JULIUS STONE LECTURE

Automated Discovery of Genetic Diseases by Saturation Mutagenesis in Mice

Friday, April 28, 2017                   9:15 am – 9:45 am             Oregon Ballroom 201-202

Introduction by Ponciano Cruz, MD

Bruce Beutler, MD
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Bruce A. Beutler, MD, who shared the 2011 Nobel Prize in Physiology or Medicine, is an internationally recognized leader in immunology and the Director of the Center for the Genetics of Host Defense at UT Southwestern Medical Center. Drs. Beutler and Jules A. Hoffmann of Strasbourg University in France shared the Nobel Prize “for their discoveries concerning the activation of innate immunity,” the first step in the body’s immune response. The late Dr. Ralph M. Steinman of Rockefeller University in New York was also honored in 2011. Dr. Beutler is known for his work in unlocking the secret of how the body detects infection and launches an inflammatory response. His current endeavors involve an attempt to identify every gene involved in the response to potentially infectious agents like bacteria or viruses. At UT Southwestern, Dr. Beutler runs one of the largest mouse mutagenesis programs in the world. He and his group have tracked down several hundred mutations that cause abnormalities in mice. Many of these mutations have important implications in infectious diseases or autoimmune conditions in which the body turns on itself, such as lupus and rheumatoid arthritis. Dr. Beutler’s team also has identified many thousands of other genetic mutations that form the nucleus of a mutation archive that eventually will encompass all mouse genes. Dr. Beutler, a Regental Professor at UT Southwestern who holds the Raymond and Ellen Willie Distinguished Chair in Cancer Research, in Honor of Laverne and Raymond Willie Sr., earned his medical degree from the University of Chicago after graduating from the University of California, San Diego. His postgraduate career at UT Southwestern includes an internal medicine internship and neurology residency. During a brief fellowship and faculty appointment at Rockefeller University, Dr. Beutler isolated tumor necrosis factor, one of the most important mediators of inflammation. He then returned to UT Southwestern as a faculty member and Howard Hughes Medical Institute Investigator from 1986 to 2000. His seminal work during this period was broadly relevant to host responses to viral infection, cancer, and autoimmunity, and ultimately led to the Nobel Prize. Between 2000 and 2011, Dr. Beutler was at The Scripps Research Institute in La Jolla, Calif.

LECTURESHIP HISTORY

The Julius Stone Lectureship is intended to promote the advancement of knowledge in immunology as it relates to the skin and skin disease. The Lectureship is intended to honor Dr. Julius Stone, whose great commitment to the application of new principles of immunology to the benefit of patients with skin disorders is recognized by this award.