

Carine Blanchard, PhD

Research Instructor

Department of Pediatrics; Division of Allergy and Immunology

Description of Research:

Dr. Blanchard's primary interest is to understand the molecular pathogenesis involved in food allergy related disorders. In order to better understand the molecular mechanisms underlying these diseases, her laboratory has studied a murine model of oral allergen-induced intestinal anaphylaxis. Interestingly, Dr. Blanchard and her colleagues recently uncovered that this model was characterized by an increased expression of the secreted protein TSG6 mRNA, tumor necrosis factor induced gene 6. At the same time, they also discovered that TSG6 mRNA was upregulated in a human food allergy related disease, eosinophilic esophagitis (EE). Taken together, these sets of observations have focused Dr. Blanchard's attention on uncovering the regulation of expression and role of TSG6 in food allergy related responses. Dr. Blanchard's second objective is to understand the role of the molecule periostin in inflammation. She has preliminary evidence that this molecule is involved in inflammatory cell recruitment in several allergy models.

Collaborations:

Dr. Blanchard will collaborate with Drs. Rothenberg and Hogan on the role of TSG6 in food allergy. Additionally she will work with Drs. Karp and Hogan on the role of periostin in other inflammatory models.