M. Cecilia Berin

A. Personal Statement

I have studied mechanisms of food allergy for over 20 years, beginning with the mucosal immunology of allergic disease. My laboratory focuses on immune mechanisms of allergy and tolerance to foods, using patient-based research approaches. I have worked with several NIH-funded clinical trial consortia to develop and implement immune monitoring approaches to the study of allergen immunotherapy and the development of allergy in early life. We study the contribution of allergen-specific T cells to the development, maintenance, and resolution of food allergy.

I have been involved with the Consortium for Food Allergy Research since its inception, beginning with mechanistic work in mouse models in CoFAR 1 (2005-2010), and taking over the direction of clinical trial-associated mechanistic work in CoFAR 2 (2012-2017) where we successfully established real-time antigen-specific T cell assays for two multi-center clinical trials in food allergy. I received an Opportunity Fund award to identify biomarkers of treatment response by mass cytometry for the OUTMATCH study in CoFAR 3, and am a co-investigator on the SUNBEAM Analysis and Bioinformatics Center (ABC).

In 2022 I moved from Mount Sinai to Northwestern University. I had been collaborating for several years with Stephanie Eisenbarth and contributed to her discovery of Tfh13 cells, and more recently have established collaborations with Ruchi Gupta on her CAN DO study that is the basis of the CRC-specific project of this application. We have established a Food Allergy Working Group at Northwestern that brings together physicians and scientists interested in food allergy from Medicine Allergy/Immunology, Pediatrics Allergy/Immunology, and the Center for Food Allergy and Asthma Research (CFAAR).