



Center for Student Research

Annual Report 2023 - 2024

Contents

Introduction	2
Student Research on Campus	3
Workshops, Events, and Partnerships	3
Mountain Lion Research Day and CSURF	5
Travel Awards	5
Undergraduate Research Academy	6
2023 Cohort.....	6
2024 Cohort.....	7
Graduate Research Academy	9
Graduate Leadership Training.....	9
Writing Circles	11
Graduate Peer Mentor Program	11
What is Next for the CSR?	12
URA Study	12
Graduate Student Grant Writing Bootcamp	12
Final Thoughts	13

Introduction

The CSR entered its fifth year in fall 2023 with 392 student members! We formed new partnerships, supported more students and faculty, and continue to build our space on campus as the hub of all things student research and creative works. The director took on another role as coordinator for faculty affairs, so while there may have been fewer events sponsored by the CSR, our rich network of colleagues in other units helped collaborate on successful, interactive activities for students. The

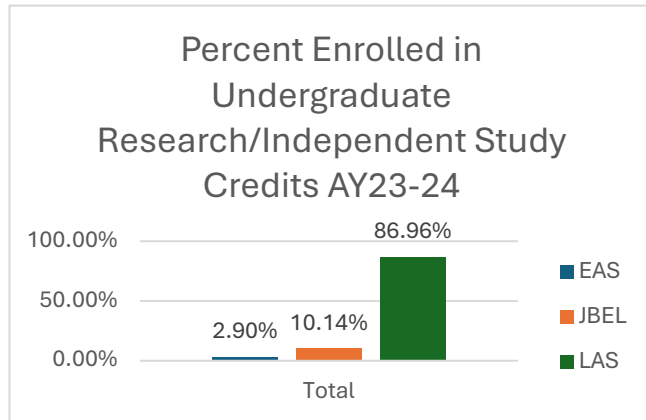


Figure 1: A bar chart showing the percentages of students enrolled in undergraduate research/ independent study and their respective colleges.

Aspirational Graduate Peer Mentor reached a new milestone of its 100th student mentee connecting with one of our skilled graduate student mentors. These peer mentors have also played an important role in coaching the past two Undergraduate Research Academy cohorts, offering practical advice and encouragement to these students. We were also thrilled to partner with the Graduate School and the Dean of LAS to host the first Graduate Student Leadership Training Series focused on leadership skills in research spaces. Overall, it has felt as though the CSR is hitting its stride with a good balance on in-person synchronous events as well as established means of information sharing students can access any time. We are looking forward to the coming year as we hope to connect with even more students and bring them into research and creative work experiences!

Student Research on Campus

Our office continues to use multiple means to document student participation in research and creative works on campus including registration for the 9499 course number and other independent study credits. This past academic year, we had 69 students enroll in at least one credit. Figure 1 shows the percentage of enrollments from each college. As in past years, LAS enrollments far outnumber other colleges. Of particular note, there were no students enrolled in these courses from College of Public Service, College of Business, or College of Education. The College of Engineering and Applied Science also had unexpectedly low numbers, especially with how frequently their undergraduate students engage in research. We plan to be more intentional this year with targeted advertising to these colleges to help encourage the use of these credits for their students. Another way we are able to track participation in undergraduate research is from students registered to present at Mountain Lion Research Day. This year we had a total of 98 student presenters and 100 additional student co-authors. Finally, we also track research participation through funding for student research assistants. From June 2023 to June 2024, we had a total of 199 students funded through a state or federal grant for their work on a variety of projects across campus. Using these metrics, we have nearly 400 individual student researchers! However, this number does not necessarily reflect students that are volunteers or are otherwise missed in the multiple measurements we currently use, so the true number is likely much higher.

Workshops, Events, and Partnerships

This past academic year, the CSR continued to form partnerships with units across campus to deliver research-relevant support for a wide array of students. We did make a conscious choice, however, to reduce the number of events due to low participation in in-person events. Instead, we focused heavily on recruiting attendees for the featured events which proved successful. In fall

2023, we again held the Student Researcher Social bringing together students from across campus for an afternoon of socializing and learning about other research on campus. In total ~45 student researchers and a 6 faculty took part in this event. In the coming year, we plan to include



Figure 2: The UCCS Student Researcher Social, Fall 2023

more formal programing to help connect faculty with students that do not year have a research mentor. Faculty from the Helen and Arthur E. Johnson College of Nursing and Health Sciences are especially interested in a more formal event where they can recruit undergraduate researchers

to their labs. In spring 2024, the CSR partnered with the Career Center, First2Go, and the Graduate Admissions Recruiter to host Stepping On the Road to Graduate School. This was a well-attended event where our units shared practical information about planning for graduate school. Then, for the second half of the event, we were joined by a larger panel of our Aspirational Graduate Peer Mentors who shared what a day in the life of a graduate student is really like. They offered deep insight into what they do as graduate students and how they navigate the challenges and opportunities a graduate educational experience brings with it. We are already planning another addition to this series – Stepping on the Road to Research, where we hope to engage more first-year students in thinking about research and creative work experiences.

Mountain Lion Research Day and CSURF

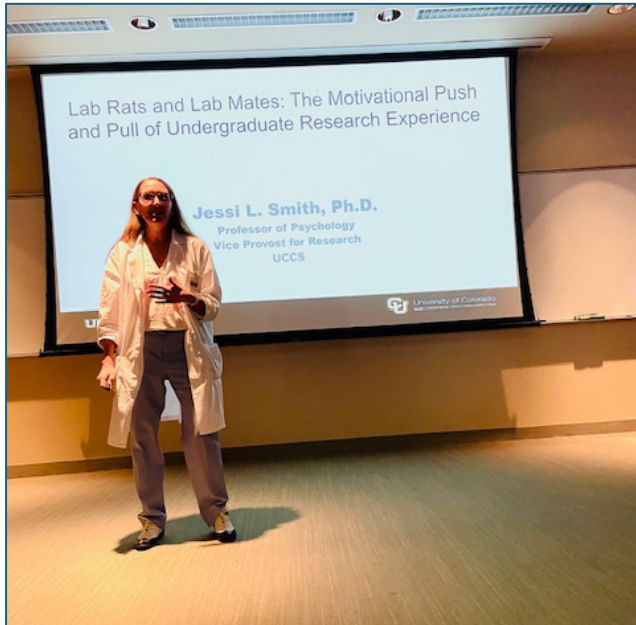


Figure 3: Jessi L. Smith, Ph.D. and vice chancellor for research at UCCS, presenting her work at CSURF 2024

The 2023-24 academic year saw the 15th annual Mountain Lion Research Day (MLRD) and the 20th annual Colorado Springs Undergraduate Research Forum (CSURF). We saw record attendance at MLRD with over 270 attendees and 98 presenters. This included 37 graduate presenters and 61 undergraduates. The 20th annual CSURF was held at UCCS (as this conference rotates among the four sponsor

campuses each year) and saw 281 from three of the four campuses. Of these, 58 were students from UCCS. Pikes Peak State College did not have any student presenters, but this could be an opportunity for UCCS to draw on the student body of PPSC for volunteer research assistants, which will also encourage greater enrollment from this talented local population!

Travel Awards

The Undergraduate Travel Award continues to be utilized regularly by students from many different departments. In the 23-24 academic year, we supported 9 students with the \$400 award to travel to conferences to present their work, network with peers, or to participate in field research opportunities. Three students from the Philosophy department used smaller portions of the award to attend a virtual symposium in their field while another used the funds to help cover cost for a summer philosophy retreat at CU Boulder – one of only 20 students nationwide selected for such an opportunity. Another student in Anthropology utilized the money to help

support their daily living expense while gathering ethnography data in Japan. This travel award, while modest, helps students pursue incredibly rich opportunities to expand their learning and experiences as an undergraduate. With this in mind, we sought to gather donations to increase the number of awards we are able to give out to students each year. The CSR director worked closely with the Advancement team to launch a crowd funding campaign. We expect by the beginning of the fall semester, we will have gathered enough funds to support 2-3 more travel awards in the coming academic year beyond the 10 we already offer thanks to the generous support of our campus community. To learn more about the campaign or, click [here](#). Donations can be made [here](#).

Undergraduate Research Academy

2023 Cohort

The 2023 URA cohort completed an exit survey evaluating their research experience over the past year. Of the 16 respondents, all reported moderate to great gains in basic research skills, researcher identity, and research communication abilities (see Appendix A for figures). As in previous cohorts, the students report one of the most impactful aspects of the summer research experience is their hands on work on a project and their interactions with their mentor. In terms of catalyzing a research career path, 88% of respondents agreed or strongly agreed that the summer research experience confirmed their interest in continuing this degree path in graduate school, prepared them for advanced course work, and prepared them for graduate school. We also see a continuing trend of many URA students choosing UCCS for their graduate education so that they may continue to work with their current faculty mentor. Of the respondents, 80% have either already applied to a graduate program or plan to within the year. Of those that have

already applied (n=5), all applied to UCCS and 80% are or will be attending UCCS for graduate school and one will be attending a Ph.D. program at Idaho State University.

This year, we expanded the URA exit survey to explore how and why students are interested in this opportunity (and research in general). Based on their qualitative feedback, most students seek out research opportunities like the URA to improve their career or graduate education opportunities. In the fall, with the help of Dr. Katie Busby, we plan to conduct an in-depth study of the 2024 cohort members to investigate this relationship development more closely.

2024 Cohort

We welcomed the 2024 Undergraduate Research Academy cohort in May. This year's cohort



Figure 4: The 2024 URA cohort

includes a diverse range of majors beyond STEM-related fields that typically far outnumber the social and behavioral science projects. This

cohort includes one student from Social Work and one from Criminal Justice (our first College of Public Service students in three years!), one in geography, one in Health Sciences, one in Teaching and Learning and two in sociology. While we still have a large number of students representing the natural sciences and the College of Engineering, this cohort demonstrates some success in improving recruitment from majors that maybe under-utilizing the URA.

We also see greater gender parity in this year's cohort with a near 50-50 split of men- and women- identified members (13 men-identified, 14 women-identified). Of note, we have eight

women-identified students working in STEM fields including physics, computer science, biology, and biochemistry. We also see growing diversity of the race/ethnicity of the URA cohort this year. While the members are still majority white (64%), the number of students from historically marginalized racial and ethnic backgrounds has increased from 15% in 2023 to 36% in this most recent cohort.

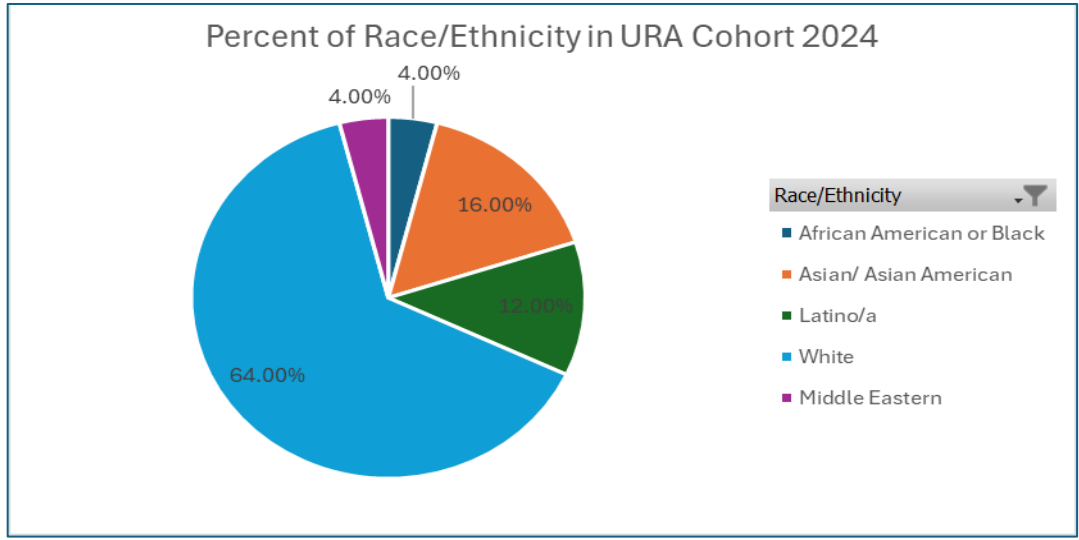


Figure 5: Figure 5: A Pie Chart Showing the Percentage of Race/Ethnicity in the URA Cohort 2024

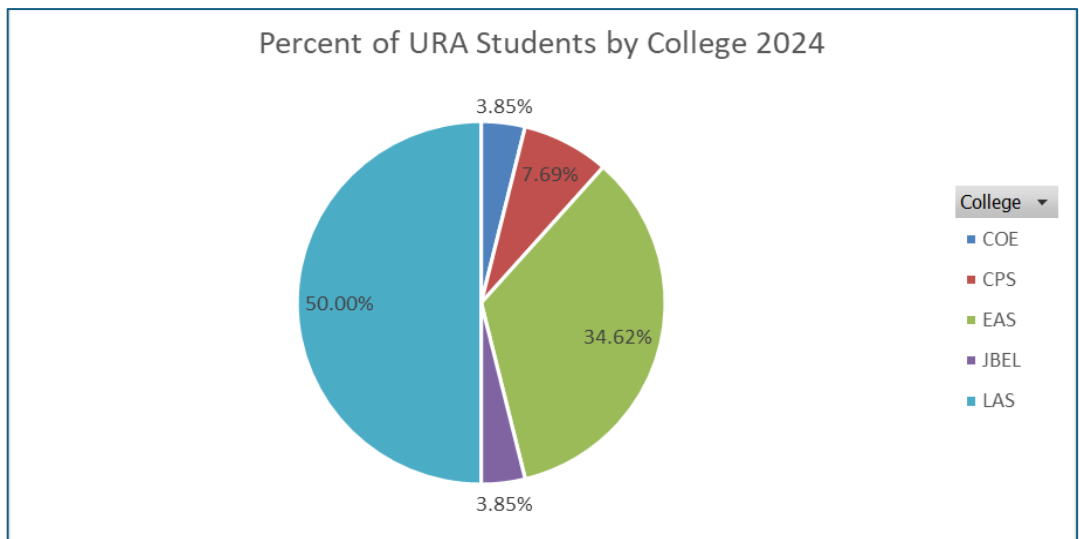


Figure 6: A Pie Chart Showing the Percentage of URA Students By College in the 2024 Cohort

Graduate Research Academy

Graduate Leadership Training

The UCCS Graduate School Dean Dr. Kelli Klebe requested specific training tailored for The

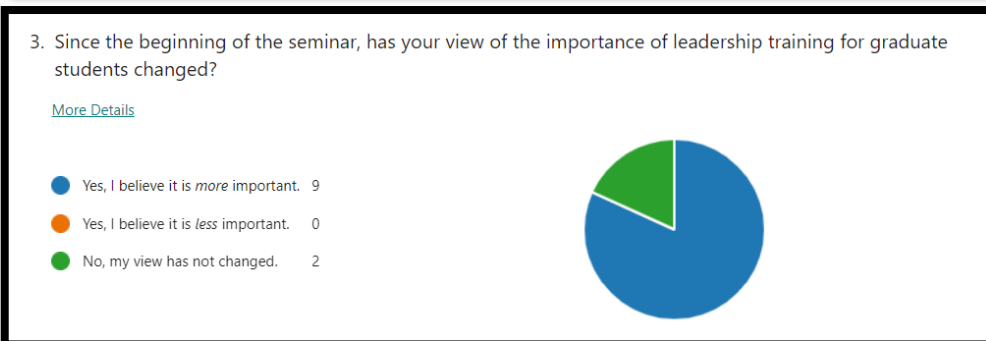
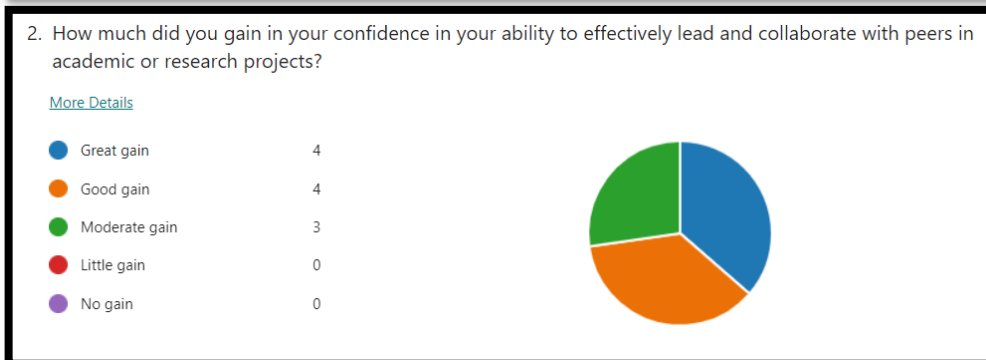
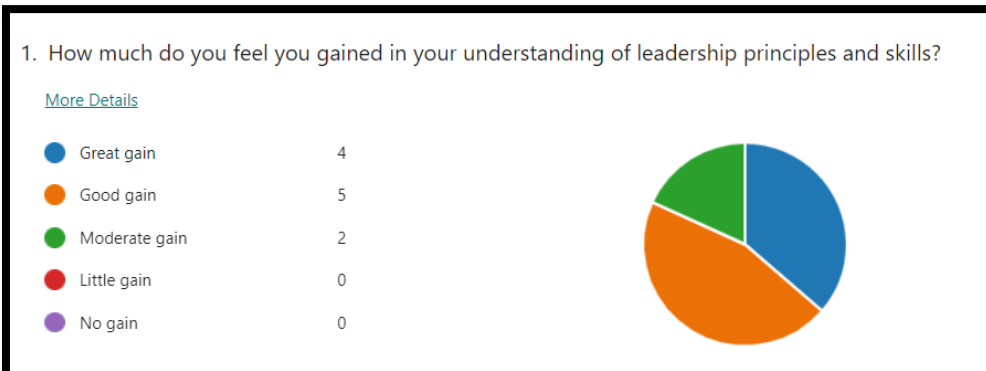


Figure 7: Survey Results from students after participating in the Graduate School Leadership Training

Graduate Research Academy. The director planned a spring leadership training in the spring of 2024 in partnership with the Dean of LAS Dr. Lynn Vidler. This training served as an introduction into leadership with an eye toward

leadership in the research space specifically. The training took part in three 90-minute sessions led by Dr. Vidler. The CSR director recruited and organized the sessions and gathered pre and post evaluation data on student's understanding of leadership and their opinion of the training series. The sessions included an introduction to leadership styles and how one's values impact

their leadership, an interactive session on tackling challenges in research spaces, and how to balance self-care. Each session included an examination of power differentials inherent in mentored relationships and how to leverage campus resources to advocate for oneself. In total, 16 graduate students participated in the sessions (63% women-identified, 25% BIPOC, 50% STEM). From the pre and post data, we see students reported moderate to significant gains in their understanding of leadership principles regarding research spaces. In addition, the participants had an overwhelmingly favorable opinion of the training series as a whole and expressed that they hope this kind of training can continue to be offered in the future for graduate students. You can review the full evaluation survey responses [here](#). Selected quotes below capture a general sentiment of student participants in this program and we feel this would be a useful offering to continue providing for our graduate students:

“It is important to help students realize their ability to influence their realms, even when they may not have a leadership role. Leadership isn't just for "leaders.””

“Graduate students are going to take leadership roles in the industry, academia, and in the society after they graduate. However, most students graduating with advanced degrees have had no formal training in leadership. Hence, it is important to promote leadership training among graduate students and provide them with a way to get started in thinking about their future roles and how they can make a positive impact in the society they will work in.”

“Programs like this help graduate students find a sense of community to learn about leadership and share their barriers. Departments do not generally ask graduate students how they feel and what issues are they going through. I think programs like these create a safe environment for graduate students to learn about each other’s problems, and strategies to handle those problems. Lynn created a relaxed and safe space to talk about leadership issues and strategies. Jennifer did great work organizing it.”

Writing Circles

With support from the Provost Office, the CSR continued to host the graduate Write On! writing circles in fall 2023 and spring 2024. In the spring, we added a virtual writing circle option which had much more stable attendance and participation than the in-person sessions. We believe this is due to reduced barriers that result from needing to commute to campus and parking fees. Moving into the fall 2024, we plan to host only a virtual option as this appears to be the preference for most attendees. Results from our fall and spring writing circles show we had eight students participate in at least four meetings and some of their outcomes include two students competing annotated bibliographies, three students making significant progress on their literature reviews, and one student submitting a creative writing novella for publication.

Graduate Peer Mentor Program

The Aspirational Graduate Peer Mentor Program celebrated the milestone of meeting with the 100th undergraduate mentee this spring! While the meetings tend to occur just once per student, we have internally sought ways to incorporate our trained graduate peer mentors into ongoing CSR activities including the URA and preparing for graduate school events. We have found leveraging their skills in settings with larger groups of students to be especially helpful in advice-sharing and allows the graduate peer mentors to tackle common issues that come up for undergraduates in these group settings. This increases the reach of our graduate peer mentors *and* helps reduce the burden on the undergraduate mentee to reach out first. In the coming academic year, we plan to organize at least one event each semester where the graduate peer mentors can meet with small groups of undergraduates interested in or already engaged in research to share their experiences and advice.

What is Next for the CSR?

URA Study

As mentioned previously, the CSR director partnered with Dr. Katie Busby to develop a mixed methods study to look at experiences and outcomes for the Undergraduate Research Academy cohort of 2024. While our office tracks exit data from the URA each year, this study, for which we sought IRB approval, will include focus group interviews with both the URA students and their faculty mentors as well as an expanded exit survey for the student-faculty pairs. We are particularly interested in how these relationships form and the ways in which faculty support the autonomy, competence, and sense of belonging for their mentees. Results from this study may help inform future workshops for faculty and their student research assistants and help identify best-practices in fostering student belonging in research spaces.

Graduate Student Grant Writing Bootcamp

Stemming from frequent student requests and the success of the ongoing Faculty Grant Writing Bootcamp organized by UCCS Research Development Coordinator Dr. Kelly McNear, the CSR will host its own bootcamp for grant writing for graduate students. This opportunity will be open to all graduate students, with those in the Graduate Research Academy receiving early registration. The bootcamp will take place over the course of four 2-hour sessions and much of the content will be adapted from the faculty version of the Grant Writing Bootcamp. As graduate students may need greater orientation to finding funding opportunities and various funding mechanisms, the sessions will include practical skills for how to locate relevant funding and determining requirements/eligibility for possible awards.

Final Thoughts

As we reflect on the 2023-24 academic year, the UCCS Center for Student Research (CSR) has made significant strides in fostering a vibrant research community on campus. With nearly 400 student researchers actively engaged in various projects, the CSR continues to be a cornerstone for student research and creative works. Our partnerships with different units across campus have enabled us to deliver impactful events and workshops, despite the challenges of low in-person participation. The success of initiatives like the Aspirational Graduate Peer Mentor Program, the Undergraduate Research Academy, and the Graduate Leadership Training Series highlights our commitment to supporting students at every stage of their academic journey.

Looking ahead, we are excited to build on this momentum. Our plans to expand targeted advertising, host new events, and conduct in-depth studies on student experiences will help us better understand and support our diverse student body. The upcoming Graduate Student Grant Writing Bootcamp and the continued focus on leadership training are just a few examples of how we aim to equip our students with the skills and opportunities they need to succeed.

In conclusion, the CSR is not just a hub for research; it is a community where students can grow, learn, and thrive. We are proud of the progress we have made and are eager to continue our mission of fostering a culture of research excellence at UCCS. Thank you to all our partners, mentors, and students for making this year a success. We look forward to another year of innovation, collaboration, and discovery!