

Program for “Microbes and Mucosal Immunity 2008”

Organizing Committee:

Peter B. Ernst, DVM, PhD; Sheila E. Crowe, MD; Brian K. Reuter, PhD

Wednesday June 25, 2008, 4:00 pm Jordan Hall Auditorium, University of Virginia.

Opening Remarks: Peter Ernst, DVM, PhD, University of Virginia, Charlottesville, VA
Keynote speaker: Mitchell Kronenberg, PhD, La Jolla Institute for Allergy & Immunology, La Jolla, CA.
A Crucial Role for a TNF Family Receptor in Preventing Colitis

Reception to follow

Thursday June 26, 2008, Ednam Hall, Boar’s Head Inn.

Session I: The Gastrointestinal Tract: Anatomy, Physiology & Pathology

Session Chair: Peter Ernst, DVM, PhD, Dept. of Medicine, University of Virginia

Speakers:

9:00 am Wallace MacNaughton, PhD, Dept. Physiology & Biophysics, University of Calgary
Physiology of the Gastrointestinal Tract I
9:45 am Marshall Montrose, PhD, Dept Molecular & Cellular Physiology, University of Cincinnati
Physiology of the Gastrointestinal Tract II

Coffee

10:45 am Jerrold Turner, MD, Dept. of Pathology, University of Chicago
Pathologies of the Human Gastrointestinal Tract
11:15 Atul Bhan, MD, Dept. of Pathology, Harvard Medical School, Boston, MA
The Application of Comparative Pathology in the Gut

Lunch Break (12:00 – 1:00 pm)

Session II: Infectious Agents: The Era of Biodefense

Session Chair: Brian Reuter, PhD, Dept. of Medicine, University of Virginia

Speakers:

1:00 pm Fernando Torres-Velez, DVM, PhD, Dept. of Pathology, University of Georgia
The Role of Veterinary Pathologists in Emerging Infectious Diseases

1:30 pm Christina Sigurdson, DVM, PhD, Dept. of Pathology, University of California, San Diego
A Dual Attack: How Intestinal Inflammation May Affect Prion Invasion

2:00 pm Richard Guerrant, MD, Dept. of Medicine, University of Virginia
Infectious Diarrhea: Impact and Novel Approaches to Control

Coffee

3:00 pm Sheila Crowe, MD, Dept. of Medicine, University of Virginia
Gastrointestinal Epithelium & Microbial Interactions

3:30 pm Christian Jobin, PhD, Dept of Medicine, University of North Carolina
Dissecting the Molecular Mechanisms Controlling Intestinal Innate Response to Microorganisms

4:00 pm Chris Moskaluk, MD, University of Virginia
Microdissection and Microarray Approaches to Gene Expression Profiling

4:30 pm **Discussion Period for Sessions I and II**

Friday June 27, 2008, Ednam Hall, Boar's Head Inn.

Session III: GI Responses to Infection: Innate and Adaptive Immune Responses

Session Chair: Sheila Crowe, MD, Dept of Medicine, University of Virginia

Speakers:

9:00 am Brian Reuter, PhD, Dept of Medicine, University of Virginia
Experimental Models in GI Research: Crohn's Disease

9:30 am Peter B. Ernst, DVM, PhD, Dept of Medicine, University of Virginia
Experimental Models in GI Research: Colitis

10:00 am Maria Abreu, MD, Dept. of Medicine, University of Miami Medical School
Innate Immunity in Inflammatory Bowel Diseases

Coffee

10:45 Tim Denning, PhD, Vaccine Research Center, Emory University
Immune Regulation by Intestinal Antigen Presenting Cells

11:15 Ken Croitoru, MD, Dept. of Medicine, McMaster University
Adaptive Mucosal Immunity in the GI Tract: Understanding the Role of T cells in IBD Pathogenesis

11:45 Balfour Sartor, MD, Dept. of Medicine, University of North Carolina
The Role of Commensal Enteric Bacteria in the Pathogenesis of Chronic Gastrointestinal Inflammation

Lunch Break (12:15 – 1:00 pm)

Session IV: Outside the Scope: Biomedical Engineering, Bioinformatics and Gene Expression

Session Chair: Peter Ernst, DVM, PhD, Dept of Medicine, University of Virginia

Speakers:

- 1:00 pm Shayn Peirce, PhD, Dept. of Biomedical Engineering, University of Virginia
A Bioengineering Approach to Studying Tissue Growth and Adaptation:
Combining Experiments with Agent-Based Computational Models
- 1:30 pm Jesus Nieves-Rivera, MD, Dept. of Medicine, University of Colorado
Blockade of Lymphocyte Trafficking as a Therapeutic Strategy for GI
Inflammation
- 2:00 pm Jayson Rieger, PhD, Adenosine Therapeutics, Charlottesville, VA
Medicinal Chemistry as a Tool for Drug Discovery – Development of A2AR
Agonists

Coffee

- 2:45 pm Peter B. Ernst, DVM, PhD, Dept. of Medicine, University of Virginia
Combating GI Inflammation through Adenosine Receptors
- 3:15 pm Patrick Concannon, PhD, Dept. of Biochemistry and Molecular Genetics,
University of Virginia
Mapping Genes in Genetically Complex Disorders: Diabetes and Malnutrition
- 3:45 pm Roderick Jensen, PhD, Dept. of Biology, Bioinformatics Institute, Virginia Tech
Exploring Functional Genomics using DNA Microarrays, Next-Generation
Sequencing, and Bioinformatics
- 4:15 pm **Discussion Period for Sessions III and IV**
- 4:30 pm Closing Remarks: Peter Ernst