

EDITOR'S MEMO

Hello, everyone. As we enter December of this year, I would like to take this opportunity to express gratitude to everyone working in healthcare and/or related to someone working in healthcare over the last nine months. This unpredictable, challenging, and life-changing year has affected our work, our homes, and our way of life in ways we are only beginning to realize. Throughout this time, however, all those involved in creating these last issues of *Advances in Pulmonary Hypertension*—the editorial board, guest editors, authors, and participants—have graciously volunteered time above and beyond their “day jobs” and their COVID responsibilities to make these issues successful. Thank you to all of you who have contributed. A special thanks to our incredible Managing Editor, Clarissa Nemeth, who has kept us on track, kept us organized, and kept us moving forward over the last year. Our deep appreciation also extends to Rebecca Aune, who, as PHA's outgoing Director of Quality Care and Research, was phenomenal over the last two years in helping us succeed in every way imaginable and was instrumental in transitioning us from print to online. We are thrilled to welcome Elizabeth Joseloff, PhD, the Vice President, Quality Care & Research, of PHA to *Advances*. Her advice and leadership have been invaluable to all of us and we look forward to the years ahead. All of our appreciation goes to the entire

PHA and all the support over the last year.

This unique issue will have a great impact on our community to the extent in which an issue can make a unique contribution compared with the existing literature in the field. I would like to thank and congratulate Dr Todd Bull, the Guest Editor, for creating this incredible compilation on altitude and pulmonary hypertension (PH).

In the first article of this issue, Drs Christopher Chang and Jeffrey Robinson, both from the Oregon Health and Science University, discuss what we know about high-altitude pulmonary hypertension (HAPH). The authors describe the history behind the discovery and the early investigations into HAPH that we base many of our studies on today.

In the next article, Dr William K. Cornwell III from the University of Colorado and Dr Andrew Lovering from the University of Oregon discuss the cardiovascular and pulmonary physiologic responses to hypoxia and altitude. This outstanding review emphasizes clinically relevant changes that occur both acutely and chronically after going to high-altitude locations.

In our PHPN section, Amanda Schnell Heringer, RN, MS, and Elise Hazlewood, RN, MS, CCNS, walk us through the challenges of traveling at high altitude with PH. They discuss considerations needed regarding precautions, preparations, and altitude testing.

They detail the precautions PH patients need to look out for when traveling by air; go into the preparations (including oxygen) patients should adhere to before traveling; and explain what types of testing are needed prior to going to high altitude. It is an excellent review of the up-to-date recommendations.

Finally, in an extraordinary interview, Dr Bull spoke with Dr Peter Hackett of the Altitude Research Center at the University of Colorado. Dr Hackett is a world-renowned authority on altitude physiology and medicine with an unparalleled career and experience in high-altitude settings. The interview spans not only Dr Hackett's unique career path, but also how this field has unfolded in recent decades. Thank you to both Dr Bull and Dr Hackett for this contribution.

I know you will enjoy and learn so much from this issue of *Advances*. This exceptional issue will serve as a resource to so many regarding the fascinating field of altitude physiology and how it relates to our patient population.

Deborah Jo Levine, MD

Professor of Medicine, Pulmonary and Critical Care
Medical Director Lung Transplantation
Director of Pulmonary Hypertension
University of Texas Health Science Center
San Antonio
San Antonio, TX

GUEST EDITOR'S MEMO

The mountains are calling and I must go—John Muir

Likely for as long as mankind has walked this earth, the lure of the mountains has called to us. The satisfaction and joy of ascending our high peaks are known to many of us, but there is also a cost for climbing too high. This issue of *Advances in Pulmonary Hypertension* reviews some of the fascinating impacts of high altitude on the pulmonary vasculature. A great deal of our current

understanding of pulmonary vascular physiology was derived from early clinical observations of the impact of altitude on the pulmonary arteries and right ventricular function. The ability to study, understand, and then modify these acute and chronic changes remains of great clinical importance as more and more of the population live and recreate at high elevations.

In the ensuing pages, Drs Jeff Robinson and Christopher Chang from the University of Oregon review the

fascinating history of altitude research, taking us from early observations in animals through some of the early human studies which helped to unravel this complex physiology. Dr Andrew Lovering from the University of Oregon and Dr William Cornwell from the University of Colorado review the fascinating impacts of altitude on cardiopulmonary physiology and right ventricular function during exercise.

Amanda Schnell Heringer, RN, MS, and Elsie Hazlewood, MS, CCNS, walk

through some of the important clinical considerations for altitude-related travel in patients with pulmonary hypertension.

Lastly, Dr Peter Hackett takes us on the fascinating journey of his career in high-altitude medicine, reviewing his initial steps down this career path, some harrowing and life-threatening mo-

ments, and personal accomplishments and epiphanies along the way.

We hope the reader will be inspired to look further into this fascinating subject, and perhaps some young investigators starting their careers may discover the opportunities this field of investigation can offer.

Todd Bull, MD

Professor, Medicine–Pulmonary Sciences & Critical Care

Director Center for Lungs and Breathing

Director Pulmonary Vascular Disease Center

University of Colorado School of Medicine

Aurora, CO