

- A-728** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Neurons in Brain Slices Obtained from Ischemic Preconditioned Rats Can Utilize Lactate as Energy Source** *Takaaki Kitano, MD; Kettaro Yoshioka, MD; Naoko Nisimaru, MD; Hideo Iwasaka, MD; Takayuki Noguchi, MD, Department of Anesthesiology, Oita Medical University, Oita, Oita, Japan.* Our results suggest that neurons in pre-stressed brain increase the ability to utilize lactate efficiently.
- A-729** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Effects of Volatile Anesthetics on NMDA Excitotoxicity in Primary Mixed Neuronal/Glial Cultures** *Masaya Kudo, M.D.; Yoonki Lee, M.D.; Gary W. Massey, B.S.; David S. Warner, M.D.; Robert D. Pearlstein, Ph.D., Anesthesiology, Duke University, Durham, NC, United States.* Only modest protection against NMDA excitotoxicity was provided by volatile anesthetics at clinical concentrations in neural culture.
- A-730** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Neuroprotection by Desflurane during Deep Hypothermic Circulatory Arrest** *C. Dean Kurth, M.D.; M. Priestley, M.D.; H.M. Watzman, M.D.; J. McCann, B.S., Anesthesia, The Children's Hospital of Philadelphia, Philadelphia, PA, United States.* Desflurane improves neurologic outcome after deep hypothermic circulatory arrest in newborn pigs.
- A-731** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Spinal Cord Ischemic Injury Induced by Aortic Cross-Clamping: Effect of Tacrolimus (FK506)** *Loic Lang-Lazdunski, MD; Jean Mantz, MD, PhD; Catherine Heurteaux, PhD; Danielle Rouelle, BA; Michel Lazdunski, PhD, DSc, Cardiovascular surgery, Hopital Bicbat, Paris, France.* FK506 afforded significant but only partial neuroprotection in a rat model of spinal cord ischemia induced by aortic cross-clamping.
- A-732** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Dexmedetomidine Protects Against Neonatal Excitotoxic Brain Injury** *Vincent Laudenbach, M.D.; Jean Mantz, M.D., Ph.D.; Philippe Evrard, M.D.; Pierre Gressens, M.D., Ph.D., Laboratory of Developmental Neurology, INSERM E9935, Robert Debre Hospital, Paris, France.* We compared the influence of dexmedetomidine and clonidine on the extent of excitotoxic neonatal brain lesions in a murine model.
- A-733** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Anesthetic Influenced CO<sub>2</sub> Reactivity in a Silicone Embolus Model of Focal Ischemia** *Kathryn K. Lauer, M.D.; Hui Shen, M.D.; Anthony G. Hudetz, B.M.D., Ph.D.; John P. Kampine, M.D., Ph.D., Anesthesiology, Medical College of Wisconsin, Milwaukee, WI, United States.* This study evaluated CO<sub>2</sub>(sub)2/(sub) reactivity acutely, and 2 weeks after a silicone embolus rat stroke model under pentobarbital and isoflurane anesthesia.
- A-734** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Neuroprotective Effect of Low-Dose Lidocaine in a Rat Model of Transient Focal Cerebral Ischemia** *Baiping Lei, MD, PhD; Ira S. Kass, PhD; James E. Cottrell, MD, Department of Anesthesiology, SUNY-HSC at Brooklyn, Brooklyn, NY, United States.* The present study demonstrates that low-dose lidocaine, when given before transient focal cerebral ischemia, significantly reduces infarct size.
- A-735** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Supranormal Hemoglobin Levels Combined with Normal Hematocrit Decrease Cerebral Blood Flow in Rats** *C. Lenz, MD; Th. Frietsch, MD; A. Rebel, MD; W. Kuschinsky, MD; K. Waschke, MD, Dept. of Anesthesia, Fac. Mannheim, Univ. Heidelberg, Mannheim, Germany.* CBF is reduced by 37% when hemoglobin content is raised from 15 to 20 g/dl by blood exchange with erythrocytes suspended in a hemoglobin solution.
- A-736** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**An Inhibitor of 20-HETE Formation Attenuates the Fall in Cerebral Blood Flow Following Subarachnoid Hemorrhage** *Hirotsugu Okamoto, M.D., Ph.D.; Kristopher G. Maier, Ph.D.; David R. Harder, Ph.D.; Richard J. Roman, Ph.D., Physiology, Medical College of Wisconsin, Milwaukee, WI, United States.* 20-HETE, a cytochrome P450 metabolite of arachidonic acid, may contribute to acute cerebral vasospasm following SAH.
- A-737** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Cerebral Blood Flow Sensitivities to CO<sub>2</sub> Determined by Read's Rebreathing Method and the Steady-State Method Are Not Equal** *Jaideep J. Pandit, FRCA; Ravi M. Mohan, PhD; Nicole D. Paterson; Marc J. Poulin, DPbil, Nuffield Department of Anaesthetics, John Radcliffe Hospital, Oxford, Oxon, United Kingdom.* Read's rebreathing method yields a smaller CBF-CO<sub>2</sub> response than the steady-state method.
- A-738** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Effect of Halothane and Sevoflurane on Microvascular Spasm in a Rat Model of Subarachnoid Hemorrhage (SAH)** *Kyung W. Park, MD; Hai B. Dai, MD; Mark E. Comunale, MD; Frank W. Sellke, MD, Anesthesia, Beth Israel Deaconess Medical Center, Boston, MA, United States.* Endothelial dysfunction of rat cortical arterioles after subarachnoid hemorrhage is not worsened by halothane or sevoflurane.
- A-739** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Chromosome Mapping of the Human Homologue of a New Glutamate Receptor Gene Suggests Roles in Neuroprotection and Autism** *Raymond S. Roginski, MD, PhD; Bhaskara K. Mohan Raj, PhD; Scott W. Finkernagel, MS; Leonard J. Sciorra, PhD, Anesthesia, UMDNJ-RW Johnson Medical School, New Brunswick, NJ, United States.* Presence in *humans* means that this gene can have medical relevance.
- A-740** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Comparison of Human and Rat Sequences of a New, Putative Glutamate Receptor Reveals Conserved Elements** *Raymond S. Roginski, MD, PhD; Bhaskara K. Mohan Raj, PhD, Anesthesia, UMDNJ-RW Johnson Medical School, New Brunswick, NJ, United States.* The existence of a conserved *human* form means that this gene may have medical importance. Interspecies conservation of key Glu receptor elements was found.
- A-741** Room E, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Brain Tissue Oxygenation and Cerebral Blood Flow during Hemodilution and Hypoxia** *Phillip G. Schmid, III, MD; Michael M. Todd, MD; Johnny E. Brian, MD; JoAnn Schwarting, Anesthesia, University of Iowa, Iowa City, IA, United States.* Brain tissue oxygenation decreases more during hypoxia than during hemodilution when arterial O<sub>2</sub> contents are decreased to equivalent degree.