Hauptman-Woodward Welcomes New Principal Research Scientist Alexander McPherson

Alexander McPherson, Ph.D., has joined the Hauptman-Woodward Medical Research Institute as a part-time principal research scientist.

A long-time HWI collaborator and internationally acclaimed molecular biologist, McPherson specializes in X-ray diffraction analysis of protein, nucleic and virus crystals; Atomic Force Microscopy studies of biological structures; and the mechanisms of macromolecular crystallization.

Author of several books on crystallography and crystal science, McPherson also holds a patent for a crystal-growing apparatus using vapor diffusion techniques. He maintains editorial positions with nearly a dozen scientific journals and has published more than 300 papers. McPherson has held a number of prestigious fellowships including the American Cancer Society Fellowship; the Damon Runyon Cancer Foundation Fellow; an NIH Traineeship and the Ford Foundation Fellowship. He has been honored with the Fankuchen Award for research and teaching by the American Crystallographic Association, the medal for Outstanding Scientific Research by NASA, and the Faculty Research Award at UC Riverside. In addition, he has been an invited speaker at more than a hundred scientific conferences and seminars worldwide. For 22 years he has been an instructor of the Cold Spring Harbor Laboratory course in X-ray Diffraction Methods in Biology.

He is a consultant for a number of pharmaceutical companies and private organizations including: Merck and Co.; Abbott Laboratories; Wyeth-Allerst; Biogen-IDE; Monsanto and Novo Nordisk. For 15 years, McPherson was a US Principal Investigator for Microgravity Research for NASA, and his experiments have flown more than two dozen times on the US Space Shuttle, The Russian Space Station MIR, and the International Space Station.

Prior to joining HWI, McPherson held positions at the University of California, Irvine; the University of California, Riverside, where he was chairman of the Department of Biochemistry; the Milton S. Hershey Medical Center at Pennsylvania State University and the Massachusetts Institute of Technology.

McPherson received his bachelor’s degree in Physics from Duke University, his Ph.D. in Biological Sciences from Purdue University, and completed his postdoctoral research at the Massachusetts Institute of Technology.

He will spend half the year in California and half the year in Buffalo, New York.