

**NON-IGE MEDIATED IMMUNE REACTIONS TO FOODS:  
RESEARCH NEEDS AND SCIENTIFIC APPROACHES TO ASSESSING SAFETY.**

*A FAAM 2016 pre-meeting workshop, organized by:*  
ILSI Health & Environmental Sciences Institute (HESI)  
Protein Allergenicity Technical Committee (PATC)



**12-13 October, 2016**

Sheraton Roma Hotel & Conference Centre,  
Rome, Italy.



*Special thanks to EACCI for making this event possible with logistical support.*

## **Workshop Abstract**

Food allergy, or the adverse response of the immune system towards food proteins, is an important public health issue across the globe. Adverse responses can range from minor skin irritation to life threatening anaphylaxis. Immunologically, food allergy is manifested either as IgE mediated (e.g., type 1 hypersensitivity), mixed IgE and non-IgE mediated, or non-IgE mediated responses [Coeliac Disease (CD) and associated conditions, dermatitis herpetiformis and gluten ataxia]. In majority, food allergies are manifested as IgE mediated immune responses. Historically, the focus of food-allergy research and safety assessment has been on both IgE and non-IgE mediated immune responses. However, in recent years, the research efforts are focused on improving the scientific understanding of the prevalence, etiology, and detection of non-IgE mediated allergic responses to foods.

## **Goals & Objectives**

This workshop will provide an opportunity to discuss the current state of the science in immunologic mechanisms of non-IgE mediated food allergy with a specific emphasis on use of these data to assess food safety. Workshop participants will discuss the current approaches and possible gaps in the characterization and detection of proteins anticipated to trigger non-IgE responses including the etiology of CD, and the role of dietary proteins in inducing/triggering this disease. In addition, participants will also consider whether the safety assessment of foods derived from genetically modified (GM) crops should include considerations related to non-IgE mediated food allergy. Specifically, the discussions of this workshop will also focus on the review of the current practice of bioinformatic assessment of whether proteins introduced into GM crops have homology to proteins known to mediate non-IgE mediated food allergy, like CD.

## Program overview

**Session 1** - Formal invited presentations on overall safety assessment of GM crops, with focus on allergenicity; applying bioinformatics data to the safety assessment for non-IgE mediated immune response; and current trends in gluten-free foods.

**Session 2** - Interactive discussion on protein characterization platforms used to assess the CD potential of specific proteins: Are these characterization platforms suitable in conjunction with hypothesis testing/hazard identification for individual proteins or foods?

**Session 3** - Consensus on key discussion points and conclusions for publication.

## Outcome

The interactive format of this scientific program is intended to elicit participant feedback on current data-gaps, research needs, and the potential for integration of new data into the food safety assessment process. As a result, we expect that a series of specific recommendations will be generated at the conclusion of this workshop. The discussions and recommendations from this session will form the basis of a summary report that will be submitted for publication in a peer-reviewed scientific journal.

## Workshop Registration

Participation is free but all attendees must pre-register for the workshop on the link below (in addition to the EAACI/FAAM 2016 meeting registration). A registration link will be posted on the FAAM 2016 website, under "Pre- and Post-Meetings" -> HESI Workshop, in early July.

***Registration is on a first-come, first-served basis and space is limited to 60 participants.***

For additional information, please contact Ms. Teyent Getaneh, HESI, at [tgetaneh@hesiglobal.org](mailto:tgetaneh@hesiglobal.org)

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