William E. Klunk, MD/PhD ‘84, distinguished professor of psychiatry and neurology and co-director of the Alzheimer’s Disease Research Center at the University of Pittsburgh, is recognized for revolutionizing Alzheimer’s research by developing the first method for imaging amyloid plaques in the living human brain.

This achievement followed more than a decade of painstaking studies that flew in the face of then-current thinking. Klunk and his collaborator, Chet Mathis, PhD, eventually developed a compound they named Pittsburgh Compound B (PiB). When labeled with a radioactive isotope, PiB crosses the blood-brain barrier and binds to amyloid deposits in the brain, enabling them to be visualized with PET scans. Before the advent of PiB, amyloid plaques in the brain could be seen only at autopsy, but Alzheimer’s disease can now be diagnosed in living people. As well as improving clinical diagnoses, PiB has made Alzheimer’s studies much more accurate, as PiB scans eliminate patients with other types of dementia from Alzheimer’s trials. Unprecedented insights into the changes in the brain that occur many years before Alzheimer’s develops have also resulted, as PiB can reveal plaques even in people without symptoms.

Klunk has been recognized with most of the top prizes in his field, including a MetLife Foundation Award for Medical Research, the Potamkin Prize for Research in Pick’s, Alzheimer’s, and Related Diseases from the American Academy of Neurology, the Ronald and Nancy Reagan Research Institute Award, and the Zaven Khachaturian Award from the Alzheimer’s Association. Thomson Reuters (now Clarivate Analytics) listed him as a Highly Cited Researcher every year between 2014 and 2018 and as among the World’s Most Influential Scientific Minds in 2014 and 2015.

Klunk obtained a bachelor’s degree from Shippensburg University in Pennsylvania in 1978 and an MD/PhD from Washington University in 1984. After an internship, residency, and fellowship at the University of Pittsburgh’s Western Psychiatric Institute and Clinic, he became a faculty member there in 1988.

The Washington University Medical Center Alumni Association is pleased to present its Alumni Achievement Award to Dr. Klunk.