Plenary Session

Space Expert to Describe Medicine “Off the Earth”

Jonathan B. Clark, MD, MPH, will deliver the Sunday state-of-the-art lecture on “Up in Space: Medicine Off the Earth.” Dr. Clark is an assistant professor of neurology and space medicine at Baylor College of Medicine and Center for Space Medicine. He is also clinical assistant professor at the University of Texas Medical Branch. Dr. Clark’s avid interest in space medicine—especially the neurologic effects caused by extreme environments and crew survival in space—is apparent in his many professional endeavors. He serves as Space Medicine Advisor for the National Space Biomedical Research Institute (NSBRI). He is board certified in neurology and aerospace medicine and is an Aerospace Medical Association Fellow. Dr. Clark is also medical director of the Red Bull Stratos Project, a manned stratospheric balloon freefall parachute flight test program, and chief medical officer for Excalibur Almaz, an orbital commercial space company.

From 1997 to 2005, Dr. Clark worked at NASA as a Space Shuttle Crew Surgeon. He was a member of the NASA Spacecraft Survival Integrated Investigation Team from 2004 to 2007 and a member of the NASA Constellation Program EVA Standing Review Board from 2007 to 2010. He served 26 years on active duty with the U.S. Navy and qualified as a Naval Flight Officer, Naval Flight Surgeon, Navy Diver, and Special Forces Military Freefall parachutist.

State-of-the-Art Lecture

Young Investigator Wins Award For Kidney Fibrosis Findings

The ASN Young Investigator Award will be presented to Katalin Susztak, MD, PhD, for her groundbreaking research on the mechanisms of progressive chronic kidney disease. Dr. Susztak is an associate professor of medicine and genetics at the Albert Einstein College of Medicine in New York City.

The work in her laboratory is aimed at understanding the cellular and molecular mechanisms that lead to progressive renal fibrosis in chronic kidney diseases. She performs translational research to identify novel genetic, genomic, and epigenomic biomarkers of chronic kidney disease. She has shown that an integrative analysis of epigenetic and genetic determinants in diseased cells can provide a basis for more accurately modeling the critical biological pathways involved in mediating the progressive phenotype in individual patients.

Dr. Susztak's genetic approaches use a mouse model to test the role of candidate signaling molecules directly in vivo. Specifically, her work has highlighted the role of the Notch and Wnt/beta-catenin pathways, renal epithelial cell homeostasis, and renal stem or progenitor cell function and differentiation in progressive chronic kidney disease. Her recent results revealed the role of embryonic programs in the development of adult disease-causing alterations in renal epithelial cells and in causing kidney fibrosis. These studies have a broad clinical significance because they could be used to develop novel therapeutic strategies.

Dr. Susztak received her doctoral and medical degrees from Semmelweis University School of Medicine in Budapest, Hungary, in 1997. She completed her clinical fellowship in nephrology at the Albert Einstein College of Medicine in 2002. She conducted her postdoctoral work with Dr. Erwin Bottinger, where her observations led to the recognition that injury and apoptosis of podocytes are the earliest lesions in progressive diabetic nephropathy.

Dr. Susztak serves on the ASN Glomerular Disease Advisory Group. She will receive the award and deliver the Young Investigator Address titled “Kidney Fibrosis: Where Kidney Repair Went Awry” on Sunday, November 13.