

THE PART THE CLOUD CHALLENGE on NEUROINFLAMMATION

The Part the Cloud (PTC) challenge on inflammation will accelerate therapeutics and discovery of innovative compounds to be used in early clinical trials. Inflammation in the brain is part of the neurodegeneration process, but the role it plays is a mystery. Adding to the mystery, the immune system in the brain seems to be both injurious as well as beneficial. We know so little about these processes. Only recently have we discovered that cells involved in inflammation originate both from within the brain and the peripheral blood cells that migrate to the brain. Recently, new genes have been identified that increase the risk for neurodegeneration, but little is also know about their function. Furthermore, there is evidence that external factors like systemic inflammation and obesity are influencing the immune response in the brain. The challenge is to harness these processes and slow the detrimental effects or redirect them for beneficial outcomes. The PTC challenge on neuroinflammation will influence the development of new therapeutic strategies.

The PTC challenge on neuroinflammation will accelerate our understanding of process in neurodegeneration. Because neuroinflammation is prevalent in so many diseases of the brain, identifying therapies that target this process will have broad implications for treating a large number of the devastating brain diseases including Traumatic Brain Injury, Chronic Traumatic Encephalopathy, Amyotrophic Lateral Sclerosis, Vascular Dementia, Frontotemporal Dementia, Parkinson's, Huntington's and Alzheimer's. The Challenge will accelerate our knowledge of imaging and rapidly advance therapeutics in the clinical setting. Now is the time to challenge the scientific community to address neuroinflammation, which has been understudied for the past decades.

The PTC Challenge will fund best in class projects that effectively demonstrate that their proposal will translate into human trials of an experimental drug or drugs targeting inflammation with the goal of improving cognition/ function in individuals with neurodegenerative diseases.

SELECTION OF FINALISTS

Up to four projects will be selected as a finalist for this program. These projects will receive \$1,000,000 over 2 years to fully develop their proposal. Projects will be evaluated throughout the 2 years as well as at the conclusion for satisfactory progress and the project with the most viable translation to helping human disease will be awarded a \$3,000,000 award to advance their project forward.

Projects will be evaluated by the attention to translational details for moving through the development pipeline, as well as their innovation and out of the box thinking to address these challenge questions.