INVEST IN HOPE



Your Donation Makes a Difference

Your contribution to Hope Happens is an investment that supports collaborative research at the Hope Center, and will lead to new treatments for many neurological disorders.

GIVE HOPE

Levels of Recognition

HOPE SOCIETY MEMBER	\$1,000 - \$25,000 and over
FRIEND OF HOPE HAPPENS	\$500 - \$999
SUPPORTER	\$100 - \$499
ANNUAL FUND DONOR	\$1 - \$99

Moving for a Cure



HOPE HAPPENS PROMOTES RESEARCH AT THE HOPE CENTER FOR NEUROLOGICAL **DISORDERS.**



BECAUSE **OF FRIENDS** LIKE YOU...

ens for neurological disorders



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"Innovation through Collaboration and Shared Resources"



Learn more about Hope **Center Pilot Projects**

Each year, scientists at the Hope Center for Neurological Disorders at Washington University are invited to request up to \$100,000 for collaborative research projects. The projects are selected by an independent faculty review panel for their scientific merit, innovation, and ability to advance the mission and translational neuroscience goals of the Hope Center. Your gift will help to support more of these innovative projects!



Reprogramming Rod Photoreceptors to Treat **Retinal Degeneration** Investigators **Principal Investigator:** Joseph Corbo (WashU Pathology & Immunology) Collaborator: Vladimir Kefalov (WashU Ophthalmology & Visual

Millions of people worldwide suffer from retinal degeneration with varying degrees of vision loss, including complete blindness. This research project seeks to develop a novel therapy to prevent photoreceptor degeneration caused by mutations in genes. The strategy relies on genetic 'reprogramming' of those photoreceptors. This research project might pave the way for future reprogramming-based therapies to treat vision loss in patients with retinal degeneration.

For more information about scientific teams and pilot projects, please visit the Hope Center's website at hopecenter.wustl.edu.



Developing Biomarkers for Chemotherapy-Induced Peripheral Neuropathy Investigators **Principal Investigator: Stefanie Geisler** (WashU Neurology) Collaborator: Amanda Cashen (WashU Medicine), Anne Fagan (WashU Neurology)

Pain from chemotherapy-induced peripheral neuropathy (CIPN) can greatly diminish cancer patients' quality of life and can even cause permanent disability. Most CIPNs are characterized by early nerve fiber breakdown (axonal degeneration). This research project has two goals: It seeks to identify patients who would most benefit from an axon-protective agent and, if successful, will provide an outcome measure for assessment of the effectiveness of an axon protective agent.



Defining the Mechanisms by which MS4A4A Regulates **TREM2** in Alzheimer's Disease Investigators **Principal Investigator:** Celeste Karch (WashU Psychiatry) Collaborator: Thomas Brett (WashU Medicine), Laura Piccio

(WashU Neurology

Alzheimer's disease is the most common neurodegenerative disease; however, there are currently no effective treatments or cures. At the core of this project is the role of the TREM2 gene, which was first identified in the immune system. Certain mutations in TREM2 increase the risk for Alzheimer's disease. The project aims to better understand how TREM2 influences Alzheimer's risk by using molecular and biochemical approaches in a model system. The results of this project will provide a framework for developing treatments that restore or enhance function of TREM2, with the goal of preventing neurodegenerative disease.