



Physical Activity and Neurocognitive Health (PNC) Laboratory

Department of Kinesiology and Community Health

University of Illinois at Urbana-Champaign

Supervised Research Experience

Starting Summer 2020

Opened to undergraduate students across the Campus

A minimum commitment of 2 semesters

Priority will be given to students who can commit to the summer semester

We can all be physically active (think of your daily work out!) and sedentary (all these hours of studying!) at the same time. May these behaviors affect how we think?

Join us to learn more!

The PNC Laboratory directed by Dr. Dominika Pindus is conducting projects examining daily physical activity, sedentary behaviors cognitive and brain functions in children. Currently we have three projects, a cross-sectional project focused on the relationships of objectively measured physical activity and sedentary behaviors to cognitive and brain functions in children and adults and two acute intervention studies which test the effects of prolonged sitting on cognitive and brain functions in preadolescents and adults. We use accelerometers (motion sensors) to measure physical activity and inclinometers to measure sitting and standing in free living. To assess neurofunctional responses to prolonged sitting, we collect electroencephalography (EEG), and Event-related Potentials (ERPs) while participants perform cognitive tasks. Other measures used in our laboratory include assessment of maximal aerobic capacity, heart rate telemetry, neuropsychological assessments and a set of health-behavior questionnaires.

We are currently recruiting Undergraduate Research Assistants to help with our projects.

Students can expect to be involved in various duties during their research experience, including:

- Participant recruitment and screening
- Preparation of data packages
- Data collection, organization, and processing including accelerometry and cognitive data processing
- Delivery of physical activity intervention to break prolonged sitting time
- Experience in deployment and data screening using accelerometry and inclinometers
- Experience in administration of neuropsychological tests and cognitive computerized tasks
- Assisting with collection of neurophysiological data (electroencephalography)
- Graded Maximal Exercise Testing
- PNC website updates and social media updates

You can receive 3 credit hours (12 hours/week) for this research experience as part of a course offered at the Department of Kinesiology and Community Health (KIN 385):

<https://courses.illinois.edu/schedule/2019/spring/KIN/385>

If you are interested, please apply directly for this opportunity, by submitting required documents via <https://forms.gle/HYkrjx93EZYh1XGW9> by **May 1st 2020.**

Required documents

1. Your curriculum vitae
2. A brief cover letter explaining why you are interested in this research opportunity
3. Your class schedule for the semesters which you are applying for

If you have questions, please email Dr. Dominika Pindus at pindus@illinois.edu