A Letter from the CPCC Chair
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The Council on Cardiopulmonary, Perioperative and Critical Care has a diverse constituency. Although pulmonary hypertension and regulation of the pulmonary circulation have historically been areas of interest of our council, more broadly our members are focused on basic and translational science and care delivery related to normal integrated cardiopulmonary physiology as well as in disease such as pulmonary hypertension or that require critical care, perioperative care, or emergency cardiovascular care and resuscitation. Thus, we have a number of issues important for advocacy. To coordinate the advocacy efforts of councils and interdisciplinary working groups, the AHA has implemented the Advocacy Ambassador program. Hunter Champion is the ambassador for our council. In that role, Hunter will coordinate advocacy efforts for CPCC and serve as a liaison to this overall AHA advocacy administrative structure. He will be soliciting support from council membership regarding current advocacy issues and initiatives. I encourage you to get involved. Your efforts are particularly important now, as we are facing the prospect of stalled growth in the NIH budget. You can participate locally, through your division or affiliate offices, by joining grassroots advocacy networks such as You’re the Care, and/or by responding to Hunter’s call for participation. Your participation need not take a great deal of your time — but collectively we can make an impact.

In addition to the advocacy ambassador initiative, council leadership will participate in Lobby Day this May in Washington, DC. An important part of this event is the face-to-face meetings with legislators of AHA volunteers, staff and cardiovascular disease/stroke survivors. Our council, as have others, has provided support to allow survivors to attend. At our leadership meeting this past November, we made the commitment to double our monetary contribution to this important effort. Furthermore, we are working with AHA staff to recruit survivors of pulmonary vascular disease to participate in Lobby Day.

On a final note, I would like to mention a few items relating to the AHA Scientific Sessions in Dallas. I want to acknowledge Ken Bloch, the outgoing chair of the CPCC Program Committee, for his work. The programming for fall sessions organized by Ken and co-chair Karl Kern was again superb! Karl will take over the duties as chair of the Program Committee and be joined by co-chair Skip Garcia. Second, I would like to extend congratulations to the finalists for the Cournand and Comroe Young Investigator Award competition this year — all gave excellent presentations that stimulated lively discussion. Finally, I would like to congratulate the four recipients of our CPCC Junior Investigator Travel Awards named below, and to encourage all young investigators to apply for this award next year.

The Cournand and Comroe Young Investigator Prize in Cardiopulmonary and Critical Care was established to recognize the accomplishments of young investigators and to encourage promising investigators to continue with their research in biomedical sciences. Five finalists presented their research findings on Nov. 15, at Scientific Sessions 2005.

The winner of the prize was Dr. James West from the University of Colorado Health Sciences Center in Denver. Dr. West's presentation was titled “Loss of BMPR2 Leads to Increased Cytokines in Transgenic Mouse Lung.” Other authors were Dr. Marloes Hoedt-Miller, Karen Fagan, and David Rodman.

The competition featured truly outstanding presentations representing both the cardiopulmonary and critical care interests of the Council on Cardiopulmonary, Perioperative and Critical Care. Other finalists were:

• Dr. Garvan Kane from the Mayo Foundation, Rochester, Minn. (Kcnj8 Gene Knockout Disrupts Coronary Vasoreactivity Compromising Cardiac Function and Survival in Sepsis),

• Dr. Hemal Patel from The University of California, San Diego (Caveolae and Caveolins Regulate Intracellular Calcium in Idiopathic Pulmonary Arterial Hypertension), and

• Dr. Pieter Vermeersch from the Catholic University of Leuven, Belgium (Soluble Guanylate Cyclase Deficiency Selectively Abolishes NO-Mediated Pulmonary Vasodilation and Increases the Pulmonary Vascular Remodeling Response to Chronic Hypoxia).

Each of the five finalists delivered a superb presentation of their research findings, and deserve our congratulations for their outstanding work.

Applications for the 2006 Cournand and Comroe Young Investigator Prize, to be presented at Scientific Sessions 2006, are encouraged. Candidates must be AHA members (Early Career or Premium Professional) and be working in an area of research related to pulmonary and critical care biology. Candidates should have completed training within the last five years, or be PhDs/MDs in their first five years after faculty appointment. Candidates are required to submit an AHA abstract, as well as an unpublished manuscript based on independent research. Additional supporting information is required, including a curriculum vitae and a statement detailing how much of the design and research work was done by the candidate. The deadline is late May 2006. Additional information about the eligibility and evaluation criteria for this award can be found on the American Heart Association Web site.
CPCC Junior Investigator Travel Stipends encourage junior investigators to participate in council and AHA activities at the Scientific Sessions. Applicants must be members of the AHA/ASA at any level and must be Early Career Investigators or trainees. Four awards were made at Scientific Sessions 2005. Each winner received a $500 travel stipend, as well a complimentary ticket to the CPCC Annual Dinner. We congratulate the winners for 2005:

- **Iyad Ayoub** (Finch University of Medicine and Science)
- **Nesrine El-Bizri** (Stanford University School of Medicine)
- **Georg Hansmann** (Stanford University School of Medicine)
- **Peter Pokreisz** (Catholic University of Leuven, Belgium)

Dr. Marlene Rabinovitch, the Dwight and Vera Dunlevie Professor of Pediatric Cardiology and director of research of the Vera Moulton Wall Center for Pulmonary Vascular Disease at Stanford University School of Medicine.

Dr. Rabinovitch’s lecture focused on how understanding the biology of the vessel wall will lead to new strategies to retard progression and induce regression of pulmonary vascular disease. She spoke on the pivotal role of a serine elastase and demonstrated how mechanisms such as serum factors and MTS1 (a calcium-binding protein found in association with smooth muscle cell migration and proliferation) may increase elastase activity, leading to SMC proliferation.

This figure from Dr. Rabinovitch’s talk summarizes the many growth factors and receptors on smooth muscle cells that conspire to promote proliferation, and some of the factors in endothelial cells that might prevent survival. The good news is that activation of multiple pathways is probably needed to induce disease. Further, Rabinovitch presented data indicating that other factors such as elastin/fibulin, the BMP pathway, and nitric oxide may suppress these growth-promoting pathways through repression of AML1 and activation of PPAR. Missing one of these protective pathways may not be sufficient to induce disease, but activating one or more may be enough to reverse it. She concluded that as we learn more, we hope to have more options to prevent and reverse this devastating disease.