Dr. Sellati Receives $1.6M Grant

Timothy J. Sellati, Ph.D., Associate Professor, has been awarded a four-year, $1.6 million grant from the National Institutes of Health, National Institute of Allergy and Infectious Disease, for his research entitled, “Modulating MMP-9 and Neutrophil Recruitment: A Therapeutic Strategy for Tularemia.” This research focuses on lessening the immune response to a deadly form of bacteria which in turn, could actually prevent death.

According to Dr. Sellati, this idea runs counter to what many currently think. Our bodies mount immune responses to bacteria in an effort to get rid of them. Part of that response includes tissue damage (inflammation), which is responsible for our feeling sick. What people may not realize is that in some cases the immune response may do more harm than good. When talking about respiratory tularemia, the response is excessive, causing lung damage by neutrophils, resulting in more inflammation. It is hoped that this important research will answer the question of how to reduce inflammation while maintaining the benefits of the immune response.

Although AMC is actively working on vaccines for tularemia, the focus of this research is to find an effective therapeutic treatment.

Dr. Hempel Receives Fellowship

Nadine Hempel, Ph.D., Postdoctoral Fellow, has received a three-year, $165,000 Fellowship grant from the National Institutes of Health, National Cancer Institute in support of her research entitled, “Regulation of Tumor Cell Migration by Mitochondrial Superoxide Dismutase.”

(Mentor: J. Andres Melendez, Ph.D.)

Medical Student Investigation Day

The Fifth Annual Medical Student Investigation Day was held September 24, 2008 in Choices Café. Medical students gave poster presentations from their summer research work. Anna Terajewicz presented her poster entitled, “The Role of CIITA in Rejection of Breast Cancer.” (Mentor: Jonathan A. Harton, Ph.D.)
CIMD Annual Research Retreat and Picnic

The Center for Immunology & Microbial Disease held its Annual Research Retreat on Thursday, August 21, 2008 at the River Stone Manor in Scotia, NY.

This year’s oral presentations were given by graduate student Amanda Melillo, postdoctoral fellow Nadine Hempel, Ph.D., and principal investigator J. Andres Melendez, Ph.D.

All CIMD students in their second year and beyond presented posters of their research and were judged by CIMD faculty and postdoctoral fellows. The following awards were presented:

1st & 2nd Year Students

1st Place
Bhuvana Katkere
“Elucidating the Effects of Interferon-γ on Macrophage Antigen Processing”

2nd Place
Maninjay Atianand
“Pyrin Only Protein-2 (POP2) Modulates Pro-inflammatory Responses Through the Regulation of NF-κB (p65/RELA) Signaling and Inflammasome Functions”

3rd Place
Kerry Cirillo
“Expression and Purification of a Putative Francisella tularensis Outer Membrane Protein, omp85”

Seniors Students

1st Place
Douglas Durrant
“IL-12 Alleviates IL-17-Mediated Allergic Lung Inflammation in the Absence of T-bet Regulation”

2nd Place
Amanda Melillo
“These “Schu’s” Were Made for Silencing: The Ability of Francisella tularensis to Dampen the Host Immune Response”

3rd Place
Kathleen McCabe
“Establishing the Molecular Mechanisms of B-Cell Receptor Internalization”

The weather was fantastic and many people joined in on football and baseball games while others listened to music provided by Bob Lord.

New students had an opportunity to meet current CIMD students and staff.

Everyone had a great time and there were no sport-related injuries this year!
Conferences, Meetings and Study Sections

James A. Bennett, Ph.D., was asked to participate in a workshop for the development of a medical student/research site for a joint Union College/Albany Medical College combined degree program, July 2-3, 2008 in Riverside, CA.

Timothy J. Sellati, Ph.D., was invited to give a seminar entitled, “Restraint of Chronic Inflammation Requires CD-14-dependent Modulation of the P13K/AKT/p38-MAPK Axis to Negatively Regulate TLR Signaling,” at the 10th Biennial Meeting of the International Endotoxin & Innate Immunity Society, July 30-August 2, 2008 in Edinburgh, Scotland.

Meenakshi Malik, D.V.M., Ph.D., presented a poster entitled, “Coordination of Extra- and Intra-cellular Recognition of Francisella tularensis by Macrophages.”

Dennis W. Metzger, Ph.D., was invited to be keynote speaker at the 8th Annual Buffalo Conference on Immunology in Buffalo, NY, September 8-9, 2008.

Karsten R.O. Hazlett, Ph.D., was invited to serve on the Army Research Office Workshop Bacterial Composition as a Function of Growth Conditions in Arlington, VA, September 28-October 1, 2008.

Peer-reviewed Publications

Sammons-Jackson WL, McClelland K, Manch-Citron JN, Metzger DW, Bakshi CS, Rasley A, and Anderson BE. Generation and characterization of an attenuated mutant in a response regulator gene of Francisella tularensis live vaccine strain (LVS). DNA Cell Biol. 27:387-403, 2008. This work was featured on the cover.


Wright AK, Briles DE, Metzger DW, and Gordon SB. Prospects for use of interleukin-12 as a mucosal adjuvant for vaccination of humans to protect against respiratory pneumococcal infection. Vaccine. 26:4893-903, 2008.
Other News Items...

- Congratulations to Douglas Durrant and his wife, Emily, on the birth of their son, Benjamin Cedric Durrant. Benjamin was born on July 22, 2008 and weighed 10lbs, 4 oz.

- Congratulations to Sally Catlett and her husband, Mike, on the birth of their daughter, Avery Lynn Catlett. Avery was born on September 6, 2008 and weighed 8 lbs.

- Reminder: Angelica is in the ME-2 elevator lobby Tuesdays, between 9-10 a.m. for pick-up and delivery of lab coats.

Things to do in the Capital Region...

- Adirondack Stampede Charity Rodeo—11/7/08, Glens Falls, NY  (Seven rodeo events) www.glensfallscc.com
- LARAC Fall Arts Festival—11/8-9/08, Queensbury, NY  (Arts, crafts, baked goods, etc.) www.larac.org
- Christmas Country Tour—11/28-29/08, Indian Lake, NY  (Crafters and artisans, etc.) www.indian-lake.com
- Cooperstown...A Christmas Past—12/13/08  (Visit Santa, carolers, horse drawn rides, etc.) www.cooperstownchamber.org
- Albany WinterFest—12/27/08  (Games, music, fireworks, etc.) www.albanyevents.org

Upcoming CIMD Seminars

November 3, 2008
12 Noon, MS-316
Carlos de Noronha, Host

Gregory Viglianti, Ph.D.
Associate Professor
Department of Microbiology
Boston University School of Medicine

“The Effects of Toll-like Receptor/Nuclear Receptor Crosstalk on HIV-1 Cis and Trans Infection”

November 10, 2008
12 Noon, MS-316
James R. Drake, Host

Laurence C. Eisenlohr, V.M.D., Ph.D.
Professor
Department of Microbiology and Immunology
Jefferson Medical College, Thomas Jefferson University

“Charting MHC Class 1– and Class II-Restricted Antigen Processing Pathways”

November 24, 2008
12 Noon, MS-316
Huaiqing Chen, Host

Dieter M. Schifferli, D.V.M., Ph.D.
Associate Professor of Microbiology
School of Veterinary Medicine
University of Pennsylvania

“Yersinia pestis: How it Spreads and Defends Itself from the Host”

December 8, 2008
12 Noon, MS-316
Jing-Ren Zhang, Host

Francis E. Nano, Ph.D.
Professor
Department of Biochemistry and Microbiology
University of Victoria

“Type 6 Secretion Encoded by the Francisella Pathogenicity Island”

www.amc.edu/academic/research/imd.html