

Keystone Symposia is pleased to present

The Gut Microbiome: The Effector/Regulatory Immune Network

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February 10–15, 2013 | Sagebrush Inn and Conference Center | Taos, New Mexico | USA



The mammalian GI track harbors a complex assemblage of microbial organisms that are essential for the development of the immune system. Alterations of the gut microbiota may lead to immune dysregulation both in the gut and in distal effector sites leading to the development of autoimmune disease. This meeting will focus on the role of the microbiota in balancing the effector and regulatory response leading to immune homeostasis. Recent findings suggest that altering certain bacterial populations present in the gut can lead to an inflammatory state associated with Th1/Th17 polarization. In contrast, other commensal bacteria and their antigenic products, when presented in the correct context, are regulatory and protect against inflammation. Particular emphasis will be placed on the biologic dynamics of the microbiota, the interaction with APC, modulation of the regulatory network and the immunologic consequences on experimental and human autoimmune conditions such as IBD, CNS demyelination and RA. The practical application of these novel interactions between the host and gut microbiota may lead to the identification of new therapeutics and novel insights into the mechanisms of human autoimmunity. The opportunity to assemble basic scientists in bacteriology and mucosal immunology with clinicians to explore this rapidly expanding arena is unique as there have been no previous organized meetings to meet this need. How the gut microbiome guides effector and regulatory immune functions will provide new pathways for the development of novel therapeutic targets.

Plenary Session Topics:

- > The Gut Microbiome
- > Gut Microbiome and Immune Development
- > Gut Microbiome-APC Interactions
- > Experimental Colitis/IBD: Regulator Networks
- > Gut Bacteria Modulation of Effector Networks
- > Gut Modulation of Effector/Regulatory Networks in CNS Disease
- > Modulation of Gut Microbiota and Autoimmunity
- > Gut Bacteria Modulation of Autoimmunity

Abstract & Scholarship Deadline: October 9, 2012

Late-Breaking Abstract Deadline: November 8, 2012

Early Registration Deadline: December 5, 2012

Note: Scholarships are available to students and postdoctoral fellows and require a brief application and submission of an abstract. Short talk speakers will also be selected from abstracts. Early registration saves US\$150 on later fee. Information shown is subject to possible change.

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