ASA ABSTRACTS

A-650  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Chronic Milrinone Reduces the Negative Myocardial Functional
and Metabolic Effects of Nitric Oxide in Dogs James T. Tau, Ph.D.,
M.D.; Mark W. Huang, M.D.; Harvey R. Weiss, Ph.D.; Peter M.
Scholz, M.D., Anesthesiology, Physiology & Biophysics and Surgery, UMDNJ-
Robert Wood Johnson Medical School, New Brunswick, NJ, United
States. Chronic milrinone reduces myocardial effects of nitric oxide
suggesting defects in cGMP system.

A-651  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Preconditioning with Sevoflurane Enhances Calcium Sensitive
after Ischemia in Intact Guinea Pig Hearts Sri Rama S. Varad-
darajan, MD; Hanszmborg An, MD; Enis Novaldijar, MD; David F.
Stowe, MD PhD, Anesthesiology and Physiology, Medical College of Wisco-
sin, Milwaukee, WI, United States. Sevoflurane preconditioning before
ischemia improves contractility and myocyte calcium sensitivity in
intact hearts.

A-652  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Volatile Anesthetics Beneficially Affect bcl-2 to-bax Ratio in Cal-
cium-Overloaded Adult Rat Ventricular Myocytes M. Zangg, MD;
S.A. Shafiq, Ph.D; Maq Siddiqui, Ph.D; Department of Anatomy and
Cell Biology, SUNY, Brooklyn, NY, United States. Volatile anesthetics
increase bcl-2 to bax ratio in calcium-overloaded cardiocytes represent-
ing a new mechanism of apoptotic cardioprotection.

A-653  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)
Adrenergic Stimulation Does Not Induce Apathosis in Adult
Cardiomyocytes Michael Zangg, MD, Elaina Luccinetti, MS, Maq
Siddiqui, PhD; Department of Anatomy and Cell Biology, SUNY,
Brooklyn, NY, United States. Adrenergic stimulation does not in-
duce apoptosis in cardiocytes and thus may serve as perioperative
molecular ventricular assistance.

Experimental Circulation: Emerging Clinical
Issues

A-654  Room 301, 10/17/2000 9:00 AM - 10:30 AM (PD)
Assessment of the Efficacy of External Vest Assist for the Treat-
ment of Acute Heart Failure in Dogs Marc L. Dickstein, M.D.; Mark
Gelfand; Henry Halperin; Michael Weisfeld; Daniel Burkhoff, M.D.,
Anesthesiology, Columbia University, New York, NY, United States.
Cardiac cycle-specific chest compression with a circumthoracic pneu-
matic vest does not improve cardiac output in a canine model of heart
failure.

A-655  Room 301, 10/17/2000 9:00 AM - 10:30 AM (PD)
Tropinon Ic (cTnI) for Diagnosis of Postoperative Myocardial
Infarction (PMI) after Coronary Artery Bypass Graft (CABG)
Surgery with Cardiopulmonary Bypass (CPB) Denis P. Libbe, MD;
Philippie Bizouarn, MD; Jacques Hellas, MD; Odile Delaroche, MD;
Yvronick A. Blandeol, MD, Ass Profess, Anesthesiology, CHU, Nantes,
France. Tropinon Ic did not predict postoperative myocardial infar-
cion in coronary surgery.

A-656  Room 301, 10/17/2000 9:00 AM - 10:30 AM (PD)
Effect of High Thoracic Epidural Anesthesia (TEA) on Global
Left Ventricular (LV) Function in Patients with Coronary Artery
Disease (CAD) Christoph Schmidt, MD, Stefan Wirtz, MD; Hugo Van
Aken, MD, PhD; Thomas Moellboff, MD, PhD; Elmar Berendes, MD,
PhD, Klinik fur Anaesthesiologie, Westfaelische Wilhelms-Univer-
sity Muenster, Munster, NRW, Germany. TEA results in improved LV
function in patients with CAD.

A-657  Room 301, 10/17/2000 9:00 AM - 10:30 AM (PD)
Inhibition of Complement, Neutrophil and Platelet Activation
by an Anti-Factor D Antibody during Extracorporeal Circulation
Paul G. Lobaer, MD; Michael Fung, Ph.D.; Akif Undar, Ph.D.;
Raquel Reyna, R.N.; William K. Vaughn, Ph.D., Anesthesiology, Bay-
lor College of Medicine, Houston, TX, United States. Action of anti-
Factor D mab on alternative pathway activation during ex vivo extra-
corporeal circulation.

A-658  Room 301, 10/17/2000 9:00 AM - 10:30 AM (PD)
Nitric Oxide Gas (NO) Attenuates Sickle Hemoglobin Polymer-
ization, In Vitro C. Alvin Head, M.D.; Pedro Montero-Huerta,
M.D.; Jay X. Tang, Ph.D.; George H. Addona, Ph.D.; Kenneth R.
Bridges, M.D., Anesthesiology and Critical Care, Massachusetts General Hospital,
Boston, MA, United States. Sickle hemoglobin (Hbs) polymerizes with
deoxygenation. Our study demonstrates that nitric oxide gas reduces
Hbs polymerization.

A-659  Room 301, 10/17/2000 9:00 AM - 10:30 AM (PD)
Selective Perfusion and Differential Temperature Management
during Cardiopulmonary Bypass Preserves Regional Blood Flow
in the Spinal Cord Dwight D. Deal, B.S.; Jason C. Vernon, B.S.;
James M. Zboryouski, B.S.; David A. Stump, Ph.D.; David A. Zvara, M.D.,
Anesth. Dept., Wake Forest Univ: Sch of Med., Winston-Salem, NC,
United States. Differential perfusion during CPB results in preserved
blood flow to the spinal cord.

A-660  Room 301, 10/17/2000 9:00 AM - 10:30 AM (PD)
Is Selective Perfusion and Differential Temperature Manage-
dment during Cardiopulmonary Bypass Deleterious to the Kid-
ney? D.D. Deal, B.S.; T. Jones, FRCS; J.C. Vernon, B.S.; M.H. Wall, M.D.;
D.A. Stump, Ph.D., Anesth. Dept., Wake Forest Univ: Sch. of Med.,
Winston-Salem, NC, United States. Selective perfusion and differential
temperature management during CPB is not deleterious to the kidney.

A-661  Room 301, 10/17/2000 9:00 AM - 10:30 AM (PD)
Series Oxygenation Configuration Enhances O2 Delivery W.
Kelly, MD; Y. Xua, MD; R. Harter, MD; J. Ralston, BS, CCP; T. Smith, BS,
CCP, Department of Anesthesiology, The Ohio State University, Co-
lumbus, OH, United States. A study comparing oxygenator efficiency
in a series vs. parallel system. A series configuration is more efficient
at oxygen delivery compared to a single oxygenator or 2 oxygenators in
parallel.

Experimental Circulation: Systemic & Reflex
Circulatory Control

A-662  Room 220–222, 10/17/2000 10:30 AM - 12:00 PM (PD)
Inhaled Isoflurane Inhibits Cardiovascular Responses to Gluta-
mate Microinjection into Nucleus Tractus Solitarius in Unanes-
theitized Decerebrate Rats Kyoung S.K. Chang, MD, PhD; Jong S.
Lee, MD; Don R. Morrow, BS; Michael C. Andresen, PhD, Anesthesiology,
Oregon Health Sciences University, Portland, OR, United States.
Isoflurane may depress baroreflex control of HR by suppressing NTS
glutamate receptors.