

**Department of Microbiology, Immunology & Molecular Genetics**

**Seminar Program**

**2010 – 2011**

**Richard Flavell, Ph.D.** (Dean's Distinguished Lecture Series"

Yale University School of Medicine

"Inflammasome in health and disease"

**Brad T. Cookson, M.D., Ph.D.** (Alan Kaplan Minisymposium)

Department of Laboratory Medicine

University of Washington

"Pyroptosis: Coordinated host inflammatory responses"

**John T. Harty, Ph.D.** (Alan Kaplan Minisymposium)

Department of Pathology

University of Iowa College of Medicine

"The Impact of antigen-stimulation history on differentiation and protection by memory CD8 T Cells"

**Randal Voss, Ph.D.**

Department of Biology

University of Kentucky

"Axolotl Story: Enabling an Endangered Species for Human Health and Disease Research"

**Ferric C. Fang, M.D.**

University of Washington School of Medicine

"*Salmonella*: A Window into Biology"

**Michael W. White, Ph.D.**

Department of Molecular Medicine & Global Health

University of South Florida

"Distinct subtranscriptomes underlie the peculiar cell cycles of Apicomplexa parasites"

**De'Broski R. Herbert, Ph.D.**

Department of Pediatrics

Cincinnati Children's Medical Center

"Epithelial cells initiate TR2 immunity during allergy and worm infection"

**Deborah . Anderson, Ph.D.**

Veterinary Pathobiology

University of Missouri

"Control of inflammation by *Yersinia pestis* virulence factors"

**Steven F. Ziegler, Ph.D.**

Director, Immunology Program

Benaroya Research Institute, Seattle, WA

"FOXP3, TSLP and the Regulation of Immunity and Inflammation"

**Linden Hu, M.D.**

Department of Medicine

Tufts Medical Center

“The “inside scoop” on Toll-like receptor signaling: Mechanisms of phagocytosis and endosomal signaling in response to *Borrelia burgdorferi*”

**W. Edward Swords, Ph.D.**

Department of Microbiology & Immunology

Wake Forest University Health Sciences

“thriving in the briar patch: Haemophilus influenza and neutrophil extracellular traps”

**Christopher M. Waters, Ph.D.**

Department of Microbiology & Molecular Genetics

Michigan State University

“Targeting cyclic di-GMP signaling to Prevent Biofilm Formation”

**Jianming Hu, Ph.D.**

Department of Microbiology & Immunology

The Penn State University College of Medicine

“Virus-Cell Interactions in Hepatitis B Virus Replication and Persistence”

**Clay Fuqua, Ph.D.**

Department of Biology

Indiana University

“The surprising cellular asymmetry of the rod-shaped bacterial pathogen *Agrobacterium tumefaciens*”

**George S. Deepe, Ph.D.**

Department of Medicine

University of Cincinnati College of Medicine

“Chemobiology of *Histoplasma capsulatum* Infection”

**Paul D. Roepe, Ph.D.**

Georgetown University

“Quinoline antimalarial drug resistance: Implications for new therapy”

**2009 – 2010**

**Bruce Beutler, M.D.** (Dean’s Distinguished Lecture Series)

The Scripps Research Institute

“How do we sense infection? TLRs and the Genetic Analysis of Innate Immunity”

**Byron W. Caughey, Ph.D.** (Alan Kaplan Minisymposium)

Laboratory of Persistent Viral Diseases

Rocky Mountain Laboratories

“Prions and the transmissibility of protein misfolding”

**David Westaway, Ph.D.** (Alan Kaplan Minisymposium)  
Centre for Prions and Protein Folding Diseases  
University of Alberta  
“Shadoo & PrP: Overlapping Activities of Two Mammalian Prion Proteins”

**Shelley M. Payne, Ph.D.**  
Department of Molecular Genetics and Microbiology  
University of Texas at Austin  
“Iron and bacterial pathogenesis: Regulation of *Shigella* iron acquisition systems”

**Boris Striepen, Ph.D.**  
Center for Tropical & Emerging Global Diseases  
University of Georgia  
“the Toxoplasma Apicoplast – What do Human Parasites do with an Algal Endosymbiont?”

**James Ou, Ph.D.**  
Department of Molecular Microbiology & Immunology  
University of Southern California  
“Hepatitis C virus and autophagic response”

**Virginia L. Miller, Ph.D.**  
Departments of Genetics & Microbiology & Immunology  
University of North Carolina, Chapel Hill  
“*Yersinia pestis* Yaps: What are they talking about?”

**Jon Goguen, Ph.D.**  
Department of Molecular Genetics and Microbiology  
*Yersinia pestis* and innate immunity: Mechanisms and mysteries”

**Stephanie A. Cormier, Ph.D.**  
Pharmacology & Experimental Therapeutics Pulmonary/Critical Care Medicine  
“A role for IL-4R $\alpha$  in the immunopathogenesis associated with neonatal RSV infection”

**James N. MacLeod, V.M.D., Ph.D.**  
Department of Veterinary Science  
University of Kentucky  
“Equine Genomics”

**Stephen J. McSorley, Ph.D.**  
Department of Medicine, Division of Gastroenterology, Hepatology & Nutrition  
University of Minnesota  
“Visualizing antibody and T cell responses to Salmonella infection”

**George C. Tsokos, M.D.**  
Division of Rheumatology  
Beth Israel Deaconess Medical Center  
Harvard Medical School

**Lauren Opremcak Bakaletz, Ph.D.**

Pediatric Research

The Ohio State University College of Medicine

“Role of the type IV pilus of nontypeable *H. influenza* in the pathogenesis of otitis media and prospects for vaccine-mediated prevention”

**Lesley E. Smythies, Ph.D.**

Department of Medicine/Gastroenterology

University of Alabama at Birmingham

“Extracellular Matrix-associated Cytokines Regulate Effector Cell Responses in the Human Gastrointestinal Mucosa”

**John C. Byrd, Ph.D.**

Leukemia Research, Medicine & Medicinal Chemistry, Translational Research, Comprehensive Cancer Ctr

The Ohio State University

“Immune Therapies for CLL”

**Xiang-Jin Meng, M.D., Ph.D**

Department of Biomedical Sciences & pathobiology

College of Veterinary Medicine

Virginia Polytechnic Institute

“Hepatitis E Virus: An Emerging Zoonotic Pathogen”

**Robert L. Hendricks, Ph.D.**

Department of Ophthalmology

University of Pittsburgh

“Immune Control of Herpes Simplex Virus Latency”

**Christopher A. Hunter, Ph.D.**

Department of Pathobiology

University of Pennsylvania

“Imaging the immune response to Toxoplasma”

**2008 – 2009**

**Gregor Adams, Ph.D.** (Alan Kaplan Minisymposium)

Keck School of Medicine

University of Southern California

“Deconstructing the Adult Hematopoietic Stem Cell Niche”

**Bruce Lahn, Ph.D.** (Alan Kaplan Minisymposium)

University of Chicago

“The “Occlusis” Model of Cell Fate Restriction”

**Shobhona Sharma, Ph.D.**

Department of Biological Sciences

Tata Institute of Fundamental Research

“Host-parasite interactions in malaria, immunity, pathology and metabolism”

**Allen G. Harmsen, Ph.D.**

Veterinary Molecular Biology

Montana State University

“Protein cage nanoparticles as a novel broad spectrum immunoprophylactic treatment”

**Jane Hoyt Buckner, M.D.**

Translational Research

Benaroya Research Institute

“Mechanisms of lost tolerance in type 1 diabetes: Genotype-phenotype analysis reveals common disease pathways”

**Christopher Hellen, Ph.D.**

Department of Microbiology & Immunology

SUNY Downstate Medical Center

“New insights into cap-dependent and picornavirus IRES-mediated mechanisms of eukaryotic translation initiation”

**James Hartsfield, DMD, Ph.D., FACMG**

Department of Oral Health Science

College of Dentistry

University of Kentucky

“Genetic Factors in External Apical Root Resorption”

**Mark Gomelsky, Ph.D.**

Department of Molecular Biology

University of Wyoming

“c-di-GMP: Coming of age of the bacterial second messenger involved in lifestyle choices”

**Jason C. Baratz, Ph.D.**

Department of Microbiology & Immunology

Crieghton University School of Medicine

Gabriel Nunez, M.D.

Department of Pathology

University of Michigan Medical School, Ann Arbor

“Nod-like Receptors in Immunity and Disease”

**Brian S. Murphy, M.D.**

Division of Infectious Disease

University of Kentucky

“Macrophage activation states during Pseudomonas infection: Work in progress”

**Justin D. Radolf, M.D.**

Center for Microbial Pathogenesis

University of Connecticut Health Center

“Tracking spirochetes and spirochete gene expression: Illuminating the pathogenesis of Lyme disease”

**Jyoti Misra Sen, Ph.D.**

National Institute on Aging  
National Institutes of Health

“Molecular Mechanisms in T Cell Development, Function and Aging”

**Eric M. Ostertag, M.D., Ph.D.**

Transposagen Biopharmaceuticals, Inc.

“Junk DNA: One species’ trash is another species’ treasure”

**Mark Wooten, Ph.D.**

Department of Microbiology & Immunology  
University of Toledo Health Science Campus

“Host-Pathogen Interactions in the Development of Lyme Disease and Melioidosis”

**Xuming Zhang, DVM, Ph.D.**

University of Arkansas for Medical Sciences

“The Yin and Yang of Coronavirus Infection in CNS Cells”

**Erik Eckhardt, Ph.D.**

Department of Internal Medicine/Gastroenterology  
University of Kentucky

“A Novel role for Dietary Fat in Inflammation and Immunity”

**Hao Shen, Ph.D.**

Department of Microbiology  
University of Pennsylvania School of Medicine

“regulation of memory T cell differentiation: Implication for rational vaccine design”

**Maria-Luisa Alegre, M.D., Ph.D.**

Department of Medicine/Rheumatology  
University of Chicago

“IFN-gamma-mediated resistance in the brain against an intracellular protozoan parasite”

**2007 – 2008**

**Derya Unutmaz, M.D.** (Alan Kaplan Minisymposium)

Smilow Research Center  
New York University School of Medicine

“Developmental Programs of Human Regulatory T Cells and Their Role During HIV Infection”

**Warner C. Greene, M.D., Ph.D.** (Alan Kaplan Minisymposium)

Gladstone Institute of Virology & Immunology  
University of California, San Francisco

“APOBEC3G: An intracellular centurion that counters both exogenous retroviruses and endogenous retroelements”

**Tony Romeo, Ph.D.**

Department of Microbiology & Immunology  
Emory University School of Medicine

“Dispensing the Glue: Identification and regulation of a Biofilm Polysaccharide Adhesin”

**Karen Norris, Ph.D.**

University of Pittsburgh

“Pneumocystis and COPD: Lessons from monkeys and men”

**Pei-Yong Shi, Ph.D.**

Department of Biomedical Sciences  
School of Public Health  
State University of New York/Albany

“Molecular Mechanism of West Nile Virus Replication”

**Joyce Wu, Ph.D.**

Joslin Diabetes Center  
Harvard Medical School

“CpG: Surprising anti-inflammatory effect on arthritis”

**James W. Ajioka, Ph.D.**

Department of Pathology  
University of Cambridge

“Using “omic” technologies to investigate toxoplasma infection”

**Brydon L. Bennett, Ph.D.**

Director/Inflammation Research  
Experimental Therapeutics Group  
Celgene

“JNK Inhibitors: Into the Clinic”

**David Bloom, Ph.D.**

Department of Molecular Genetics & Microbiology  
University of Florida College of Medicine

“Epigenetic Control of Herpes Simplex virus Latent Gene Expression”

**Kathleen A. McDonough, Ph.D.**

Division of Infectious Diseases  
New York State Department of Health

“From White Plague to Black Death: Bacterial gene expression in host-associated environments”

**Peter Palese, Ph.D.** (Deans Distinguished Lecture Series)

Department of Microbiology  
Mount Sinai School of Medicine

“The Pathogenicity of Pandemic Influenza Viruses”

**Peter Laslo, Ph.D.**

Department of Molecular Genetics and Cell Biology  
University of Chicago

“Gene regulatory networks that orchestrate macrophage development”

**Stefan Stamm, Ph.D.**

Department of Molecular and Cellular Biochemistry

“Regulation of Alternative Splicing by Reversible Phosphorylation”

**Dennis W. Metzger, Ph.D.**

Center for Immunology & Microbial Disease  
Albany Medical College

“Inhibition of Pulmonary Anti-Bacterial Defense During Recovery from Influenza Virus Infection”

**Rebecca Adkins, Ph.D.**

Department of Microbiology & Immunology  
University of Miami

“Infection of murine neonates with Yersinia enterocolitica: Immunological and bacterial mechanisms”

**Tom G. Schwan, Ph.D.**

Laboratory of Zoonotic Pathogens  
National Institute of Allergy & Infectious Diseases

“Natural history to pathogenicity of tick-borne relapsing fever spirochetes”

**Aleem Siddiqui, Ph.D.**

Department of Medicine  
University of California, San Diego

“Hepatitis C virus alters lipid metabolism”

**Jo Anne L. Flynn, Ph.D.**

Department of Microbiology & Molecular Genetics  
University of Pittsburgh School of Medicine

“T cells and tuberculosis: What are they doing?”

**Dennis W. Metzger, Ph.D.**

Center for Immunology & Microbial Disease  
Albany Medical College

“Inhibition of Pulmonary Anti-bacterial Defense during recovery from Influenza Virus Infection”

**Dennis G. Karounos, M.D.**

Division of Endocrinology & Molecular Medicine  
University of Kentucky College of Medicine

“Immunology of Type 1 diabetes: Can mice lead us to a cure”

**2006 – 2007**

**Edward S. Mocarski, Ph.D.** (Alan Kaplan Minisymposium)

Department of Microbiology and Immunology

Emory University School of Medicine

“Cytomegalovirus exploitation of the inflammatory response”

**David L. Woodland, Ph.D.** (Alan Kaplan Minisymposium)

Trudeau Institute

“CD8 T cell memory in the respiratory tract”

**Philip Stashenko, DMD, Ph.D.** (UK Chapter of American Association for Dental Research)

Forsyth Dental Center

Harvard University

“Modulation of oral bone by the Immune system”

**Steven A. Weinman, M.D., Ph.D.**

Department of Internal Medicine

University of Texas Medical Branch

“Role of mitochondria in Hepatitis C induced pathogenesis”

**Paula Traktman, Ph.D.**

Department of Microbiology & Molecular Genetics

Medical College of Wisconsin

“The Intricate Choreography of the Vaccinia Virus Life Cycle”

**Claudio Soto, Ph.D.**

Department of Neurology

University of Texas Medical Branch

“Molecular mechanism of prion propagation”

**Margo A. Brinton, Ph.D.**

Department of Biology

Georgia State University

“West Nile virus-host cell interactions”

**Steven J. Triezenberg, Ph.D.**

Van Andel Institute

“transcriptional activation by the herpes virus VP16 protein: Beautiful hypotheses slain by ugly facts”

**Andreas J. Baumler, Ph.D.**

Department of Medical Microbiology & Immunology

University of California at Davis

“Evasion of innate immune surveillance by *Salmonella typhi*”

**Luis Actis, Ph.D.**

Department of Microbiology

Miami University

“Cellular Functions Involved in Biofilm formation by the Opportunistic Pathogen *Acinetobacter baumannii*”

**Tanya Dragic, Ph.D.**

Department of Microbiology & Immunology

Albert Einstein College of Medicine

“The Peculiar Pathway of HCV Entry”

**Mary O’Riordan, Ph.D.**

Department of Microbiology & Immunology

University of Michigan Medical School

Innate Immunity to Intracellular Bacterial Pathogens”

**Bernard P. Arulanandam, Ph.D.**

Department of Biology

University of Texas at San Antonio

“A Targeted Mucosal Vaccination Approach Against Genital Chlamydia Muridarum Infection”

**Richard T. Marconi, Ph.D.**

Department of Microbiology & Immunology

VA Commonwealth University

“Interaction of members of the Factor H protein family with pathogenic spirochetes: Lyme disease to periodontal disease, immune evasion to adherence”

**Peter Bradley, Ph.D.**

Department of Microbiology, Immunology & Molecular Genetics

“The role of Toxoplasma rhoptries in invasion and host-pathogen interaction”

**Rodger McEver, M.D.**

Department of Biochemistry & Molecular Biology

University of Oklahoma Health Sciences Center

“Selectin-dependent leukocyte adhesion under flow”

**Ralph S. Baric, Ph.D.**

Department of Epidemiology

Department of Microbiology & Immunology

University of North Carolina at Chapel Hill

“SARS-CoV Pathogenesis and Vaccine Design”

**Wolfram R. Zuckert, Ph.D.**

Department of Microbiology, Molecular Genetics & Immunology

University of Kansas Medical Center

“Rules and regulators of Spirochetal Lipoprotein transport”

