ASA ABSTRACTS

A-125  Room 302, 10/17/2000 9:00 AM - 10:30 AM (PD)
The Use of Proteomics to Identify Molecular Markers of Opioid Tolerance Howard B. Gutstein, MD; Heju Zhang, BS, Anesthesiology, UT-MD Anderson Cancer Center, Houston, TX, United States. New proteomic technology permits the a priori identification of molecular markers of opioid tolerance and dependence.

A-126  Room 302, 10/17/2000 9:00 AM - 10:30 AM (PD)
Phosphorylation of p90 Ribosomal S6 Kinase by Mitogen-Activated Protein Kinase in the Signal Transduction Pathway of the μ Opioid Receptor Takehiro Suda, M.D.; Hisatoshi Uga, M.D.; Hiroyuki Minami, M.D.; Kazuhiko Fukuda, M.D., Department of Anesthesiology, Kyoto University Hospital, Kyoto, Japan. p90RSK are phosphorylated by μ opioid receptor activation via PTX-sensitive G-protein and MAPK cascade.

A-127  Room 302, 10/17/2000 9:00 AM - 10:30 AM (PD)
Acute Treatment with Opioids and Stimulants Alter RGS4 mRNA Levels in Rat Brain Gavin B. Bishop, B.S.; Eileen J. Curran; Stanley J. Watson; Huda Akil, Ph.D.; Howard B. Gutstein, M.D., Anesthesiology, M.D. Anderson Cancer Center, Houston, TX, United States. The current study demonstrates RGS4 mRNA is altered by acute treatment of opioids and psychostimulants.

A-128  Room 302, 10/17/2000 9:00 AM - 10:30 AM (PD)
Do Opioids Acutely Activate ERK in Neuronal Cell Lines? Howard B. Gutstein, MD, Anesthesiology, UT-MD Anderson Cancer Center, Houston, TX, United States. The activation of extracellular-signal-related kinase(ERK) by opioids varies in different neuronal cell lines. This suggests that the effects of opioids on neurons depend on the cell types and second messenger molecules present.

A-129  Room 302, 10/17/2000 9:00 AM - 10:30 AM (PD)
Do Propofol and Remifentanil Interact in a Supraadditive Manner? Sven Albrecht, M.D.; Jorg Fechner, M.D.; Harald Ihnken, M.S.C.; Thomas Palmers, M.D.; Helmut Schubert, M.D., Ph.D., Department of Anesthesiology, University of Erlangen-Nuremberg, Erlangen, Germany. From a clinical point of view propofol and remifentanil as measured by the EEG median frequency show an additive type of pharmacodynamic interaction.

A-130  Room 302, 10/17/2000 9:00 AM - 10:30 AM (PD)
Remifentanil Dose-EEG Bispectral Response during Propofol/Regional Anesthesia Toshiya Kottarostabi, MD; Jay W. Johansen, MD, Ph.D.; Anne M. McKenzie-Brown, MD; Peter S. Sebel, MB,BS,PhD, MBA, Anesthesiology, Emory University, Atlanta, GA, United States. The addition of remifentanil, in an effect size concentration of 0.5 to 10 ng/ml, to a stable propofol anesthetic, decreases BIS in a dose related manner.

A-131  Room 302, 10/17/2000 2:00 PM - 3:30 PM (PD)
Comparative Cardiac Effect of R(+) and S(-) Bupivacaine with S(-) Ropivacaine Roberto T. Sudo, M.D., Ph.D.; Margarite M. Trachtez, M.D., Ph.D.; Gisele Zapata-Sudo, M.D., Ph.D.; Thomas E. Nelson, Ph.D., Dept. of Basic and Clin. Pharmacol., ICB, UFRJ, Rio de Janeiro, Brazil S(-) ropivacaine is less cardiotoxic than racemic, R(+), or S(-) bupivacaine.

A-132  Room 302, 10/17/2000 2:00 PM - 3:30 PM (PD)
Volume Determination of the Thoracolumbar Epidural Space through Magnetic Resonance and Relationship with Anthropometric Parameters Jose Otaño C. Auler, Jr., Charnam; Mauro R. Piazza, Doctor; Carmen N. Bello, Doctor, Anesthesiology Dept., Hospital das Clinicas - FMUSP, Sao Paulo, Sao Paulo, Brazil. EDS volume measure through Magnetic Resonance Image: importance in clinical epidural anesthesia technique.

A-133  Room 302, 10/17/2000 2:00 PM - 3:30 PM (PD)
Block of the Brachial Plexus Branches by the Humeral Route with Ropivacaine 0.75%, Elisabeth Gaertner; Gay Freys; Catherine Cuby; Krassimir Dilorosky; Thierry Pottecher, Anesthesiology, CHU Hautepiere, Strasbourg, France.

A-134  Room 302, 10/17/2000 2:00 PM - 3:30 PM (PD)
Effect of Lidocaine Pretreatment in Preventing the Induction of Acute Necrotizing Pancreatitis in the Rat Mei-Yang Tsou, MD, Ph.D.; Sylvia Cecchore, Ph.D.; Paul Teoton, M.D.; Thomas N. Tajuntski, Ph.D., M.D., Department of Anesthesiology, University of Virginia, Charlottesville, VA, United States. Lidocaine decreases proinflammatory cytokine concentrations in acute necrotizing pancreatitis.

A-135  Room 302, 10/17/2000 2:00 PM - 3:30 PM (PD)
Postoperative Femoral Nerve Block Improves Analgesia, Enhances Rehabilitation, and Reduces Length of Hospital Stay after Total Knee Replacement Hong Wang; Bob R. Doctor; James Verner, Anesthesiology, Henry Ford Hospital, Detroit, MI, United States. Femoral nerve block reduces morphone use, improves analgesia, rehabilitation outcome and reduces length of hospital stay.

A-136  Room 302, 10/17/2000 2:00 PM - 3:30 PM (PD)
How Much Are Na and K Channels Involved in Evoked Cytosolic Ca2+-Transients and Local Anesthetic Effects? Fang Xu, Ph.D; Esperanza Recio-Pinto, Ph.D; Jin Zhang, MD; Thomas J.J. Blanck, MD, Ph.D, Anesthesiology, The Hospital for Special Surgery, New York, NY, United States. A major action of various LAs is to inhibit [Ca2+]cyt-rise in addition to their effects on Na and K channels.

A-137  Room 302, 10/17/2000 2:00 PM - 3:30 PM (PD)
Effects of Ropivacaine on Mitochondrial Energy Metabolism in Left Ventricles of Rats Submitted to Chronic Hypoxia Francois Sztark, MD, Ph.D; Karine Nonette, MD, Monique Malgat, Ph.D; Jean-Pierre Mazat, PhD, Laboratoire d’Anesthesiologie Universite de Bordeaux 2, Bordeaux, France. Chronic hypoxia alters energy metabolism in left ventricle and increases bupivacaine toxicity on mitochondria.

A-138  Room 302, 10/17/2000 2:00 PM - 3:30 PM (PD)
Eicosanoid-Shift Using General and Epidural Anaesthesia Compared to Single General Anaesthesia Anne M. Harks, Dr.; Gerhard Brudier, Dr. Dr.; Hugo Von Aken, Univ.-Prof.; Norbert Senninger, Univ.-Prof.; Guenthier Winde, Prof., General Surgery, University of Muenster, Muenster, Germany. Combined GA + TEA has an influence on the cyclooxygenase- and lipooxygenase-pathway increasing leukotriens and decreasing thromboxanes.