

**3rd Annual UC Davis Research Retreat on Host Microbe
Interaction (HMI)
Granlibakken, October 9th-10th, 2008**

ORGANIZING COMMITTEE

Chairs:

Satya Dandekar, Ph.D.

Andreas Bäumlner, Ph.D.

Members:

Stephen Barthold D.V.M, Ph.D.

Nicole Baumgarth, D.V.M, Ph.D.

Charles Bevins, M.D., Ph.D.

Kathy DeRiemer, Ph.D.

Bryce Falk, Ph.D.

Richard Michelmore, Ph.D.

Richard Pollard, M.D.

John Roth, Ph.D.

Barbara Shacklett, Ph.D.

Jay Solnick, M.D., Ph.D.

Tilahun Yilma, D.V.M., Ph.D.

PROGRAM UC DAVIS HMI TAHOE RETREAT

October 9

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

1:00-3:00 ***Scientific Session 1 (Mt. Lake Conference Room)***

Moderator: Nicole Baumgarth (CCM, PATHOLOGY, MICROBIOLOGY AND IMMUNOLOGY)

1:00-1:20 *David Mills* (VITICULTURE AND ENOLOGY) "Microbial consumption of human milk oligosaccharides: Yet another reason to thank your mother"

1:25-1:40 *Mark Underwood* (NEONATOLOGY) "Necrotizing enterocolitis: Prevention and Prediction"

1:45-2:00 *Angie Gelli* (PHARMACOLOGY) "The extracellular proteome of *Cryptococcus neoformans* and its role in the invasion of the central nervous system"

2:05-2:15 *Amber Hartman* (GC, EVOLUTION AND ECOLOGY) "Waters: An Automated Workflow to analyze 16S rRNA data"

2:20-2:30 *Jeewan Jyot* (PLANT PATHOLOGY) "Fig mosaic associated virus: A new type of negative strand RNA virus?"

2:35-2:45 *Sumathi Sankaran* (MEDICAL MICROBIOLOGY AND IMMUNOLOGY)
"Inflammation driven gut mucosal damage contributes to HIV persistence and disease progression"

3:00-3:30 **Break**

3:30-5:30 ***Scientific Session 2 (Mt. Lake Conference Room)***

Moderator: Bryce Falk (PLANT PATHOLOGY)

3:30-3:50 *Helen Raybould* (ANATOMY/PHYSIOLOGY AND CELL BIOLOGY)
"Chemosensing in the intestinal lumen: the bug-brain connection"

- 3:55-4:10 *Maria Marco* (FOOD SCIENCE & TECHNOLOGY) "Host-microbe interactions of *Lactobacillus plantarum* with humans, mice, and plants "
- 4:15-4:25 *Michael Hornsby* (CCM, MMI, INFECTIOUS DISEASES) "Interaction between *H. pylori*, host antimicrobial peptides, and the rhesus gastric microbiota"
- 4:30-4:40 *Ulrich Schaff* (BIOMEDICAL ENGINEERING) "*Anaplasma phagocytophilum* mimicry in binding E-selectin ligands on neutrophils reduces activation necessary for migration across inflamed endothelium"
- 4:45-4:55 *Kristie Oxford* (CCM, PATHOLOGY). "The Contribution of Persistent Infections Toward Chronic Health Conditions: Old Monkey Tales"
- 5:00-5:10 *John A Lindbo* (PLANT PATHOLOGY) "Using plant viral vectors to fight animal virus infections: Producing diagnostic reagents and vaccine candidates from a new tobacco mosaic virus expression vector"
- 5:15-5:25 *Çagla Tükel* (MEDICAL MICROBIOLOGY AND IMMUNOLOGY) "Responses to amyloids of microbial and host origin are mediated through Toll-like receptor 2"

5:30-6:30pm *Check in (Lobby) and Poster Setup (Mountain Ballroom)*

6:30-7:30pm *Dinner (Granhall)*

7:45-10:00pm *Poster Session (Mountain Ballroom)*

October 10

7:30-8:30am *Breakfast (Granhall)*

8:45-10:00am *Scientific Session 3 (Mt. Lake Conference Room)*

Moderator: Richard Michelmore (GENOME CENTER)

- 8:45-9:05 *Pamela Ronald* (PLANT PATHOLOGY) "The bacterial molecule AvrXa21 triggers rice innate immunity"

- 9:10-9:25 *Lorena Navarro* (MICROBIOLOGY) "Identification of a Molecular Target for the *Yersinia* Protein Kinase A (Insights into the Molecular Mechanism of *Yersinia* Pathogenesis)"
- 9:30-9:45 *Kristina Abel* (INTERNAL MEDICINE) "The need "4" help in infant S/HIV infection"
- 9:50-10:05 *Thomas Huser* (CENTER FOR BIOPHOTONICS SCIENCE & TECHNOLOGY)
"Advanced live cell microscopy of viral spread"

10:10-10:30am **Coffee Break**

10:30-12:00pm **Scientific Session 4 (Mt. Lake Conference Room)**

Moderator: Charles Bevins (MEDICAL MICROBIOLOGY AND IMMUNOLOGY)

- 10:30-10:50 *Nicholas Kenyon* (PULMONARY & CRITICAL CARE MEDICINE) "The role of nitric oxide in airway inflammation: Biomarker or therapeutic target?"
- 10:55-11:10 *Artyom Kopp* (EVOLUTION AND ECOLOGY) "A *Drosophila* model for understanding the molecular mechanisms of host-symbiont interactions"
- 11:15-11:30 *Johan Leveau* (PLANT PATHOLOGY) " Microbial ecology of plant diseases: from triangle to network "
- 11:35-11:45 *Maarten de Jong* (MEDICAL MICROBIOLOGY AND IMMUNOLOGY) "Uncovering the vices of the pathogenic bacterium *Brucella abortus*"
- 11:50-12:00 *Kristina Rothausler* (CCM, PATHOLOGY, MICROBIOLOGY AND IMMUNOLOGY) "Maintenance of long-lived anti-viral antibodies in the absence of B cell memory following influenza virus infection"

12:00-1:00pm **Lunch (Granhall)**

POSTER SESSION (Mountain Ballroom, 7:45-10:00pm)

SIZE OF POSTER BOARDS: 4'x8'; POSTER SIZE: 4'x4'

Name	Department	Poster Title
Barboza, Mariana	Chemistry	Analysis of glycoprotein-bacterial interactions by scanning optical microscope based oblique-incidence optical reflectivity difference
Bruno, Laura	MMI	Transcriptional response of bovine mucosa to infection with <i>Salmonella enterica</i> serovar Typhimurium
Butler, Brian	MMI	Pediatric malaria and Invasive bacterial co-infections
Castillo, Patricia	MMI	NO TITLE AVAILABLE
Chau, Jennifer	MMI	Malaria co-infection animal models
Chessa, Daniela	MMI	<i>Salmonella enterica</i> serotype Typhimurium Std fimbriae bind the H-Type 2 histo-blood group oligosaccharide
Chin, Franklin	Path/Lab Medicine	A novel mechanism for modulation of PAK/SNTK activation via acidic and core domains of HIV-1 and DIV-Nef
Chromy, Brett	Lawrence Livermore	Proteomic characterization of host-pathogen interactions
Chu, Hiu-Tung	MMI	Antimicrobial properties of human defensin 6
den Hartigh, Andreas	MMI	Characterization of the <i>Brucella abortus</i> Type IV secretion system
Drexler, Anna	MMI	Insulin signaling and oxidative stress responses to hIGF-1 in <i>Anopheles stefani</i>
Fairclough, Stephen	Molecular & Cell Biology	<i>Choanoflagellate</i> colony formation
Garcia-Rolan, Tena	MMI	NO TITLE AVAILABLE
George, Michael	MMI	NO TITLE AVAILABLE
Glavan, Tiffany	MMI	Divergent T cell response in mucosa during pathogenic & non-pathogenic SIV infection
Godinez, Ivan	MMI	IL-23 orchestrates mucosal responses to <i>Salmonella enterica</i> serotype Typhimurium in the intestinal mucosa
Hartman, Amber	GC/Ecology and Evolution/MMI	Waters: an automated workflow to analyze 16S rRNA data
Hastey, Christine	CCM	Subversion of humoral immunity following <i>Borrelia burgdorferi</i> Infection
Holsclaw, Cynthia	MCB	PopA3 is an acyltransferase essential for the biosynthesis of polyacyltrehalose from <i>Mycobacterium tuberculosis</i> .
Hornsby, Michael	CCM, MMI, ID	Interaction between <i>H. pylori</i> , host antimicrobial peptides, and the rhesus gastric microbiota ²
Horton, Ashley	MMI	Single nucleotide polymorphisms in <i>Anopheles gambiae</i>

immune signaling genes

Leonard, Brian	MMI	The role of defensins in canine innate immunity
Leveau, Johan	Plant Pathology	Exhibition of the mycomuncher DNA puzzle
Ronald, Pam	Plant Pathology	The rice/ <i>Xanthomonas</i> interaction Bovine-host response to <i>Salmonella enterica</i> serovar Typhimurium infection
RussellJoseph Smithers, Hannah	MMI MMI	The African malaria mosquito PKC gene family: orthologs of critical mammalian immune cell signaling genes
Stopka, Thomas	MMI	Sterile syringe access and HIV/AIDS risk behaviors among injection drug users: Yolo county, 2004-2006
Sun, Yao Hui	MMI	Beta-lactamase reporter, a novel system to study bacterial T4SS
Surachetpong, Win	MMI	MAPK signaling pathways regulate the mosquito response to malaria parasite infection
Thiennimitr, Parameth	MMI	Contribution of flagellin to intestinal inflammation during <i>Salmonella enterica</i> serotype Typhimurium infection
Vu, Kiem	Medical Pharmacology	The extracellular proteome of <i>Cryptococcus neoformans</i> and its role in CNS invasion
Wilson, Paul	MMI	NO TITLE AVAILABLE
Winter, Sebastian	MMI	TviA, in conjunction with RcsB, coordinates expression of the invasion associated Type 3 Secretion System
Xu, Jiying	PHS	Risk factor analysis of drug resistant tuberculosis in Hunan, China
Zhao, Xlaoyan	Pediatrics	Adaptive and innate responses in smoke exposed and <i>Chlamydia pneumoniae</i> infected ApoE ^{-/-} mice