CMIB Retreat

The first CMIB retreat was successfully held on June 15th and 16th 2007. We had over 125 registered participants that represented numerous Colleges across campus. In total we had 78 poster presentations, 7 faculty talks, and 14 short talks by graduate students, post-doctoral scientists, and research scientists. Thank you to everyone that participated in this event.

Thank you to all our poster and presentation judges and congratulations to our winners of the best poster and short talk.

Enjoy the photos!

Grant News

Amal Amer (PI)
Caspase-1 controls the survival of intracellular lung pathogens in macrophages
Davis Heart and Lung Research Institute Thematic Program
Direct costs: $50,000
Period: 07/01/07 – 06/30/08

Lauren O. Bakaletz (PI)
Identification and Assessment of Several Targeted and Novel Candidate Antigens for the Prevention of NTHI-induced Otitis Media
Agency: GlaxoSmithKline Biological Direct Costs: $172,706
Period: 6/1/07 – 5/31/08

Gillian Beamer (PI)
(>92 faculty mentor: Joanne Turner) Chemokines and their receptors in the pathogenesis of tuberculosis Agency: NIH/NIAID, Type: K08 AI-071111 Direct costs: $359,352
Period: 08/01/07 – 06/30/11

Larry Schlesinger and John Gunn (Co-PIs)
Development of a bacteriophage lambda delivery system as a vaccine candidate against intracellular bacterial pathogens Agency: PhageVax Inc. Direct costs: $10,000
Period: 5/07-4/08
2007 CMIB Retreat Photos

From L to R: Associate Director of Education: Bob Munson, Assoc. Dir. of Programming: Joanne Turner, Assoc. Dir. of Operations/Vice Dir.: John Gunn, Director: Larry Schlesinger

Retreat Participants

Vendor Displays/Participants

Retreat Participants

Poster Displays
Prizes and Awards

**Gillian Beamer** (PI: Joanne Turner): Recipient of 2007 PEO scholarship ($10,000 for educational and research activities).

**Gillian Beamer** (PI: Joanne Turner) won travel awards for her poster at The Ohio State University College of Veterinary Medicine Advanced in Veterinary Medicine Day, 2007 and The Ohio State University, OSUMC Graduate and Postgraduate Research Day, 2007.

**Rob Crawford** (PI: John Gunn) won a travel grant to attend the 107th American Society for Microbiology General Meeting, Toronto, Canada.

**Joe Jurcisek** (PI: Lauren Bakaletz): Invited Speaker, 9th International Symposium on Recent Advances in Otitis Media.

**Kevin Mason** (PI: Lauren Bakaletz) won a postdoctoral fellow poster award at the CCRI Retreat.

**Glen McGillivary** (PI: Lauren Bakaletz) won a Center for Microbial Interface Biology Retreat travel grant for postdoctoral fellow poster presentation.

**Laura Novotny** (PI: Lauren Bakaletz) won an American Society for Microbiology student travel grant.

**Laura Novotny** (PI: Lauren Bakaletz) won a graduate student poster award at the CCRI Retreat.
The CMIB work in progress (IBGP 795) will move to **BRT room 105** starting September 24th 2007. The schedule for fall is already complete but there are vacancies for winter so please sign up to present. Information on the schedule, sign up, and class information can be found on the CMIB website (cmib.osu.edu). The call number for Autumn quarter is 16149-1, 1 credit hour.

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**CMIB Seminar Series**

The 4th year of the CMIB seminar series will begin on September 17th 2007. The seminar series will be held in the **BRT room 105 or 115**. Please note that due to scheduling complications this year the exact location in the BRT (and the time for one seminar) will vary. These changes will be clearly announced prior to the seminar.

We have 5 outstanding speakers scheduled for our 2007-2008 series. If you would like to meet with any of our guest speakers during their visit please contact Joanne Turner (joanne.turner@osumc.edu). Information about the seminar series can be found at cmib.osu.edu.

**September 17th 2007: BRT 105, 4pm.**

**Harry Mobley, Ph.D., Professor and Chair of Department of Microbiology and Immunology, University of Michigan.**

Dr Mobley’s laboratory is interested in the molecular mechanisms of bacterial pathogenesis. The laboratory is studying virulence mechanisms of uropathogenic *Escherichia coli* and *Proteus mirabilis* that cause urinary tract infection, and *Helicobacter pylori* that causes gastritis and peptic ulcer disease.

Co-sponsors: Children’s Research Institute and the Department of Pathology

**November 5th 2007: BRT 105, 3:30pm.**

**David Woodland, Ph. D., Member, Trudeau Institute.**

The goal of Dr Woodland’s research program is to understand T cell memory in the lung with a view to vaccine development. Studies focus on several respiratory pathogen models in mice, including influenza virus, Sendai virus, murine γ-herpesvirus (MHV-68), and *M. tuberculosis*.

Co-sponsor: Department of Veterinary Medicine

**October 22nd 2007: BRT 115, 4pm.**

**Aaron Mitchell, Ph.D., Harold S. Ginsberg Professor of Molecular Pathogenesis, Department of Microbiology, Columbia University.**

Dr Mitchell’s laboratory is interested in the fungal environmental response pathways. His main focus is *Candida albicans*, the major invasive fungal pathogen of humans. *C. albicans* causes an array of infections in both immunocompetent and immunocompromised hosts, and their goal is to understand and combat virulence mechanisms. Dr Mitchell also works with the model yeast *Saccharomyces cerevisiae*, which offers unparalleled genetic and post-genomic resources. The goal of this work is to understand novel regulatory mechanisms.

**January 14th 2008: BRT 115, 4pm.**

**David Engman, Ph. D, M.D., Associate Professor of Pathology and Microbiology-Immunology, NorthWestern University.**

Dr Engman’s research is focused on 3 areas: (i) organelle biogenesis in trypanosomes, (ii) pathogenesis and treatment of inflammatory heart disease and (iii) diagnosis of human genetic and infectious diseases.

**March 17th 2008: BRT 115, 4pm.**

**Vojo Deretic, Ph. D., Department Chairperson. Molecular Genetics and Microbiology, University of New Mexico HSC.**

Dr Deretic’s interest are focused on autophagy, a fundamental biological process defined as a cyttoplasmic homeostasis pathway whereby cytoplasm portions get sequestered by membrane for delivery to lysosomes. This leads to removal of damaged or surplus organelles and turnover of stable, long-lived macromolecules. Autophagy has been previously implicated in both health-promoting and disease-associated states in cancer, neurodegeneration, development, and aging. Autophagic degradation is a major effector of innate and possibly adaptive immunity mechanism for direct elimination of intracellular microbes and other aspects of immunity.
Publications


Sow FB, Florence WC, Satoskar AR, Schlesinger LS, Zwilling BS, Lafuse WP. Expression and localization of hepcidin in macrophages: a role in host defense against tuberculosis (J Leuko Bio; Epub ahead of print).
CMIB Faculty Profile

Robert S. Munson Jr., PhD

Dr. Robert Munson, Jr. is Director of Education for the CMIB. He is a member of the Center for Microbial Pathogenesis, Director the Core DNA Sequencing Facility and Director of the Office of Research Graduate Studies at Columbus Children’s Research Institute. His primary academic appointment is Professor of Pediatrics at The Ohio State University with joint appointments in the Department of Molecular Virology, Immunology and Medical Genetics and the Department of Microbiology.

The Munson laboratory is interested in the pathogenesis of Haemophilus disease. Nontypeable Haemophilus influenzae is an important cause of otitis media in children, and a major cause of lower respiratory disease in children in the developing world. The organism is also associated with exacerbations of chronic bronchitis and pneumonia in elderly. Haemophilus ducreyi is the causative agent of chancroid, a sexually transmitted disease. Chancroid facilitates the transmission of HIV.

Ongoing projects include determination of the structure and mechanism of assembly of the type IV pilus of H. influenzae as well as the identification and characterization of glycoproteins produced by H. ducreyi. The first bacterial genome was sequenced in 1995. The Munson laboratory subsequently led groups that sequenced the genome of an H. influenzae strain isolated from a child with otitis media and the genome of a strain of H. ducreyi. The laboratory is currently involved in the determination of the sequence of the genome of a strain of H. influenzae isolated from a patient with chronic bronchitis. These projects led to the development of microarrays that have been and are currently employed to understand how these pathogens respond to changes in their environment and respond to environmental stress. The goal of these projects is to completely understand the pathogenesis of disease caused by H. influenzae and H. ducreyi. This information will be critical for the development of efficacious vaccines.

Dr. Munson received his BA in Microbiology at the University of Connecticut in 1968 and his Ph.D. from the University of Connecticut Health Center in 1976. After his postdoctoral training at Washington University School of Medicine, he joined the faculty in the Division of Infectious Diseases in the Department of Pediatrics at Washington University School of Medicine in 1980. In 1994, he joined the faculty in the Department of Pediatrics at The Ohio State University. Dr. Munson was a member of the NIH Bacteriology/Mycology Study Section, an ad hoc reviewer for several additional NIH study sections, as well as an ad hoc reviewer for numerous national and international grant funding agencies. He is currently a member of the Veteran’s Administration Merit Review Committee for Infectious Diseases. Dr. Munson has been a member of the Editorial Board of “Infection and Immunity” since 1989 and is a Fellow in the Infectious Diseases Society of America and the American Academy of Microbiology. When not in the lab, Bob enjoys swimming, snorkeling, skiing and biking.