

- A-636** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Inhibition of Neutrophil-Endothelium Cascade May Contribute to Cardioprotection by Isoflurane** *Guochang Hu, MD; Agnieszka Piotrowski, MD; M. Ramez Salem, MD; George J. Crystal, PhD, Anesthesiology, IL Masonic Med Ctr & Univ IL Col Med, Chicago, IL, United States.* Isoflurane inhibited production of superoxide by neutrophils, and protected coronary endothelium from neutrophil-induced injury.
- A-637** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**The Level Of PKA Stimulation Does Not Modulate the Sevoflurane Effect on Cardiac Sodium Current** *Kurt M. Klippel, M.D.; Wai-Meng Kwok, Ph.D.; Zeljko J. Bosnjak, Ph.D., Department of Anesthesiology, Medical College of Wisconsin, Milwaukee, WI, United States.* The depression of peak  $I_{Na}$  by sevoflurane is independent of the level of PKA activation.
- A-638** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Intracellular Signal Transduction of Isoflurane Induced Mitochondrial Oxidation, Implications for Preconditioning** *Shinji Kobro, M.D., Ph.D.; Quinn H. Hogan, M.D.; Yuri Nakae, M.D., Ph.D.; Zeljko J. Bosnjak, Ph.D., Anesthesiology, Medical College of Wisconsin, Milwaukee, WI, United States.* Isoflurane-induced flavoprotein oxidation depends on phospholipase C and tyrosine kinase, but not on  $IP_3$ .
- A-639** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Propofol Attenuates  $\beta$ -Adrenoreceptor-Mediated Increases in L-type  $Ca^{2+}$  Current and cAMP Accumulation in Ventricular Myocytes** *Hiroshi Kurokawa, MD; Paul Murray, PhD; Derek Damron, PhD, Anesthesiology Research, Cleveland Clinic Foundation, Cleveland, OH, United States.* Propofol attenuates  $\beta$ -adrenergic signal transduction in cardiac myocytes upstream of adenylyl cyclase.
- A-640** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Inhibition of Apoptosis Is Correlated with Decreased Lethality in Murine Endotoxic Shock** *M. Meisner, MD; P. Daigner, MD; T. Birkern, MD; C. Weiss, MD; K. Reinbart, MD, Department of Anaesthesiology, Univ. of Jena, Jena, Germany.* In this study we investigated the effects of a recently synthesized inhibitor of acidic Sphingomyelinase on lethality and apoptosis in a murine endotoxic shock model.
- A-641** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Blockade of Ischemic Preconditioning by Ketamine is Enantiomer Specific In Vivo** *Jost Mullenbeim, MD; Jan Frassdorf, MD; Benedikt Preckel, MD; Volker Thamer, MD; Wolfgang Schlack, MD, Physiology I, Heinrich-Heine-University, Dusseldorf, Germany.* Ketamine but not S(+)-ketamine blocks ischemic preconditioning in vivo. Thus, the influence of ketamine is enantiomer specific.
- A-642** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Mild Hypothermia Modulates the Effects of Isoproterenol on Cardiac Contraction and  $Ca^{2+}$  Transients** *Yuri Nakae, MD, PhD; Satoshi Fujita, MD, PhD; Noriaki Kanaya, MD, PhD; Shigeyuki Yamada, MD; Akiyoshi Namiki, MD, PhD, Anesthesiology, Sapporo Medical University, Sapporo, Hokkaido, Japan.* Mild hypothermia enhances the effects of isoproterenol on cardiac contraction and  $Ca^{2+}$  transients.
- A-643** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Isoproterenol Inhibits Oxygen Radical Stimulated Transcription of Genes Encoding the Inflammatory Cytokines Tumor Necrosis Factor Alpha (TNF), Interleukin-1 Beta (IL-1), and Interleukin-6 (IL-6) in the Rat Heart** *Walter H. Newman, PhD; Zhongbiao Wang, MD, PhD; Jerry G. Webb, PhD; Manuel R. Castresana, MD, Anesthesiology, Mercer University School of Medicine, Macon, GA, United States*
- A-644** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Cyclosporine Reduces Myocardial Infarction Size in a Rat Model** *Claus Niemann, MD; Uwe Christians, MD, Ph.D.; Haydar Akbari, MD; Leslie Z. Benet, Ph.D.; Maythem Saeed, DVM, Ph.D., Anesthesia, Biopharm.Science, Radiology, University of California, San Francisco, San Francisco, CA, United States.* Our preliminary results demonstrate, that cyclosporine significantly reduces the area of infarct in vivo.
- A-645** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Influences of Acute Normovolemic Hemodilution on Left Ventricular Systolic and Diastolic Function in Dogs** *Junpei Nozaki, M.D.; Hiroshi Kitabata, M.D.; Katsuya Tanaka, M.D.; Akio Iseki, M.D.; Shuzo Osbita, M.D., Anesthesiology, Tokushima University School of Medicine, Tokushima, Japan.* Acute normovolemic hemodilution enhanced left ventricular systolic and diastolic function.
- A-646** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Age-Related Propofol Effects on Myocardial Contraction and Intracellular  $Ca^{2+}$  Dynamics of Isolated Rat Hearts** *Takeshi Oguchi, M.D.; Toshiaki Yamaguchi, M.D.; Satoshi Kashimoto, M.D.; Atsushi Furuya, M.D.; Kenichi Masui, M.D., Anesthesiology, Yamanashi Medical University, Nakakoma, Yamanashi, Japan.* Propofol caused age-related cardiac depression, which is not mediated by a decrease in  $[Ca^{2+}]_i$ .
- A-647** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Inotropic and Electrophysiologic Effects of Azumolene Sodium in Ventricular Myocardium In Vitro** *Wyun Kon Park, MD; Ki Jun Kim, MD, Anesthesiology, Yonsei University College of Medicine, Seoul, Korea.* The direct myocardial depressant action of azumolene seems to be caused partly by inhibition of calcium influx. SR calcium uptake may not be altered.
- A-648** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**A Computer Model of Cardiopulmonary Physiology: Research and Clinical Applications** *Ying Sun, Ph.D.; Ernesto Goldman, M.D.; Yun-Hee Ko, M.S.; Angel R. Viola, M.D.; Ricardo J.M. Puy, M.D., Electrical & Computer Engineering, University of Rhode Island, Kingston, RI, United States.* The study demonstrated a computer model and system identification method to fit clinical hemodynamic data accurately ( $r=0.99$ ).
- A-649** Room D, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Interaction of MCI-154, a Calcium Sensitizer, and Isoflurane on Myocardial Contractility and Hemodynamics in Chronically Instrumented Dogs** *Shunji Takabashi, M.D.; Sungsam Cho, M.D.; Shiro Tomiyasu, M.D.; Koji Sumikawa, M.D., Anesthesiology, Nagasaki Univ. School of Medicine, Nagasaki, Japan.* MCI-154 restores myocardial contractility and enhances coronary vasodilation during isoflurane.