

Accelerated Cure Project for MS

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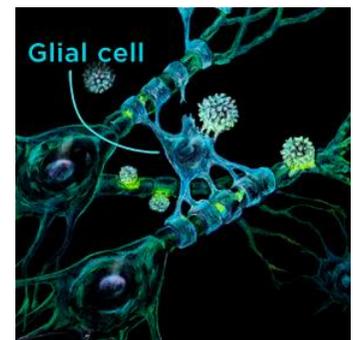


Accelerating research towards a cure for multiple sclerosis

Changing the Course of Neuroscience

Ben Barres, MD PhD 9/13/54 – 12/27/17

We, at ACP, and the scientific community are saddened by the loss of Dr. Ben Barres, who recently lost his fight with pancreatic cancer. Dr. Barres was an acclaimed Stanford neuroscientist whose research revolutionized our understanding of the brain. Frustrated at physicians' inability to provide cures or even to understand the causes of complex degenerative brain diseases, his main focus was determining the molecular and cellular causes of brain tissue degeneration. In his early work, Dr. Barres used samples from the ACP Repository for a study that focused on the role of the blood brain barrier in both the cause and progression of MS. He shared ACP's collaborative approach to research and went to great lengths to make his methods and data widely available to others working in the same area. He was known by many in the neuroscience community as the "godfather of glia" for his pioneering research into the roles played by the brain's glial cells. Glial cells make up about 90 percent of the brain's cells and, interestingly, are not nerve cells. Earlier researchers thought that glia merely supplied stability and nutrients to the brain's neurons. Dr. Barres pioneered the idea that glia play a central role in the "wiring" of our brain and are integral for maintaining the brain's network of synapses, through which neurons pass signals to one another. Dr. Barres' research



demonstrated that inflamed or “reactive” glial cells play an causal role in neurodegenerative disorders, such as Alzheimer’s, Parkinson’s and Huntington’s diseases, multiple sclerosis (MS), amyotrophic lateral sclerosis (ALS), and glaucoma. In 2011, Dr. Barres co-founded a biotechnology company, Annexon Biosciences, to translate these findings into drugs that could someday succeed in retarding or preventing the progression of neurodegenerative disorders. Dr. Barres not only changed the course of neuroscience, but he also cared deeply about other people and touched many lives. He was devoted to his students and trainees, and was beloved for his efforts to promote equity and diversity in science.