A-969 Room 310, 10/17/2000 10:30 AM - 12:00 PM (PD)
Preoperative Intradermal Acupuncture Reduces Postoperative Pain, Analgesic Requirements, and Sympatho-Adrenal Responses *Naoki Kotani, M.D.; Yutaka Sato, M.D.; Hiroshi Hashimoto, M.D.; Masatoshi Muraoka, M.D.; Akitomo Matsuki, M.D., Anesthesiology, University of Hirosaki, Hirosaki, Aomori-ken, Japan.* Preoperative insertion of intradermal needles is effective for reducing postoperative pain.

A-970 Room 310, 10/17/2000 10:30 AM - 12:00 PM (PD)
Epidural Catheter Length That Can be Threaded without Coiling in Lumbar Epidural Space *Young-Jin Lim, MD; Sang-Chul Lee, MD, Anesthesiology, Seoul National University College of Medicine, Seoul, Korea.* The length of catheter threaded into lumbar epidural space without coiling was measured using fluoroscopy. It was 2.8 cm (median), and varied from 1.0 to 8.0 cm.

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A-971 Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Chronic Opioid Administration Alters Pain Thresholds in a Rat Model of Incisional Pain *David J. Clark, M.D./Ph.D.; Xiangqi Li, M.D., Anesthesiology, Stanford University, Palo Alto, CA, United States.* These studies examine the effect of chronic opioid use on post-procedural pain in a model of incisional pain. Chronic opioid use is correlated with increased post-procedural hyperalgesia and allodynia.

A-972 Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Evidence of the Involvement of cGMP-Dependent Protein Kinase I α in Spinal Processing of Nociceptive Information *Yuan-Xiang Tao, Ph.D., M.D.; Roger A. Johns, M.D.; Aalya Hassan; Elie Haddad, M.D., Department of Anesthesiology and Critical Care Medicine, Johns Hopkins University School of Medicine, Baltimore, MD, United States.* cGMP-dependent protein kinase Iα is involved in pain processing.

A-973 Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Cannabinoids Reduce Morphine-Induced Emesis in Ferrets *Isabelle I. Simoneau, M.D.; Maged Hamza, M.D.; Heriberto P. Mata, B.S.; Frank Porrecca, Ph.D; T. Philip Malan, Jr., M.D.,Ph.D, Department of Anesthesiology, University of Arizona, Tucson, AZ, United States.* The mixed CB1/CB2 cannabinoid receptor agonist, WIN 55212-2, dose-dependently prevents retching and vomiting induced by morphine.

A-974 Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Role of NOS Isoforms on the Modulation of Pain and Associated Cardiovascular Effects in the Rat Formalin Test *Marie-Francoise Doursout, Ph.D.; Yangyan Liang; Jacques E. Chelly, M.D., Ph.D., MB, Anesthesiology, University of Texas Medical School, Houston, TX, United States.* Our data provide direct evidence of the involvement of cNOS and iNOS in nociceptive behaviors in the rat formalin test.

A-975 Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Intracerebroventricular Morphine Evokes GABA Release through Activation of 5-HT3 Receptor in the Spinal Cord *Tomoyuki Kawamata, MD; Keiichi Omote, MD; Masaki Toriyabe, MD; Mikito Kawamata, MD; Akiyoshi Namiki, MD, Anesthesiology, Sapporo Medical University School of Medicine, Sapporo, Hokkaido, Japan.* I.c.v. morphine evokes spinal GABA release via the activation of spinal 5-HT3 receptors.

A-976 Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Efficacy of Spinal Cyclooxygenase (COX) Inhibitors and Clonidine Combination to Relieve Postoperative Pain in a Validated Animal Model *Patricia M. Lavand'homme, MD, PhD; Nathalie Renier; Marc De Kock, MD, PhD, Anesthesiology, St Luc Hospital - UCL, Brussels, Belgium.* Spinal selective COX2 inhibitor displays clonidine sparing effect in post-incisional pain.

A-977 Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Effect of Joro Spider Toxin (JSTX) on Primary and Secondary Hyperalgesia after Incision in the Rat *Esther M. Pogatzki, MD; Jan S. Niemeier, BS; Linda S. Sorkin, PhD; Timothy J. Brennan, PhD, MD, Anesthesia, Univ of Iowa, Iowa City, IA, United States.* IT JSTX, an antagonist to Ca2+ permeable AMPA receptors, blocked secondary but not primary punctate hyperalgesia after incision.

A-978 Room 310, 10/17/2000 3:30 PM - 5:00 PM (PD)
Tumor Necrosis Factor α Mediates Spontaneous Activity in Chronically Compressed Dorsal Root Ganglion Neurons in the Rat *Jun-Ming Zhang, M.S.,M.D.; Huiqing Li, M.D.; Sorin J. Brull, M.D., Anesthesiology, University of Arkansas for Medical Sciences, Little Rock, AR, United States.* TNF-α altered firing rate of abnormal activity and action potential characteristics of the injured sensory neuron.

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A-979 Room 301, 10/18/2000 9:00 AM - 10:30 AM (PD)
Calcium Dependence of Low-Dose Local Anesthetic Neurotoxicity *Michael E. Johnson, M.D.,Ph.D.; Cindy B. Ubl, B.S., Anesthesiology, Mayo Medical School, Rochester, MN, United States.* Low dose local anesthetic is neurotoxic after 2-4 hr exposure. Cytoplasmic calcium buffering by BAPTA is not protective. Equipotent bupivacaine is as toxic as lidocaine under these conditions.

A-980 Room 301, 10/18/2000 9:00 AM - 10:30 AM (PD)
Nicorandil, Calcium and Glyceryl Trinitrate - Efficacy in Reversal of Ropivacaine-Induced Cardiotoxicity *Jennifer M. Porter, FFARCSI; Farouk Markos, BSc; H.M. Snow, PhD; George D. Shorten, PhD, Anaesthesia & Intensive Care Medicine, Cork University Hospital, University College Cork, Cork, Ireland.* Calcium chloride was effective in reversing ropivacaine-induced depression of myocardial contractility.

A-981 Room 301, 10/18/2000 9:00 AM - 10:30 AM (PD)
Inhibition of L-Type Ca^{2+} Current by Bupivacaine Enantiomers in Rat Cardiac Myocytes *G. Zapata-Sudo, M.D., Ph.D.; M.M. Trachez, M.D., Ph.D.; R.T. Sudo, M.D., Ph.D.; T.E. Nelson, Ph.D., Dept. of Basic and Clin. Pharmacol., UFRJ, Rio de Janeiro, Brazil.* R(+) and S(-)bupivacaine block L-type calcium current of cardiac myocytes in a dose-dependent manner, by binding to the inactivated state of the channel.

A-982 Room 301, 10/18/2000 9:00 AM - 10:30 AM (PD)
Stereoselective Effects of Ropivacaine on Lysophosphatidate Signaling *Markus W. Hollmann, MD; Andreas Berger, MS; Lars G. Fischer, MD; Marcel E. Durieux, MD, PhD, Department of Anesthesiology, University of Virginia, Charlottesville, VA, United States.* Inhibition of LPA signaling by S(-)ropivacaine is less than that induced by comparable concentrations R(+)ropivacaine, lidocaine or bupivacaine.