Dr. Shaw completed his undergraduate training in Bioengineering at Brown University, and medical school (M.D.) training as well as his graduate training and doctorate (Ph.D.) in Biomedical Engineering at Case Western Reserve University. His internship, residency in Internal Medicine, fellowship in Cardiology, and postdoctoral fellowship in the Lily Jan Lab were at the University of California San Francisco (UCSF). He joined the faculty at UCSF Department of Medicine and became an Investigator at UCSF's Cardiovascular Research Institute in 2007. In 2013, he moved to the Smidt Heart Institute at Cedars-Sinai Medical Center and, in 2019, he became Director of the Nora Eccles Harrison Cardiovascular Research and Training Institute (CVRTI) at the University of Utah.

Dr. Shaw's research is focused on basic myocardial biology. His team defined the paradigm of Targeted Delivery which describes how individual heart muscle cells maintain their internal organization, and how the organization is disrupted in the cells of failing hearts. In the course of their studies, his team has identified ("cloned") two proteins that occur in the heart and maintain the metabolic and functional health of heart muscle. These proteins are being explored are first-in-kind biomarkers of failing hearts and as therapeutics to rescue hearts that are already failing.

Dr. Shaw is boarded in Cardiology and Internal Medicine. His clinical interests are general cardiology, heart failure, and heart transplantation. He is holder of the golden stethoscope from UCSF, is a first ballot member of the American Society of Clinical Investigation, and has been continuously funded from the National Institute of Health (NIH) since 2004. He is active on multiple NIH peer review committees including being a standing member of NIH's Cardiac Contractility Hypertrophy and Failure (CCHF) study section.