

Christopher Bunick, MD, PhD

Associate Professor, Department of Dermatology, Yale University School of Medicine

Dr. Christopher Bunick is an associate professor of dermatology and physician-scientist, specializing in general medical dermatology and dermatologic surgery at Yale University School of Medicine's Department of Dermatology. Dr. Bunick provides care for all types of dermatologic conditions at Yale Dermatology Middlebury in CT while leading a National Institutes of Health funded research laboratory.

Dr. Bunick leads a structural biology research program where he performs unique dermatologic research studying the 3-dimensional structures of skin-related proteins using x-ray crystallography and cryo-electron microscopy. The Bunick lab applies biochemistry, structural biology, and cell biology techniques to investigate biological processes of human skin with the goal of tackling scientific questions that can improve clinical care of patients. Dr. Bunick has over 30 years experience in biochemistry and structural biology research. He has received several awards throughout his career, including a Young Investigator Award from the American Academy of Dermatology for his structural biology work in the atopic dermatitis field, specifically on profilaggrin and keratins 1 and 10. His work has been published in multiple medical and scientific journals. Most recently, his research has shed light on mechanisms of action of oral drugs for acne vulgaris and biologic and systemic medications for psoriasis and atopic dermatitis, bringing his work from bench to bedside.

Dr. Bunick received his bachelor's degree from Vanderbilt University and his MD and PhD degrees from Vanderbilt University School of Medicine. As an undergraduate at Vanderbilt University, Dr. Bunick studied filamentous plant viruses, sparking his interest in long, filamentous systems, and leading to his current research on intermediate filaments, particularly keratin function in the human skin barrier. He completed his medical internship, dermatology residency, and a dermatology research fellowship (mentored by Nobel Laureate Dr. Thomas A Steitz) at Yale University School of Medicine.