



REQUEST FOR PROPOSALS

Mechanistic Assays using Stored Plasma from ITN LEAP-Trial Participants

The Immune Tolerance Network (ITN) is an international clinical research consortium supported by the National Institute of Allergy and Infectious Diseases, NIH with the mission to accelerate the clinical development of immune tolerance therapies through a unique collaborative model.

The ITN develops, implements, and conducts trials of novel immune tolerance therapeutics in solid organ and islet transplantation, autoimmune diseases, and allergy & asthma. ITN trials look beyond the traditional endpoints of safety and efficacy, actively investigating the mechanisms of tolerance induction and maintenance by integrating hypothesis-driven, mechanism-based research into all our clinical trials. The overarching goals are to establish tolerance in the human clinical setting, to improve our understanding of the underlying mechanisms of immune tolerance, and to develop new biomarkers of tolerance in human disease.

The LEAP trial ([TrialShare](#)), and its follow-up LEAP-On ([TrialShare](#)), demonstrated that very young children at-risk of peanut allergy who consumed peanut not only became de-sensitized (LEAP) but remained so and became tolerant after cessation of peanut consumption (LEAP-On). The results were specific in that only peanut desensitization/tolerance was induced; no other food allergies were affected. In addition to the clinical endpoints studied during the LEAP trial, the ITN has performed a number of mechanistic studies from samples collected from the participants in the study, including assessment of specific immunoglobulins to peanut components and other allergens, cytokine analyses, and basophil activation testing. There are further banked plasma samples from 582 participants who had their peanut allergy status confirmed by oral food challenge (n=48 allergic and n=534 not allergic) that are available for supplementary mechanistic analyses. Most of these participants have plasma available at multiple study time points; with volumes ranging from 250µl to 2.5ml. Along with demographic and disease-specific information, the participant cohort in this study is extremely well characterized with full genomic sequence for over 500 participants. The clinical, mechanistic, and demographic trial data are available to the public on our website, [TrialShare](#).

The ITN is especially interested in the following:

- Novel analyses; e.g. those not already performed and published, will be prioritized.
- Novel mechanistic pilot studies that test a hypothesis that has prior experimental support;
- Mechanistic pilot studies that are using cutting edge technologies, especially those that are now being adapted from a pre-clinical to a clinical setting.

Immune Tolerance Network Request for Proposals

The ideal proposal will be supported by preliminary data and be designed to test a mechanism of tolerance. The laboratory should have a strong publication record for the assay proposed to be used in this study. The proposal should state the hypothesis to be tested and include any preliminary data, and indicate how the new findings will be integrated with the existing lab assessments and clinical findings. A power calculation that justifies the requested sample size should be included. Proposals that either only request samples or those that request samples and some funding are welcome (funding will be determined upon availability and scope of the work proposed). The ITN will work with investigators whose proposals are approved to provide assistance with analyses and data integration.

Proposals should be brief, no more than 5-pages. The proposal review process will focus on evaluating the conceptual framework of the proposed mechanistic study and its significance and suitability for further development. Responses to this RFP will be evaluated upon receipt and the RFP will remain open until the samples have been allocated.

Please direct all proposal submissions and any questions concerning this RFP to Philip Bernstein, PhD:
pbernstein@immunetolerance.org