

### **Buffett Undergraduate Research Fellowship Opportunity**

*Prevalence and Development of Food Allergy and Other Atopic Conditions Among Indian School-Age Children*

**Faculty Mentor:** Ruchi Gupta, Professor, Feinberg School of Medicine

**Project Synopsis:** Food allergy (FA) and atopic diseases are a significant public health concern in the U.S., with 8% of children and 11% of adults being diagnosed with FA. FA remains underexplored in India—particularly within the pediatric community. While food sensitization is higher (26.5%), confirmed FA is much lower (1.2%), reflecting environmental and cultural dietary differences amid growing concerns that increasing urbanization and Westernized lifestyles may elevate FA risk.

This project aims to examine why the prevalence of atopic conditions is higher in the US compared to India. It will build off previous work our center has done in north India—assessing allergic conditions among school age children through microbiome sample collection and surveys to understand prevalence of food allergy and atopic conditions as well as how early introduction practices and protective effects of the skin and gut microbiome influence atopy development. The next phase of this project will focus on replicating this work in both west India and here in the US and then compare the results of our findings.

**Project Term:** Summer and Academic Year 2026

**Project Location:** Hybrid, on campus

**Job Description:** The undergraduate Research Fellow will be an integral member of the research team, contributing to participant recruitment, data collection and analysis, and the preparation of a manuscript reporting study findings. This role offers hands-on research experience and meaningful involvement across multiple stages of the project. The Fellow will receive structured mentorship through regular check-ins and ongoing guidance in research methods, data collection, and analysis, with increasing responsibility as skills develop. Mentorship will also support professional growth, including opportunities for presentation, authorship, and preparation for graduate or professional pathways. This collaborative mentoring approach emphasizes skill development, independence, and confidence as an emerging researcher.

**Time Commitment:** The expected weekly average is 24-32 flexibility hours.

**Number of available positions:** One