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 Guo Bang Hu, MD; Agnieszka Piotrowska, MD; M. Ramez Salem, MD; George J. Crystal, PhD, Anesthesiology, IL Masonic Med Ctr & Univ Ill 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. Klipfel, 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 Shiji Kobro, M.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 IP3.

A-639  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS) Propofol Attenuates β-Adrenergoreceptor-Mediated Increases in L-type Ca2+ Current and cAMP Accumulation in Ventricular Myocytes Hiromi Kurokawa, MD; Paul Murray, Ph.D; Derek Damron, Ph.D, Anesthesiology Research, Cleveland Clinic Foundation, Cleveland, OH, United States. Propofol attenuates β-adrenergic signal transduction in cardiac myocytes upstream of adenyl 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. Deigner, MD; T. Birkern, MD; G. Weiss, MD; K. Reinbart, MD, Department of Anesthesiology, Univ of Jena, Jena, Germany. In this study we investigated the effects of a recently synthesized inhibitor of acidic Sphingomyelinease 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 Enantio- mer Specific In Vivo Jost Mullenbein, MD; Jan Frassdorf, MD; Benedikt Preckel, MD; Volkmar Thamer, MD; Wolfgang Schlaack, MD, Physiologicky I, Heithrich-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 Ca2+ Transients Yuri Nakae, MD, PhD; Satosbi Fujita, MD, PhD; Noriaki Kanaya, MD, PhD; Shigeo Yamada, MD; Akiyoshi Namiki, MD, PhD, Anesthesiology, Sapporo Medical University, Sapporo, Hokkaido, Japan. Mild hypothermia enhances the effects of isoproterenol on cardiac contraction and Ca2+ 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. Neuman, PhD, Zborg-biao 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 AKBart, MD; Leslie Z. Benet, Ph.D.; Maythem Saeed, DVM, Ph.D, Anesthesiology, 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 Tamaka, M.D.; Akio Ieki, M.D.; Shuzo Oshita, 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 Kasimoto, M.D.; Atsushi Furuaya, M.D.; Kenichi Matui, M.D., Anesthesiology, Yamashita Medical University, Nakakoma, Yamasanashi, Japan. Propofol caused age-related cardiac depression, which is not mediated by a decrease in [Ca2+].

A-647  Room D, 10/16/2000 2:00 PM - 4:00 PM (PS) Inotropic and Electrophysiological 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. Pay, 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 Toyiastu, M.D.; Koji Sumikawa, M.D., Anesthesiology, Nagasaki University School of Medicine, Nagasaki, Japan. MCI-154 restores myocardial contractility and enhances coronary vasodilation during isoflurane.