

# Seminars in

# Respiratory and Critical Care Medicine

# **Editors-in-Chief**

#### Antoni Torres, MD, PhD, FERS, FCCP, ATSF

Professor of Medicine (Pulmonology) Senior Consultant of the Respiratory and Intensive Care Unit Hospital Clinic of Barcelona University of Barcelona CIBERES IDIBAPS Barcelona, Spain

# Nishant Gupta MD, MS

Professor of Medicine Director, Interstitial and Rare Lung Disease Program Division of Pulmonary, Critical Care and Sleep Medicine University of Cincinnati Cincinnati, Ohio

# **Editors Emeriti**

Thomas L. Petty, MD, and Reuben M. Cherniak, MD (1979–1996) Joseph P. Lynch, III, MD (1996–2020)

# **Editorial Board**

# Robert P. Baughman, MD

University of Cincinnati Medical Center Cincinnati, Ohio

# John Belperio, MD

Professor of Medicine
Division of Pulmonary and Critical Care
Medicine, Clinical Immunology, and Allergy
David Geffen School of Medicine at UCLA
Los Angeles, California

# Francesco Blasi, MD

IRCCS Fondazione Ospedale Maggiore Policlinico Cà Granda Milano, Milan, Italy

# Jean Chastre, MD

Groupe Hospitalier, Pitie-Salpetriere Paris, France Ulrich Costabel, MD

Ruhrlandklinik, Essen, Germany

#### E. Wesley Ely, MD

Vanderbilt University School of Medicine VA TN Valley GRECC Nashville, Tennessee

#### Charles Feldman, MD

Charlotte Maxeke Johannesburg Academic Hospital and University of the Witwatersrand, Johannesburg, South Africa

# Allan R. Glanville, MD

St. Vincent's Hospital Darlinghurst, Australia

# Margaret S. Herridge, MD, MSc, FRCPC, MPH

Director of ICU Research Critical Care and Respiratory Medicine University Health Network, University of Toronto, Toronto, Ontario

# James C.M. Ho, MD

Department of Respiratory Medicine University of Hong Kong Department of Medicine Queen Mary Hospital, Hong Kong, SAR

#### Marc Humbert, MD, PhD

Université Paris-Sud, Inserm U999 Service de Pneumologie Hôpital Bicêtre Assistance Publique Hôpitaux de Paris Le Kremlin Bicêtre, France

# Andrew M. Jones, MD

Consultant Physician and Honorary Clinical Chair in Respiratory Medicine Manchester Adult Cystic Fibrosis Centre University Hospitals South Manchester, Manchester, UK

# Mordechai R. Kramer, MD

Pulmonary Institute Rabin Medical Center Beilinson Hospital. Petach Tikya. Israel

# Teofilo L. Lee-Chiong, Jr., MD

Professor of Medicine University of Colorado Division of Pulmonary, Critical Care, and Sleep Medicine Sleep and Behavior Health Sciences Center National Jewish Health Denver, Colorado

# Carlos M. Luna, MD

Hospital de Clínicas Universidad de Buenos Aires Buenos Aires, Argentina

# Richard A. Matthay, MD

Yale University School of Medicine New Haven, Connecticut

#### David L. Paterson, MBBS, FRACP, FRCPA, PhD

University of Queensland Centre for Clinical Research Royal Brisbane and Women's Hospital Campus Brisbane. Australia

# Gordon D. Rubenfeld, MD, MSc, FRCPC

Interdepartmental Division of Critical Care Medicine, University of Toronto Chief, Program in Trauma, Emergency and Critical Care, Sunnybrook Health Sciences Center, Toronto, Ontario

#### Curtis Sessler, MD

Virginia Commonwealth University Health Sciences Center Richmond, Virginia

# Pallav L. Shah, MD

Royal Brompton & Harefield NHS Foundation Trust Royal Brompton Hospital London, UK National Heart & Lung Institute Imperial College, London, UK Chelsea and Westminster Hosital NHS Foundation Trust London, UK

# Victor F. Tapson, MD

Cedars-Sinai Medical Center, Los Angeles, California

# Jean-Louis Teboul, MD

Paris South University, Bicêtre, France

# Jean-Louis Vincent, MD

Erasme Hospital, (Free University of Brussels) Brussels, Belgium

# J. Christian Virchow, MD

Universität Rostock, Rostock, Germany

# Lorraine B. Ware, MD

Vanderbilt University Hospital Nashville, Tennessee

# Tisha Wang, MD

Division of Pulmonary and Critical
Care Medicine, Allergy, and Clinic
Immunology
Clinical Chief, Division of Pulmonary
and Critical Care Medicine
David Geffen School of Medicine at UCLA
Los Angeles, California

Founded by Thomas L. Petty, MD and Reuben M. Cherniak, MD in 1979.

© 2021. Thieme. All rights reserved. Seminars in Respiratory and Critical Care Medicine is published six times a year in February, April, June, August, October, and December by Thieme Medical Publishers, Inc., 333 Seventh Avenue, New York, NY 10001.

Subscription and pricing information in  $\in$ , US\$, and Indian Rupees can be found online at **www.thieme.com/srccm/subscribe**.

Periodicals postage is paid at New York, NY and additional mailing offices. POSTMASTER: send changes of address to Seminars in Respiratory and Critical Care Medicine, Thieme Medical Publishers, Inc., 333 Seventh Avenue, New York, NY 10001. Copies not received will be replaced upon written notification to the Publisher. Notification must be received within three months of issue date for U.S. subscribers, and within four months of issue date outside the United States.

Editorial comments should be sent to **journals@thieme.com**. Articles may be submitted to this journal on an open-access basis. For further information, please send an e-mail to openaccess@thieme.com. The content of this journal is available online at **www.thieme-connect.com/products**. Visit our Web site at **www.thieme.com** and the direct link to this journal at **www.thieme.com/srccm**.

Seminars in Respiratory and Critical Care Medicine is listed in Biological Abstracts, Current Contents/Clinical Medicine, EMBASE, Excerpta Medica, Index Medicus, MEDLINE, Research Alert, Science Citation, Scopus, and Scisearch. Thieme Medical Publishers is a member of the CrossRef initiative.

Advertisers in North and South America contact: Cunningham Associates, 180 Old Tappan Road, Old Tappan, NJ 07675. Advertisers outside The Americas contact: Pharmedia, Anzeigen und Verlagsservice GmbH, Postfach 30 08 80, D-70448 Stuttgart, Germany.





