Pedro Cabrales, Ph.D.

Present Position: Assistant Professor, Department of Bioengineering, University of California San Diego, La Jolla, California, United States.

Education: B.S. in Mechanical Engineering, University of Los Andes; Bogotá, Colombia (1997); M.S. in Mechanical Engineering. University of Los Andes; Bogotá, Colombia (1999); Ph.D. in Engineering. University of Los Andes; Bogotá, Colombia (2004); Postdoctoral Fellow, Department of Bioengineering, University of California San Diego, La Jolla, California (2004-2006); Research Scientist, La Jolla Bioengineering Institute, La Jolla, California (2006-2009).

Professional Societies: Microcirculation Society, American Physiological Society, Biomedical Engineering Society, Society for Free Radical Biology and Medicine, American Society for Artificial Internal Organs, International Society on Blood Substitutes, Shock Society.

Funding: NIH/BRP: Bioengineering Design of Artificial Blood (2000-2010), R24 HL64395 to Marcos Intaglietta. Role: Scientist. NIH: Nitric Oxide Protects Against Microcirculatory Complications of Malaria (2007-2011), R01 HL087290 to Leonardo Carvalho. Role: Scientist. NIH: Transfusion Trigger Extension by Plasma Expanders (2006 2011), R01 162354 to Marcos Intaglietta. Role: Subcontract PI.

Honors and Awards: Outstanding Presentation Award, 52nd annual conference American Society for Artificial Internal Organs, Chicago, IL (2006). Young Investigator Award, 11th International Symposium on Blood Substitutes. Beijing, China (2007). Young Investigator Award, 6th Current Issues on Blood Substitute Research. Tokyo, Japan (2008). Young Innovators Fellowship. American Society for Artificial Internal Organs (2009).

Grant Review: Swiss National Science Foundation (2005). Swiss National Science Foundation (2008). US Army Medical Research (2009).

Peer Review: American Journal of Physiology - Heart and Circulatory Physiology; Analytical Biochemistry; Artificial Organs; Biotechnology Progress; Comparative Biochemistry and Physiology; Experimental Physiology; Expert Opinion on Drug Delivery; Intensive Care Medicine; Journal of American Society for Artificial Internal; Journal of Applied Physiology; Journal of Clinical Anesthesia; Life Sciences Journal; Neuroscience Letters; Scandinavian Journal of Clinical & Laboratory Investigation

Current Research Interests: 1) Analysis of the biological action of the simplest molecular gas species crucial for the living process, to determine how this integration results in the regulation of local metabolism; 2) Translation of biological signals into quantitative measurement; 3) mechanical and biochemical regulation of central and peripheral circulation.

Personal Statement: It is a great honor to be nominated to serve the Microcirculatory Society as Councilor, and I am excited at the prospect of participating in this capacity. The Microcirculatory Society has long played a special role championing research and education, and providing a community-based group to enhance the research capabilities of its members. In my view, there are several characteristics that differentiate the Microcirculatory Society from other scientific societies; from the broad backgrounds

of its members, to the specificity of the topics they study. Much more needs to be done before many of mechanisms studied at the microcirculation level are adequately understood, and the Microcirculatory Society provides the best scenario for the synergistic interaction of currently relevant knowledge in the field. I believe that the Microcirculatory Society can be truly successful with the intent of connecting all members and individuals involved, directly and/indirectly, on microcirculation studies, thus creating a space to develop consensus, where all points of view are welcome. Building a stronger Microcirculatory Society community both in the classroom and on the campus; nationally and worldwide is where the future of the society lies. Thank you for the opportunity to be of service.