

## Exercising Our Resources About PH



The topic of exercise as it relates to pulmonary vascular disease is a critical one. As we all know, most of the symptoms of pulmonary hypertension occur not at rest, but during exertion. Yet, most of what we know about the pathophysiology of pulmonary hypertension is based on resting hemodynamics.

I would like to now provide a shameless plug. In the Pulmonary and Critical Care Unit at Massachusetts General Hospital (MGH), my professional home for the past 9 months, we have a cardiopulmonary exercise laboratory that is, in my humble opinion, without equal. We have the ability to completely describe the cardiovascular and pulmonary pathophysiology of exercise intolerance. Through integrated measurements of hemodynamics, ventilatory equivalents, and cardiac function, the cause of unexplained dyspnea can almost always be determined.

So, when we decided to devote an issue

of *Advances* to exercise and PH, I immediately approached my colleagues, Drs David Systrom and Greg Lewis, Director and Associate Director of the Exercise Physiology Lab at MGH. David and Dr Will Oldham, a Pulmonary and Critical Care Fellow in the combined Harvard program, have written a useful description of the technical aspects of performing exercise physiology studies and provided some case studies in which cardiopulmonary exercise testing was diagnostic.

Greg has contributed a comprehensive review of the topic of exercise induced pulmonary hypertension. Although an elevated pulmonary arterial pressure during exercise has been removed from the definition of pulmonary hypertension, I think you will agree it is still an important finding that deserves further study. Greg's article truly is a state-of-the-art review of the topic.

Two of my good colleagues, Drs Charles Burger of Mayo Clinic Jacksonville and Sonja Bartolome of UT Southwestern, have rounded out this issue by

addressing 2 additional important topics. Charles has written a review of the 6-minute hall walk test. This simple measure of exercise capacity, although not as "cool" as the Level 3 exercise studies described by my MGH colleagues, turns out to be powerful in its own right as an easy to perform and prognostically robust tool.

Finally, Sonja has reviewed the therapeutic effects of exercise and pulmonary rehabilitation in patients with pulmonary hypertension, an area in which our thinking has evolved considerably. We no longer view exercise as "contraindicated" in our patients and, in fact, data are emerging to suggest great benefits to pulmonary rehab in PAH patients.

It was a pleasure editing this issue and I look forward to any feedback you have regarding this or any other topic related to *Advances*.

**Richard Channick, MD**  
Editor-in-Chief

### Watch for Upcoming Issues of *Advances in Pulmonary Hypertension*

**Autumn 2010: Inflammation and Growth Factors in PAH: PHA's 9<sup>th</sup> International Pulmonary Hypertension Scientific Sessions, guest edited by Karen A. Fagan, MD**

**Winter 2011: Ethical Considerations in Pulmonary Hypertension, guest edited by Harrison Farber, MD**

**Spring 2011: WHO Group 2: Pulmonary Hypertension Owing to Left Heart Disease, guest edited by Myung Park, MD**