

2024 PSYCHIATRY UNDERGRADUATE RESEARCH PROGRAM AND LEARNING EXPERIENCE (PURPLE)

The 2024 **P**sycho**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.

This year's program will be held with a hybrid model (some in-person work and some online) and may be held completely digitally depending on evolving institutional guidelines. The program will run from **May 20th to August 13th, 2024**. An outline of the research activities is listed on page three.

This year, the PURPLE Program and the Avielle Foundation will be collaborating to support one student and mentor pair who embody their mission to enhance brain research and increase compassion. The student will have the opportunity to travel to a conference to present their work. More information will be made available soon.

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 6-14 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 physically present during in-person didactics and 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 program will be hybrid and will become virtual as needed depending on changing guidelines. All accepted students from 2023 will receive the same rigorous, fun, and meaningful experience for which PURPLE is known!

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 **nine** highly qualified undergraduate students for the 12-week program. 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.

Applicants are subject to complete a required toxicology test and pass a background check upon hiring. This will be paid for by the PURPLE program. Students are also required to provide proof of COVID-19 Vaccination or must file for an exemption.

Student Stipend: **A stipend of \$3,720 will be provided to each selected student.** Although the program will be partially 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.

The application deadline is Wednesday March 13th, 2024 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 13th 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](https://redcap.link/19ek08a9) or web address by Wednesday, March 13th, 2024 (midnight MST): <https://redcap.link/19ek08a9>

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 2024. All applicants will be notified of final application decisions, regardless of selection status, by the first week of May 2024.

CONTACT INFORMATION

The information in this packet serves as general guidance to the 2024 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:

<p>Yunliang (Lily) Luo, BS Director PURPLE@ucdenver.edu</p>	<p>Shanna Trott, BA Assistant Director PURPLE@ucdenver.edu</p>
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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	<ul style="list-style-type: none"> Literature search and writing a literature review Developing a research proposal Pitching your ideas to funders Shadowing digital study visits 	<ul style="list-style-type: none"> Practice the scientific method from the proposal stage through implementation and closeout Gain skills with various scientific tools
Data Handling and Analysis	<ul style="list-style-type: none"> Data collection and data entry Data analysis Data visualization 	<ul style="list-style-type: none"> Familiarity with data manipulation techniques, including basic statistics Develop skills in collecting, analyzing, summarizing, and reporting data
Scientific Communication	<ul style="list-style-type: none"> Designing a scientific poster and oral presentation Presenting research to a scientific audience Writing up results 	<ul style="list-style-type: none"> Develop confidence in communicating research outcomes to a real-world audience

<p>Career and Graduate School Preparation</p>	<ul style="list-style-type: none"> • Workshops on various research skills, graduate school, and career preparation • Directed readings • Panel discussions • Campus and facilities tours • Clinical shadowing 	<ul style="list-style-type: none"> • 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
<p>Collaboration and Networking</p>	<ul style="list-style-type: none"> • Collaborate with diverse teams, cohort members, and faculty • Networking with notable thinkers in the discipline 	<ul style="list-style-type: none"> • 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



Ellen Stern, MA

- Ellen Stern is director of government affairs within the Community Health and Advocacy Division at Children's Hospital Colorado. She has worked for 8 years at Children's Hospital Colorado, after starting her career as a social worker, public health advocate and congressional staffer. She is inspired daily by her colleagues at Children's Hospital Colorado to champion the needs of children and families through public policy change. Ellen has a Master of Arts degree in Political Science from the University of Colorado at Denver and a Bachelor of Social Work degree from Colorado State University.
- Following Children's Hospital Colorado's declaration of a state of emergency for youth mental health in 2021, the government affairs team has successfully advanced and championed multiple child and youth mental health policy proposals in partnership with community advocates, families, providers and local, state and federal lawmakers. The aim of this project is to continue to expand access to mental health services for children, youth and families in Colorado across the care continuum by developing and advocating for mental health funding and system transformation. The PURPLE student will learn policy research skills, support stakeholder relations with internal clinicians and external community advocacy groups, and they will support the identification of evidence-based mental health policy solutions to address current challenges in Colorado.
- The student will also gain experience with trainers at Partners for Children's Mental Health, a partnership between Children's Hospital Colorado and the University of Colorado, who support primary care providers and school-based professionals with youth mental health training and skills-building workshops. Mentors will also support clinical shadowing experiences at Children's Hospital Colorado in primary care, the emergency department and inpatient care to support the application of their policy research with current clinical issues and trends.
- Potential research topics for students include the intersection of youth mental health and social media, School-based mental health, Primary care integration models, State trends in managing patients with high acuity mental health needs, System of care research, and funding from other states.
- Students will engage in research and analysis (~5 hours/week), stakeholder relationships and consensus-building (~3 hours/week), develop and promote advocacy tactics that educate and empower people to activate on timely policy issues (~2 hours/week), and Mental health clinical shadowing experiences (approx. 12 hours across 12-week program).

MENTOR PROFILE



Matt Mishkind, PhD

***Dr. Mishkind's project has been selected for the Richman Scholar Program for Excellence in Mentoring.**

The student paired with this mentor will be eligible for additional funds for travel to a professional conference.

- Matt Mishkind, PhD, has focused his career on two focal points: military health care and organizational development. He began his military health career with the Deployment Health Clinical Center (DHCC) at Walter Reed Army Medical Center in Washington, DC. He also served as one of the original staff members tasked with developing the National Center for Telehealth and Technology (T2) located on Joint Base Lewis-McChord, Washington State. While at T2, Dr. Mishkind helped lead the development of several technology-based initiatives to improve behavioral health access across the Department of Defense. His particular focus was on developing telehealth programs for remote and otherwise isolated populations. Both DHCC and T2 are part of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE).
- Dr. Mishkind has 20 publications primarily focused on improving access to behavioral health care for military populations. He is also certified as a Senior Professional in Human Resources. Dr. Mishkind has also held positions focused on organizational development. Most recently, he served as team lead for training and human capital initiatives at the Bureau of Reclamation within the United States Department of Interior.
- His current study surrounds VitalCog. VitalCog is our suicide prevention program designed for the workplace and specific communities. We will be developing and implementing two pilot programs this year. One is the development of a Spanish language training for the construction industry and the other is the development of Postvention programming. We will need assistance with program development, pilot implementation, and evaluation. We also have existing data that needs to be evaluated. The overall goal of the work is to develop best practices for suicide prevention and community-based training.
- The Johnson Depression Center is an active clinic and students will have the opportunity to meet with clinicians and administrators to understand clinical operations. Students will have the opportunity to participate in community trainings and be certified to conduct trainings. Students can also participate in meetings with Board members and other community members.
- Dr. Mishkind has worked in academia, Government, and the private sector and has a diverse background and a good understanding of diverse career opportunities. His work is community-focused and intended to expand services beyond the traditional healthcare system. We could provide student mentee with a different perspective on careers in mental health, which may include interesting, hands-on opportunities.
- Learn more: https://www.coloradodepressioncenter.org/staff_trusted/matt-mishkind-phd/

MENTOR PROFILE



Sarah Nagle - Yang, MD

- Dr. Sarah Nagle-Yang is the inaugural Vice Chair of Quality for the Department of Psychiatry and Deputy Executive Director of the Colorado Center for Women's Behavioral Health at the University of Colorado School of Medicine. She has been a specialist in reproductive psychiatry for over a decade and is passionate about providing high-quality psychiatric care to women across the reproductive lifespan, building innovative models of care to expand access to treatment, and developing interdisciplinary education on topics within reproductive psychiatry. She is a co-editor of the first comprehensive textbook on Women's Reproductive Mental Health, the president of the North American Society for Psychosocial Obstetrics and Gynecology and a founding contributor to the National Curriculum in Reproductive Psychiatry. In Colorado, she co-chairs the Colorado Maternal Mental Health Collaborative and Framework Leadership Team and is a member of the Colorado Maternal Mortality Review Board. Dr. Nagle-Yang graduated from the University of Cincinnati School of Medicine and completed residency in psychiatry at Montefiore Medical Center/Albert Einstein College of Medicine in New York City. She completed fellowships in Consult Liaison Psychiatry and Public and Community Psychiatry at University Hospitals Cleveland Medical Center.
- Dr. Nagle-Yang's research project will be an evaluative project to study initial characteristics and outcomes of patients engaged in care within the Healthy Expectations Perinatal Intensive Outpatient Program. Students may contribute by gathering and analyzing data related to patient demographics, clinical diagnoses and severity, treatment outcomes and satisfaction with the program. Students can expect to develop their skills in data collection and analysis, data management, communication, interdisciplinary collaboration and understanding of ethical issues.
- Students will have opportunities ranging from shadowing in the clinical program, clinical and evaluation-focused meetings, and creation of visual reports for key stakeholders.
- Learn more here: <https://som.cuanschutz.edu/Profiles/Faculty/Profile/29970>

MENTOR PROFILE



Allison Dempsey, PhD

- Dr. Allison Dempsey and the Connections team have developed comprehensive behavioral health programs for young children with complex medical conditions and their families on inpatient medical units and in outpatient clinics. In doing this work she learned to appreciate how technology could be used to reduce disparities in care, improve efficiency and effectiveness of service delivery, and lead to greater health outcomes. The team uses critical psychology and human-centered design skills to identify larger problems in healthcare that could be solved meaningfully with technological innovation.
- Our project would be related to examining parental involvement in cares in NICU parents. We are specifically interested in factors that are associated with visitation (either in person or virtual) at the infant, parent/family, and system level). We'd also like to examine how these relate to length of stay in the NICU. We have the data in our program evaluation data base. The data would help us identify gaps/areas of need and strategies to continue to enhance our services. The data would be publishable (as program evaluation data). The student would also be involved in other research projects/activities going on in our program, including grant-funded research projects. We have a weekly research meeting on Fridays that they would need to attend in person from 12-130.
- The student would have the opportunity to:
 - Shadow activities in various program rotations.
 - Attend clinical and research team meetings.
 - Set up REDCap databases for research projects and program evaluation.
 - Enter data into REDCap
 - Conduct basic analyses for program evaluation.
 - Assist with preparing IRB applications and revisions.
- Learn more: <https://som.cuanschutz.edu/Profiles/Faculty/Profile/27872>

MENTOR PROFILE



Kimberly Kelsay, MD

- Dr. Kimberly Kelsay is a Child and Adolescent Psychiatrist with over 20 years of experience. Her expertise is working within integrated care settings such as primary care settings. Within this setting, we provide behavioral health consultations to primary care providers. My colleagues bring expertise in engaging diverse populations and one of our colleagues is Spanish speaking. with publications regarding this population.
- Dr. Kelsay's study aim is to explore potential barriers to ADHD medication care for children of Spanish-speaking families. Within the primary care setting, we hypothesize that children of Spanish-speaking families may not start ADHD medications as often as their peers with English-speaking parents and if they do start medications, may not take as long, and remain at lower doses. Within our clinic, we have an established database that will allow us to identify medical records of children with ADHD.
- The student will assist with coding or the identified medical records for the above variables, in addition to others that may impact ADHD care. These will include demographics, medical complexity, identified psychosocial needs, and the use of an interpreter in clinical visits.
- The student will also assist in literature reviews, prepare a poster from data, and participate as they are able in manuscript preparation. They will learn data coding from electronic medical records, poster preparation, hypothesis generation, and testing.
- The student will participate in weekly lab/team meetings, data entry, and poster or manuscript preparation. In addition, the student will shadow the preceptors on this proposal to gain a sense of the clinical context of this project. Two of the preceptors are child and adolescent psychiatrists and one is a psychologist. All work within a large clinic that provides pediatric care to a largely Medicaid-diverse clinic.
- Learn more: <https://som.cuanschutz.edu/Profiles/Faculty/Profile/11280>

MENTOR PROFILE



Jessica Kenny, PhD
(she/her/hers)



Ayelet Talmi, PhD
(she/her/hers)

- Jessica Kenny, PhD is an Assistant Professor in the Department of Psychiatry at the University of Colorado School of Medicine and a Licensed Clinical Psychologist. Her primary clinical and research interests focus on integrated behavioral health in primary care and specialty medical settings, program development and outcomes evaluation, providing trauma-informed and culturally sensitive-care, addressing adolescent depression and suicidality in primary care, and increasing access to care for historically marginalized populations.
- Ayelet Talmi, PhD is a Professor in the Departments of Psychiatry and Pediatrics at the University of Colorado School of Medicine and a Licensed Clinical Psychologist. Her primary clinical and research interests focus on behavioral health service delivery systems for children and families, integrated behavioral health in primary care and community settings, early childhood mental health, and young children with special health care needs.
- The current project uses clinical informatics and coded multidisciplinary notes to track, characterize, and evaluate integrated behavioral health services for adolescents and/or children involved with child welfare in pediatric primary care settings. Examples of ongoing projects include assessing the impact of: adolescent depression screening in primary care, substance use in adolescents, psychosocial risk and adversity on adolescent depression, behavioral health, and primary care provider interventions and recommendations and adolescent health outcomes, a medical home focused exclusively on children and families involved with child welfare and associated health outcomes, and health disparities on service utilization and health outcomes. The student will learn about electronic health record data collection, clinical informatics as a driver for clinical decision-making, assessment of health outcomes to determine program impact, and enhancing clinical care through research and quality improvement efforts.
- Students have the opportunity to shadow integrated pediatric primary care clinical work for children aged 0-18 in a large, urban pediatric primary care clinic serving predominantly Medicaid-insured patients, with about 30% of families identifying as monolingual Spanish-speaking. They will be joining the CLIMB (consultation and liaison in mental health and behavior) team meetings, have multiple professional development meetings with each of their co-mentors to discuss career options and trajectories, and participate and learn about clinical informatics, data entry and cleaning, dataset management, and creation of a poster and oral presentation. Students will be encouraged to learn and think about research to inform clinical practice and systems-level reform.
- Learn more:
 - <https://som.ucdenver.edu/Profiles/Faculty/Profile/35678>
 - <https://som.ucdenver.edu/Profiles/Faculty/Profile/1735>

MENTOR PROFILE



**Emily Hemendinger, MPH,
LCSW**

- Emily Hemendinger is a Licensed Clinical Social Worker and Assistant Professor with the Department of Psychiatry. She is the Clinical Director of the Obsessive Compulsive Disorder (OCD) and Anxiety Program. She has over ten years of clinical experience and has a background in behavioral and community health sciences. Her research focuses on treatment refractory OCD, Deep Brain Stimulation, and quality of life. She also is studying executive functioning (specifically cognitive flexibility) in OCD, eating disorders, and psychosis. Other research interests of hers include social media and mental health, sexuality, weight-neutral healthcare, and increasing specialized mental health care access.
- We have a number of projects that a student may work on, depending on their interests. The OCD Program and Neuromodulation Program are involved in Deep Brain Stimulation for OCD projects, including the quantitative and qualitative COMIRB-approved study around quality of life. A student would be responsible for assisting with data analyses, interviews, and qualitative coding. This research study may have an additional family/caregiver interview added to it that a student can help with. This would help elaborate the data we have already collected on the quality of life in those with OCD who had DBS surgery, but also allow us to collect data on the impact of the OCD pre and post-DBS surgery on caregivers. Another research project that is in the early stages focuses on sexuality, sexual quality of life, and OCD. Depending on the level of contribution from the student, this may lead to an opportunity for them to be on a journal article/publication project. One of our trainees and I are creating a curriculum on weight-neutral healthcare, weight stigma, and Health At Every Size for doctors, physicians, clinicians, and possibly medical students. A student could help us with curriculum creation, implementation, and evaluation. We also have our IOP starting and a possible Peer Specialist program starting in 2024 that could be worked on. The IOP and Peer Specialist programs are focused on expanding access to affordable and specialized mental health care. These would be process improvement and program evaluation projects. Creating curricula could also be a part of these projects.
- Students will have the opportunity to shadow individual and group therapy sessions, as well as team meetings for outpatient and IOP. They will also have the option to assist with our quarterly newsletter and in the planning for our annual fundraiser, ExposurePalooza. They may also have the option to assist with program evaluation/quality improvement tasks around the IOP.
- Learn more: <https://som.cuanschutz.edu/Profiles/Faculty/Profile/29092>

MENTOR PROFILE



Rachel Davis, MD

- Rachel Davis, MD is Associate Professor of Psychiatry and Neurosurgery and Vice Chair for Clinical Affairs and Strategy, Medical Director of the OCD Program, and Service Director of Psychiatric Neuromodulation. Dr. Davis specializes in treating individuals with severe and refractory obsessive-compulsive disorder, including via deep brain stimulation. Dr. Davis is a Colorado Native and grew up in the rural (frontier), Southeastern Colorado town of Eads, CO. She completed her undergraduate training at the University of Colorado Boulder, medical school at the University of Colorado Health Sciences Center, and psychiatry residency at the University of Colorado Anschutz Medical Campus. She enjoys working with people from diverse backgrounds and is LGBTQ+ affirming.
- Dr. Davis and her team host a podcast with called **“Transplant Talks”**
<https://open.spotify.com/show/6yPv16c6bl9A14oYs6Iqih>
- In Transplant Talks, psychiatrist and living liver donor, Rachel Davis, MD, interviews living donors, healthcare experts, and transplant recipients to bring you stories of courage, hope, and innovation in the world of organ transplantation. These stories will demystify the process of living liver and kidney donation and debunk common organ donation myths. Organ transplantation changes lives every day, and Transplant Talks shines a light on some of the most incredible stories in the Transplant world.
- The student will learn to help edit podcast episodes and will also help with promotion and marketing of the podcast. Dr. Davis will also support the student in a project about living organ donation.
- During the remaining internship hours, the student can expect to shadow other mental health providers. They will also participate in lab meetings and other research projects as time allows.
- Learn more: <https://som.cuanschutz.edu/Profiles/Faculty/Profile/13845>

MENTOR PROFILE



Michelle L. West, PhD
(she/her/hers)

- I am the director of the early psychosis clinic: the Program for Early Assessment, Care, and Study (PEACS) at the CU Anschutz. My clinical and research focuses on treating and understanding young people who are exhibiting early symptoms of psychosis, before onset of acute psychotic symptoms (CHR-p). PEACS offers specialized outpatient clinical services (evaluation, treatment), contributes to innovative research, and provides training. PEACS works with young people (ages 12-30) who are starting to experience new changes in their thinking or mental health, which may include: difficulties thinking clearly, uneasiness with others, sensitivity to sights/sounds, withdrawing from friends/family, and troubles with school/work.
- The student will meet with me to decide their research focus. In the past, interns have done projects related to race and ethnicity considerations for clinical settings, overlap of psychosis and other diagnoses (e.g. OCD), and gender identity in psychosis populations. As a result, each intern's project is different and will be determined at the start of their term at PEACS.
- In addition to their project, interns will be involved in PEACS clinical team meeting, PEACS lab meetings, DEI didactics, shadowing evaluations and coaching sessions, training in the Structured Interview for Psychosis-Risk Syndromes, and early psychosis seminars.
- Learn more:
 - <https://medschool.cuanschutz.edu/psychiatry/programs/PEACS/peacs-meet-our-team>
 - <https://som.ucdenver.edu/Profiles/Faculty/Profile/30178>