

Past Lecturers

January 2001 - Ravinder N. Maini, Kennedy Institute of Rheumatology, London, U.K.

January 2002 - Cornelia N. Weyand, Mayo Medical School, Rochester MN

January 2003 - Steven R. Goldring, Harvard Medical School, Boston MA

November 2003 - Bevra H. Hahn, UCLA School of Medicine, Los Angeles CA

November 2004 - Daniel L. Kastner, NIAMS, NIH, Bethesda MD

January 2006 - Robert Terkeltaub, University of California, San Diego CA

February 2007 - Betty Diamond, Columbia University Medical Center, New York NY

January 2008 - Frank C. Arnett, University of Texas Health Sciences Center, Houston TX

January 2009 - Michael D. Lockshin, Weill-Cornell Medical College, New York NY

May 2010 - Charles A. Dinarello, University of Colorado School of Medicine, Denver CO

December 2010- Pierre Miossec, Claude Bernard University of Lyon, Lyon, France

November 2011- Matthew A. Brown, Diamantina Institute, Brisbane, Australia

February 2013- Gary S. Hoffman, Cleveland Clinic Foundation, Cleveland OH

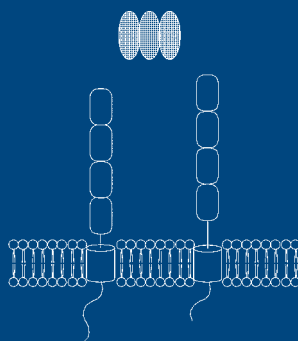
March 2014- Gary S. Firestein, University of California, San Diego CA

February 2015- David T. Felson, Boston University, Boston, MA

March 2016 - Dafna D. Gladman, University of Toronto, Toronto, Ontario, Canada

March 2017 - James T. Rosenbaum, M.D., Oregon Health & Science Univ, Portland, OR

January 2018 - Chester V. Oddis, M.D., University of Pittsburgh, Pittsburgh, PA



RAY A. AND ROBERT L. KROC

LECTURESHIP IN RHEUMATOLOGY

IN MEMORY OF DR. MORRIS ZIFF

John J. O'Shea, Jr., M.D.

Scientific Director

National Institute of Arthritis and Musculoskeletal and Skin Diseases

National Institutes of Health

Bethesda, MD

Cytokine Signaling: From Jakinibs to the Epigenome

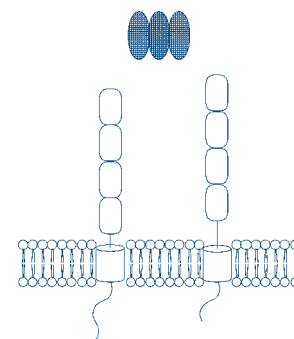
Friday, February 12, 2021

Zoom - 8 AM

UTSouthwestern

Medical Center

INTERNAL MEDICINE GRAND ROUNDS





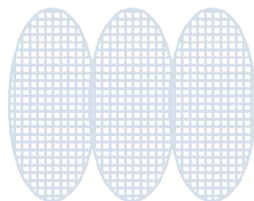
MORRIS ZIFF, PH.D., M.D.
NOVEMBER 19, 1913 - AUGUST 22, 2005

Dr. Morris Ziff, one of the foremost leaders in rheumatology in the 20th century, was the founding director of the Rheumatic Diseases Division at UT Southwestern. Dr. Ziff earned a Ph.D. in chemistry from NYU in 1937 and for the next seven years was a productive and innovative research biochemist. He entered medical school at NYU in 1944, and by 1950 he was a faculty member at NYU, where he began his career as an investigator of rheumatic disease. He came to UT Southwestern in 1958 to head the Rheumatic Diseases Division. In 1983, he became the founding director of the Harold C. Simmons Arthritis Research Center at UT Southwestern. He retired from these positions in 1984 but maintained a productive research laboratory until 1988 and an active clinical practice until 1999. To honor Dr. Ziff's many contributions to the field of rheumatology and his loyalty and dedication to UT Southwestern and the Department of Internal Medicine, Dr. Ziff's students and colleagues helped to establish a lectureship in Rheumatology in honor of Dr. Ziff.

Dr. Ziff's career in rheumatology encompassed a remarkable number of pioneering studies of the pathophysiology of inflammatory rheumatic disease, particularly rheumatoid arthritis and systemic lupus erythematosus. His investigations of rheumatoid immunopathology, synovial and cartilage ultrastructure and biochemistry, animal models of rheumatic disease, and the mechanism of action of anti-rheumatic agents helped open important new fields of research in the rheumatic diseases. During the last four years of his laboratory career, Dr. Ziff and his associates published a series of seminal papers on the role of cytokines and vascular endothelium in synovial inflammation, setting the stage for the later development of anti-cytokine therapy. An astute clinician, Dr. Ziff described a number of clinical syndromes in rheumatology and recognized ahead of his time the strong hereditary component of many rheumatic diseases.

At least as important to Dr. Ziff's legacy is his role as a mentor. Over the years he trained 131 fellows, including many who went on to be leaders in academic rheumatology throughout the world. Dr. Ziff was the recipient of numerous prizes and honors, among them the first Gold Medal Award given by the American College of Rheumatology, the Heberden Medal, the Carol-Nachman Prize in Rheumatology, the First World Conference on Inflammation Prize, the First Duke University Award in Rheumatology Research, and honorary memberships in over 20 national rheumatology societies on five continents. In 1981, he was named to an Ashbel Smith Professorship, the highest honor bestowed by the University of Texas Board of Regents.

Dr. Ziff's career embodied the highest ideals of academic medicine and clinical investigation, and his personal warmth and humanity endeared him to countless trainees, colleagues, and friends. His remembrance remains an inspiration to those who knew him.



John J. O'Shea, Jr., M.D.

Dr. John J. O'Shea graduated Phi Beta Kappa from St. Lawrence University with a BS degree, and then earned his MD degree from the University of Cincinnati. He carried out a residency in Internal Medicine at the State University of New York Upstate Medical University and did subspecialty training at the National Institute of Allergy and Infectious Diseases, NIH. He did further postdoctoral training at the National Institute of Child

Health and Human Development. He is currently the Director of the Intramural Research Program at the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), NIH. Dr. O'Shea served as the Acting Director of the NIH Center for Regenerative Medicine from 2009-2011.

Dr. O'Shea has made fundamental discoveries related to the basic mechanisms underlying cytokine signal transduction. He and his colleagues first cloned the human tyrosine kinase Jak3 and discovered its role in signaling by interleukin-2. These insights led to the discovery of JAK3 mutations as a cause of severe combined immunodeficiency. The demonstration of the role of Janus kinases in cytokine signaling led Dr. O'Shea and his colleagues to propose that targeting Jaks would represent a new class of immunomodulatory drugs. He was awarded a U.S. patent for his work on Janus family kinase inhibitors and developed a Cooperative Research and Development Agreement with the pharmaceutical company Pfizer, which generated one such compound. This drug, tofacitinib, is now approved for the treatment of rheumatoid arthritis and is the first oral therapy for rheumatoid arthritis approved in a decade. Six other JAK inhibitors have been approved by the FDA for various indications, and many others are in late phase clinical development. Dr. O'Shea's work also has provided fundamental insights into the role of STAT family transcription factors in regulating helper lymphocyte development and differentiation. Dr. O'Shea has also discovered the genetic basis of a number of diseases, for which he and his colleagues coined the term "autoinflammatory diseases". Dr. O'Shea has made many important insights into the control of Thelper1 (Th1), Th17 and regulatory T cells, as well as the molecular basis of Job's (Hyperimmunoglobulin E) syndrome. Most recently, he has made seminal discoveries related to how cytokines impact the epigenome.

Dr. O'Shea has received numerous awards, including: the NIH Director's Award four times, the US Public Health Service Physician Researcher of the Year Award, the Irish Immunology Public Lecture Award, the Arthritis Foundation's Howley Prize, the Ross Prize in Molecular Medicine, the Milstein Prize for Cytokine and Interferon Research, AAI-Steinman Award for Human Immunology, the Daniel Drake Prize, as well as Danny Thomas, Lockett, Cochran, Stone, Talmadge, Ishizaka, Emory Distinguished Scientist, and AAI-Distinguished lectureships. He was nominated to give a lecture at the Nobel Forum. He was designated as one of the "The World's Most Influential Scientific Minds 2003-2014" by Thompson Reuters. Dr. O'Shea is a member of the American Association of Physicians, a Fellow of the American Association for the Advancement of Science (AAAS) and a member of the National Academy of Medicine. He has published more than 300 peer-reviewed articles and has been on the editorial boards of many journals including the Journal of Biological Chemistry, Blood, Journal of Immunology, Immunity and the Journal of Experimental Medicine. Dr. O'Shea is a founding Director of the NIH/Oxford Graduate Program in Biomedical Science. He is member of the Stem Cell Working Group for the Advisory Council to the Director of the NIH and a Professor of Pathology at the University of Pennsylvania.