

## 2025 PSYCHIATRY UNDERGRADUATE RESEARCH PROGRAM AND LEARNING EXPERIENCE (PURPLE)

The 2025 **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.

**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 8th, 2025**. 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.

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

**Applicant Eligibility:** This year, we are recruiting 6-7 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 12th, 2025 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 via REDCap by the March 12th 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 Wednesday, March 12th, 2025 (midnight MST): <https://redcap.link/mdk6lgkh>**

Letters of recommendation can be submitted via the above link or emailed directly by your recommender(s) to: [PURPLE@ucdenver.edu](mailto: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 faculty mentors via teleconferencing in April 2025. All applicants will be notified of final application decisions, regardless of selection status, by the first week of May 2025.

## CONTACT INFORMATION

The information in this packet serves as general guidance to the 2025 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:

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

Career and Graduate School Preparation	<ul style="list-style-type: none"> <li>● Workshops on various research skills, graduate school, and career preparation</li> <li>● Directed readings</li> <li>● Panel discussions</li> <li>● Campus and facilities tours</li> <li>● Clinical shadowing</li> </ul>	<ul style="list-style-type: none"> <li>● Prepare for careers and graduate education in behavioral health, psychiatry, and psychology</li> <li>● Gain exposure to the major concepts and controversies in the discipline</li> <li>● Explore potential job and educational pathways</li> </ul>
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Collaboration and Networking	<ul style="list-style-type: none"> <li>• Collaborate with diverse teams, cohort members, and faculty</li> <li>• Networking with notable thinkers in the discipline</li> </ul>	<ul style="list-style-type: none"> <li>• Professionally present your personal brand</li> <li>• Learn to work with diverse teams</li> <li>• Connect with real scientists doing the work of the discipline</li> </ul>
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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 Profiles



## Matt Mishkind, PhD

Dr. Matt Mishkind and the Johnson Depression Center's Community Programs team have developed community-based training and education programs that are designed to extend the reach of the center to communities across the state and nationally through diverse educational offerings to increase understanding of depression, bipolar, anxiety, and related disorders, reduce stigma, prevent suicide, and increase access to quality mental health care. Educational offerings are delivered to communities, in schools, businesses, and to professional groups including health care professionals, and university faculty, staff, and students. The JDC community and education programs trained close to 12,000 individuals in fiscal year 2024. Over the past several years, the JDC has expanded its VitalCog: Mental Health and Suicide Education programs. It now offers training for the workplace, construction, throughout athletics, and peer support. The VitalCog program includes the management of over 800 trainers across the nation. The JDC now offers 21 mental wellness education programs.

- Our project would be related to developing, evaluating, and disseminating one or more of our educational programs. We anticipate this summer to focus on further development of our mental health and athletics programming, suicide prevention efforts in the construction industry, analyzing community programming needs, and implementation of community-based education. One need will be a review of workplace-based mental health initiatives with the intent of publishing and presenting results. There are multiple opportunities across programs, and we will work with the selected student to find the best fit with their interest. We are not a traditional research lab and anticipate that the student will be involved in a range of professional activities.
- The student would have the opportunity to:
  - Shadow activities in various program rotations.
  - Attend clinical, research, and operational team meetings.
  - Engage with the JDC Board of Directors.
  - Conduct training and education sessions.
  - Participate in focus groups.
  - Develop evaluations.
  - Enter into and review data in REDCap
  - Conduct basic analyses for program evaluation.

Learn more: [www.coloradodepressioncenter.org](http://www.coloradodepressioncenter.org); [www.vitalcog.com](http://www.vitalcog.com);



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## 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>

- PURPLE student will work on a survey about attitudes towards living organ donation. Dr. Davis and a former student created the survey as part of last year's PURPLE program and administered it to participants on the Anschutz Campus.
- Student will work on administering the survey in tattoo shops.
- Student will also assist with:
  - (1) updating existing COMIRB exempt protocol
  - (2) recruiting tattoo shops to participate
  - (3) administering the survey (recruitment in person) multiple times
  - (4) analyzing the data
  - (5) in addition to the poster, optional opportunity to participate in creation of and publishing a manuscript.

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>



## **Emma Lyons, PhD**

Emma Lyons, PhD, is an Assistant Professor of Psychiatry and a licensed psychologist in the Cystic Fibrosis Center at Children's Hospital Colorado/CU School of Medicine. Dr. Lyons provides psychological intervention and assessment to children with CF and their families and is involved in several research studies aimed at improving the mental health and wellbeing of children, adolescents, and young adults with CF, and their caregivers. Dr. Lyons' current research is centered on eating behaviors in younger children with CF, and evaluating parenting interventions to address picky eating concerns that can interfere with optimal CF treatment and care.

The aim of our project is to collect data on the presence, frequency, and intensity of picky eating behaviors among children with cystic fibrosis (CF) and how they relate to caregiver wellbeing and CF care. Nutritional management is central to CF care, but the emphasis on optimal dietary intake is often highly stressful for caregivers, especially when children with CF demonstrate food refusal and/or pickiness. We are interested in evaluating picky eating in children with CF to inform potential parent-focused behavioral interventions that would address this concern. The student would assist in data management and collection, and could contribute to additional research inquiries focused on eating behavior and nutrition in children with CF.

- The student would have the opportunity to:
  - Shadow multidisciplinary CF medical visits
  - 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/20013>



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## **J. Kyle Haws, PhD**

Dr. Kyle Haws and the study team are focused on optimizing the delivery of the Youth Empowerment and Support (YES) platform in pediatric primary care settings. The project involves equipping pediatric primary care providers with the skills to implement YES and evaluating real-world challenges and opportunities for its use. The leverages participatory research and implementation science to understand how mental health interventions can be adapted for youth in healthcare settings, using evidence-based practices and technology to improve accessibility and engagement in care.

The current project involves collecting feedback from pediatric primary care providers and youth on how YES fits into pediatric primary care and exploring the challenges and opportunities in its implementation. Students will have the chance to be involved in various aspects of the study and other related research projects, including data collection, analysis, and intervention development. They will also gain experience working in a collaborative, interdisciplinary environment, engaging with experts in mental health and healthcare delivery. We have a weekly virtual research meeting on Fridays.

### **The student would have the opportunity to:**

- Assist with recruitment and data collection for the YES Study and other related projects.
- Set up and manage REDCap databases for research projects.
- Conduct data analysis and assist with survey design.
- Participate in weekly team meetings to discuss study progress and research activities.
- Contribute to the preparation of research findings for publication or presentation.
- Gain exposure to grant writing and IRB submission processes.
- Participate in co-creation workshops with youth and providers to adapt YES.
- Shadow visits to pediatric practices where the team pitches YES over lunch to gather feedback from providers.

Learn more: <https://som.cuanschutz.edu/Profiles/Faculty/Profile/38890>



## **Lina Patel, PsyD and Erica Gleason, PhD**

Lina Patel is an Associate Professor, and the Director of the Down Syndrome Behavioral Health Collaborative. She also serves as Director of Neurodevelopmental, Behavioral, and Cognitive Assessment at the Linda Crnic Institute for Down syndrome.

Erica Gleason is a licensed psychologist and an instructor in the Child and Adolescent Division at the University of Colorado.

Dr. Patel's research work is in the field of Down syndrome. Dr. Patel works with scientists, researchers, and clinicians within the context of clinical trials, cognitive assessments, and behavioral phenotyping. She also provides care for individuals with developmental disabilities in the context of feeding, behavioral support, school consultations, and desensitization to medical equipment.

The student will have the opportunity to:

- Work on a project where the aim is assessment of behavioral challenges using a play based assessment for individuals with Down syndrome.
- Help with data collection, behavioral coding and data entry.
- Student can participate in shadowing of clinical appointments, data entry, participation in research meetings (study is two sites).

Learn more: <https://som.cuanschutz.edu/Profiles/Faculty/Profile/4420>



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## **Jonathan Safer, PhD**

Dr. Safer-Lichtenstein research has focused on diagnosis and intervention for neurodivergent children, including those with autism and ADHD. His ongoing research primarily centers around developing the evidence base for low-cost interventions that are more accessible to underserved groups, including Hispanic/Latinx populations in both the U.S. and Latin America, who experience severe disparities in service utilization.

The project on which a PURPLE student could become most involved is related to the translation and adaptation of a manualized intervention called Unstuck and On Target for Spanish-speaking families. Aspects of this project will include piloting the Spanish version of the intervention at our clinic in the U.S. and working with interested partners in different Latin America countries to help them determine what is necessary for them to adapt, pilot, and evaluate the intervention in their settings. The student could be involved in any aspect of this project, including shadowing/assisting with data collection and entry, child assessments, and intervention groups. The student could also be involved in other research projects/activities going on in our broader program, including a large trial of Unstuck and On Target in community mental health settings.

The student would have the opportunity to:

- Shadow child and caregiver intervention groups.
- Shadow child assessments.
- Attend research team and community partner meetings.
- Set up REDCap databases for research projects.
- Enter data into REDCap.
- Assist with preparing IRB applications and revisions.

Learn more: <https://som.cuanschutz.edu/Profiles/Faculty/Profile/39551>