The NINDS hosted the 17th Annual Meeting of the Morris K. Udall Centers of Excellence for Parkinson’s Disease (PD) Research from October 27-28, 2015 at the Hyatt Regency Hotel in Bethesda, Maryland. Attendees included Udall Center Directors, investigators, trainees, advocacy groups, and NINDS Program staff.

The Udall Centers program was established by the National Institute of Neurological Disorders and Stroke (NINDS) in 1997 immediately following the passage of the Morris K. Udall Parkinson’s Disease Research Act (P.L. 105-78) into law. The NINDS currently funds 9 Udall Centers across the country. These Centers advance high-impact research programs, including the identification and characterization of candidate and disease-associated genes, elucidation of neurobiological mechanisms underlying PD, establishment of improved PD model systems, development of potential therapeutic approaches, and novel avenues of clinical research. The Centers continue to create and foster multidisciplinary research environments that enhance collaborative approaches. Udall Centers also serve as local and national resources for PD research through sharing of data and resources, as well as outreach to the patient and advocacy communities.

This year, the NINDS welcomed a new Udall Center at the Brigham and Women’s Hospital of Harvard University into the program. Led by Jie Shen, PhD, the Harvard team will define intersecting pathogenic mechanisms resulting from mutations in two key PD-associated genes, α-synuclein and LRRK2. Investigators will use cutting-edge induced pluripotent stem cell (iPSC) and animal models to explore mechanisms of synuclein toxicity and define alterations in the autophagy-lysosomal pathway that lead to neurodegeneration and PD. Improved understanding of the neurobiological mechanisms underlying changes in α-synuclein and LRRK2 function will both increase understanding of disease
etiology and inform therapeutic approaches for improved treatments for persons with PD.

Hosted by the NINDS, and developed by the Udall Center Coordinating Committee (UC⁳), the meeting agenda was designed to provide a forum in which participants could interact and discuss emergent issues in the research and treatment of PD and related disorders. Investigators from each Udall Center provided highlights of recent significant advances at their Centers. Moreover, Center Directs led lively discussion on three “hot topics” in Parkinson’s disease research: Genetic Contributions to Idiopathic Parkinson’s Disease, Mechanisms of Cell Death in Parkinson’s Disease, and Heterogeneity of Parkinson’s Disease. Trainees and junior faculty also had the opportunity to present their own research at the Udall Centers during a poster session.