

Andrew P. Kowalczyk, PhD

Biographical Sketch

Dr. Andrew P. Kowalczyk is Endowed Professor of Dermatology at the Pennsylvania State University College of Medicine, Hershey, Pennsylvania, USA. Research in the Kowalczyk laboratory spans mechanisms of cell adhesion, membrane trafficking, and organelle communication, with broad implications for skin biology and disease. Studies from the Kowalczyk lab revealed key mechanisms of cadherin membrane trafficking and the role of cadherin turnover in vascular patterning and epidermal inflammation. Using a combination of high-resolution volume electron microscopy and live-cell optical imaging, the Kowalczyk lab recently discovered an association of the endoplasmic reticulum with desmosomes and adherens junctions. Ongoing work investigates how this adhesion–organelle complex regulates keratinocyte calcium and lipid homeostasis.

Dr. Kowalczyk has been an active member and leader in the Society for Investigative Dermatology (USA) since the early 1990s, serving on the Board of Directors and as Vice President. He has chaired the Gordon Research Conference on Cell Contact and Adhesion and co-chaired the Scientific Program Committee for the Society for Investigative Dermatology at the International Investigative Dermatology conference in Kyoto (2008). As a dedicated mentor, he has trained numerous graduate students, postdoctoral fellows, medical students, and dermatology residents.