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 Shoda, M.D.; Hisatoshi Uga, M.D.; Hiroyuki Mima, M.D.; Kazuhiko Fukuda, M.D., Department of Anesthesia, Kyoto University Hospital, Kyoto,.* 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 Ihmsen, M.Sc.; Thomas Palmaers, M.D.; Helmut Schwilden, MD, 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 Koitabashi, MD; Jay W. Johansen, MD,PhD; Anne M. McKenzie-Brown, MD; Peter S. Sebel, MB,BS,PhD,MBA, Anesthesiology, Emory University, Atlanta, GA, United States.* The addition of remifentanil, in a effect site concentration of 0.5 to 10 ng/ml, to a stable propofol anesthetic, decreases BIS in a dose related manner.

Anesthetic Action: Local & Regional Anesthesia

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.; Margarete M. Trachez, 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 Otavio C. Auler, Jr., Charmain; Mauro R. Piazza, Doctor; Carmen N. Bello, Doctor, Anesthesia Dept., Hospital das Clinicas - FMUSP, Sao Paulo, Sao Paulo, Brazil.* EPS 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; Guy Freys; Catherine Cuby; Krassimir Dilovsky; Thierry Pottecher, Anesthesiology, CHU Hautepierre, 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-Yung Tsou, MD., Ph.D.; Sylvia Cechova, Ph.D.; Paul Yeaton, M.D.; Thomas N. Pajewski, Ph.D., M.D., Department of Anesthesiology, Health Science Center, University of Virginia, Charlottesville, VA, United States.* Lidocaine decreases pro-inflammatory 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 B. Boctor; James Verner, Anesthesiology, Henry Ford Hospital, Detroit, MI, United States.* Femoral nerve block reduces morphine 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 Ca^{2+}-Transients and Local Anesthetic Effects? *Fang Xu, PhD; Esperanza Recio-Pinto, PhD; Jin Zhang, MD; Thomas J.J. Blanck, MD, PhD, 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 Bupivacaine on Mitochondrial Energy Metabolism in Left Ventricles of Rats Submitted to Chronic Hypoxia *Francois Sztark, MD, PhD; Karine Nouette, MD; Monique Malgat, PhD; 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 Brodner, Dr. Dr.; Hugo Von Aken, Univ.-Prof.; Norbert Senninger, Univ.-Prof.; Guenther Winde, Prof., General Surgery, University of Muenster, Muenster, Germany.* Combined GA+TEA has an influence on the cyclooxygenase- and lipoxygenase-pathway increasing leukotriens and decreasing thromboxanes.