PSY 390 Research Opportunity – Spring 2022

Students may also enroll via their departmental independent study mechanism, with advisor approval.

Laboratory Information
Neurodevelopmental Family Lab
http://Nddfamilylab.weebly.com

Principal Investigator: Dr. Bridgette Kelleher
Associate Professor of Clinical Psychology, Neuroscience and Behavior
Director, Purdue Autism Research Center
https://www.purdue.edu/hhs/psy/directory/faculty/kelleher_bridgette.html

Primary Contact
Tyra Protho (please refer to in emails as “Tyra”)
Graduate Student

Secondary Contact
Anita Panjwani
Postdoctoral Scholar

Description of Neurodevelopmental Family Lab
Dr. Kelleher’s lab conducts research on the early development of children with neurodevelopmental disorders in order to identify early markers of risk and resilience in clinical populations. Kelleher lab methods include clinical assessments, behavioral observation, psychophysiological data collection (e.g. heart activity, EEG), use of wearable sensors, and ecological momentary assessments. Information about Dr. Kelleher’s broader research interests are available at nddfamilylab.weebly.com.

Description of Research Team
Students recruited into this position will be primarily involved in prepping and processing study materials, and analyzing behavioral data collected in Dr. Kelleher’s Parent-Administered Neurodevelopmental Assessment (PANDABox). PANDABox is a novel telehealth-based assessment where research staff collaborate with caregivers to remotely assess early development of children with rare genetic conditions (e.g., Angelman, Down, and Fragile X syndromes).

Students will also help with prepping and processing study materials for a home-based study funded through the Angelman Syndrome Foundation (ASF) geared at understanding the gut microbiome and dietary intake of children with Angelman syndrome.

Our lab family includes a large, diverse team of staff, graduate students, and undergraduate students. We typically involve over 15 undergraduate students in research activities each semester across a variety of project teams.

Description of Undergraduate Participation
Undergraduate participation may involve a combination of the following:

1. Prepping and processing study materials
2. Data management
3. Cleaning and entering data
4. Professional development activities
5. Independent or team-based research projects and presentations

All students involved in the Kelleher lab complete a combination of lab-focused research tasks (~60% of time), professional development (~15%), and a research poster than is often completed in teams (~25%; if students do not elect to do a poster, this time is spent on research tasks). Students who join the lab in the spring frequently wait to join a poster team until the following fall.

Research setting
For this position, all research tasks will be completed in person in Dr. Kelleher’s laboratory. Option to complete some tasks remotely will be based on amount of research credits registered.

2 credits = 6 hours (1 hour might be completed remotely)
3 credits = 9 hours (2 hours might be completed remotely)

Number of assistants needed
4

To apply
• Complete our lab application at https://nddfamilylab.weebly.com/future-team-members.html. Here, you can also view a syllabus from past 390 courses.
• Email your application to Tyra Protho at tprotho@purdue.edu.
• Indicate you are interested in the PANDABox/ASF Team within your email and application.
• Tyra Protho will provide additional information about virtual interviews.

Additional comments
Due to the advanced training involved with joining the lab, a 2-semester commitment is required. Preference will be given to students who plan to remain in the lab for 3+ semesters. Freshmen and sophomores are encouraged to apply.

Our lab is an inclusive space for students with a variety of research/academic backgrounds, including students with limited prior exposure to the research process. We provide substantial mentorship to support students in developing skills over time. Mentorship includes both peer-to-peer supports, engagement with graduate students and staff, and group and individual meetings with Dr. Kelleher.

Diversity, equity, and inclusion are central to our lab’s mission and values. We are committed to providing a welcoming, inclusive, and valuing environment to all students, faculty, staff, and guests, consistent with Purdue’s Nondiscrimination Policy Statement. All are welcome at our lab table, regardless of race, religion, color, sex, age, national origin or ancestry, genetic information, marital status, parental status, sexual orientation, gender identity and expression, disability, or status as a veteran. Moreover, we fully believe that working in an environment that includes and centers diverse perspectives benefits us all as scientists, practitioners, and humans.