

**A-608** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Halothane, Enflurane, and Isoflurane (except Sevoflurane) Affect Vascular Tension through Calcium-Activated and Voltage-Sensitive K<sup>+</sup> Channels in Isolated Rabbit Lungs** Renyu Liu; Naoto Okazaki; Yuichi Ishibe; Mayumi Ueda, Department of Anesthesiology, Tottori University Faculty of Medicine, Yonago, Tottori, Japan

**A-609** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Adenoviral Overexpression of a Dominant-Negative IKK $\beta$  Specifically Blocks NF- $\kappa$ B Activation in TNF- $\alpha$  Challenged Vascular Endothelium and Prevents Endothelial Adhesion of Neutrophils under Laminar Flow Conditions** Steffen E. Meiler, M.D.; Robert E. Gerszten, M.D.; Rebecca Hung, M.D.; Takashi Matsui, M.D.; Anthony Rosenzweig, M.D., Anesthesia & Critical Care, Massachusetts General Hospital, Boston, MA, United States

**A-610** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**The Effects of Water-Soluble Etomidate on Hemodynamics and Sympathetic Nerve Activity in Totally Deafferented Rabbits** H. Narita, MD; R. Rajewski, MD; M. McIntosh, MD; K. Iwasawa, MD; H. Goto, MD, Anesth. Univ. of Kansas Med. Ctr., Kansas City, KS, United States. Water soluble etomidate was found to be safer than currently available etomidate as an anesthetic agent for hemodynamically unstable patients.

**A-611** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Isoflurane Attenuates Hypoxic Pulmonary Vasoconstriction by Potentiating  $\beta$  Adrenoreceptor-Mediated Pulmonary Vasodilation** Paul Naughton, MD; Si-Oh Kim, MD; Paul Murray, PhD, Anesthesiology Research, Cleveland Clinic Foundation, Cleveland, OH, United States. Propranolol abolishes the attenuated hypoxic pulmonary vasoconstrictor response during isoflurane anesthesia.

**A-612** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Effects of Hypocapnia and Hypercapnia on Thromboxane A2 Analog-Induced Decrease in Coronary Flow before and after Disruption of Endothelial NOS in the Isolated Guinea Pig Heart** K. Okazaki, MD; M. Endou, MD, Anesth., Yokohama City Univ., Yokohama, Japan. When endothelium is impaired, coronary flow in the presence of a thromboxane A2 analog is lower in hypocapnia than in hypercapnia.

**A-613** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Involvement of Endothelium-Dependent Mechanisms in Phenylephrine-Induced Phasic Contraction of Mesenteric Small Artery in Rat** Kayoko Okazaki, MD; Sumibiko Seki, MD, PhD; Jun-ichi Hattori, MD; Noritsugu Tobse, MD, PhD; Akiyoshi Namiki, MD, PhD, Anesthesiology and Physiology, Sapporo Medical Univ. Sch. of Med., Sapporo, Hokkaido, Japan. PE-induced oscillatory vasoconstriction may be mediated by EDHF.

**A-614** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Myocardial Ischemia Initiates Intracoronary Fibrinolysis** B. Osterlund, MD; S. Haggmark; G. Johansson; H. Seeman-Lodding, MD; B. Biber, Prof., Surgical and Perioperative Science, Umea, Sweden. Brief coronary ligation induces significant increases in net coronary release of tissue-type plasminogen activator, indicating an endothelial profibrinolytic coronary response.

**A-615** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Endothelial Injury Modifies Vascular Response to Halothane** Irene Rozet, MD; Irene Hirsh, MD; Vera Brod, PhD; Haim Bitterman, MD, PhD; Reuven Pizov, MD, Anesthesiology and CCM, Lady Davis Carmel Center, Haifa, Israel. Halothane induced greater vasodilatation on the intact, rather than on the deendothelized carotid artery. There is probably an endothelial mediated effect on the large arteries.

**A-616** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**NO-Dependent Mechanism in Skin Vasodilation in Defervescence** Tomoyo Saito, M.D.; Jun Iwamoto, M.D.; Hideki Matsumoto, M.D.; Hiroshi Iwasaki, M.D., Anesthesiology, Asabikawa Medical College, Asabikawa, Japan. The mechanism for heat dissipation in defervescence was examined in LPS-induced fever in the rabbit. The mechanism underlying defervescence includes active vasodilation possibly mediated by NO.

**A-617** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Effect of Propofol on the Vascular Action of Norepinephrine in Hypertension** Emmanuel Samain, MD, PhD; Adeline Clichet; Helene Bouillier; Jean Marty, MD; Jean-Francois Renaud, PhD, Service of Anesthesiology, Beaujon Hospital, Clichy, France. The inhibition by propofol of norepinephrine effect on aortic rings was observed at lower concentration in hypertensive strain.

**A-618** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Halothane Inhibits Contraction in Resistance Arteries without Affecting Intracellular Calcium Signaling** Isao Tsuneyoshi, MD, PhD; Gail M. Maher, BS; Walter A. Boyle, MD, Department of Anesthesiology, Washington University, St. Louis, MO, United States. Halothane produced vasodilation of high K<sup>+</sup>-contracted small rat mesenteric arteries *in vitro*, without a significant effect on [Ca<sup>2+</sup>]<sub>i</sub>.

**A-619** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Effects of Thiamylal on Adenosine Triphosphate-Sensitive Potassium Channels during Acidosis** Yasuo Tsutsumi, M.D.; Syuzo Osbita, M.D.; Hiroshi Kitabata, M.D.; Takashi Kawano, M.D.; Sakai Yoko, M.D., Department of Anesthesiology, Tokushima University School of Medicine, Tokushima, Japan. Thiamylal inhibits acidotic-induced K<sub>ATP</sub> channel activities.

**A-620** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Thiopental Affects Water Permeability of Aquaporin-1 (AQP1)** J. Voigtlaender; B. Heindl; C. de Wit; B.F. Becker, Inst. of Anesthesiology, University of Munich, Germany. The effects of anesthetics on AQP1 were studied in red blood cells (RBC). Thiopental, but not midazolam and propofol reduced rapid water movement into RBC similar to the AQP1-blocker HgCl<sub>2</sub>.

**A-621** Room D, 10/16/2000 9:00 AM - 11:00 AM (PS)  
**Loss of Heart Rate Variability in Patients Undergoing Osmotic Blood-Brain Barrier Disruption (BBBD)** Yoram G. Weiss, M.D.; Arie Edén-Openheim, M.D.; Charles Weissman, M.D.; Misha Perouansky, M.D., Anesthesiology, Hadassah - Hebrew University School of Medicine, Jerusalem, Israel. BBBD produces a physiologic perturbation reflected by loss of heart rate variability and chaotic behavior.