

Mary D. (Molly) Frame, Ph.D.

Present Position: Associate Professor of Biomedical Engineering (ViceChair), Physiology/Biophysics, Molecular Cardiology Institute, Stony Brook University, NY.

Education: A.B., University of Missouri-Columbia, Biology (1980), Ph.D., University of Missouri-Columbia, Physiology (1990), Post-Doctoral Fellow, University of Rochester, Department of Biophysics (1990-1993).

Professional Societies: American Physiological Society (1990), Fellow (2009); American Heart Association, Circulation (1994); American Association for the Advancement of Science (1990); Biomedical Engineering Society (1999); The Microcirculatory Society (1991).

Honors and Awards: Curator's Scholarship, University of Missouri (1976), American Heart Association, Finalist Melvin L. Marcus Young Investigator Award (1994), McGowen Research Award for contributions to Regenerative Medicine (2004). Fellow, The American Physiological Society (Cardiovascular) (2009), Golden Key Honor Society (2011).

National Funding (current): NIDDK, 2003-2010, and in review; NIEHS, pending; NIAMS, pending.

Grant Review: NIH: (Programs of Excellence for Nanotechnology, 2004), (Modeling and Analysis of Biological Systems, 2005-6), (AED F14, NIBIB, 2007), (NANO, 2010-11), (R25 Education, 2010). AHA: (NE Region, 2003-7); National: Bioeng BSc1, 2007-9; Bioeng BSc2 (coChair 2010; Chair 2011).

Peer Review: American Journal of Physiology, Journal of Applied Physiology, Biological Reviews, Cancer Research, FASEB Journal, Journal of Investigative Dermatology, Journal of Vascular Research, Microcirculation, Microvascular Research, Thrombosis Research.

Professional Activities: Microcirculatory Society (Program Committee, 1996-2000; Membership Committee, 2001-5, Chair, 2002-5; Councilor, 2003-9; Treasurer, 2004-6; Secretary, 2007-9); NIH Working Group, Vascular Biology and Computational Models (2005); Users Executive Committee, Center for Functional Nanomaterials, Brookhaven Natl. Lab. (2004-9, Chair 2006-9); AHA, Unified Peer Panel overseeing Unified Peer Review (2009- present), Founders Affiliate Representative (2011-13).

Current Research Interests:

Our primary research focus is to understand how inflammatory processes affect microvascular flow distribution. We have three translational foci: metabolic disorder, thermal burn injury (and the effect of key treatments), and toxicity of nano-sized metal oxides used in the semi-conductor industry.

Personal Statement:

The Microcirculatory Society has been instrumental in fostering and training many young investigators. Time and devotion by the senior members to this end have developed continuity in ways that larger societies may not have retained. Leadership decisions to increase the numbers of travel awards to the graduate students and postdoctoral fellows has ensured their attendance and participation in the society. Of course, one goal is to increase numbers of active vibrant members. Over the next decade, the MCS will face the challenge of maintaining mentoring and cohesive interactions, while moving to a stronger and larger active membership.