto
- P2. Exposure to LPS Impairs Macrophage (MF) Activation in Response to Gram Position Stimuli
W Heagy, Northwestern University
- P3. LBP-Knockout Mice Have Increased GRO-1 (MIP2) and IL-6 Gene Expression Following Partial Thickness Thermal Injury
L Lahoda, University of Michigan
- P4. IL-6 Predicts Septic Mortality in ND4 Mice and Antibiotics Fail to Rescue Septic Mice with High IL-6
IR Turnbull, Washington University School of Medicine
- P5. Pharmacologic Pre-Conditioning Prevents HL-60 Cell Apoptosis by Disrupting Jun-Kinase Phosphorylation
F Yang, University of California-San Francisco
- P6. Growth Hormone Downregulation of IL-6 and IL-Beta Induced Acute Phase Response in Hepatocytes is Dependent on IGF-1
X Wu, Shriners' Hospitals for Children/University of Cincinnati
- P7. Monotherapy Versus Multi-Drug Therapy for the Treatment of Perforated Appendicitis in Children
EP Nadler, Children's Hospital of Pittsburgh
- P8. Prevention of Wound Infections in Morbidly Obese Patients by Infusion of Antibiotics into the Subcutaneous Space
J Alexander, University of Cincinnati

- P9. Exposure to Gram Negative Bacteria Decreases Central Venous Line's Susceptibility to Gram Positive Infection
JW Hindman, University of Arkansas
- P10. Osmolar Stress Inhibits Human PMN Apoptosis Through Suppression of MCL-1
RL Carnaggio, Denver Health Medical Center
- P11. Oxidant-Induced Priming of the Macrophage Involves Activation of Phosphatidylinositol 3-Kinase (P13-K) and P38 Through a SRC Dependent Pathway
RG Khadaroo, University Health Network, Toronto, Canada
- P12. Gene Expression Profiling of BLP-Induced Tolerization in Human Monocytes
J Coffey, Cork University Hospital
- P13. Selective Cyclooxygenase-2 Inhibition Attenuates Skeletal Muscle Ischemia Reperfusion Injury
JJ Dillon, Cork University Hospital
- P14. Ketamine Attenuates LPS-Induced TNF- α and IL-6 Expression in the Rat
KS Helmer, University of Texas-Houston Medical School
- P15. Lipopolysaccharide and TNF-a Induce Different Gene Expression Patterns in Murine Myeloid Dendritic Cells
PA Efron, University of Florida
- P16. Differential Expression of Nitric Oxide Synthase (NOS) During Endotoxemia: Implications in Gastric Injury
SD West, University of Texas-Houston Medical School
- P17. Stat Activation by Inflammatory Cytokines in Gut Epithelial Cells
CK Ogle, Shriner's Hospitals for Children/University of Cincinnati
- P18. COX-2 Inhibition Attenuates End-Organ Injury in an In Vivo Model of Acute Pancreatitis
GC O'Brien, Cork University Hospital
- P19. Trauma Patient Monocyte (MO's) Dendritic Cell (DC) Defects Corresponds to Altered MO TLR4 Modulation
TK Laudanski, University of Rochester
- P20. Alpha Defensin Component of the Innate Immune Response in Severe Burns
N Namias, University of Miami
- P21. Global Gene Expression Profiles of Stimulated Whole Blood
RJ Freezor, University of Florida
- P22. Surgical Treatment of Spondylodiscitis
CW Schinkel, University of Munich
- P23. Toll-Like Receptor Regulation and Signalling in Kupffer Cells
MK Dahle, Institute for Surgical Research, University of Oslo
- P24. Signal Transduction Pathways in Endothelial Dysfunction
C Wilasrusmee, SUNY Upstate Medical University
- P25. Immune Complex Binding Causes Reversible Size/Shape Change and Decreased Deformability of Erythrocytes
M Kamiyama, New Jersey Health Care System

- P26. The Protective Effect of Glucan in Polymicrobial Sepsis is Not Due to Changes in Circulating Cytokine Levels
TR Ozment-Skelton, East Tennessee State University
- P27. Gene Profiling of Acute Lung Injury Following Sepsis and Visceral Ischemia
DJ Minnich, University of Florida
- P28. Injury-Associated Induction of Two Novel Murine Aids (MAIDS) Virus-Related Retroviral RNAs in the Liver of Mice
K Cho, Shriners' Hospital for Children, Northern CA
- P29. Effects of Glucocorticoids on Nuclear Factor-KAPPAB Activation in Jejunal Mucosa of Endotoxin Shock Mice
X Sun, University of Cincinnati
- P30. Mechanisms of Gram-Positive Experimental Septic Shock In-Vivo
AO Aasen, Institute of Surgical Research, University of Oslo
- P31. Does Fungal Infection Worsen Outcomes From Infection Among Surgical Patients?
MG Hughes, University of Virginia
- P32. Increased Serum Glucan Levels Correlate With Decreased Cytokine Levels in ICU Patients with Infections
A Gonzalez, East Tennessee State University
- P33. Retinoic Acid Increases Survival Following Intra-abdominal Sepsis: A Hepatoprotective Mechanism
T Kurt, Sinai Hospital, Baltimore
- P34. Enhanced Toll-Like Receptor Reactivity after Injury is Associated with Increased Mortality to LPS
TJ Murphy, Brigham and Women's Hospital
- P35. Levamisole Modulates Macrophage Function by Reducing both Pro-Inflammatory and Anti-Inflammatory Cytokine Production
C-J Lo, Changhua Christian Hospital, Taiwan
- P36. Reclassification of Urinary Tract Infections in Critically Ill Trauma Patients. A Time Dependent Analysis
G Bochicchio, RAC Shock Trauma Center, Baltimore
- P37. Increased Soluble L-Selectin Levels Diminish Neutrophil Surface L-Selectin Expression and Attenuate Endotoxin Mediated Oxidative Activity
P Chaudhury, McGill University
- P38. Inadequate Resuscitation Prior to Surgery for Intra-abdominal Sepsis can be Identified with Progressive Tachycardia and Uraemia Using Serial Physiology Scores
GN O'Dair, University Hospital of North Tees-Stockton