

# Contributors

## **CONSULTING EDITOR**

---

### **GREGORY S. MARTIN, MD, MSC**

Professor, Division of Pulmonary, Allergy, Critical Care and Sleep Medicine, Research Director, Emory Critical Care Center, Director, Emory/Georgia Tech Predictive Health Institute, Co-Director, Atlanta Center for Microsystems Engineered Point-of-Care Technologies (ACME POCT), President, Society of Critical Care Medicine, Atlanta, Georgia, USA

## **EDITORS**

---

### **LAUREN R. SORCE, PhD, RN, CPNP-AC/PC, FCCM, FAAN**

Founders Board Nurse Scientist, Associate Director Nursing Research, Ann & Robert H. Lurie Children's Hospital of Chicago, Assistant Professor, Division of Pediatric Critical Care Medicine, Northwestern University Feinberg School of Medicine, Pediatric Critical Care Nurse Practitioner, Chicago, Illinois, USA

### **JOY D. HOWELL, MD, FAAP, FCCM**

Assistant Dean for Diversity and Student Life, Vice Chair for Diversity in Pediatrics, Professor of Clinical Pediatrics, Weill Cornell Medicine, Office of Student Diversity, Department of Pediatrics, Division of Pediatric Critical Care Medicine, New York, New York, USA

## **AUTHORS**

---

### **HIBA ABUELHIJA, MD**

Fellow in Pediatric Critical Care Medicine, Pediatric Critical Care, Hadassah University Medical Center, Hadassah Ein Kerem, Jerusalem, Israel

### **MANZILAT AKANDE, MD, MPH**

Section of Critical Care, Department of Pediatrics, Oklahoma University Health Sciences Center, Oklahoma City, Oklahoma, USA

### **RYAN P. BARBARO, MD, MSC**

Division of Pediatric Critical Care, University of Michigan Medical School, Susan B. Miester Child Health Evaluation and Research Center, University of Michigan, Ann Arbor, Michigan, USA

### **RONALD A. BRONICKI, MD, FCCM, FACC**

Division of Critical Care Medicine, Department of Pediatrics, Baylor College of Medicine, Texas Children's Hospital, Houston, Texas, USA

### **RACHEL CHAPMAN, MD**

Department of Pediatrics, Division of Neonatology, Fetal and Neonatal Institute, Children's Hospital, Department of Pediatrics, Keck School of Medicine of University of Southern California, Los Angeles, California, USA

**PAUL A. CHECCHIA, MD, FCCM, FACC**

Division of Critical Care Medicine, Department of Pediatrics, Baylor College of Medicine, Texas Children's Hospital, Houston, Texas, USA

**THOMAS CONLON, MD**

Division of Critical Care Medicine, Department of Anesthesiology and Critical Care Medicine, Children's Hospital of Philadelphia, University of Pennsylvania, Philadelphia, Pennsylvania, USA

**MARTHA A.Q. CURLEY, PhD, RN, FAAN**

Ruth M. Colket Endowed Chair in Pediatric Nursing, Children's Hospital of Philadelphia, Professor, Department of Family and Community Health, University of Pennsylvania School of Nursing, Professor, Department of Anesthesia and Critical Care Medicine, Perelman School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania, USA

**MARY DAHMER, PhD**

Division of Critical Care, Department of Pediatrics, University of Michigan, Ann Arbor, Michigan, USA

**LISA DELSIGNORE, MD**

Assistant Professor, Tufts University School of Medicine, Division of Pediatric Critical Care, Tufts Children's Hospital, Tufts Medical Center, Boston, Massachusetts, USA

**LESLIE A. DERVAN, MD, MS**

Co-Director, Neurocritical Care Program, Seattle Children's Hospital, Associate Professor, Division of Pediatric Critical Care Medicine, University of Washington, Seattle, Washington, USA

**IVIE ESANGBEDO, MD**

Associate Professor, Division of Pediatric Critical Care, Seattle Children's Hospital, University of Washington School of Medicine, Seattle, Washington, USA

**ERICKA L. FINK, MD, MS**

Department of Critical Care Medicine, UPMC Children's Hospital of Pittsburgh, Pittsburgh, Pennsylvania, USA

**SARAH GINSBURG, MD**

Division of Critical Care Medicine, Department of Pediatrics, The University of Texas Southwestern Medical Center, Dallas, Texas, USA

**KATELIN HOSKINS, PhD, MBE, CRNP**

Assistant Professor of Nursing, University of Pennsylvania School of Nursing, Philadelphia, Pennsylvania, USA

**ROBERT HYSLOP, RN**

Heart Institute, Children's Hospital Colorado, Aurora, Colorado, USA

**SHARON Y. IRVING, PhD, CRNP**, Associate Professor of Pediatric Nursing, Division of Critical Care Medicine, Cincinnati Children's Hospital Medical Center, University of Cincinnati, Cincinnati, Ohio, USA

**AIMEE JENNINGS, CPNP-AC/PC, FCCM**

Division of Critical Care Medicine, Advanced Practice, Seattle Children's Hospital, Seattle, Washington, USA

**CHRISTINE JOYCE, MD**

Department of Pediatrics, Division of Pediatric Critical Care Medicine, Weill Cornell Medicine, New York, New York, USA

**OLIVER KARAM, MD, PhD**

Professor, Department of Pediatrics, Yale School of Medicine, New Haven, Connecticut, USA

**ELINORE J. KAUFMAN, MD, MSHP**

Assistant Professor of Surgery, Division of Traumatology, Surgical Critical Care, and Emergency Surgery, Perelman School of Medicine, University of Pennsylvania, Penn Presbyterian Medical Center, Philadelphia, Pennsylvania, USA

**ROXANNE KIRSCH, MD, MBE**

Division of Cardiac Critical Care, Department of Critical Care Medicine, Clinical Bioethics Associate, Department of Bioethics, The Hospital for Sick Children, Toronto, Ontario, Canada

**ANISHA KSHETRAPAL, MD, MEd**

Assistant Professor, Department of Pediatrics, Division of Emergency Medicine, Ann & Robert H Lurie Children's Hospital of Chicago, Chicago, Illinois, USA

**JOEL K.B. LIM, MBBS, MRCPCH**

Children's Intensive Care Unit, Department of Pediatric Subspecialties, KK Women's and Children's Hospital, Singapore

**GRAEME MACLAREN, MBBS, MSc**

Cardiothoracic Intensive Care Unit, National University Health System, Singapore

**PAULA MAGEE, MD, MPH**

Division of Critical Care Medicine, Department of Pediatrics, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, Illinois, USA

**CANDACE MANNARINO, MD**

Assistant Professor, Department of Pediatrics, Divisions of Cardiology and Critical Care Medicine, Ann & Robert H Lurie Children's Hospital of Chicago, Chicago, Illinois, USA

**JOSEPH C. MANNING, PhD, RN**

Clinical Associate Professor/Charge Nurse, Paediatric Critical Care Outreach, Nottingham Children's Hospital, Nottingham University Hospitals NHS Trust, Queens Medical Centre Campus, Associate Professor/Deputy Director, Centre for Children and Young People Health Research, School of Health Sciences, University of Nottingham, Nottingham, United Kingdom

**MJAYE L. MAZWI, MBChB**

Department of Critical Care Medicine, Division of Cardiology, The Hospital for Sick Children, Toronto, Ontario, Canada

**MARY E. McBRIDE, MD, MEd**

Associate Professor of Pediatrics and Medical Education, Department of Pediatrics, Divisions of Cardiology and Critical Care Medicine, Ann & Robert H Lurie Children's Hospital of Chicago, Chicago, Illinois, USA

**NDIDIAMAKA MUSA, MD**

Professor, Division of Pediatric Critical Care, Seattle Children's Hospital, University of Washington School of Medicine, Seattle, Washington, USA

**CARLIE MYERS, MD, MS**

Instructor, Division of Critical Care Medicine, Cincinnati Children's Hospital Medical Center, University of Cincinnati, Cincinnati, Ohio, USA

**MARIANNE NELLIS, MD, MS**

Associate Professor, Department of Pediatrics, Division of Pediatric Critical Care Medicine, Weill Cornell Medicine, New York, New York, USA

**AKIRA NISHISAKI, MD, MSCE**

Division of Critical Care Medicine, Department of Anesthesiology and Critical Care Medicine, Children's Hospital of Philadelphia, University of Pennsylvania, Philadelphia, Pennsylvania, USA

**JACQUELINE S.M. ONG, MB BChir (Cantab)**

Division of Paediatric Critical Care, Khoo Teck Puat–University Children's Medical Institute, National University Hospital, Department of Paediatrics, Yong Loo Lin School of Medicine, National University of Singapore, Singapore

**JENNA PACHECO, PharmD, BCPPS**

Division of Palliative Care, Tufts Children's Hospital, Tufts Medical Center, Boston, Massachusetts, USA

**ERIN T. PAQUETTE, MD**

Division of Critical Care Medicine, Department of Pediatrics, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, Illinois, USA

**MARGARET PARKER, MD, MCCM**

Department of Pediatrics, Stony Brook University, Easton, Maryland, USA

**MALLORY A. PERRY-EADDY, PhD, RN, CCRN**

Assistant Professor, Department of Pediatrics, University of Connecticut School of Nursing, Storrs, Connecticut, USA; Assistant Professor, Department of Pediatrics, University of Connecticut School of Medicine, Farmington, Connecticut, USA

**BLYTHE E. POLLACK, MSN, CPNP-AC**

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

**MICHELLE RAMIREZ, MD**

Division of Pediatric Critical Care Medicine, Department of Pediatrics, NYU Langone Medical Center, Hassenfeld Children's Hospital, New York, New York, USA

**THERESE S. RICHMOND, PhD, RN, FAAN**

Andrea B. Laporte Professor of Nursing, Associate Dean for Research and Innovation, University of Pennsylvania School of Nursing, Philadelphia, Pennsylvania, USA

**JULIANA ROMANO, MD**

Department of Pediatrics, Division of Pediatric Critical Care Medicine, Weill Cornell Medicine, New York, New York, USA

**SARA ROSS, MD**

Associate Professor, Tufts University School of Medicine, Division of Pediatric Critical Care, Tufts Children's Hospital, Tufts Medical Center, Boston, Massachusetts, USA

**LAZARO N. SANCHEZ-PINTO, MD, MBI, FAMIA**

Department of Pediatrics, Ann and Robert H. Lurie Children's Hospital of Chicago, Northwestern University Feinberg School of Medicine, Chicago, Illinois, USA

**JENNIFER SHENKER, MD**

Fellow in Pediatric Critical Care Medicine, Department of Pediatrics, New York Presbyterian Hospital, Weill Cornell Medicine, New York, New York, USA

**KATHERINE N. SLAIN, DO**

Division of Pediatric Critical Care Medicine, University Hospitals Rainbow Babies & Children's Hospital, Department of Pediatrics, Case Western Reserve University School of Medicine, Cleveland, Ohio, USA

**ANN THOMPSON, MD, MCCM**

Department of Critical Care Medicine, Vice Dean, University of Pittsburgh, Pittsburgh, Pennsylvania, USA

**YUEN LIE TJOENG, MD, MS**

Assistant Professor, Division of Pediatric Critical Care, Seattle Children's Hospital, University of Washington School of Medicine, Seattle, Washington, USA

**MEGAN TOAL, MD**

Department of Pediatrics, Division of Pediatric Critical Care Medicine, Weill Cornell Medicine, New York, New York, USA

**CHANI TRAUBE, MD**

Department of Pediatrics, Weill Cornell Medicine, New York, New York, USA

**TAMARA VESEL, MD**

Clinical Associate Professor of Medicine and Pediatrics, Tufts University School of Medicine, Division of Palliative Care, Tufts Medical Center, Boston, USA

**R. SCOTT WATSON, MD, MPH**

Associate Division Chief, Division of Pediatric Critical Care Medicine, Children's Hospital, Professor, Division of Pediatric Critical Care Medicine, University of Washington, Seattle, Washington, USA

**MARK D. WEBER, RN, CPNP-AC, FCCM**

Division of Critical Care Medicine, Department of Anesthesiology and Critical Care Medicine, Children's Hospital of Philadelphia, University of Pennsylvania, Philadelphia, Pennsylvania, USA

**KIMBERLY WHALEN, RN, MS, CCRN**

Pediatric Intensive Care Unit, Mass General for Children, Boston, Massachusetts, USA

**DEREK WHEELER, MD, MMM, MBA**

Professor, Division of Critical Care, Ann & Robert H. Lurie Children's Hospital of Chicago, Northwestern University Feinberg School of Medicine, Chicago, Illinois, USA

**ERIC WILSTERMAN, MD**

Department of Pediatrics, Division of Pediatric Critical Care Medicine, Weill Cornell Medicine, New York, New York, USA

**PHOEBE YAGER, MD**

Assistant Professor, Harvard Medical School, Pediatric Intensive Care Unit, Mass General for Children, Boston, Massachusetts, USA

**JERRY J. ZIMMERMAN, MD, PHD, FCCM**

Department of Pediatrics, Faculty, Pediatric Critical Care Medicine, Seattle Children's Hospital, Harborview Medical Center, University of Washington, School of Medicine, Seattle Children's Hospital, Seattle, Washington, USA