A-1327 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Intravenous Anesthetics Inhibit Capacitative Calcium Entry in Pulmonary Artery Smooth Muscle Cells Izumi Kondo, MD; Satoru Tanaka, MD; Derek Damron, PbD; Paul Murray, PbD, Anesthesiology Research, Cleveland Clinic Foundation, Cleveland, OH, United States. Ketamine and diazepam inhibit capacitative calcium entry in pulmonary artery smooth muscle cells.

A-1328 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Synergistic Effects of Hypoxia and Monocrotaline in Murine Pulmonary Hypertension Geoffrey K. Lighthall, MD, PhD; Ronald G. Pearl, MD, PhD, Anesthesiology, Stanford University, Stanford, CA, United States. The combination of monocrotaline and hypoxia led to RV hypertrophy and altered vascular morphology consistent with pulmonary hypertension—a greater effect than with hypoxia or monocrotaline alone.

A-1329 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Does Sleep Apnea Hypopnea Syndrome Increase the Risks of Difficult Intubation and Extubation? Manjula, M.D.; M. Ramez Salem, M.D.; Natarajan V. Raman, M.D.; Ninos J. Joseph, B.S.; Arthur J. Klowden, M.D., Dept Anesth, Illinois Masonic Med Ctr, Chgo, II, United States. Severe SAHS is likely associated with difficult airway management. Adequate help and equipment should be available during intubation and extubation.

A-1330 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) The Effects of Intravenous Almitrine on PaO2 during One-Lung Ventilation (OLV) Marc Moutafis, MD; Nicolas Dalibon, MD; Ngai Liu, MD; Guy Kuhiman, MD; Marc Fischler, MD, Anesthesiology, Hopital Foch, Suresnes, France. Intravenous almitrine partially prevents the increase in pulmonary shunt and the decrease in PaO2 induced by one-lung ventilation.

A-1331 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Ketamine and Etomidate Inhibit Acetylcholine-Induced Pulmonary Vasorelaxation Koji Ogawa, MD; Satoru Tanaka, MD; Paul Murray, PbD, Anesthesiology Research, Cleveland Clinic Foundation, Cleveland, OH, United States. Ketamine and etomidate inhibit acetylcholine induced pulmonary vasorelaxation by attenuating both the NO-and EDHF-mediated components of the response.

A-1332 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Meta-Analysis of the Effect of Low Dose Volatile Anesthetics on the Ventilatory Response to Hypoxia Jaideep J. Pandit, FRCA, Nuffield Department of Anaesthetics, John Radcliffe Hospital, Oxford, United Kingdom. The meta-analysis suggests that studies differ because anesthetics have different actions on the hypoxic chemoreflex; not because of the different study conditions used.

A-1333 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) The Protective Role of TIMP-1 in a Acid Aspiration Mouse Model Edward T. Plata, DC, MD; Jadwiga D. Helinski, MA; Bruce A. Davidson, BS; Paul Soloway, Pb.D; Paul R. Knight, MD, Ph.D, Anesthesiology, SUNY Buffalo, Buffalo, NY, United States. We disproved our original hypothesis and found that TIMP-1 KO mice are not more vulnerable to lung injury following acid aspiration.

A-1334 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Piglet Diaphragm Function during Prolonged Mechanical Ventilation Peter J. Radell, MD; Sten Remabl, MD,PhD; David G. Nichols, MD; Lars I. Eriksson, MD,PhD, Dept. of Anesthesia and Intensive Care, Karolinska Hospital and Institute, Stockholm, Sweden. Piglet diaphragm contractility and evoked EMG amplitude decreased after 5 days controlled mechanical ventilation.

A-1335 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Isoflurane Potentiates β Adrenoreceptor Mediated Pulmonary Vasorelaxation Ju-Tae Sohn, MD; Paul Murray, PhD, Anesthesiology Research, Cleveland Clinic Foundation, Cleveland, OH, United States. Isoflurane potentiates β adrenoreceptor-mediated pulmonary vasorelaxation via an endothelium-dependent mechanism at a site upstream of adenylyl cyclase in the signaling pathway.

A-1336 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Effects of Hypoxia on EDHF-Mediated and Anandamide-Induced Relaxation in Canine Pulmonary Artery Satoru Tanaka, MD; Koji Ogawa, MD; Paul Murray, PbD, Anesthesiology Research, Cleveland Clinic Foundation, Cleveland, OH, United States. Hypoxia inhibits EDHF-mediated, but not anandamide-induced, relaxation in canine pulmonary artery.

A-1337 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Probenecid Effect on Intracellular cGMP and Isometric Force in Canine Pulmonary Artery Miwa Taniguchi, M.D.; Keith A. Jones, M.D.; David O. Warner, M.D.; William J. Perkins, M.D., Anesthesiology, Mayo Clinic and Foundation, Rochester, MN, United States. cGMP efflux does not play a significant role in regulating intracellular cGMP in canine pulmonary artery following treatment with nitric oxide.

A-1338 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Respiratory Depression by Tramadol: Involvement of Opioid Receptors Luc J. Teppema, PhD; Cees N. Olievier; Albert Daban, MD PhD, Department of Physiology, Leiden University Medical Center, Leiden, Netherlands. Tramadol causes considerable respiratory depression, which is, for at least 50%, due to an action on opioid receptors.

A-1339 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Mapping of Regional Pulmonary PaO₂, PaCO₂ and pH through Mathematical Modeling of Positron Emission Tomography (PET) Data M.F. Vidal Melo, MD, PbD; D.M. Call; R.S. Harris, MD; J.D.H. Layfield; J.G. Venegas, PbD, Anesthesia and Critical Care, Massachusetts General Hospital, Boston, MA, United States. Mathematical modeling is applied to PET estimates of V_A and Q providing images of local blood gases and pH.

A-1340 Room G, 10/17/2000 2:00 PM - 4:00 PM (PS) Effects of Posture and PEEP on Ventilation (V) and Perfusion (Q) Heterogeneity in Sheep Sten M. Walther, MD PbD; Mats J. Johansson, MD; Torun Flateboe; Anne Nicolaysen; Gunnar Nicolaysen, MD PbD, Heart Centre, University Hospital, Linkoping, Sweden. V/Q is more uniform in the prone posture. PEEP (10cmH₂O) reduces V/Q heterogeneity in supine in spite of increased Q heterogeneity.