The Pulmonary Vascular Research Institute and its future

Pulm Circ 2015;5(2):219. DOI: 10.1086/681547.

The Pulmonary Vascular Research Institute (PVRI) has three primary objectives: to improve the care of patients all over the world who suffer from pulmonary vascular disease (PVD), to facilitate and accelerate research in the clinical and basic science of the disease, and to encourage the development of new therapies. As an international organization, we are particularly concerned with improving the care of those living in disadvantaged communities in the developing world. Membership is open to all who work in the field of PVD. We hold two international meetings every year: one is the Annual World Congress on Pulmonary Vascular Disease while the other is concerned with drug discovery and development. Beginning in 2007 in Malta, the annual congress has been held in a different country every year in order to increase awareness of the disease and to facilitate interaction and collaboration across the world. The membership is encouraged to join one or more task forces, a regional task force such as the Latin American or Central Asia Task Force and/or a special-interest task force dealing with, for example, schistosomiasis or right heart failure. This journal, *Pulmonary Circulation*, is our journal, of which we are very proud. We also have an online journal called the *PVRI Chronicle*, which is written and produced by the younger members of the PVRI.

So having been in existence now for 8 years, what have we learned, and how does this experience influence our strategy for the next few years? The PVRI is a democratic organization with a worldwide membership, and the logistics of keeping everyone informed and involved have become more challenging as we have grown from an early membership of about 20 to the present membership of 768. The organization has been strengthened immeasurably by the appointment of a chief executive, Stephanie Barwick, last April, by defining the regulations by which we govern ourselves, and by clarifying the structure of the PVRI (<http://www.pvri.info>). Several of the regional task forces, the Pediatric Task Force, and the young members of the PVRI have been very active, while the productivity of the special-interest task forces has varied considerably.

So what does the future hold for the PVRI? With respect to *improving clinical care in developing countries*, common problems include lack of awareness and a shortage of experience in treating PVD, together with inadequate social and financial resources. The PVRI is in an ideal position to help: (1) The concept of holding PVRI regional master classes in the diagnosis and management of PVD has been welcomed, and the first was held in Bishkek, Kyrgyzstan, in April 2015. The participants came from all Central Asian countries and the teachers from Saudi Arabia and Italy. Saudi Arabia was able to speak from its own recent experience in running master classes and putting together management guidelines for use in less privileged circumstances. Developing countries are often best placed to

advise each other. (2) The PVRI works constantly to keep its program of webinars up to date. (3) Because many clinicians working in isolation have sleepless nights worrying about difficult patients, we propose to create a confidential discussion forum on the PVRI website on which anonymized clinical data can be presented and discussed. (4) Many countries wish to develop clinical networks and to extend networks across borders. This is very challenging, but several members of the PVRI have relevant experience and will help. (5) Education and training are fundamental to improving the care of patients with PVD. Therefore, we propose to create short-term fellowships that will allow a young physician or basic scientist working on PVD to visit another unit, preference of course being given to those from developing countries to visit a more affluent country.

The PVRI is in an ideal position to *facilitate and accelerate research* in both clinical and basic science. We provide a global networking environment where those with similar interests can exchange ideas. People working in remote regions often lack the resources and infrastructure to investigate the most intriguing questions. Collaborating with more fortunate colleagues in other countries can be of great mutual benefit. The collaboration between Brazil, the United Kingdom, and the United States in examining the pathobiology of schistosomiasis provides an excellent example. High-altitude research is another. The Annual Congress and the Drug Discovery and Development Symposium afford the opportunity to meet in person, while electronic communication is more feasible for many, and much depends on the drive and enterprise of the task force leaders.

Encouraging the development of new therapies is extremely difficult. The pathobiology of PVD is complex, knowing the most promising signaling pathway(s) to target therapeutically is hard, the time from concept to bedside is long, and the pharmaceutical industry may be less enthusiastic about investing in drugs that will not have a potential market as large as, say those for cancer or atherosclerosis. We, the PVRI, need to engage with industry and with the regulatory authorities, and indeed, this is the primary purpose of the Drug Discovery and Development Symposium, which has become an annual event involving both parties. Individual members of the PVRI working in laboratories across the world are just coming together to form a new Preclinical Drug Discovery Task Force, which should help progress the field in the years to come.

In summary, the PVRI is poised to lead very significant advances in the care and therapeutic management of patients with PVD. We have an enthusiastic and energetic membership, and, working together over the years, we have the potential to achieve our goals.

Sheila G. Haworth, *President of the Pulmonary Vascular Research Institute*