A-756  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Presynaptic Calcium Channels Coupled to Glutamate Release Are Less Sensitive than Sodium Channels to Isoflurane or Propofol  Hugh C. Hommedah, Jr, MD,PhD; Martin L. Birch, BS; Ratnakumar Lingamneni, PhD, Anesthesiology & Pharmacology, Weill Medical College of Cornell University, New York, NY, United States

A-757  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Epidural Lidocaine Decreases End-Tidal Sevoflurane Required to Suppress Level of Consciousness as Measured by the Bispectral Index (BIS)  Peter S. Hodgson, MD; Spencer S. Liu, MD, Anesthesiology, Virginia Mason Medical Center, Seattle, WA, United States.
Epidural lidocaine decreases the sevoflurane needed to suppress level of consciousness as measured by BIS.

A-758  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Nitrous Oxide Induced Met-enkephalin Release Provokes Dopamine Release in Rat Adrenal Medulla Cultured In Vitro  Shin-ichi Hisardama, MD, Phd; Meryn Maze, MB, CCh, FRCP; Toshikazu Hasimoto, MB; Matthew Jones, MB, BS, FRCA; Masahiko Fujimura, MD, Magill Department of Anesthesiology, Melbourne and Westminster Campus, Imperial College of Science, Technology and Medicine, University of London, London, United Kingdom

A-759  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
The Non-Linear EEG Dynamics Increase with Depth of Anesthesia  Christian Jeleazor, MD; Frank Bremer, MD; Helmut Schweidler, M.D.,Ph.D., Department of Anesthesiology, University of Erlangen, Erlangen, Germany.
The non-linear EEG dynamics were studied during different anesthesia states. The frequency of non-linear EEG epochs increases with anesthesia depth, but it remains under 5%.

A-760  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Effects of Convulants and Depressant Barbbiturate Steroidomers on Neuronal Nicotinic Acetylcholine Receptors in Rat CNS Neurons  Y. Kamiya, M.D.; T. Andoh, M.D.; I. Watanabe, M.D.; T. Higashi, M.D.; F. Okusuma, M.D., Anesthesiology, Yokohama City University School of Medicine, Yokohama, Kanagawa, Japan.
Both convulstant and depressant barbiturates equally inhibit neuronal nAChRs in rat CNS neurons.

A-761  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Low Dose Lidocaine Rapidly Inhibits Axonal Transport in Cultured Mouse Dorsal Root Ganglion Neurons  Akifumi Kanai, MD; Hiromi Higumi, MD; Tadaslhi Kowaki, MD; Sumio Hoka, MD, Anesthesiology and Physiology, Kitasato University School of Medicine, Sagamihara, Japan.
Low dose lidocaine decreased axonal transport in DRG neurons due to Ca^{2+} influx and activation of CAM II kinase.

A-762  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Mitochondrial Effects on Ethanol Sensitivity  Ernst-Bernhard Kasper, Ph.D.; Phil G. Morgan, MD; Margaret M. Sedensky, MD, Anesthesiology, Cleveland, OH, United States.
The primary defect of a nematode hypersensitive to anesthetics is a malfunction of Complex I. However, comparing wildtype and mutant the respiratory capacity of Complex I does not correlate to the anesthetic state.

A-763  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Inhibition of nAChRs in rat CNS neurons by halogenated agents correlates with their amnesic effects but not anesthetic effects.

A-764  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Phystostigmine Reverses Unconsciousness during a Steady-State Infusion of Midazolam  Pascal Meuret, MD; Gerard Audibert, MD; Pierre Fiset, MD; Steven Backman, MD; Marie C. Laxenaire, MD, Anesthesia Department, Hopital Central, Nancy, France.
Unconsciousness was associated with a decrease of BIS: 96% to 54%.
Phystostigmine reversed unconsciousness in all 7 subjects (BIS 83%).

A-765  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Site of Action of Propofol on Muscarinic M1 Receptor-Mediated Signaling in Xenopus Oocytes  Yoshisasa Nagose, M.D.; Koji Sumitaka, M.D., Anesthesiology, Nagasaki University School of Medicine, Nagasaki, Japan.
This study clarifies the inhibitory effect and the site of action of propofol on muscarinic M1 receptor-mediated signaling in Xenopus oocytes.

A-766  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Midazolam Does Not Inhibit Implicit Memory Formation in Human Volunteers Not Undergoing Surgery  Anthony N. Passannante, MD; Jason D. Arndt, MA; Elliot L. Hirshman, PhD, Anesthesiology, UNC-Chapel Hill, Chapel Hill, NC, United States.
Midazolam 0.5mg/kg was administered to 48 human volunteers. Explicit and implicit memory was assessed. Midazolam impaired explicit memory and spared implicit memory.

A-767  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Mice with Glycine Receptor Subunit Mutations Are Both Sensitive and Resistant to Enflurane  Joseph J. Quinnan, MD; Leonard L. Firestone, MD; Carolyn Ferguson, B.S.; Kate Jester; Gregg E. Homanics, Ph.D., Dept. of Anes./CCM, U. of Pittsburgh, Pittsburgh, PA.
Glycine receptor mutant mice were more sensitive to enflurane in the LORR assay, but resistant to enflurane in the tail clamp assay.

A-768  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Inhalational Anesthetics Stabilize the Interaction between G-Protein Subunits  Mario J. Rebecchi, Ph.D; John W.oihlcro, B.S.; Donna Miller, B.S.; Rakesh Gupta, M.D., Srinivas N. Poylyada, Ph.D., Anesthesiology, School of Medicine, State University of New York, Stonybrook, NY, United States.
Inhalational anesthetics promote the affinity between the heterotrimeric G-protein subunits.

A-769  Room D, 10/17/2000 9:00 AM - 11:00 AM (PS)
Contribution of Nitric Oxide, Prostaglandins and Epoxyeicosatrienoic Acids to Isoflurane-Induced Cerebral Hyperemia in Mice  Hui Shen, MD; Anthony G. Hudecz, Ph.D; Neil E. Farber, MD; PhD; Richard J. Roman, PhD; John P. Knapoine, MD, PhD, Anesthesiology, Medical College of Wisconsin, Milwaukee, WI, United States.