

A-1355 Room 224-226, 10/16/2000 3:30 PM - 5:00 PM (PD)
The Effect of Non-Smoking Duration on Alveolar Macrophage Function during Anesthesia and Surgery Naoki Kotani, M.D.; Hiroshi Hashimoto, M.D.; Eiji Hashiba, M.D.; Takeshi Kubota, M.D.; Akitomo Matsuki, M.D., *Anesthesiology, University of Hirosaki, Hirosaki, Aomori-ken, Japan.* It takes up to 6-months after stopping cigarette smoking in alveolar macrophage functions to return to normal.

A-1356 Room 224-226, 10/16/2000 3:30 PM - 5:00 PM (PD)
The Role of Inflammatory "Priming" in the Progression of Pulmonary Dysfunction in the Surgical Patient with COPD Edward T. Plata, DC, MD; Stanley F. Fernandez, MD; Jadwiga D. Helinski, MA; Bruce A. Davidson, BS; Paul R. Knight, MD, Ph.D., *Anesthesiology, SUNY Buffalo, Buffalo, NY, United States.* Surgical COPD patients without acute exacerbation demonstrate changes associated with their host antimicrobial defenses.

A-1357 Room 224-226, 10/16/2000 3:30 PM - 5:00 PM (PD)
Hypoxia Increases ICAM-1-Mediated Adherence of Neutrophils to Alveolar Epithelial Cells Caveb Madjdipour, MD; Thomas Pasch, MD; Beatrice Beck-Schimmer, MD, *Institutes of Anesthesiology and Physiology, University of Zurich, Zurich, Switzerland.* This study shows that exposure of alveolar epithelial cells to hypoxia increases ICAM-1-mediated adherence of neutrophils.

A-1358 Room 224-226, 10/16/2000 3:30 PM - 5:00 PM (PD)
Mechanism of Lung Injury during Ischemia: Cleavage and Translocation of Focal Adhesion Proteins in Endothelial Cells E. Heidi Jerome, MD; Stephen X. Yang, MD; Jabar Bhattacharya, Ph. D., *Anesthesiology, Columbia University, New York, NY, United States.* Ischemic injury causes cleavage and increased cytoplasmic amounts of focal adhesion kinase and paxillin in freshly isolated lung endothelial cells.

Respiration: Control of Breathing / Upper Airways

A-1359 Room 220-222, 10/18/2000 2:00 PM - 3:30 PM (PD)
Respiratory Sites of Action of Propofol Albert Daban, MD PhD; Diederik Nieuwenhuijs, MD; Elise Sarton, MD; Luc Teppema, PhD, *Department of Anesthesiology, Leiden University Medical Center, Leiden, Netherlands.* Propofol, already at relatively low doses, affects ventilatory control by an effect on respiratory pathways in the brainstem common to both chemoreflex loops.

A-1360 Room 220-222, 10/18/2000 2:00 PM - 3:30 PM (PD)
Mixed Effects Modeling of the Ventilatory Response to Carbon Dioxide in Humans Thomas Bouillon, MD; Joergen Bruhn, MD; Jean-Louis Griffoul, MSc; Steven L. Shafer, MD; Andreas Hoeft, MD, *Anesthesia, University Hospital Bonn, Bonn, Germany.* Mixed effects modeling of the ventilatory response to CO₂ in humans requires inclusion of an effect site for CO₂ and yields a nonlinear CO₂ response curve.

A-1361 Room 220-222, 10/18/2000 2:00 PM - 3:30 PM (PD)
Opioid Induced Respiratory Depression Is Invariably Associated with Irregularity of Breathing Thomas W. Bouillon, MD; Joergen Bruhn, MD; Heiko Roepcke, MD; Andreas Hoeft, MD, *Anesthesia, Bonn University Hospital, Bonn, Germany.* The "regularity of breathing" measured as quartile coefficient of 20 successive tidal volumes (Qeff20 TV) predicts opioid induced respiratory depression.

A-1362 Room 220-222, 10/18/2000 2:00 PM - 3:30 PM (PD)
Use of Dynamic Negative Airway Pressure (DNAP) to Quantitate Sedative-Induced Upper Airway Obstruction Ronald S. Litman, D.O.; Jennifer Hayes, B.S.; Matthew Basco, B.S.; Peter L. Bailey, M.D.; Denbam S. Ward, M.D., Ph.D., *Anesthesiology, University of Rochester, Rochester, NY, United States.* Dynamic application of negative airway pressure can quantitate a drug's propensity to cause upper airway obstruction.

A-1363 Room 220-222, 10/18/2000 2:00 PM - 3:30 PM (PD)
The Effect of Sevoflurane and Desflurane on Airway Reactivity P.A. Klock, MD; E.G. Czeslick, MD; J.M. Klafka, MD; A. Ovassapian, MD; J. Moss, MD, PhD, *Anesthesia, U. Chicago, Chicago, IL, United States.* This study compares the ability of sevo. (S) and des. to attenuate bucking caused by ETT cuff inflation. At 1.8 MAC both agents prevented bucking. At 1 MAC (S) better attenuated the response to cuff inflation.

A-1364 Room 220-222, 10/18/2000 2:00 PM - 3:30 PM (PD)
Difficult Intubation Is Not Predicted by Mallampati's Criteria in Morbidly Obese Patients Elisabeth Lavaut, MD; Philippe Juvin, MD; Herve Dupont, MD; Monique Demetriou, MD; Jean Marie Desmonts, MD, *Anesth. Dept., Bichat Hospital, Paris, France.* In morbidly obese patients, a high Mallampati score does not predict a poor laryngoscopic vision.

A-1365 Room 220-222, 10/18/2000 2:00 PM - 3:30 PM (PD)
The Protective Effect of Cuff Lubrication Against Pulmonary Aspiration Peter J. Young, FRCA; Anita Patil, FRCA; Alan Haddock, FDS RCS(ed); Mark C. Blunt, FRCA, *Department of Anaesthetics, Queen Elizabeth Hospital, Kings Lynn, Norfolk, United Kingdom.* Tracheal tube cuff lubrication with a water-soluble gel reduces pulmonary aspiration of dye from 83% to 11% (P<0.001) in spontaneously ventilating dental patients.

A-1366 Room 220-222, 10/18/2000 2:00 PM - 3:30 PM (PD)
Tracheal Intubation without Paralysis with Intubating Laryngeal Mask Maurizio Cereda, MD; Lorenzo De Marchi, MD; Federico Villa, MD; Mirco Nacoti, MD; Paolo Maisano, MD, *Anesthesiology, The North Carolina at Chapel Hill, Chapel Hill, NC, United States.* We study the possibility of tracheal intubation without paralysis using Intubating Laryngeal Mask (LMA Fastrach)