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Short Biography

Dr. Marks earned his B.S. with Honors in Biological Sciences from Cornell University (Ithaca, NY, USA) and his Ph.D. in Immunology/ Microbiology from Duke University (Durham, NC, USA) under the supervision of National Academy of Sciences member, Peter Cresswell. He completed two post-doctoral fellowships at the National Institutes of Health (Bethesda, MD, USA), first on transcriptional control with Keiko Ozato and then on membrane trafficking and quality control with Juan Bonifacino, before joining the faculty at the University of Pennsylvania in 1995. He joined Children's Hospital of Philadelphia in 2013. Dr. Marks has coauthored over 100 publications, has been continuously funded by the National Institutes of Health since 1998, and is considered one of the leaders in the field in the biology of lysosome-related organelles. He was awarded the Aaron Lerner lectureship by the Pan-American Society for Pigment Cell Research in 2009, and in 2016 was inducted as a Fellow of the American Association for the Advancement of Science - the largest scientific organization worldwide. Dr. Marks also serves as co-editor of the journal *Traffic,* an editorial board member of several other journals , and a member of a National Institutes of Health study section.

Research Interests

The goal of Dr. Marks' research is to understand the molecular mechanisms underlying the formation and function of intracellular cell type-specific lysosome-related organelles, and how these mechanisms are disrupted by disease. Much of his work focuses on melanosomes, organelles of pigment cells within which melanins are synthesized and stored, but he also studies the biogenesis of dense granules in platelets, lamellar bodies in lung epithelial type II cells, and maturing phagosomes in dendritic cells. These organelles are each disrupted in variants of Hermansky-Pudlak syndrome, a group of related genetic disorders characterized by albinism, bleeding diathesis, and often lung fibrosis and immunodeficiency.