

Upstate Trains Physicians in a Setting of Science and Scholarship



Steven J.
Scheinman, MD

The education we provide to our medical students is enriched by the environment of scholarship and inquiry created by our productive faculty. There is a great deal of groundbreaking research done at Upstate, both by faculty members of long standing and others just recently recruited. There is too little space here to describe more than a few, but I want to share with you some of their activities.

Our Department of Microbiology and Immunology houses a unique SCID mouse facility, in which immunodeficient mice, engrafted with human stem and immune cells, are a remarkably robust animal model with a human immune system. This allows our faculty to study growth of human cancers, effects and metabolism of chemotherapeutic agents, and gene therapy, as well as antiviral agents and for the study and development of human vaccines. Led by Drs. Rosemary Rochford, Gerold Feuer, and Jennifer Moffat, it is supported by major grants from the NIH and the NYS Stem Cell Board. Tim Endy, MD, MPH, chief of Infectious Diseases in the Department of Medicine, is expressing the human receptor for dengue virus in these mice rendering them susceptible to infection and creating an animal model for human dengue disease.

The SCID facility was one reason that Bill Kerr, PhD chose to come to Upstate. Dr. Kerr is an Empire Scholar in Microbiology/Immunology and Pediatrics and the Murphy Professor supported by an endowment through the Golisano Children's Hospital campaign. His work has had a major impact on our understanding of graft-versus-host disease in bone marrow transplantation, and childhood leukemia.

Dr. Ruth Weinstock has built the Joslin Diabetes program into a substantial center for research into the delivery of care to diabetics,

with major active trials into new therapies and approaches, such as using computers and video connections to manage diabetes from a distance. Meanwhile, in the laboratory, George Holz, MD, Empire Scholar and Professor of Medicine, is studying a new class of glucose-lowering agents, incretin mimetics, which hold the promise of more effective and safer therapy for type-2 diabetics.

Our Center for Vision Research comprises faculty from the departments of Ophthalmology, Biochemistry, and Molecular Biology working on retinal function and diseases. Leaders such as Francesca Pignoni, PhD, our third Empire Scholar, and Barry Knox, PhD, professor of Biochemistry and Molecular Biology, work on retinal development and the molecular structure of photoreceptors. It is one of the most significant vision research programs in the nation.

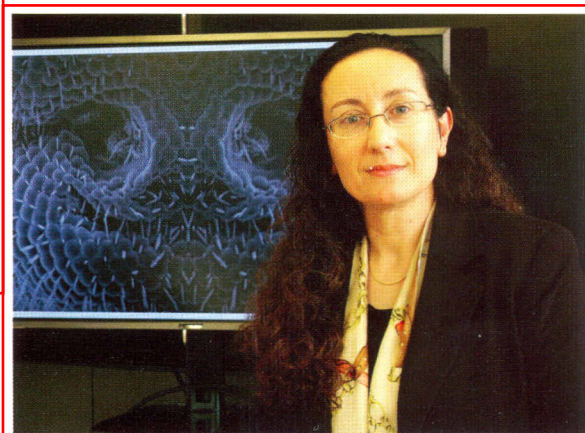
On another occasion, I will fill you in on our nascent Cancer Research Institute, headed by our new chair of Pharmacology, Ziwei Huang, PhD.

Altogether, research at Upstate is growing even at a time of financial austerity because it is so essential to our identity as an academic medical center and to the climate in which we train future physicians. Our research funding is now at the highest level ever in our history. Recruitments for researchers are currently active in most of the basic science departments as well as in several clinical departments, seeking investigators who can bring discoveries from the bench to the bedside—as well as the classroom.

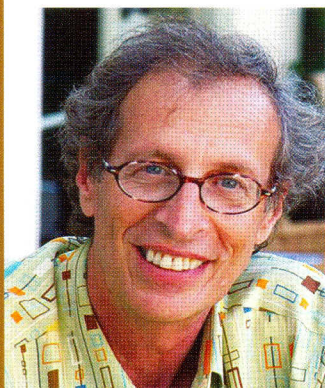
Medicine is a learned profession, and not merely a trade, and the best physicians—the kind produced by Upstate—are prepared for their careers in a setting of science and scholarship.



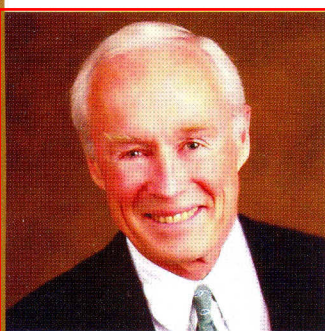
Ruth Weinstock, MD, HS '85



Francesca Pignoni, PhD



Lanny Taub, MD '67



Robert Barlow, Jr., PhD

1995 but continued to work as a civilian medical adviser on military disability matters until his death. He was the co-author of "Principles and Practice of Military Forensic Psychiatry" (1997) and served as an expert witness, writer and consultant. Armitage was also an examiner for the American Board of Psychiatry and Neurology. He is survived by his wife, Barri; his son, David; and several other relatives.

1967

Lanny Taub, of Laguna Beach, CA, died June 28, 2009. Dr. Taub completed his pediatrics specialty training at the Children's Hospital of Los Angeles, where he was the chief resident. He then served as a major in the U.S. Air Force and chief of pediatric services for Turkey and North Africa, before entering into private practice. He served in many capacities for a number of hospitals and medical centers as well as serving as medical director of the Chapman University's student health service and consultant for the Orange, Irvine and Tustin Unified School Districts. He is survived by his wife, Jane; his sons, Aaron and Ethan; and other relatives and numerous close friends.

1972

Michael J. Walker, of Columbus, OH, died September 1, 2008.

1973

Chester R. Jarmolowski, of Allison Park, PA, died November 24, 2009. Dr. Jarmolowski completed an internship in medicine and received a fellowship in cardiovascular radiology at Upstate. Later he joined the staff of Upstate's Radiology Department. He spent the remainder of his career in Pittsburgh as an interventional radiologist and was named a Fellow in the Society of Interventional Radiology, the American College of Radiology and the Council on Cardiovascular Radiology of the American Heart Association. He is survived by his wife, Nancy; his daughters, Maggie and Christina; and several other relatives.

Joseph J. Rainone, of Apple Valley, CA, died September 3, 2009.

2006

Abby M. Ezero, of Williamsport, PA, died November 2, 2009. Dr. Ezero was accepted into the Family Medicine Residency Program at the Williamsport Hospital and Medical Center in Williamsport, PA. After completing her residency in June 2009, she pursued her dream of being a family practice physician and began working for Susquehanna Health System at the Community Health Center in Williamsport. Ezero was a member of the American Medical Association, American Academy of Family Physicians, and the American College of Physicians. She is survived by her husband Dan; her son, Liam; her parents, Bob and Lynne Borow; and several other relatives.

Faculty

Robert Barlow, Jr., PhD, of Jamesville, NY, died December 24, 2009. After receiving his doctorate from Rockefeller University in New York City, Dr. Barlow became a scientist, researcher, and professor at Syracuse University for 28 years until the late 1990s, when he joined the faculty at Upstate Medical University. He was the driving force to establish the Center for Vision Research, a group that now numbers 50 people and is the largest clinically focused research group at Upstate. His leadership was critical in establishing the SUNY Upstate Foundation's endowment to support vision research and the SUNY Eye Institute, a collaboration of all four SUNY medical schools performing vision research. Throughout his career, Barlow had been the recipient of numerous awards and held many leadership positions on several boards. He had been a visiting scholar at Harvard University, University of Cambridge in England, and the University of Tsukuba in Japan and had a long list of invited presentations as a lecturer. He was featured in many scientific journals and programs, including *Nature* magazine, the Discovery Channel, and the BBC. Barlow's work has been published in more than 103 scientific papers, and there are five more that will be published posthumously. Due to his thoughtful preparation, his important work on macular degeneration will be continued under the guidance of his colleagues at Upstate. He is survived by his wife, Patricia; his daughters, Kimberly and Jill; his son, Jack, and many other relatives.