University of Michigan Department of Microbiology and Immunology Recognized as a “Milestones in Microbiology” Site

On 22 October 2015, the University of Michigan Department of Microbiology and Immunology became the twelfth Milestones in Microbiology site designated by ASM. The Milestones program, established to promote greater awareness and appreciation of microbiology, recognizes institutions with a strong history of significant contributions advancing the field of microbiology.

The University of Michigan Department of Microbiology and Immunology (UM M&I)’s distinguished history began in 1881 with one of the first bacteriology courses in the United States, Sanitary Science, taught by Victor Vaughan. In 1902, Professor Frederick G. Novy became chair of the Department of Bacteriology at UM, where he brought his training under Robert Koch and Louis Pasteur to bear, developing some of the earliest techniques for the study of anaerobes, spirochetes, and trypanosomes. Novy became the fifth president of the Society of American Bacteriologists, which later became ASM. Other distinguished UM microbiologists include Paul De Kruif, author of Microbe Hunters; former ASM president and proteomics innovator Frederick Neidhardt; Rolf Freter, a pioneer of microbiome research; and Thomas Francis, Jr., a leader in research on influenza and epidemiology and mentor to Jonas Salk during development of the polio vaccine.

Kicking off a three-day celebration of the Milestones in Microbiology designation, Powel Kazajian, M.D., Ph.D., Professor of Internal Medicine, outlined the history and accomplishments of Frederick Novy. This subject is of special interest to Kazajian, as Novy was the topic for Kazajian’s doctoral dissertation in history. Harry Mobley, Ph.D., current Frederick G. Novy Distinguished University Professor and Department Chair, then spoke at the “plaquing” ceremony, highlighting M&I’s ongoing contributions to microbiology. Mobley also noted that a descendent of Frederick Novy, Heather Smith, also a microbiologist, was in attendance. Smith, Novy’s great-great-granddaughter, commented that she was thrilled to learn firsthand how his work laid the foundations for microbiology research in the United States. M&I faculty were honored to have the University of Michigan President, Mark Schlissel (also a Professor of M&I), attend and give congratulatory remarks. Reflecting on his background in virology, Schlissel joked that he is one of only a few university presidents who would catch Mobley’s earlier “plaquing” reference. The president is “proud of our [UM M&I’s] historical role in this field” of microbiology and emphasized microbiology’s role in the evolution of molecular biology and contributions to precision medicine.

Douglas Eveleigh, Ph.D., Chair of the ASM Milestones in Microbiology Committee, described the role of ASM’s Center for the History of Microbiology and some specific contributions by UM M&I faculty. He then introduced former ASM president Moselio Schaechter, Ph.D., who expressed his own fond remembrance of UM M&I’s contribution to the history of microbiology. Schaechter made special mention of Neidhardt’s influence, remarking, “in addition to his powerful scientific discoveries, his chairmanship of the department is celebrated for his introduction of participatory management, an operating mode then unique in medical schools; the current chair, Harry Mobley, has successfully continued it.” Schaechter also noted that although Neidhardt was unable to attend the Milestones event in person, he was surely there “in spirit.” Schaechter then presented the ASM Milestones in Microbiology plaque to the Department. The plaque, detailing key UM historical figures, was later installed at the entrance to M&I’s office, serving to achieve ASM’s objective of increasing professional and public recognition of the significance of microbiology.

A live podcast recording of This Week in Mi-
crobiology (TWiM) immediately followed the plaque unveiling ceremony. In TWiM episode #114, host Vincent Racaniello and co-hosts Michele Swanson and Moselio Schaechter highlighted research by UM’s Vincent Young, Mary O’Riordan, and Harry Mobley. The Department’s annual Neidhardt-Freter Symposium concluded Thursday’s events. UM M&I established the symposium, now in its fifth year, as a venue for leading bacterial physiology and pathogenesis researchers to share their research with UM while honoring esteemed former colleagues Neidhardt and Freter. Manuela Raffatellu, Ph.D., from the University of California, Irvine, and Sam Miller, M.D., of the University of Washington, shared their work on Salmonella. Raffatellu recollected that a parting gift from her postdoctoral mentor had been a copy of Neidhardt’s text Escherichia coli and Salmonella (EcoSal), and selection for the lectureship meant a lot to her. Miller recounted that during a previous visit in 1992, he interacted with both Freter and Neidhardt, and thus it was a special honor to return for the Symposium.

Friday featured the live recording of Vincent Racaniello’s This Week in Virology (TWiV) episode #360 with co-host Kathy Spindler and featured guests Adam Lauring, Akira Ono, and Mike Imperiale. The Milestones in Microbiology celebration concluded on Saturday with the Michigan Branch of ASM Fall 2015 meeting, hosted at the University of Michigan Union. With a “Spotlight on Bacterial Pathogenicity,” three UM alumni, Andrew Camilli, Melody Neely, and Neal Hammer, were plenary speakers at the Branch meeting. Students and faculty from schools throughout Michigan, including Michigan Tech, more than 500 miles away on the Upper Peninsula, participated in the meeting with posters, oral presentations, and networking.

For the schedule of Milestone events and links to video recordings of Powel Kazanjian’s talk, the plaquing ceremony, TWiM, and TWiV, see http://umhealth.me/M-in-M. For more information on the Milestones program, see www.asm.org/milestones-in-microbiology.