

**JOHN P COOKE MD PHD**  
**Professor of Medicine and Associate Director**  
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Dr. Cooke is a Professor in the Division of Cardiovascular Medicine at Stanford University School of Medicine, and Associate Director of the Stanford Cardiovascular Institute. He trained in Cardiovascular Medicine at the Mayo Clinic and obtained a Ph.D. in physiology there. Subsequently, he was recruited to Harvard Medical School as an Assistant Professor of Medicine. In 1990, he was recruited to Stanford University to spearhead the program in Vascular Biology and Medicine.

At Stanford University, Dr. Cooke directs a translational research program in vascular regeneration. The focus is on restoration or stimulation of endothelial functions such as vasodilation and angiogenesis, using small molecules or stem cell therapies. In his 25 years of translational endothelial biology, he first described and characterized the anti-atherogenic effects of endothelium-derived nitric oxide; the anti-angiogenic effect of the NO synthase inhibitor ADMA; the angiogenic pathway mediated by endothelial nicotinic acetylcholine receptors; the role for this pathway in states of pathological angiogenesis; and developed an antagonist of the pathway that is now in Phase II clinical trials. His clinical research group has explored the use of angiogenic agents and adult stem cells in the treatment of peripheral arterial disease. More recently, he has generated and characterized endothelial cells derived from human iPSCs, and explored their role in angiogenesis and vascular regeneration. Recent insights from the laboratory have clarified the role of innate immune signaling in nuclear reprogramming to pluripotency and therapeutic transdifferentiation for vascular disease. Dr. Cooke's program is funded by grants from the National Institutes of Health, the American Heart Association, and industry.

Dr. Cooke has published over 400 research papers, position papers, reviews, book chapters and patents in the arena of vascular medicine and biology. He serves on national and international committees that deal with cardiovascular diseases, including those of the American Heart Association, American College of Cardiology, and the National Heart, Lung and Blood Institute. He has served as President of the Society for Vascular Medicine, as a Director of the American Board of Vascular Medicine, and as an Associate Editor of *Vascular Medicine*.