

**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 Vasoconstriction** *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 A<sub>2</sub> 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., Yokobama City Univ., Yokobama, Japan.* When endothelium is impaired, coronary flow in the presence of a thromboxane A<sub>2</sub> 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. Jobansson; 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 Cliche; 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. Maber, 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, 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.; Arieh Eden-Openbeim, 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.