

THE FISHER CENTER LAB AT THE ROCKEFELLER UNIVERSITY

A majority of our grant funding goes to the Zachary and Elizabeth M. Fisher Center for Research on Alzheimer's Disease (The Fisher Center Lab) at The Rockefeller University in New York. Funds are used for neurological research into finding the cause of Alzheimer's and potential new pharmacological treatment options. The Lab has been under the interim direction of Dr. Marc Flajolet since the passing of Nobel Laureate Dr. Paul Greengard in 2019. The Fisher Center provides researchers worldwide with a conceptual framework for understanding the disease process, and continues to be at the forefront of one day finding a cure for Alzheimer's disease.

During the calendar year, researchers discovered that specific types of nerve cells (neurons) are more susceptible to the Alzheimer's disease pathology, being affected and disappearing sooner than other (resistant) neurons. Fisher scientists are using a unique set of technologies to better understand underlying causes of this process and help design entirely new therapeutic strategies. New genes are being characterized that they have linked to vulnerability. A second relatively new project is centered on our discovery that a different fragment of app (called c99) is a better marker for neurodegeneration. This study was mostly based on human brain samples which gives it even more value.

In other research, our scientists accelerated the breakdown of the toxic beta-amyloid component by targeting a cellular process called Autophagy, a process responsible for removing debris from the cells, as well as identifying a novel signaling network within neurons that regulates beta-amyloid degradation. Fisher scientists continue developing therapeutic approaches, building a novel platform for drug discovery applications, as they characterize and optimize chemically active molecules, with the end goal of helping to protect people from developing Alzheimer's disease.

