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Psychiatry Undergraduate Research Program and Learning Experience

OUTCOMES REPORT 2024



University of Colorado
Anschutz Medical Campus



Table of Contents

BACKGROUND	3
VISION	5
STRATEGY	6
PROGRAM BENEFITS	8
PROGRAM OUTCOMES	10



Background

PURPLE started in 2016 to provide mentorship to undergraduate students through supervised research activities, clinical shadowing, and didactic sessions covering topics from basic research skills and scientific communication to professional branding. Through the past eight years, PURPLE has grown to become a full-fledged career pipeline, by helping to prepare and place students in behavioral health careers. PURPLE remains the only student mentorship program on the University of Colorado Anschutz Medical Campus (CU-AMC) that provides clinical research mentorship to undergraduate students with a focus on mental health.

PURPLE intentionally seeks to attract diverse, accomplished students from a wide variety of cultural, geographic, and ethnic backgrounds, and aims to help students become scientists and clinicians. Annually, we receive approximately 60 applications for the program, though the number of applicants increases each year. Applicants go through a rigorous selection process before 10-15% are invited to join the cohort. Cohorts are intentionally kept small, as each student intern is paired with a faculty mentor to work on an original clinical research project during the program. Besides building a pipeline of future mental health professionals, the program allows faculty mentors to further develop their mentoring skills and reaffirms their commitment to the behavioral health profession.

A variety of other summer institutes and mentorship programs meant to engage diverse undergraduates in STEM careers exist on the CU-AMC and at other institutions in Colorado. However, program quality varies significantly, as do program outcomes, effectiveness, and intention. PURPLE, however, is a proven model whose success has already been demonstrated.

“Our program is the only program of its kind in the state of Colorado that intentionally seeks to train, place, and retain undergraduates in behavioral health careers.”

– Emmaly Perks, Former PURPLE Director



“The connection that I had with my mentor was great and meaningful... I had an amazing opportunity to be involved in various projects throughout the year and met some amazing professionals along the way. The projects that I was involved in pushed me to think critically—outside of the box.

When I was given a raw set of data, I was encouraged to analyze/summarize the data in my own ways, with my mentor's guidance. It gives my work value, knowing that my contributions were not limited to the classroom setting or for a grade, but real-life applications.”

- PURPLE Student, 2020-2021 Cohort

Vision

The CU-AMC is the premier destination for training students of all career stages and from all backgrounds. We improve the school-to-career pipeline for minoritized individuals, reduce barriers to entry students who desire to become permanent employees, hire highly qualified employees in less time and at decreased cost, and work with local schools and corporate partners to become the Colorado employer of choice for on-the-job training and employment in STEM fields.





Strategy

Equitable Applicant Selection:

- Equitable advertising of the program
- Rigorous application process with an applicant review process uniquely configured to focus on diversity, equity, inclusion, and talent development
- Offers a stipend to support student basic living costs

Rigorous Pedagogy:

- Didactics focus on the tripartite mission of the university: developing educational theory, research techniques, and skills in clinical shadowing and working with patients
- All students are instructed in the eight career-readiness skills laid out by the National Association of Colleges and Employers' Career Readiness Benchmarks
- Ongoing evaluation and assessment ensure skills achievement
- Career development and planning integral to the program through didactics showcasing career possibilities and pathways

Intensive Mentorship:

- Responsive mentoring by faculty in 1:1 dyad
- Students are introduced to experts in the discipline and exposed to potential employers
- Students are integrated into labs and clinical settings prior to employment

Pipeline Planning:

- Planning for student hire happens early (e.g., “on the job interviews”)
- Internal student job board for vacancies on Anschutz campus
- Students selected for programs to meet specific employment goals
(e.g., student interns in basic science selected to become lab technicians)



Gender	n (N=45)	%
Female	30	67%
Male	12	27%
Identifies in Another Way	3	6%
Ethnicity		%
Hispanic or Latinx	14	31%
Not Hispanic or Latinx	30	67%
Prefer Not to Answer	1	2%
Race		
White or Caucasian	24	53%
Asian/Middle Eastern	10	22%
Black or African American	4	7%
American Indian	2	4%
Prefer not to Answer	5	11%
Bilingual		%
Yes	19	42%
First Generation College Student		%
Yes	17	38%



Program Benefits

Diversity, Equity, and Inclusion:

- More equitable pipeline programming
- Greater diversity in program participants and subsequently the CU-AMC/Colorado workforce
- Improved program outcomes for historically marginalized groups by increasing career readiness, career attainment, graduate school acceptance and completion
- Greater diversity among new behavioral health providers

Flexible Response to a Changing Economy and Evolving Workforce Needs:

- Highly educated workforce with specific skills training, positioning CU-AMC program graduates as some of the most desirable employees in the state
- A pipeline for hiring that allows us to quickly fill staff vacancies with highly trained employees specifically trained for each discipline
- Decreased time to hire and hiring costs by creating a ready pool of trained students
- Greater oversight and risk management for students enrolled in internship programs, and for the departments that host them

Cost savings:

- Students gain expert-level training and real-world experience with the support of an hourly wage, and without having to pay tuition
- Reduced time to hire equates to reduced hiring costs long-term
- Lower staff turnover and higher morale among student employees results in decreased hiring costs over time

Program Outcomes

Over the last 8 years, 54 students recruited from Colorado and the greater United States have completed the program. A few highlights of the outcomes:

- **84%** subsequently gained employment at CU or a campus affiliate (UCHealth, Children's Hospital CO)
- **48%** stay in mental health fields
- **29%** were accepted into graduate programs
 - On average students enrolled in graduate school reported that their PURPLE experience was "very helpful" in helping them apply for graduate school (4.0 on a 1-5 scale).
- **100%** reported they would recommend the program to others

"The most meaningful experience I had was working with Dr. Sarah Kennedy at the Children's Hospital. I was allowed to sit in and explore the partial hospitalization program as the patients received transdiagnostic treatment. Being able to see the improvements and acceptability of the patients gave me hope and determination. I was thrilled to see how much positive can come out of research and clinical psychology. It really gave me perspective on what I want to be doing moving forward in my career."

– **Student, 2020-2021**

Kristen Torres (Pictured at right; Student, 2018 cohort): "PURPLE was really great and gave me a lot of real-world and hands-on experience that you don't normally get in a classroom. It was so eye opening to work with patients and their families and it reaffirmed my decision to pursue a career in pediatric psychology. The experiences also led me to be more confident in my qualifications when applying for graduate school."

Alexandra Malek (Student, 2016 cohort):

"This was an invaluable experience for me as it provided a safe and supportive environment for me to develop my skills as a researcher, scientist and young professional in the healthcare field."



AYELET TALMI, PHD



*SHENGH XIONG,
DR. TALMI'S MENTEE , 2016*

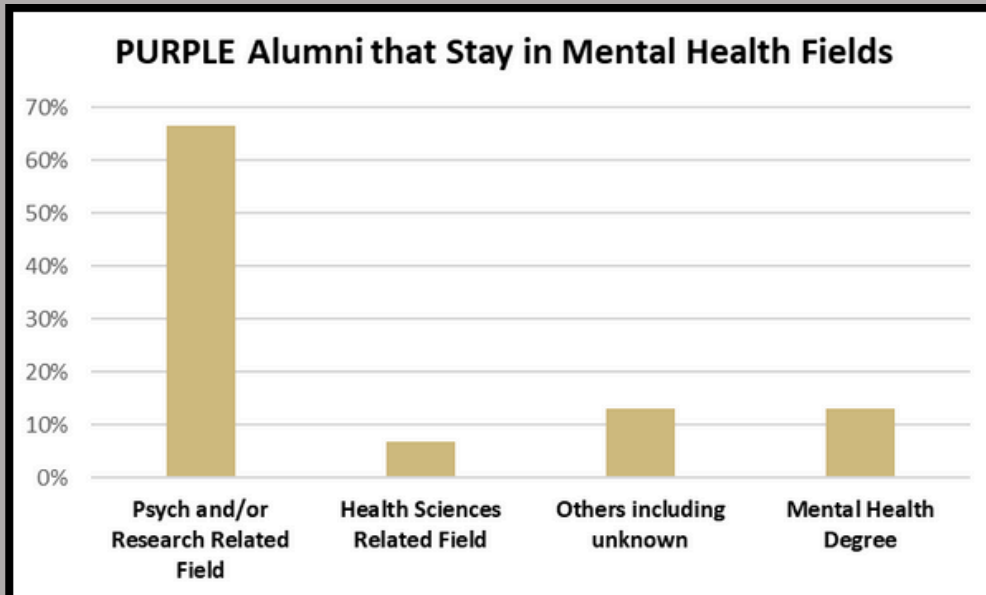
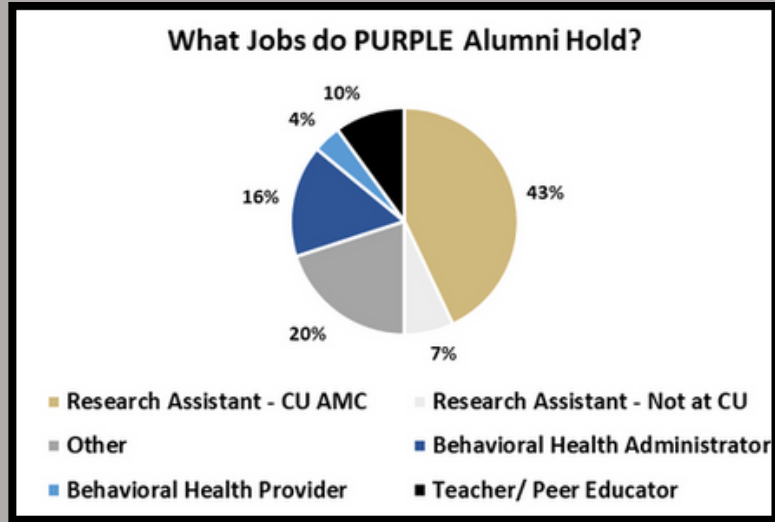
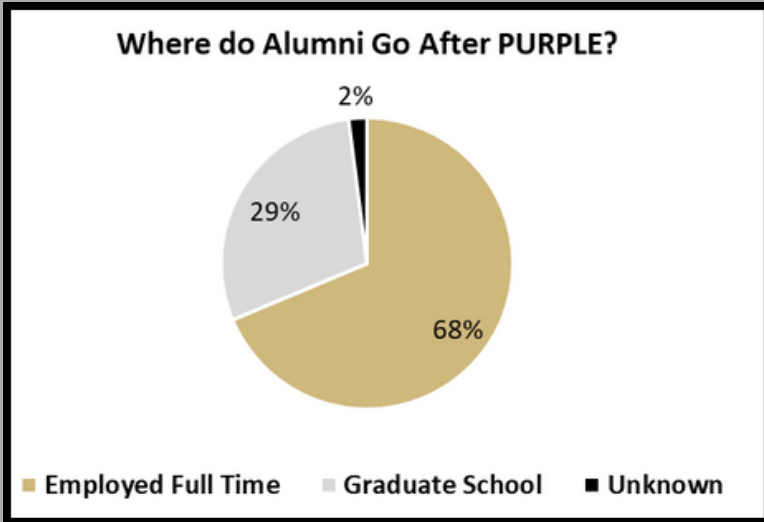
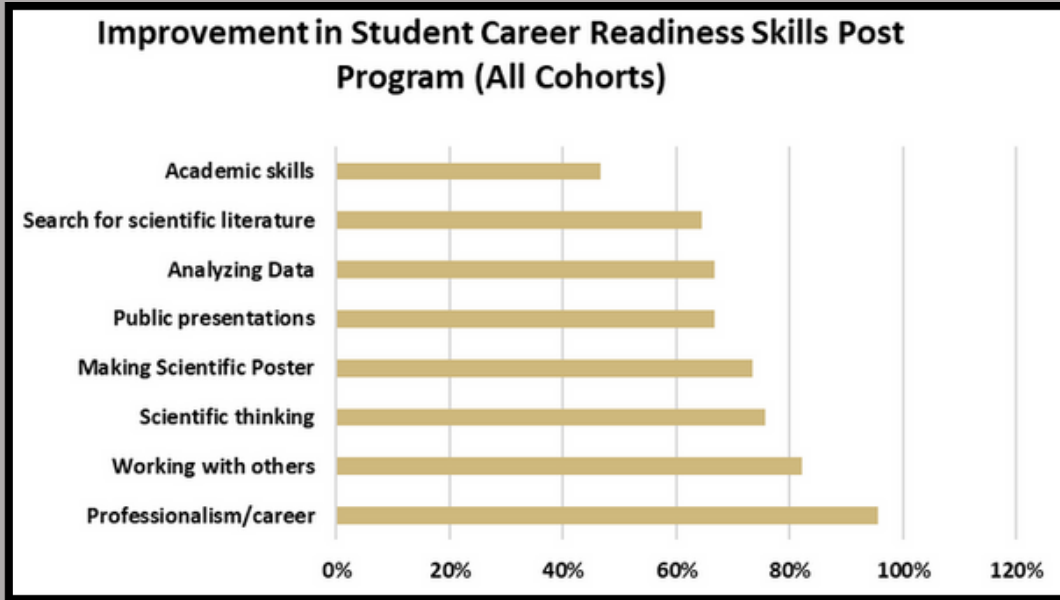
Even more remarkable was the camaraderie and community the PURPLE program created among students, faculty mentors, and past participants. You are truly creating a pipeline to engage students in possible careers in mental health and provide them with an opportunity to contribute their perspectives to the field early in their professional development

- Ayelet Talmi, PhD (PURPLE Mentor 2016 - 2024)



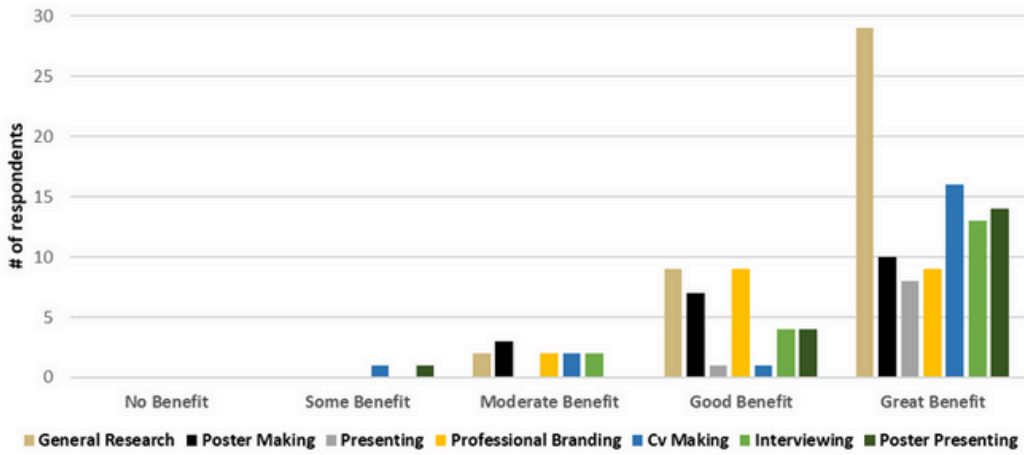
Anschutz

P.U.R.P.L.E.

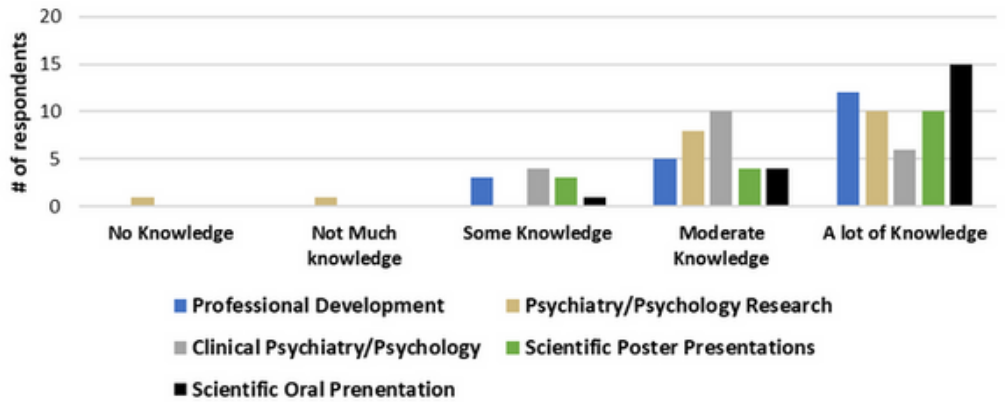


Didactic Outcomes

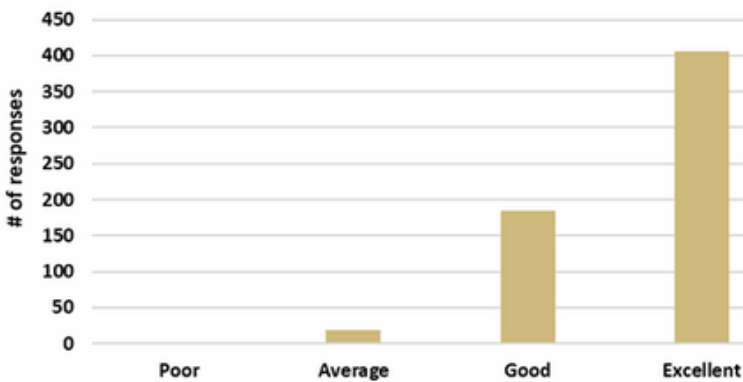
Post Program Survey: "How much benefit did you receive from the following sessions?"
(2021 - 2023 Cohorts)



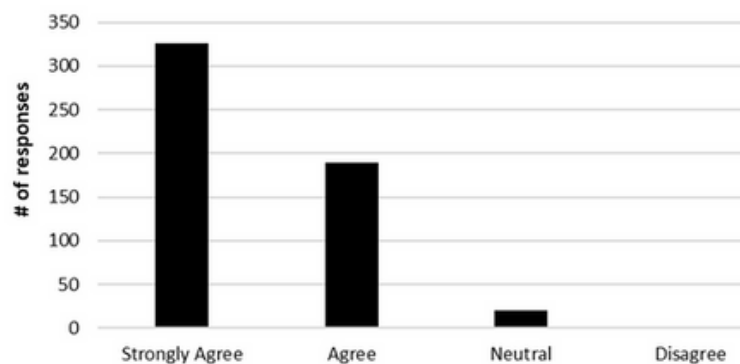
Post Program Survey: "Rate your knowledge of topics after the program"
(2021 - 2023 Cohorts)



Post Didactic: "How would you describe the quality and relevance of this didactic?"



Post Didactic: "Topics discussed during the session are useful for my future scholarly goals"





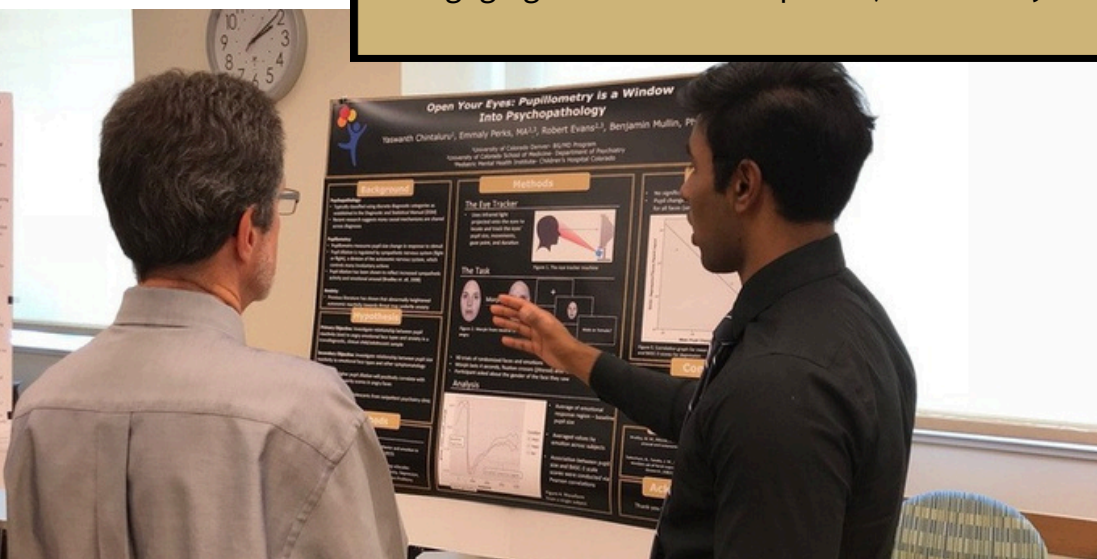
“Would you recommend PURPLE to a friend?”

“YES; PURPLE opened doors for me I didn't know existed. It showed me that I was not only capable to work in a research environment, but also have the confidence to place myself in leadership roles I would of hesitated to be in before. - **Student, 2019**

“Yes! Through this program, I was involved in real-life work that benefits the scientific/healthcare community - at the undergraduate level! - **Student, 2021**

“Yes I would, and I actually have. I feel PURPLE was so valuable to me this summer in helping me hone in on what I want to be doing in my career”. - **Student, 2022**

I would definitely recommend this program to my friends and colleagues! It was a great learning experience and it was so organized and engaging (the most engaging ones I've been a part of). - **Student, 2023**



PURPLE in the Media

Good News
Letter



Mind the
Brain
Podcast



Academic
Poster about
PURPLE



Psychiatry Pathway
Program Opens Doors to
Critically Needed
Careers



Diverse cohorts
immerse in
pediatric psychiatry
as part of PURPLE



P. U. R. P. L. E.

