

Frederick J. Schoen, M.D., Ph.D.

Dr. Schoen is Professor of Pathology and Health Sciences and Technology, Harvard Medical School (HMS), and Executive Vice-Chairman, Department of Pathology, Brigham and Women's Hospital (BWH). He received a B.S.E. (Materials and Metallurgical Engineering) from the University of Michigan (1966), a Ph.D. in Materials Science from Cornell University (1970) and an M.D. from the University of Miami School of Medicine (1974). He completed a Surgery internship in Miami, followed by residency in Anatomic Pathology and fellowship in Thoracic and Cardiovascular Pathology at the University of Florida, and joined BWH as Director of Cardiovascular Pathology in 1980.

In an institutional role as BWH liaison to (Site Miner for) the Center for Integration of Medicine and Innovative Technology (CIMIT), and the Boston Biomedical Innovation Center (B-BIC), as well as in related roles at BWH, Dr. Schoen promotes multidisciplinary collaboration, provides leadership toward clinically and cost-effective medical devices and other innovation, and promotes synergy among internal and external activities and resources to sustain and enhance innovation in health care using technology. He also has leadership responsibilities in academic programs (course development, mentoring and career development programs) in the BWH Department of Pathology, at BWH more broadly, HMS/Harvard Catalyst, and the Harvard-MIT Division of Health Sciences and Technology (HST). He is an active teacher/director of courses in Pathology, Cardiovascular Pathology, Biomaterials and Tissue Engineering, Medical Device Development, and mentoring for translational research.

Dr. Schoen's research is in the areas of pathologic studies and development of heart valve substitutes and other cardiovascular prostheses, and cardiovascular tissue engineering. He is author or co-author/editor of over 470 manuscripts in journals and books and authored Interventional and Surgical Cardiovascular Pathology: Clinical Correlations and Basic Principles (1989, co-edited Biomaterials Science: An Introduction to Materials in Medicine (1st Edition 1996, 2nd 2004; 3rd 2012), and co-edited Silver's Cardiovascular Pathology, 3rd Edition (2001). A Past-President of the Society For Biomaterials (SFB), the Society for Cardiovascular Pathology (SCVP), and the International Society for Applied Cardiovascular Biology (ISACB), Dr. Schoen is a Founding Fellow of the American Institute of Medical and Biological Engineering, and has received teaching awards at HMS and HST and the 2015 Senior Faculty Mentor Award, BWHC Center for Faculty Development & Diversity (CFDD). He received the SFB Clemson Award for Applied Biomaterials Research (1990), the SFB Founders (Lifetime Achievement in Biomaterials) Award (1999), the Society for Cardiovascular Pathology Distinguished Achievement Award (2006), and a Distinguished Alumni Award from the Department of Materials Science and Engineering at Cornell University (2011) and the 2015 Society For Biomaterials Technology Innovation and Development Award. In addition to serving currently as Vice-Chair of the Massachusetts Medicolegal Investigations Commission (which oversees the Office of the Chief Medical Examiner) and as a member of the scientific advisory board of the Massachusetts Life Sciences Center, he serves or has served on many national and international academic and governmental advisory committees, grant review committees and editorial boards, and is consultant and scientific advisor to numerous startup and established medical device companies.