

**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. Tse, Ph.D., M.D.; Mark W. Huang, M.D.; Harvey R. Weiss, Ph.D.; Peter M. Scholz, M.D., *Anesthesia, 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 Sensitivity after Ischemia in Intact Guinea Pig Hearts** Srinivasan G. Varadarajan, MD; Jianzong An, MD; Enis Novalija, MD; David F. Stowe, MD PhD, *Anesthesiology and Physiology, Medical College of Wisconsin, 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 Calcium-Overloaded Adult Rat Ventricular Myocytes** M. Zaugg, MD; S.A. Sbaifiq, PhD; Maq Siddiqui, PhD, *Department of Anatomy and Cell Biology, SUNY, Brooklyn, NY, United States.* Volatile anesthetics increase bcl-2-to-bax ratio in calcium-overloaded cardiocytes representing a new mechanism of apoptotic cardioprotection.

**A-653** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
 **$\beta_2$ -Adrenergic Stimulation Does Not Induce Apoptosis in Adult Cardiomyocytes** Michael Zaugg, MD; Eliana Lucchinetti, MS; Maq Siddiqui, PhD, *Department of Anatomy and Cell Biology, SUNY, Brooklyn, NY, United States.*  $\beta_2$ -adrenergic stimulation does not induce 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 Treatment of Acute Heart Failure in Dogs** Marc L. Dickstein, M.D.; Mark Gelfand; Henry Halperin; Michael Weisfeldt; Daniel Burkhoff, M.D., *Anesthesiology, Columbia University, New York, NY, United States.* Cardiac cycle-specific chest compression with a circumthoracic pneumatic 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)  
**Troponin Ic (cTnI) for Diagnosis of Postoperative Myocardial Infarction (PMI) after Coronary Artery Bypass Graft (CABG) Surgery with Cardiopulmonary Bypass (CPB)** Denis P. Labbe, MD; Philippe Bizouarn, MD; Jacques Helias, MD; Odile Delaroche, MD; Yvonnick A. Blanloeil, MD, *Ass Profess, Anesthesiology, CHU, Nantes, France.* Troponin Ic did not predict postoperative myocardial infarction 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 Moellhoff, MD, PhD; Elmar Berendes, MD, PhD, *Klinik fuer Anaesthesiologie, Westfaelische Wilhelms-Universitaet Muenster, Muenster, 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. Loubser, M.D.; Michael Fung, Ph.D.; Akif Undar, Ph.D.; Raquel Reyna, R.N.; William K. Vaughn, Ph.D., *Anesthesiology, Baylor College of Medicine, Houston, TX, United States.* Action of anti-Factor D mab on alternative pathway activation during ex vivo extracorporeal circulation.

**A-658** Room 301, 10/17/2000 9:00 AM - 10:30 AM (PD)  
**Nitric Oxide Gas (NO) Attenuates Sickle Hemoglobin Polymerization, 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., *Anaesthesia 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 to the Spinal Cord** Dwight D. Deal, B.S.; Jason C. Vernon, B.S.; James M. Zboyouski, 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 Management during Cardiopulmonary Bypass Deleterious to the Kidney?** 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 O<sub>2</sub> Delivery** W. Kelly, MD; Y. Xia, MD; R. Harter, MD; J. Ralston, BS, CCP; T. Smith, BS, CCP, *Department of Anesthesiology, The Ohio State University, Columbus, 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 Glutamate Microinjection into Nucleus Tractus Solitarius in Unanesthetized 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.