University of Colorado
Anschutz Medical Campus

Children's Hospital Colorado

2021 PSYCHIATRY UNDERGRADUATE RESEARCH PROGRAM AND LEARNING EXPERIENCE (PURPLE)

The 2021 **P**sychiatry **U**ndergraduate **R**esearch **P**rogram and **L**earning **E**xperience (**PURPLE**) is designed to introduce undergraduates to a variety of careers in psychology and psychiatry through participation in mentored research activities with faculty members from the University of Colorado Anschutz Medical Campus and the Children's Hospital of Colorado. Applicants will have the opportunity to learn about the CU Department of Psychiatry's research mission: to promote brain health for all, for life. **Due to COVID-19, this year's program will be held digitally** and will run from **May 24th to August 16th, 2021**. An outline of the research activities is listed on page three.

Specifically, PURPLE seeks to:
1. Provide undergraduates with basic research skills
2. Introduce undergraduates to careers in behavioral health, psychiatry, and psychology
3. Give undergraduates the tools to successfully apply to graduate school and/or job opportunities

Program Overview: During the program, each student is paired with a faculty mentor (and the mentor's research team) to complete a research project (refer to pages four through 12 for faculty mentor profiles). Students are expected to commit approximately 25 hours per week to the research program. Work schedules are flexible and will be arranged in advance with faculty mentors. However, students are still expected to be digitally present (e.g., attending digital meetings, completing work via computer, participating in digital class sessions, etc.) for 25 hours per week during the 12-week program. Upon completion of the research program, students are required to formally present their work to the department and their peers in the form of oral and poster presentations given digitally. This year's cohort will look a little different than usual, as our students from 2020 will be joining the 2021 cohort due to changes implemented to the 2020 program in response to COVID-19. All accepted students from 2020 and 2021 will receive the same rigorous, fun, and meaningful experience for which PURPLE is known, but there will be no in-person laboratory component.

Please note that based on feedback from previous cohorts, this is an intensive program requiring a significant time commitment. The digital program will be no exception. If selected, students should plan their other summer commitments accordingly.

Applicant Eligibility: This year, we are recruiting **three** highly qualified undergraduate students for the 12-week program to join the existing cohort of seven students from 2020. Competitive applicants will: A) Have a cumulative college GPA of >3.0; B) have taken at least one college statistics course; and C) show a demonstrated interest in pursuing graduate school or careers related to behavioral health, psychiatry, or psychology.

If you do not meet the listed requirements, you are still welcome to apply. We examine student profiles holistically, taking into consideration student hardship, demonstrated strengths outside of college, and overall potential. However, given the large number of applicants we receive each year, these requirements are usually the *bare minimum* qualifications we see from accepted students to our program.

Student Stipend: A stipend of $3,000 will be provided to each selected student. Although the program will be digital, it is expected that transportation, housing, and living expenses are paid for by students and are thus not included in the stipend amount. Selected students must make their own transportation and living arrangements prior to the start of the summer research program, though no transportation to campus will be required.

The application deadline is Monday, March 29th, 2021 by midnight (MST). Submissions received after this deadline will not be accepted. It is your responsibility to ensure that your recommendation letter(s) are turned in to the appropriate e-mail by the March 29th deadline, along with your application materials. See page two for application details.

APPLICATION PROCESS

Application Materials: Interested applicants are required to submit the following materials:

1) A one-page cover letter expressing your interest in PURPLE. Please address the following:
   a) Why are you applying to PURPLE?
   b) What are your career goals and how will this program help you realize these goals?
   c) With which mentors do you most wish to work, and why?
   d) What unique abilities, attributes or skills do you bring to PURPLE?

2) An unofficial academic transcript

3) An updated resume or CV

4) A letter of recommendation from a program advisor or faculty member who can speak to your professionalism, work ethics, academic performance, and any other qualities you possess that are pertinent to this summer research program

5) OPTIONAL: A second letter of recommendation from an individual who can speak to your ability to succeed in this program. This is not required, but in some cases may allow us to more holistically understand your strengths and abilities (e.g., you have a letter from both a professor and an employer, you are a double major and have letters from two professors in different fields, you have a second letter from a volunteer organization leader, etc.).

Please submit all of the above documents using this link or web address by Monday, March 29th, 2021 (midnight MST): https://redcap.ucdenver.edu/surveys/?s=AETNDJ4D8J

Letters of recommendation can be submitted via the above link or emailed directly by your recommender(s) to: PURPLE@ucdenver.edu

Applications that do not follow the above instructions will not be reviewed.

Timeline: Successful applicants will be notified by email if selected to interview with faculty mentors via teleconferencing in April 2021. All applicants will be notified of final application decisions, regardless of selection status, by the first week of May 2021.

CONTACT INFORMATION

The information in this packet serves as general guidance to the 2021 PURPLE program. Individual faculty mentors and the program director reserve the right to modify the activities and scope of the program as described herein. If you have further questions about this program, please contact the program team:

Emmaly Perks, MA, CCRP Director, PURPLE PURPLE@ucdenver.edu 303-724-4067	**Yunliang (Lily) Luo, BS** Coordinator, PURPLE PURPLE@ucdenver.edu

PROGRAM OUTLINE

During PURPLE, selected students will be paired with a faculty mentor to conduct a mentored research project. Students will also: 1) attend digital didactic sessions to learn basic research and effective scientific communication skills, 2) receive coaching on professional development skills and applying to graduate school, and 3) complete digital clinical shadowing (telehealth) opportunities. Research and didactic activities may include but are not limited to the following:

Competency	Individual Tasks	Learning Goals
Scientific Thinking and Using Tools of the Discipline	• Literature search and writing a literature review • Developing a research proposal • Pitching your ideas to funders • Shadowing digital study visits	• Practice the scientific method from the proposal stage through implementation and closeout • Gain skills with various scientific tools
Data Manipulation	• Data collection and data entry • Data analysis • Data visualization	• Familiarity with data manipulation techniques, including basic statistics • Develop skills in collecting, analyzing, summarizing, and reporting data
Scientific Communication	• Designing a scientific poster and oral presentation • Presenting research to a scientific audience • Writing up results	• Develop confidence in communicating research outcomes to a real-world audience
Career and Graduate School Preparation	• Workshops on various research skills, graduate school, and career preparation • Directed readings • Panel discussions • Campus and facilities tours • Clinical shadowing	• Prepare for careers and graduate education in behavioral health, psychiatry, and psychology • Gain exposure to the major concepts and controversies in the discipline • Explore potential job and educational pathways
Collaboration and Networking	• Collaborate with diverse teams, cohort members, and faculty • Networking with notable thinkers in the discipline	• Professionally present your personal brand • Learn to work with diverse teams • Connect with real scientists doing the work of the discipline

Students in previous cohorts have indicated **this is an intensive program requiring a significant time commitment.** If selected, students should plan their other summer commitments accordingly.

MENTOR PROFILE

Jacob Holzman, PhD, MA, BS

- Dr. Holzman researches how children and parents affect each other's mental health concerns. In particular, Dr. Holzman investigates factors related to self-regulation (e.g., emotion regulation, executive functioning) that contribute to stressful experiences for parents, affect parenting behaviors, and potentially predict responses to treatments for early childhood mental health concerns. His current project evaluates predictors of parenting focused interventions to inform ways these interventions can be tailored to have better outcomes. Dr. Holzman's work is aimed at finding possible ways to improve early childhood treatments to be more effective and equitable for parents and their young children.
- The primary aim of Dr. Holzman's project will be to evaluate factors that predict responses to a parenting focused intervention for young children with significant behavioral concerns (e.g., aggression). Specifically, the student and the team will examine whether components of parental executive functioning predict whether parents adhere to treatment recommendations, predict change in parenting practices, and predict change in children's behavioral concerns. The student will receive education on executive functioning, including how individuals stay focused, inhibit impulsive actions, and remember information. Additionally, the student will learn about leading interventions for helping children struggling with externalizing concerns, such as irritability and aggression.
- Research tasks for the student will include: Consenting participants, running data collection and report measures, collecting survey data, data entry, and coordinating/managing surveys for participants.
- Learn more: https://som.ucdenver.edu/Profiles/Faculty/Profile/29962

MENTOR PROFILE

Sarah Kennedy, PhD

- Dr. Kennedy is a licensed clinical psychologist and assistant professor specializing in the treatment of youth with emotional disorders (e.g., anxiety, depression) across levels of care. Dr. Kennedy's program of research focuses on the development, evaluation, and implementation of transdiagnostic treatments for children and adolescents, which are treatments designed to address core underlying risk and maintaining factors across diagnoses. Dr. Kennedy is currently investigating the effectiveness and implementation of transdiagnostic interventions adapted for higher levels of care, as well as the role of distress tolerance and anxiety sensitivity (i.e., "fear of fear") in treatment outcomes.
- The student will attend weekly research meetings and other members of the team. The student will have the opportunity to contribute to two different projects focusing on transdiagnostic treatment of emotional disorders in youth: 1) An examination of effectiveness (i.e., how well the treatment works) and implementation (i.e., how the treatment is delivered) of an adaptation of an evidence-based transdiagnostic treatment on higher levels of care; and 2) an investigation of multi-method measurement of distress tolerance and anxiety sensitivity in youth and their relationship to treatment outcome. For the first project, the student will have the opportunity to assist with collection of effectiveness data, learn observational coding systems for tracking therapist fidelity and adaptations to evidence-based treatment protocols, and complete qualitative coding of interviews with patients and therapists. For the second project, the student will have the opportunity to run participants through behavioral tasks assessing distress tolerance and anxiety sensitivity. The student will also be involved in data entry and management.
- Learn more: https://som.ucdenver.edu/Profiles/Faculty/Profile/28644

MENTOR PROFILE

Michelle L. West, PhD

- Dr. West is a licensed clinical psychologist, an assistant professor, and the director of the Program for Early Access Care and Study (PEACS), which is a specialized program for young people at clinical high risk for psychosis (CHR-p) and their families. Dr. West conducts specialized early psychosis evaluations and therapy, provide consultations to providers, and supervise the PEACS team. Her current projects focus on understanding and treatment of CHR-p, developing a school/work treatment, and developing a treatment for co-occurring risk for self-harm. Dr. West's psychotherapy specializations are cognitive behavioral therapy for psychosis (CBT-p), dialectical behavioral therapy (DBT), and assessment/collaborative management of suicide risk.
- The student will be joining the PEACS team/lab meetings and have the opportunity to focus on a selected early psychosis related scholarly project, relevant to ongoing PEACS work. Possible projects include analyzing PEACS referral, outreach, or clinical datasets, or working on the InVEST (Individualized Vocational and Educational Support and Training) project, which focuses on the difficulties with role (school/work) functioning that are common for CHR-p. In addition to contributing to efforts to evaluate the effectiveness of InVEST, students may have the opportunity to fill the role of InVEST "coach," with supervision from the PEACS team.
- Learn more:
    - https://medschool.cuanschutz.edu/psychiatry/programs/PEACS/peacs-meet-our-team
    - https://som.ucdenver.edu/Profiles/Faculty/Profile/30178