Alzheimer’s disease is one of the most significant risks for the growing population of elderly individuals and their families, with an estimation of 35.6 million people presently affected in the world. These numbers are expected to almost double every 20 years, to 65.7 million in 2030 and 115.4 million in 2050. As the most frequent neurodegenerative disease and a major worldwide epidemic, Alzheimer’s presents a global challenge, with increasing strain on health-care systems and our societies.

The recently evidenced existence of a decade-long silent stage of the disease, with no clinical symptoms expressed, yet biological markers observable, creates opportunities for improving and accelerating early detection. To meet the need for diagnosis of Alzheimer’s from the beginning, the AXA - UPMC Chair on Alzheimer’s has been created with the aim of developing and validating new biomarkers to increase diagnostic accuracy at the totally asymptomatic stage and to better assess drug efficacy. Hosted by the highly specialized Institute for Memory and Alzheimer’s Disease (IM2A) using the latest cutting-edge genetic, biochemical and neuroimaging technology available, the Chair will utilize the combined resources of several first-class scientific research teams in a rich variety of related research fields—from cognition to neuroimaging to genetics—working from bench to bedside. It will use quality and exhaustive cohorts of patients from all disease stages, managed through the IM2A infrastructure, which is a national reference center for several Alzheimer’s and neurodegeneration-related clinical research programs and a leading institution worldwide. It will also benefit from a unique platform for integrating and processing multimodal biomarker information in order to extract specific algorithms for early presymptomatic detection.

The Chair and full university professorship will be permanently held by Prof. Harald Hampel, who is a world-leading researcher with vast expertise and reputation in neurology, psychiatry and cutting-edge neuroscience research. With 20 years of experience, he has successfully developed international research programs dedicated to Alzheimer’s diagnosis and therapeutic algorithms.

Hampel’s findings will provide significant new understanding of Alzheimer’s Disease and related disorders, while building upon the scientific capabilities of biostatistical modeling, leading to breakthrough advances in improving both diagnosis and treatment using innovative biological markers.