![Dermatology Foundation logo]

2024- 2025 Diversity Research Supplement Award – Opportunity List

The following individuals are current or former Career Development Award recipients and current faculty members in dermatology departments or divisions. Each has provided an opportunity for a medical student to work on a 6-12-week research project sponsored by a DF Diversity Research Supplement Award (DRSA). Medical students may contact DF office for the email addresses for these individuals, to inquire further about a short-term research opportunity. Please note, this list is not limited to those mentioned, eligible individuals may apply for the DRSA regardless of whether they provided an opportunity for this list.

Faculty Member/ DF Awardee	Institution	Project Description
Dekker Deacon, MD, PhD	University of Utah	Our lab seeks to characterize the genetic and transcriptomic basis for melanoma subtypes. We have developed technologies to ask questions such as: "what gene mutations and copy number changes lead to the development, invasion, and metastasis of melanoma", "which melanomas will respond to immune checkpoint inhibition", and "do certain melanomas behave differently based on cell of origin". Medical students will have the opportunity to review clinical information, collect DNA and RNA from patient tissue, and analyze this material using a variety of methods to answer the above questions and more.
Helena B. Pasieka, MD, MS	Uniformed Services University	The Pasieka Lab at Uniformed Services University studies Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis (SJS/TEN), deadly, burn-like drug reactions. Via total body photography, clinical data, and tissue samples we are expanding a biorepository to study skin and mucosal injury and predict outcomes. Our preliminary work has identified several disparities: 1) Black and Asian patients are more likely to develop SJS/TEN than White patients, 2) Black patients are more likely present later in the course, spending more time at an outside hospital prior to transfer and presenting with higher BSA involvement upon arrival, and 3) Black patients suffer increased mortality at nearly 3x the rate compared to non-Black patients in our cohort.

Faculty Member/ DF Awardee	Institution	Project Description
Helena B. Pasieka (cont.)		We aim to create tools to diagnose SJS/TEN earlier across a diverse population, to identify useful biomarkers in SJS/TEN, and to identify genetic polymorphisms correlating with the risk for the development of SJS/TEN to common offending agents. Taken together, these advances will prevent morbidity and mortality from SJS/TEN.
Jillian M. Richmond, Ph.D.	University of Massachusetts	Our laboratory studies autoimmune skin diseases and cancers. Opportunities for students include analysis of datasets as pertinent to their interests and our lab's needs. We have a variety of opportunities including mouse models, spontaneous canine models, and ex vivo human tissue studies.
Cory L. Simpson, M.D., Ph.D.	University of Washington	My lab aims to understand how the epidermis continually forms a barrier tissue for the body and how this fundamental biological process is compromised in skin disease. Using high-resolution live microscopy, we focus on human keratinocytes (the main cells of the epidermis) at the level of single organelles. To replicate epidermis in the lab, we grow human keratinocytes in a skin model that permits us to directly visualize the development of this multi-layered tissue and its breakdown in disease. Combining this organoid system with CRISPR editing, we can model human genetic diseases in vitro and try to identify potential therapies for inherited disorders of epidermal function like Darier disease, Hailey-Hailey disease, or ichthyosis. Please note this project involves on-site research in Seattle; prior wet lab experience would make a 2–3-month project more feasible.
Joy Wan, M.D., M.S.C.E.	Johns Hopkins University	Our lab conducts patient-oriented and epidemiological research in atopic dermatitis, a chronic and burdensome skin disease that affects up to 20% of children. We have several projects focused on characterizing the psychosocial and life impacts of atopic dermatitis on children and their families. We also have ongoing studies aimed at optimizing treatments for children with atopic dermatitis. Opportunities to work with large databases and to participate in prospective data collections are available. Previous experience with statistical analysis is preferred but not required.