



Guest Editors

Paolo Palange



Paolo Palange is currently Full Professor of Respiratory Medicine at the Sapienza University of Rome (Rome, Italy) and Head of the Division of Internal Medicine and Pulmonary Medicine, Adult Cystic Fibrosis programme at Policlinico Umberto I Hospital (Rome, Italy). He qualified in Medicine at the Sapienza University School of Medicine and trained in internal medicine pulmonology in Rome and at the Indiana School of Medicine (Indianapolis, IN, USA). His main clinical fields of interest are COPD, cystic fibrosis, idiopathic arterial pulmonary hypertension and asthma.

Paolo Palange is active in research in the field of CPET in respiratory (COPD, idiopathic arterial pulmonary hypertension, cystic fibrosis) and cardiovascular diseases (chronic heart failure). He has had more than 150 original papers published and has contributed to several book chapters. He has also been involved in a number ERS scientific activities, among them all of the European Respiratory Society (ERS) Task Force documents and *ERS Monographs* on cardiopulmonary exercise testing and clinical exercise testing. He has organised several ERS courses on clinical exercise testing. He has also been actively involved in the HERMES (Harmonised Education in Respiratory Medicine for European Specialists) education programme for the ERS.

Paolo Palange was Head of the ERS's Assembly for clinical physiology and integrative biology, and was Chair of the ERS School. He has acted as co-Editor of the first and second editions of the ERS Handbook of Respiratory Medicine and was a recipient of the ERS Educational Award.



Pierantonio Laveneziana

Pierantonio Laveneziana is Pulmonologist and Associate Professor of Physiology at Sorbonne Université and the University Hospital 'Pitié-Salpêtrière' in Paris, France. He is Director of the Dyspnoea and Exercise programme at the Respiratory Department of the University Hospital 'Pitié-Salpêtrière' and at the research unit UMRS 1158 at Sorbonne Université.

Pierantonio Laveneziana gained his medical degree in 2002 and his doctorate in 2012. Since then, he has worked under leaders in the field at the following prominent research laboratories: P. Palange at Sapienza University of Rome, Rome, Italy; G. Scano at the University of Florence, Florence, Italy; D. O'Donnell at Queen's University, Kingston, ON, Canada; U. Jorde at Columbia University, New York, NY, USA; M. Humbert at the National Center for Pulmonary Hypertension, Kremlin Bicêtre, Paris, France; and T. Similowski and C. Straus at Sorbonne Université and the University Hospital 'Pitié-Salpêtrière'. He was the recipient of an Investigator Award from the 5th World Symposium on Pulmonary Hypertension (2013), and a Marie Curie Actions - International Re-integration Grant (2010–2012). From 2014 to 2015, he was Associate Professor of Respiratory Medicine (2014–2015) at the Sorbonne Université and University Hospital 'Pitié-Salpêtrière'.

Pierantonio Laveneziana has served as the Secretary (2011–2014) and Chair (2014–2017) of the Clinical Respiratory Physiology, Exercise and Functional Imaging Group of the European Respiratory Society (ERS). He is currently Secretary of the Clinical Physiology and Sleep Assembly at the ERS. He has acted as both a director and member of several ERS Task Forces.

Pierantonio Laveneziana's research focuses on the pathophysiology, mechanisms and language of dyspnoea as well as the ventilatory, respiratory mechanics and gas exchange responses to exercise and activity limitation in healthy subjects and patients with asthma, COPD, ILD, chronic heart failure, pulmonary hypertension, congenital central hypoventilation syndrome, unexplained dyspnoea and obesity. He is the author of more than 100 papers on these subjects. He is an Associate Editor of the *European Respiratory Review* and a member of the Editorial Boards of the *European Respiratory Journal*, the *Journal of COPD* and more than 20 other peer-reviewed journals.

J. Alberto Neder

J. Alberto Neder is currently Professor of Medicine at Queen's University (Kingston, ON, Canada) and is a staff respirologist at the Kingston Health Sciences Centre (KHSC; Kingston, ON, Canada). He is the Director of the KHSC's Laboratory of Clinical Exercise Physiology and the Laboratory of Pulmonary Function Tests.

J. Alberto Neder has a PhD in Clinical Physiology, which was complemented by post-doctoral experiences at the University of London (London, UK) under B.J. Whipp, and the University of Glasgow (Glasgow, UK), under S.A. Ward.



J. Alberto Neder is a physician scientist with a specific interest in the cardiocirculatory and respiratory interactions that support O₂ transfer from atmospheric air to cell mitochondria. Using physical exercise as a systemic stressor, J. Alberto Neder and his associates have been successful in elucidating the mechanisms and consequences of abnormal O₂ delivery and use in chronic cardiopulmonary diseases. These lines of research have the ultimate goal of developing and testing novel pharmacological and non-pharmacological interventions to improve patient quality of life.

J. Alberto Neder has acted as a senior author on over 200 peer-reviewed papers and has authored many book chapters on respiratory and exercise physiology, pulmonary rehabilitation and integrated care in chronic respiratory diseases. His book *Clinical Exercise Physiology: Theory and Practice* is widely used as a reference text in his home country of Brazil and remains the only Portuguese-language textbook in the field. He has extensive experience in training research personnel from undergraduate to post-doctoral levels.

J. Alberto Nede's clinical and teaching interests include COPD, COPD–heart failure overlap, cardiac and pulmonary rehabilitation, pulmonary hypertension and pulmonary vascular disease, lung function and CPET.

Susan A. Ward



Susan A. Ward gained her DPhil in Physiology from Oxford University (Oxford, UK) in 1974. Following 2 years as a Lecturer in the Department of Physiology at Liverpool University (Liverpool, UK), she moved to the University of California at Los Angeles (CA, USA), becoming Professor of Anesthesiology and Physiology in 1988. She returned to the UK in 1993, first to the Department of Physiology at the University of London's St George's Hospital Medical School (London), then to South Bank University (London) as Chair of Sports Science and, in 1998, to the University of Glasgow (Glasgow) as Director of the Centre for Exercise Science and Medicine. In 2003, she was appointed Chair of Sport and Exercise Science and Head of the School of Sport and Exercise Sciences at the University of Leeds (Leeds, UK), and then Emeritus Professor in 2007. She presently operates a research and educational consultancy.

Susan A. Ward's research interests include the control of ventilation, pulmonary gas exchange and muscle energetics during exercise in health, altered environments and disease, and she has some 170 publications on these topics. She is a Fellow of the American College of Sports Medicine, the European

Respiratory Society (ERS) and, by invitation, the European College of Sports Science.

Susan A. Ward is immediate past Editor-in-Chief of the *European Journal of Applied Physiology*. She previously served as Chair of the Pulmonary Circulation, Gas Exchange and Exercise Group of the ERS. She is a consultant for Xtreme Everest 2 (www.xtreme-everest.co.uk), a collaborative venture between Duke University (Durham, NC, USA) and the University of Southampton (Southampton, UK) and University College London (London, UK).