



## **Research Study: The Impact of Acute Phenylalanine Elevations on Neurocognitive Functioning in Adults Heterozygous for Phenylketonuria (PKU)**

You are invited to take part in a research study examining cognitive and neurological functioning among adult heterozygous carriers for PKU following ingestion of phenylalanine (Phe). The study is being conducted by Dr. Shawn Christ from the University of Missouri.

### ***Who:***

Adults (ages 18-60 years old) who are carriers of the PKU gene (for example, a parent of someone with PKU)

### ***What:***

Study participation will take place over the course of two separate days. People who take part will be asked to do a variety of things including:

1. Complete a variety of cognitive tasks including answering questions, pressing buttons on a computer, and remembering words.
2. Undergo MRIs to measure the anatomy and activity of their brain.
3. Ingest oral doses of L-phenylalanine (an amino acid naturally occurring in protein-rich food) or Vitamin C (a placebo).
4. Provide small blood samples on filter paper for analysis of current Phe and tyrosine levels.

### ***Where:***

The study will take place at the University of Missouri in Columbia Missouri. We are happy to cover hotel, mileage, and other travel expenses for participants. Additionally, we can schedule your participation to minimize potential conflicts with work or school. (Many people come and participate over the weekend.)

### ***How Long:***

Participation in this study will take a total of about 19 hours over the course of 2 days.

### ***Compensation:***

Participants will receive \$500 for completion of the study (or a prorated compensation based on amount of study completed).

### ***Benefits:***

You will contribute to our understanding of how cognitive and mental health can be affected in individuals with PKU and their families.

### ***How to participate:***

If you would like to participate in this research study or if you have questions, please contact our research staff, by phone or email:

Phone: (573) 884-8109

Email: [CNLab@missouri.edu](mailto:CNLab@missouri.edu)

**Thank you!**

**Shawn E. Christ, Ph.D.**

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