

- A-913** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Ketamine Reduces the Spinal Sensitization Induced by Chronic Administration of Morphine** *Yumiko Kiribara, DVM; Yoji Saito, MD; Tetsuro Nikai, MD; Toshibiko Nakatani, MD, Dept of Anesthesiology, Shimane Medical University, Izumo, Japan.* Ketamine inhibits the increased behavioral responses to non-noxious and noxious stimuli during repeated morphine administration.
- A-914** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Neonatal Capsaicin Treatment Attenuates Thermal and Mechanical Hyperalgesia in an Animal Model of Postoperative Pain** *Yuji Kozuka, MD; Mikito Kawamata, MD; Rika Sekine, MD; Tomoyuki Kawamata, MD; Akiyoshi Namiki, MD, PhD, Anesthesiology, Sapporo Medical University School of Medicine, Sapporo, Hokkaido, Japan.* C-nociceptors contribute to thermal and mechanical hyperalgesia in incisional pain.
- A-915** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Pain-Related Cerebral Activation Is Enhanced by a Motor Task: An fMRI Study** *Jiro Kurata, MD, PhD; Keith R. Tbulborn, MD, PhD; Ferenc E. Gyulai, MD; Leonard L. Firestone, MD, Anesthesiology/CCM, University of Pittsburgh, PA, United States.* Pain-related cerebral activation induced by Peltier-thermode stimulation on a 3-Tesla MRI scanner was enhanced by a concomitant motor task.
- A-916** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Different Efficacy of Spinal Clonidine (CLO) To Alleviate Mechanical Hyperalgesia (MH) in Postoperative and Neuropathic Pain States** *Patricia M. Lavand'homme, MD, PhD; Nathalie Renier; Marc De Kock, MD, PhD, Anesthesiology, St Luc - UCL, Brussels, Belgium.* Spinal clonidine achieves higher efficacy in relieving hyperalgesia resulting from neuropathic pain than from postoperative pain.
- A-917** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Altered Nociception in GluR2 AMPA Receptor Subunit Knockout Mice** *Takashi Masuyama, MD; Bryce Vissel, PhD; Shelle A. Malkmus, AHT; Stephen F. Heinemann, PhD; Tony L. Yaksh, PhD, Anesthesiology, University of California, San Diego, San Diego, CA, United States.* GluR2 KO induced unique pattern of responses in the facilitated pain model and greater responses in AMPA (IT)-induced agitation.
- A-918** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Fentanyl-Induced Tolerance to the Analgesic Effects of Morphine. Preventive Effect of Ketamine** *Pierre Maurette, MD; Jean-Benoit Corcuff, MD, PhD; Jean-Paul Laulin, PhD; Cyril Rivat, BS; Guy Simonnet, PhD, DAR 3, Hopital Pellegrin, Bordeaux, France.* Fentanyl induces a dose-dependent tolerance to morphine-induced analgesia that is completely prevented by ketamine.
- A-919** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**The Responses of Intracellular Calcium Ion Concentrations in Spinal Dorsal Horn Neurons to Prostaglandin E2 is Mediated through EP1 Receptor Activation** *Yoshito Nakayama, MD; Keiichi Omote, MD; Mikito Kawamata, MD; Akiyoshi Namiki, MD, PhD, Anesthesiology, Sapporo Med. Univ. Sch. of Med., Sapporo, Japan.* The increment of  $[Ca^{2+}]_i$  after perfusing PGE2 was mediated through spinal EP1 receptor.
- A-920** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Intrathecal MK801, an NMDA Antagonist, Potentiates CNQX, an AMPA-Kainate Receptor Antagonist, in a Postoperative Incisional Pain Model in Rats** *Heather A. Nath, M.D.; Andrei M. Rakic, B.S.; Anu Victor, B.S.; Anthony D. Ivankovich, M.D., Department of Anesthesiology, Rush Medical College, Chicago, IL, United States.* NMDA antagonist enhances non-NMDA glutamate antagonist reduction in tactile allodynia.
- A-921** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Effects of Peripheral Administration of a Novel Selective Antagonist for Prostaglandin E Receptor Subtype EP1 in a Postoperative Pain Model** *Keiichi Omote, M.D.; Tomoyuki Kawamata, M.D.; Mikito Kawamata, M.D.; Yoshito Nakayama, M.D.; Akiyoshi Namiki, M.D., Anesthesiology, Sapporo Med Univ Sch of Med, Sapporo, Hokkaido, Japan.* EP1 receptor antagonist inhibits the incision-induced mechanical hyperalgesia.
- A-922** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Effects of a Novel Selective Prostaglandin E2 Receptor Subtype EP4 Agonist on Inflammatory Reaction and Hyperalgesia in Monoarthritis** *Keiichi Omote, M.D.; Tomoyuki Kawamata, M.D.; Mikito Kawamata, M.D.; Yoshito Nakayama, M.D.; Akiyoshi Namiki, M.D., Anesthesiology, Sapporo Med Univ Sch of Med, Sapporo, Hokkaido, Japan.* EP4 agonist inhibits hyperalgesia and inflammation in acute and chronic monoarthritis.
- A-923** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**The Role of Receptor Subtypes in Bradykinin Hyperalgesia in Neuropathic Mice** *Takeshi Ono, MD; Makato Inoue, PhD; Hiroshi Ueda, PhD; Koji Sumikawa, MD, Anesthesiology, Nagasaki University School of Medicine, Nagasaki, Japan.* Neuropathic mice have the hyperalgesia to bradykinin, resulting from the switching of receptor subtypes from bradykinin 2 to bradykinin 1.
- A-924** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Preinjection of Intrathecal Magnesium Sulfate Improves Fentanyl Antinociception in the Rat** *Patricia M. Perry, M.D.; Robert J. McCarthy, Pharm.D.; Jeffrey S. Kroin, PhD; Anthony D. Ivankovich, M.D., Department of Anesthesiology, Rush Medical College, Chicago, IL, United States.* Intrathecal magnesium sulfate enhances the antinociceptive effect of intrathecal fentanyl following bolus administration.
- A-925** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Granulocytes Mediate Endogenous Analgesia in Early Inflammatory Pain** *Heike L. Rittner, MD; Alexander Brack, MD; Halina Machelska-Stein, PhD; Michael Schaefer, MD; Christoph Stein, MD, Klinik fuer Anaesthesiologie, UKBF, Freie Universitaet, Berlin, Germany.* Granulocytes produce opioid peptides including enkephalin and endorphin and can mediate endogenous pain control.
- A-926** Room B, 10/16/2000 2:00 PM - 4:00 PM (PS)  
**Inhibition of Norepinephrine Uptake, Tramadol, an Analgesic, on Norepinephrine Transporter Function in Adrenal Medullary Cells** *Kenichiro Sagata, M.D.; Kouichiro Minami, M.D., PhD; Koji Hara, M.D., PhD; Nobuyuki Yanagibara, PhD; Akio Shigematsu, M.D., PhD, Department of Anesthesiology and Pharmacology, University of Occupational and Environmental Health, Japan.* Tramadol inhibits the NET function.