7th Annual UC Davis Research Retreat on Host Microbe Interaction (HMI)
Granlibakken, October 18th-19th, 2012

ORGANIZING COMMITTEE

Co-Chairs:
Andreas Bäumler, Ph.D., Vice Chair of Research, Medical Microbiology and Immunology
Satya Dandekar, Ph.D., Chair, Medical Microbiology and Immunology

Members:
Nicole Baumgarth, D.V.M, Ph.D., Professor, Pathology, Microbiology and Immunology, Center for Comparative Medicine
Charles Bevins, M.D., Ph.D., Chair, Graduate Group Immunology
Shirley Luckhart, Ph.D., Director of Training Program in the Biology of Disease Vectors
Richard Michelmore, Ph.D., Director, Genome Center
Jay Solnick, M.D., Ph.D., Director, Animal Models of Infectious Disease Training Grant
Glenn Young, Ph.D., Chair, Microbiology Graduate Group

We would like to acknowledge support from:
The School of Medicine Deans Office
The School of Veterinary Medicine Deans Office
The Graduate Group Microbiology (1st year students)
The Animal Model of Infectious Disease Training Grant (Keynote Speaker)
The Department of Medical Microbiology and Immunology
October 18

12:00pm  Opening Reception and Lunch (Granhall) *

1:00-3:00pm  Scientific Session 1 (Mountain Room) *

Moderator: Richard Michelmore

1:00  Opening Address

1:15-1:30  Savithramma P Dinesh-Kumar
Department of Plant Biology and Plant Sciences
College of Biological Sciences
Title: “Autophagy targets mitochondrial protein BI2 to limit cell death during the plant immune response.”

1:40-1:55  Emanuel Maverakis
Department of Dermatology
School of Medicine
Title: TBA

2:05-2:15  Kristen Lokken (Tsolis lab)
Department of Medical Microbiology and Immunology
School of Medicine
Title: “Malaria Parasite-Induced IL-10 Contributes to Non-typhoid Salmonella Bacteremia”

2:20-2:30  Minelva Nanton (McSorely lab)
Department of Veterinary Anatomy (Center for Comparative Medicine)
School of Veterinary Medicine
Title: "An Unusual Role for B cells in Salmonella Immunity"
Robin Tecon (Leveau lab)
Department of Plant Pathology
College of Agricultural and Environmental Sciences
Title: "Characterization of a new type of clustering behavior in plant-associated bacteria"

2:50-3:20pm Break

3:20-4:45pm Scientific Session 2 (Mountain Room)

Moderator: Charles Bevins

Richard Michelmore
Department of Plant Sciences (Genome Center)
College of Agricultural and Environmental Sciences
Title: “Comparative genomics of plant-pathogen interactions”

Anna Drexler (Luckhart lab)
Department of Medical Microbiology and Immunology
School of Medicine
Title: "The effects of human insulin-like growth factor 1 on mosquito lifespan and malaria parasite transmission."

Megan Eberhardt (Barry lab)
Department of Pathology
School of Medicine
Title: "Targeting the IL-10 Signaling Pathway as a Vaccine Strategy for Cytomegalovirus"

Rebecca Elsner (Baumgarth lab)
Department of Pathology, Microbiology and Immunology (Center for Comparative Medicine)
School of Veterinary Medicine
Title: TBA

Fabian Rivera-Chávez (Bäumler lab)
Department of Medical Microbiology and Immunology
School of Medicine
Title: "Salmonella uses energy taxis to benefit from intestinal inflammation"
4:45-5:45pm  Break and Poster setup *(Lake Room)*

5:45-6:45pm  Keynote Address *(Mountain Room)*

Sponsored by the Animal Models of Infectious Disease Training Grant

*Moderator: Shirley Luckhart, Department of Medical Microbiology and Immunology, School of Medicine*

5:50-6:45  
**David Schneider**
Professor, Department of Microbiology and Immunology
Stanford University

7:00-8:00pm  Dinner *(Granhall)*

8:00-10:30pm  Poster Session *(Lake Room)*

10:30pm-1:00am  Social *(Ski Hut)*
October 19

7:30-9:00am  Breakfast (Granhall)

9:00-10:05am  Scientific Session 3 (Mountain-Lake Conference Room)

  Moderator: Nicole Baumgarth

9:00-9:15 Ioannis Stergiopoulos
Department of Plant Pathology
College of Agricultural and Environmental Sciences
Title: “Host specificity and secreted proteins: Using Dothideomycetes as model organisms to study the genetics, genomics and evolution of plant-microbe interactions”

9:25-9:35 Miriam Martin (Solnick lab)
Department of Medicine (Center for Comparative Medicine)
School of Medicine
Title: “Clash of the Titans: Competition between Helicobacter species and other inhabitants of the rhesus stomach”

9:40-9:50 Christopher Gaulke (Satya Dandekar lab)
Department of Medical Microbiology and Immunology
School of Medicine
Title: “Gut epithelial barrier disruption in retrovirus infection through microRNA deregulation”

9:55-10:05 Raj Nandety (Falk lab)
Department of Plant Pathology
College of Agricultural and Environmental Sciences
Title: "Next Generation Sequencing : Integrative host-microbe genomics on two different viruses associated with the glassy-winged sharpshooter"

10:10-10:35am  Coffee Break
**10:35am-12:00pm Scientific Session 4 (Mountain-Lake Conference Room)**

*Moderator: Satya Dandekar*

**10:35-11:05**  
Amilcar Tanuri  
*Universidade Federal do Rio de Janeiro (UFRJ)*  
Title: “Reactivation of HIV Latency with a new compound extracted from Euphorbiaceae sp.”

**11:15-11:25**  
Hossein Gouran (Abhaya Dandekar lab)  
*Department of Plant Biology and Plant Sciences*  
College of Biological Sciences  
Title: “A Novel Bacterial Secretion System May Cause Pierce’s Disease in Grapevine”

**11:30-11:40**  
Myka Estes (McAllister lab)  
*Department of Neurology* (Center for Neuroscience)  
School of Medicine  
Title: “IL-1beta and IL1RAPL1: Gene-environment interactions regulating synapse density and function in Autism”

**11:45-11:55**  
Dan Garrido (Mills lab)  
*Department of Viticulture and Enology*  
College of Agricultural and Environmental Sciences  
Title: "New insights into the molecular adaptations of infant-associated bifidobacteria to human milk glycoconjugates"

**12:00-1:00pm**  
*Lunch (Granhall)*
Acute Cellular Responses during Salmonella infection in the steptomycin-treated mouse model, Alanna Spees

The Toxoplasma Oocyst: Mechanisms of Environmental Resistance, Allison Weis

Bifidobacterium bididum impacts "expression of antimicrobial peptides and development of intestinal microbiota in a rat model of necrotizing enterocolitis", Anchasa Kananurak

Immunological regulation of p38MAPK pathway in Anopheles stephensi during parasite infection, Bo Wang

Gut epithelial barrier disruption in retrovirus infection through microRNA disregulation, Christopher Gaulke

Phage-Mediated Acquisition of a Type III Secreted Effector Protein Boosts Growth of Salmonella by Providing Access to a Host-Derived Respiratory Electron, Christopher Lopez

Dissecting HIV-1 transmission through the virological synapse using super-resolution and live 3D imaging, Deanna Thompson

The role of abscisic acid in the mosquito immune response to malaria parasite infection, Elizabeth Glennon

The effects of PTEN upregulation in epithelial tissues on Anopheles stephensi Plasmodium susceptibility and various physiological traits, Eric Hauck

Salmonella requires de novo synthesis of vitamin B12 to outgrow intestinal microbiota during inflammation, Franziska Faber

Innate amplification of Th1 responses to intracellular pathogens, Hope O'Donnell

A novel bacteria secretion system may cause Pierce's Disease in grapevine, Hossein Gouran

Effect of a plant defense activator on BBWV-1 infection, Immaculada Ferriol Safont

Malaria-induced IL-10 alters intestinal inflammatory responses to non-typhoidal Salmonella, Jason Mooney

Targeted knockdown of MAP kinase signaling in the midgut of Anotheles stephensi using mopholinos, Jose Peitri

Revealing the structure of root-associated bacterial communities in rice, Joseph Edwards

Host-Commensal Dynamics in SIV infection, Lauren Hirao

Bacterial manipulation of small Rho GTPases is pathogen-induced process detected by the NOD1 signaling pathway, Maria Winter

Induction of alternatively activated macrophages during murine Brucellosis contributes to bacterial survival and development of chronic infection, Mariana Xavier
Bacterial manipulation of small Rho GTPases is pathogen-induced process detected by the NOD1 signaling pathway, Marijke Keestra

Binding of P. falciparum to Human Endothelial Cells in culture, Michael Leibowitz

Protective B cell Reponses during Salmonella Infection, Minelva Nanton

Temporal dynamics of the rhesus gastric microbiome, Miriam Martin

The role of the protein kinase C superfamily in the innate immune response to Anopheline mosquitoes, Nazzy Pakpour

Food From the Fire: Gut Inflammation Provides Nutrients for Salmonella, Parameth Thiennimitr

Non-functional CD4+ T helper cell responses to B. burgdorferi infections, Rebecca Elsner

UC Davis Genome Center Proteomics Core, Richard Eigneheer

Transcriptional regulation of latent FIV in peripheral CD4+ T lymphocytes, Samantha McDonnel

Microbiota changes in the inflamed intestine are driven by anaerobic respiration, Sebastian Winter

RNAi targeting a virus L-Pro confers hosting immunite, Sophie Kiss

Salmonella Typhi evades complement-dependent neutrophil immunosurveillance, Tamding Wangdi

Genes encoding a predicted modification system for membrane lipids contribute to pathogenesis of Brucella melitensis, Tobias Kerrines

Hierarchial regulation of fimbriae in Salmonella enterica serotype Typhimurium via a novel CsrA titration mechanism, Torsten Sterzenbach

Brucella and the Inflammasome, Vidya Atluri