2010 CMIB Retreat

The CMIB retreat is scheduled for March 18 and 19, 2010.

Based on feedback received from attendees at past retreats, the 2010 CMIB retreat will span 2 buildings. All of the presentations will now take place in 170 Davis Heart and Lung Research Institute and the posters will be displayed and judged on the first floor of the BRT. Also, this move to 2 buildings will alleviate the crowding we have had in the past in the poster rooms.

Food service and registration will take place on the first floor of the BRT.

The 2010 Retreat Organizing committee is currently working to finalize the program. Based on feedback from participants, the organizing committee has increased the number of talks that will be given by trainees and have decreased the number of faculty presentations. We have also added an award category for best poster presented by a technician. This will give all technicians a chance to showcase their work and accomplishments.

A call for abstracts will be sent to all CMIB members in early December (please be sure to forward the announcement on to your lab personnel). The abstract deadline will be February 12.

Registration will open and more detailed information will be available online once the new CMIB website is up and running.

We look forward to everyone’s participation in the 2010 CMIB Retreat!

Retreat Keynote Address

The CMIB is pleased to be hosting as our 2010 CMIB Retreat keynote speaker William A. Petri, Jr., M.D., Ph.D., Chief, Division of Infectious Diseases and International Health from the University of Virginia Health System at the 2010 CMIB Retreat. Dr. Petri will give his presentation entitled “A polymorphism in the leptin receptor influences human susceptibility to amebiasis” on Thursday, March 18th at 4:20pm in 170 DHLRI.

Dr. Petri received his MD and PhD degrees from the University of Virginia. He completed his Residency in Internal Medicine at Case Western Reserve University in Cleveland and a fellowship in Infectious Diseases at the University of Virginia.
Awards


Cynthia Ryder (PI: Dan Wozniak): Student travel award for the 5th ASM Conference on Biofilms in Cancun, Mexico (November 15-20, 2009).

Manjusha Kulkarni (PI: Brad McGwire): NIH conference fellowship to attend the 16th Annual Midwest Microbial Pathogenesis Conference at Purdue University.

Grants

Amal Amer (PI), Larry Schlesinger (CO-I) and Susheela Tridandapani (CO-I)
“Role of caspases in *Legionella pneumophila* pulmonary infection”
Agency: NIH/NHLBI (R01)
Period: 8/1/09—5/31/14
Total Award: $1,875,000 ($1,250,000 direct and $625,000 indirect)

Amal Amer (PI)
“How can caspases control intracellular pulmonary pathogens”
Agency: NIH/NIAID (R21)
Period: 7/17/09—6/30/11
Total Award: $440,000 ($300,000 direct costs and $140,000 indirect)

Amal Amer (PI)
“Role of caspase-7 in *Legionella pneumophila* pulmonary infection”
Agency: American Lung Association
Period: 7/1/09-6/30/10
Award: $40,000 (direct)

Chad Rappleye (PI)
“Virulence factor discovery in the secreted proteome of *Histoplasma capsulatum*”
Agency: NIH/NIAID (R01)
Period: 08/01/09—7/31/14
Award: $1,545,000

Sam King (PI)
“Mechanisms of Pneumococcal Adherence”
Agency: NIH (R01)
Period: 8/1/09-7/31/13
Award: $900,000

Emilio Flano (PI)
“Regulation of T lymphocyte immunology to influenza virus”
Agency: NIH (U01)
Period: 09/12/2009-08/31/2011
Award: $841,096

Jordi Torrelles (PI)
“Remodeling of the *M.tuberculosis* cell wall by the host microenvironment”
Agency: NIH/NIAID (R00)
Period: 08/01/09-07/31/11
Award: $249,000/year

James Waldman (PI)
“Antiviral activity of leflunomide against respiratory syncytial virus”
Agency: NIH/NIAID (ARRA 1 year grant)
Period: 9/1/2009-8/31/2010
Award: $300,000

Joanne Turner (PI)
“Immune correlates of reactivation tuberculosis”
Agency: NIH/NIAID (ARRA Supplement)
Period: 09/01/2009 - 08/31/2010
Award: $66,667 (direct costs)

Joanne Turner (PI)
“CD8 T cells and immunity to tuberculosis in old mice”
Agency: NIH/NIAID (R01 bridge funds)
Period: 08/01/09-02/28/10
Award: $46,542 (direct costs)

Jennifer Edwards (PI)
“The affect of hormones and oxygen-limitation on gonococcal pathophysiology”
Agency: NIH/NIAID (R01)
Period: 8/01/2009-07/31/2013
Publications


Website

The CMIB is currently going through a website redesign. The new website will have many new features to make it a more valuable tool for the users. The new features include a calendar on the CMIB homepage which will display upcoming events of interest on campus that pertain to host-pathogen interactions. The website will also contain a more robust section on the campus wide BSL3 program that is operated under the umbrella of the CMIB. Other features include more information on research facilities and interactive drop-down menus. The CMIB faculty pages will now be updated via an information feed from the OSU:Pro system. All pages will now follow the same format and will provide more consistency to the site. Content is currently being loaded “behind the scenes” and the fully functional site will be unveiled soon.
CMIB Faculty Profile

Amal Amer, MD, PhD

Dr. Amal Amer joined OSU in February 2007 as an Assistant Professor in the Pulmonary Division, Department of Internal Medicine. Her laboratory is located in the BRT among the CMIB group which is a great fit with the host-pathogen interaction theme of the group. Dr. Amer earned her MD from Cairo University in Egypt, then a PhD in 2002 from The University of Western Ontario in Canada from The Department of Microbiology and Immunology. After her experience with microbiology research, she decided to pursue her career in academia. In 2001, she joined the laboratory of Dr. Michele Swanson, then in 2003, the laboratory of Dr. Gabriel Nunez at the University of Michigan as a postdoctoral fellow. She studied the pathogenesis of Legionella pneumophila (a pneumonia-causing bacterium) and its interaction with macrophages. Her work in Dr. Nunez’s lab resulted in key publications in Nature, Nature Immunology and The Journal of Biological Chemistry discovering bacterial ligands recognized by previously uncharacterized NOD-like receptors. She continued her work on Legionella pneumophila and she found that the activation of caspases, which were always studied in the context of cell death, can offer novel vital functions in the cell and prevent infection independently of cell death. Dr. Amer became fascinated with the cytosolic NOD-like receptors and their ability to activate inflammatory responses to combat pathogens. Interestingly, Legionella is a fascinating organism and a great tool to discover and characterize novel physiological functions in the macrophages that are exploited by the pathogen yet still unknown for scientists. Dr. Amer decided to focus her work in her laboratory here at OSU on the novel functions of NOD-like receptors and caspases in the innate immune response to pulmonary pathogens. Within a year, she and her laboratory supervisor Anwari Akhter were able to identify and characterize a new pathway for the activation of caspase-7, an executioner caspase that was thought to be activated only through programmed cell death or apoptosis. Her findings were published in PloS Pathogens Journal and were the basis for 2 NIH-funded grants and an ALA (American Lung Association) grant that she received shortly after completing her second year at OSU. Furthermore, Dr. Amer is working on bacterial infections in cystic fibrosis (CF) patients such as Burkholderia cenocepacia in collaboration with Dr. Miguel Valvano in Canada. Her lab recognized several Burkholderia factors responsible for the severe inflammation occurring in the lungs of CF patients. Their future aim is to design novel strategies to combat inflammation in the lung. Furthermore, Dr. Amer is a proud mother of Ramy (freshman at OSU) and Kareem (freshman at New Albany High School). Dr. Amer attributes her success to the great collaborative and supportive environment supplied by the Pulmonary Division and the CMIB. The mentorship from both groups was unsurpassed and the core and animal facilities were indispensable for such achievements. Also the family support from her husband Dr. Khaled Amr (pediatric anesthesiologist) and her parents allowed her to pursue her career goals. Now her lab includes Kyle Caution, a graduate student from the IBGP program, Arwa Abu Khweek a postdoctoral fellow, Sheetal Kotrange a lab technician, and Dalia Hussein, a visiting graduate student. Dr. Amer enjoys teaching and training people who love science and are keen on success. She is looking forward to the years to come with more discoveries and more enthusiastic students to train.

Announcements

Amal Amer was named Associate Editor for the journal PLoS Pathogens

Jordi Torrelles was promoted to Assistant Professor

Brian Bell (PI: John Gunn), Rob Crawford (PI: John Gunn) and Corey Clay (PIs: John Gunn and Larry Schlesinger) all successfully defended their dissertations

Lauren Bakaletz was an invited speaker at the 2nd Co-Infections Meeting at St. Jude Children’s Research Hospital in Memphis, TN