

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⁺ 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 β Specifically Blocks NF- κ B Activation in TNF- α 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 β 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., Yokobama City Univ., Yokobama, 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. 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⁺-contracted small rat mesenteric arteries *in vitro*, without a significant effect on [Ca²⁺]_i.

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_{ATP} 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 HgCl₂.

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.