IMD Newsletter
Department of Immunology & Microbial Disease at Albany Medical College

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IMD Continues a Record of Achievement

During the 2016 fiscal year, IMD Principal Investigators secured more than $5M dollars in grant funding from NIH. As a whole, Albany Medical College was awarded $11.2M in total NIH funds, and ranked 104 out of 139 medical schools. IMD secured 44% of AMC’s total NIH funding and ranked 47 out of 96 schools reporting in the Microbiology category. Thus, IMD ranked in the top 50% and ahead of other schools, such as Duke, Penn State, Brown and University of Minnesota (see illustration).

IMD’s consistent track record speaks for itself. Over the past ten (10) years, 2006-2016, IMD has been awarded almost $47M in NIH funding, which is just shy of 41% of the same ten year total NIH funding for AMC.

Other notable statistics include IMD’s extensive participation in external activities, serving on multiple journal editorial boards and Federal Advisory panels, and accepting numerous invitations to give presentations at colleges, national meetings, and organizations in both the United States and abroad.

And while our graduate training program may not be the largest, our Ph.D. Graduates routinely secure illustrious positions in academia, government, and industry across the United States, and beyond.

IMD Welcomes New Faculty Member, Dr. Wei Sun

Wei Sun, Ph.D., joined the IMD faculty in February 2017. Dr. Sun previously worked as an Research Associate Professor in the Department of Infectious Diseases and Pathology at the College of Veterinary Medicine, University of Florida at Gainesville. His research background includes the construction of regulated, delayed attenuated Y. pestis to induce protective immunity against plague. His laboratory is currently focusing on genetic modification of bacterial pathogens, such as Yersinia spp., Salmonella typhimurium, and S. paratyphi as live vaccines to prevent plague caused by Y. pestis and Yersiniosis caused by Y. enterocolitica and Y. pseudotuberculosis. He is first-author of several publications in peer-reviewed journals including: Vaccine, Infection and Immunity, and Pathogens and Disease.
IMD Students Recognized at the 38th Annual Graduate Student Research & Awards Day

The Richard Miller Alumni Prize for The Most Outstanding Research Presentations
(First place)
Recognizing Excellence in Poster Presentations
Graduate Student Alumni Award

Tiffany Zarrella—Senior
“Heat Shock Suppressor Mutations Subvert c-di-AMP Production in Phosphodiesterase-deficient Streptococcus pneumoniae”
Mentor: Dr. Guangchun Bai

The Dean’s Certificate for Excellence in Research
Recognizing Excellence in Poster Presentations

Jesse Rabinowitz—Third Year
“NRF2-mediated HIV Restriction Impacts Matrix in Primary Human Macrophages”
Mentor: Dr. Carlos de Noronha

Alumni Research Award

Carolina Chiale Ferreira—Second Year
“Virus-based Vaccine Vectors Encoding the HBV Core Protein Induce Immune Responses that Control Virus Replication in a Mouse Model of Hepatitis B”
Mentor: Dr. Michael Robek

CONGRATULATIONS TO ALL OF OUR STUDENTS!
OUTSTANDING JOB!!

Peer-reviewed Publications


Alicia Soucy, graduate student, was the recipient of the Young Scholar Award for Best Poster Presentation Entitled, “Immune Tolerance Against Pulmonary F. tularensis Infection,” at the 14th Annual International Public Health and Emerging Microbial Threats Conference at the Albany College of Pharmacy, September 19, 2016.

Alicia Soucy, graduate student, was the recipient of the Best Abstract award for her poster entitled, “Immune Tolerance to Pulmonary F. tularensis Infection,” at the American Society of Microbiology Symposium, Albany, NY, November 17, 2016.

Dennis W. Metzger, Ph.D., chaired a Department of Defense Peer-Reviewed Medical Research Program (PRMRP) Focused Program Review by teleconference, December 19-20, 2016.

Kouacou V. Konan, Ph.D., served as a grant application reviewer via teleconference for the Florida Department of Health Zika Research Review 2016, January 4, 2016.

Karsten R.O. Hazlett, Ph.D., served on the National Institutes of Health Genes and Drug Delivery Study Section in Bethesda, MD, February 15-17, 2017.

Edward J. Gosselin, Ph.D., served on the Vaccines against Microbial Disease Study Section in Seattle, WA, February 15-17, 2017.

Michael D. Robek, Ph.D., served on the NASA Study Section Microbiome of the Built Environment Aboard the International Space Station in Crystal City, VA, February 9, 2017.

Edward J. Gosselin, Ph.D., was invited to attend the Defense Threat Reduction Agency (DTRA) Francisella Program and Science Review in Lorton, VA, February 9-10, 2017.


Edward J. Gosselin, Ph.D., was invited to give a seminar entitled, “Resident-macrophages and their Role in Regulating Hematopoiesis and HSC Function,” for the Wilmott Cancer Institute at the University of Rochester, Rochester, NY, March 31, 2017.

Michael D. Robek, Ph.D., was invited to give a seminar entitled, “Virus-based Vaccine Platforms for HBV Therapeutic Immunization,” for the Center for Diagnostics and Therapeutics at Georgia State University, April 3-4, 2017.

Katie C. MacNamara, Ph.D., was invited to give a presentation entitled, “Macrophages at the Crossroads of Anemia of Inflammation: Interferon gamma Directs the Traffic,” at the Sanquin Iron Metabolism and Anemia Spring Seminar in Amsterdam, The Netherlands, April 20-21, 2017.
Guangchun Bai, M.D., Ph.D., Assistant Professor, was recognized in the April 2017 edition of *Albany Med Today* for having received a 7-year, $324,168 award for a subproject on an NIH R35 grant entitled, "Pneumonia Biology." (In collaboration with Dr. Joseph Mizgerd, Boston University.)

**Congratulations Dr. Bai!**

### IMD Seminar Series

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<tr>
<th>Date</th>
<th>Time</th>
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| June 1, 2017  | 11:00 a.m. | MS-169   | Dr. Kate MacNamara, Host | Nadia Carlesso, M.D., Ph.D.  
Professor  
Department of Hematology & Hematopoietic Cell Transplantation  
Associate Director of Basic Research, Gehr Family Center for Leukemia Research  
Beckman Research Institute at City of Hope, Indiana University  
*"Notch in the Niche: A Gatekeeper of Inflammation and Myeloid Cells Homeostasis"* |
| June 6, 2017  | 11:00 a.m. | MS-169   | Dennis W. Metzger, Host | Guohua Yi, Ph.D.  
Faculty Associate  
Center of Emphasis in Infectious Diseases, Department of Biomedical Sciences  
Texas Tech University Health Sciences Center  
*"Strategies for Eliciting Broadly Neutralizing Antibodies to HIV-1 and Gene Therapy to Confer HIV-resistance"* |
| June 8, 2017  | 11:00 a.m. | MS-169   | IMD Graduate Students, Host | Kamel Khalili, Ph.D.  
Laura H. Carnell Professor and Chair, Department of Neuroscience  
Director, Center for Neurovirology; Comprehensive NeuroAIDS Center  
Lewis Katz School of Medicine at Temple University  
*"A Novel Strategy for Eradication of HIV-1/AIDS Involving a Gene Editing Approach"* |
| June 15, 2017 | 2:00 p.m.  | MS-169   | Dennis W. Metzger, Host | Dominic Paquin Proulx, Ph.D.  
Research Scientist  
Department of Microbiology, Immunology, and Tropical Medicine  
The George Washington University  
*"Investigating Innate T cells in HIV Infection and Immunodeficiency"* |