



The University of Pittsburgh founded in 1787, one of the oldest universities in the United States, drives focus on research, innovation and key partners in Neuroscience.

- **\$1.2B** in Pitt's overall research and development expenditures in 2023
- **Pitt is 15th** among U.S. universities in research expenditures
- **Pitt is #6** in 2023 National Institutes of Health (NIH) funding for educational institutions
- **Pitt is #2** in 2023 National Institute of Mental Health funding
- **Pitt is #14** in 2023 Neurological Disorders & Stroke (NINDS) funding

## Recent Neurology Notables:



Dr. J. Timothy Greenamyre awarded the 2022 Pritzker Prize.

Dr. Raul Nogueira won the 2023 World Stroke Organization's Presidential Award.

Dr. Anthony Grace awarded the 2023 Outstanding Translational Research Award from the Schizophrenia International Research Society.

## Research Strengths | Capabilities:

### Centers

- Alzheimer's Disease Research Center
- Brain Institute
- Pittsburgh Institute for Neurodegenerative Medicine

### Research Models

- AANAT-KO Mouse Model
- Tools for High-Throughput Neurobehavioral Phenotyping
- Non-human Primate Model of Brain Diseases

### New Available Technologies

- 5563-NAMPT activator
- 6081- Reversing Age-Associated Dendritic Spine Loss
- Explore the Alzheimer's Disease collection.
- Explore the Neurology collection.



For partnering  
interest contact:

Office of Innovation and  
Entrepreneurship

[partner@pitt.edu](mailto:partner@pitt.edu)

## Related Papers:

**Using Verbally-Reported and Video-Observed Semiology to Identify Functional Seizures**, ScienceDirect (November 2023), Wesley Kerr, PhD, University of Pittsburgh Neurology

**New Blood Biomarker Can Predict if Cognitively Healthy Elderly Will Develop Alzheimer's Disease** (upmc.com) (October 2023), Tharick Pascoal, University of Pittsburgh, associate professor of psychiatry and neurology, may hold the key to understanding Alzheimer's disease progression

**Stroke patients move again with stimulator implant: Pittsburgh trial** (usatoday.com) (May 2023), George Wittenberg, MD, PhD

## Highlighted Faculty:

### Amantha Thathiah, PhD

Assistant Professor, Neurobiology

Research focus:

- Cellular and molecular pathogenesis of Alzheimer's Disease (AD)
- Mechanisms regulating GPCR and  $\beta$ -arrestin synaptic function and cognition in AD
- Integrating mouse genetics with cellular and biochemical techniques, electrophysiology and behavioral studies, and optogenetic tools
- OptoTAU, a novel light-responsive tau protein and optogenetic model of tau aggregation



### Christopher Donnelly, PhD

Associate Professor, Neurobiology, Scientific Director, LiveLikeLou Center for ALS Research

Research focus:

- Molecular pathogenesis of neurodegeneration and aging
- Induced pluripotent stem cell neurons and glia derived from ALS patients RNA binding proteins and phase transitions in health and disease
- RNA metabolism, subcellular RNA and proteins trafficking in neurons
- Formed a company, Confluence Therapeutics, focused on new ALS treatments | Pitt Med Magazine | University of Pittsburgh



### Peter Strick, PhD

Thomas Detre Professor and Chair of Neurobiology, Scientific Director, University of Pittsburgh Brain Institute

Research focus:

- Generation and control of voluntary movement by the motor areas of the cerebral cortex
- Motor, cognitive and affective functions of the basal ganglia and cerebellum
- Neural basis for the mind-body connection
- Unraveling complex neural networks in the central nervous system



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