

# Faculty Forum Departmental Spotlight

Department of Microbiology & Immunology Nejat Egilmez, Ph.D.



## **Description and Demographics**

- One of 5 basic science Departments in the SOM.
- M.S. and Ph.D. degrees in Microbiology and Immunology.
   New MS concentration in Clinical Microbiology in the works.
- 21 primary Faculty and 35 Associate Faculty.
- Currently home to 40 Graduate Students
- Chair: Nejat Egilmez, Vice Chair: Hari Bodduluri
- Department Contact: Ms. Crystal Dick (crystal.dick@louisville.edu).



#### **Department Contribution to the SOM four planning pillars**

#### **Education**

- Training Master's and Ph.D. students.
- Participating in the Cancer Biology summer undergraduate program.
- Departmental summer High School research fellows program.
- Our faculty teach in the first and second years of the Medical curriculum, the Dental School curriculum, at the undergraduate campus and participate in the basic science graduate program curricula.



#### **Department Contribution to the SOM four planning pillars**

#### Research

- Over \$6.2M in grant support annually.
- 16 active laboratories producing ~50 publications/year.
- Research areas include microbial pathogenesis (Legionella, Burkholderia, Pseudomonas, Yersinia pestis, Klebsiella, RNA viruses, malaria), vaccine adjuvants, autoimmune disease (diabetes, Lupus, MS, psoriasis), transplantation, role of microbiota in immune/inflammatory disease, tumor immunity.
- Collaborations with multiple centers (ICT, CPM, BCC, CII).



## **Department Contribution to the SOM four planning pillars**

#### **Clinical Care**

- Collaborative clinical trials through the recent internal RFP on Metagenomics and Health to study the link between social determinants, microbiota and disease susceptibility.
- Anti-cancer therapeutics developed by M&I faculty being tested in clinical trials at BCC.



#### **Department Contribution to the SOM four planning pillars**

## **Community Engagement**

- Leading the new IRFP Metagenomics and Health Project to investigate the role of social determinants in Microbiome and Health.
- Summer High School Program involving paid laboratory internships.
- UofL Science Policy and Outreach Group co-founded by one of our M&I graduate students.
- Faculty participation in High School/community college lectures.



## **Interesting Facts about the Department**

- M&I traces its origin to the
   Department of Public Health and
   Bacteriology which was officially formed in 1933 with Dr. George
   McLean Lawson as the first Chair.
- M&I graduated its first Ph.D. student in 1962.
- M&I increased its research ranking in NIH funding by 26 positions (out of a total of 97 Departments nationally) between 2013 and 2016.

