Contributors

CONSULTING EDITOR

LEE A. FLEISHER, MD, FACC, FAHA

Robert D. Dripps Professor and Chair of Anesthesiology and Critical Care, Professor of Medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, USA

EDITORS

ATHANASIOS CHALKIAS, MD, MSc, PhD, FESC, FAcadTM, FCP, FESAIC

Assistant Professor, Department of Anesthesiology, Faculty of Medicine, University of Thessaly, Larisa, Greece; Outcomes Research Consortium, Cleveland, Ohio, USA

MARY L. JARZEBOWSKI, MD

Clinical Assistant Professor, Department of Anesthesiology, University of Michigan, Department of Veterans Affairs Ann Arbor Healthcare System, Ann Arbor, Michigan, USA

KATHRYN ROSENBLATT, MD, MHS

Assistant Professor of Anesthesiology and Critical Care Medicine, Departments of Anesthesiology and Critical Care Medicine, and Neurology, Johns Hopkins School of Medicine, Baltimore, Maryland, USA

AUTHORS

PROMISE ARIYO, MD, MPH

Assistant Professor, Johns Hopkins University, Baltimore, Maryland, USA

TALIA K. BEN-JACOB, MD, MSc

Associate Professor, Department of Anesthesiology, Division of Critical Care, Cooper Medical School of Rowan University, Camden, New Jersey, USA

SUZANNE BENNETT, MD, FCCM

Associate Professor, Department of Anesthesiology, University of Cincinnati College of Medicine, Cincinnati, Ohio, USA

ALISHA BHATIA, MD

Assistant Professor, Department of Anesthesiology, Rush University Medical Center, Chicago, Illinois, USA

EDWARD BITTNER, MD, PhD, MSEd, FCCM

Associate Professor of Anesthesia, Harvard Medical School

JASON C. BRAINARD, MD, FCCM

Associate Professor, Department of Anesthesiology, University of Colorado Hospital, Aurora, Colorado, USA

JERRAD BUSINGER, MD

Associate Professor of Anesthesiology and Critical Care, Chief, Division of Anesthesia Critical Care, Fellowship Director, Anesthesia Critical Care, University of Louisville Hospital, Louisville, Kentucky, USA

ATHANASIOS CHALKIAS, MD, MSc, PhD, FESC, FAcadTM, FCP, FESAIC

Assistant Professor, Department of Anesthesiology, Faculty of Medicine, University of Thessaly, Larisa, Greece; Outcomes Research Consortium, Cleveland, Ohio, USA

PINXIA CHEN, MD

Department of Anesthesiology and Critical Care Medicine, St. Luke's University Health Network, Bethlehem, Pennsylvania, USA

CHRISTOPHER CHOI, MD

Assistant Professor, Department of Anesthesiology and Pain Management, The University of Texas Southwestern Medical Center, Dallas, Texas, USA

JARVA CHOW, MD, MS, MPH

Assistant Professor, Department of Anesthesia and Critical Care, University of Chicago, Chicago, Illinois, USA

ELIZABETH K. COTTER, MD, MPH

Assistant Professor, Department of Anesthesiology, Pain and Perioperative Medicine, University of Kansas Medical Center, Kansas City, Kansas, USA

MONICA DA SILVA, MD

Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, Alabama, USA

ALLISON DALTON, MD

Associate Professor, Department of Anesthesia and Critical Care, Section of Critical Care Medicine, University of Chicago, Chicago, Illinois, USA

KRASSIMIR DENCHEV, MD

Clinical Assistant Professor, Department of Anesthesiology, Wayne State University, Pontiac, Michigan, USA

RANJIT DESHPANDE, MD, FCCM, MBBS

Assistant Professor, Department of Anesthesiology, Yale School of Medicine, New Haven, Connecticut, USA

SUHAS DEVANGAM, MD

Department of Anesthesiology, Division of Critical Care, University of Michigan Medical School, Ann Arbor, Michigan, USA

MURTAZA DIWAN, MD

Assistant Professor, Department of Anesthesiology, University of Michigan, Ann Arbor, Michigan, USA

DAVID J. DOUIN. MD

Department of Anesthesiology, University of Colorado School of Medicine, Aurora, Colorado, USA

JENNIFER ELIA, MD

Assistant Professor, Department of Anesthesiology, University of California, Irvine School of Medicine, Orange, California, USA

BABAR FIZA, MD

Department of Anesthesiology, Division of Critical Care Medicine, Emory School of Medicine, Atlanta, Georgia, USA

CARTER M. GALBRAITH, MD

Division of Critical Care Medicine, Department of Anesthesiology and Perioperative Medicine, The University of Alabama at Birmingham, Birmingham, Alabama, USA

LEE GOEDDEL, MD, MPH

Department of Anesthesiology and Critical Care Medicine, Johns Hopkins School of Medicine, Baltimore, Maryland, USA

JONATHAN GOMEZ, MD, MS

Clinical Fellow, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins School of Medicine, Baltimore, Maryland, USA

RACHEL HAMMER, DO

Assistant Professor, Department of Anesthesiology, Emory University, Atlanta, Georgia, USA

CHRISTINA J. HAYHURST, MD

Division of Anesthesiology Critical Care Medicine, Department of Anesthesiology, Vanderbilt University Medical Center, Nashville, Tennessee, USA

MADA F. HELOU, MD

Program Director for Anesthesiology, Associate Professor of Anesthesiology, Critical Care Intensivist, Department of Anesthesiology and Perioperative Medicine, Case Western Reserve University School of Medicine, University Hospitals Cleveland Medical Center, Cleveland, Ohio, USA

ERIN HENNESSEY, MD, MEHP

Clinical Associate Professor, Stanford University

MEGAN HENLEY HICKS, MD

Assistant Professor, Department of Anesthesiology, Wake Forest University School of Medicine, Atrium Health Wake Forest Baptist Medical Center, Winston-Salem, North Carolina, USA

JOSE HUMANEZ, MD

Assistant Professor, Department of Anesthesiology, University of Florida College of Medicine–Jacksonville, Jacksonville, Florida, USA

MARY L. JARZEBOWSKI, MD

Clinical Assistant Professor, Department of Anesthesiology, University of Michigan, Department of Veterans Affairs Ann Arbor Healthcare System, Ann Arbor, Michigan, USA

AALOK K. KACHA, MD, PhD

Associate Professor, Department of Anesthesia and Critical Care, Section of Critical Care Medicine, Department of Surgery, Section of Transplant Surgery, University of Chicago, Chicago, Illinois, USA

KUNAL KARAMCHANDANI, MD, FCCP, FCCM

Associate Professor, Department of Anesthesiology and Pain Management, The University of Texas Southwestern Medical Center, Dallas, Texas, USA

ASHISH K. KHANNA, MD, MS, FCCP, FCCM, FASA

Associate Professor and Vice-Chair for Research, Department of Anesthesiology, Wake Forest University School of Medicine, Atrium Health Wake Forest Baptist, Director Perioperative Outcomes and Informatics Collaborative (POIC), Winston-Salem, North Carolina, USA; Outcomes Research Consortium, Cleveland, Ohio, USA

SARAH KHORSAND, MD, FASA

Assistant Professor, Department of Anesthesiology and Pain Management, The University of Texas Southwestern Medical Center, Dallas Texas, USA

BRENT KIDD, MD

Assistant Professor, Department of Anesthesiology, University of Kansas Medical Center, Kansas City, Kansas, USA

MICHAEL E. KIYATKIN, MD

Assistant Professor, Department of Anesthesiology, Albert Einstein College of Medicine, Montefiore Medical Center, Bronx, New York, USA

JOHN C. KLICK, MD, FCCP, FASE, FCCM

Associate Professor, Department of Anesthesiology, University of Vermont Medical Center, University of Vermont Larner College of Medicine, Burlington, Vermont, USA

RAFAL KOPANCZYK, DO

Assistant Professor, Department of Anesthesiology, The Ohio State University Wexner Medical Center, Columbus, Ohio, USA

ALAN KOVAR, MD

Assistant Professor, Oregon Health Sciences University

SHREYAJIT R. KUMAR, MD

Assistant Professor of Clinical Anesthesiology, Department of Anesthesiology, Weill Cornell Medicine, Department of Anesthesiology, NewYork-Presbyterian Hospital, New York, New York, USA

HOWARD LEE, MD

Department of Anesthesiology, Northwestern University Feinberg School of Medicine, Northwestern Memorial Hospital, Chicago, Illinois, USA

GRETCHEN LEMMINK, MD

Assistant Professor, Department of Anesthesiology, University of Cincinnati College of Medicine, Cincinnati, Ohio, USA

RON LEONG, MD

Clinical Assistant Professor of Anesthesiology, Thomas Jefferson University Hospital, Sidney Kimmel Medial College, Philadelphia, Pennsylvania, USA

CHRISTOPHER MAHROUS, MD

Department of Anesthesiology, Cooper Medical School of Rowan University, Camden, New Jersey, USA

LUCAS MEUCHEL, MD

Fellow, Oregon Health Sciences University

HALEY MIRANDA, MD

Assistant Professor, Department of Anesthesiology, Pain and Perioperative Medicine, University of Kansas Medical Center, Kansas City, Kansas, USA

DOMAGOJ MLADINOV, MD, PhD

Assistant Professor, Department of Anesthesiology, Perioperative and Pain Medicine, Brigham and Women's Hospital, Boston, Massachusetts, USA

FRANK M. O'CONNELL, MD, FACP, FCCP, FCCM

Anesthesiology, Atlanticare Regional Medical Center, Pomona, New Jersey, USA

LOUISA J. PALMER, MBBS

Department of Anesthesiology, Division of Critical Care, Brigham and Women's Hospital, Boston, Maryland, USA

KIMBERLY F. RENGEL, MD

Division of Anesthesiology Critical Care Medicine, Department of Anesthesiology, Vanderbilt University Medical Center, Nashville, Tennessee, USA

KATHRYN ROSENBLATT, MD, MHS

Assistant Professor of Anesthesiology and Critical Care Medicine, Departments of Anesthesiology and Critical Care Medicine, and Neurology, Johns Hopkins School of Medicine, Baltimore, Maryland, USA

VEENA SATYAPRIYA, MD

Assistant Professor, Department of Anesthesiology, The Ohio State University Wexner Medical Center, Columbus, Ohio, USA

MARA A. SERBANESCU. MD

Department of Anesthesiology, Duke University Hospital, Durham, North Carolina, USA

ARCHIT SHARMA, MD, MBA, FASE

Division of Cardiothoracic Anesthesia, Solid Organ Transplant, and Critical Care, Department of Anesthesia, University of Iowa Carver College of Medicine, Iowa City, Iowa, USA

LIANG SHEN, MD, MPH

Assistant Professor of Clinical Anesthesiology, Department of Anesthesiology, Weill Cornell Medical College, New York, New York, USA

SHAHLA SIDDIQUI, MD. MSc. FCCM

Department of Anesthesia, Critical Care and Pain Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, Massachusetts, USA

MATTHEW SIGAKIS, MD

Department of Anesthesiology, Division of Critical Care, University of Michigan Medical School, Ann Arbor, Michigan, USA

JORDAN SISCEL, MD

Assistant Professor, Department of Anesthesiology, University of Kansas Medical Center, Kansas City, Kansas, USA

LAUREN SUTHERLAND, MD

Assistant Professor, Columbia University Irving Medical Center, New York, New York, USA

MADIHA SYED, MD

Assistant Professor of Anesthesiology, Department of Intensive Care and Resuscitation, Anesthesiology Institute, Cleveland Clinic Foundation, Cleveland, Ohio, USA

CHRISTOPHER W. TAM, MD

Assistant Professor of Clinical Anesthesiology, Department of Anesthesiology, Montefiore Medical Center, Bronx, New York, USA

BRANT M. WAGENER, MD, PhD

Divisions of Critical Care Medicine, and Molecular and Translational Biomedicine, Department of Anesthesiology and Perioperative Medicine, The University of Alabama at Birmingham, Birmingham, Alabama, USA

LINDSAY A. WAHL, MD

Department of Anesthesiology, Northwestern University Feinberg School of Medicine, Northwestern Memorial Hospital, Chicago, Illinois, USA

WILLIAM JOHN WALLISCH, MD

Assistant Professor, Department of Anesthesiology, University of Kansas Medical Center, Kansas City, Kansas, USA

MATTHEW A. WARNER, MD

Assistant Professor, Department of Anesthesiology and Perioperative Medicine, Mayo Clinic, Rochester, Minnesota, USA

PEGGY WHITE, MD

Associate Professor, University of Florida

AHMED ZAKY, MD, MSc, MPH, MBA, FASA

Department of Anesthesiology and Perioperative Medicine, University of Alabama at Birmingham, Birmingham, Alabama, USA