UNIVERSITY OF CALIFORNIA, RIVERSIDE

UCR

UNDERGRADUATE RESEARCH TRACKING REPORT

2014-2015

UCR | Undergraduate Education

UNDERGRADUATE RESEARCH TRACKING REPORT

UNIVERSITY OF CALIFORNIA, RIVERSIDE

OFFICE OF UNDERGRADUATE EDUCATION

2014-2015 ACADEMIC YEAR

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PUBLISHED SEPTEMBER 20, 2017

EXECUTIVE SUMMARY

- About twenty percent (19.9%) of enrolled undergraduates participated in faculty-mentored research and creative activities in Academic Year 2014-15. Activities tracked in this report include (i) research courses for academic credit, (ii) sponsored research programs (e.g., Mentoring Summer Research Internship (MSRIP)), (iii) paid undergraduate research positions, and (iv) participation in research program within the Office of Undergraduate Education (e.g., Undergraduate Research and Creative Activity Mini-Grants).
- Student participation in undergraduate research was very similar to the time period covered by the last report, academic year 2012-13 (19.9% vs. 21.9%). The discrepancy is largely due to lower enrollment in research courses.
- The majority of students participated through research courses and late in their academic career.
- Efforts to involve more students in research might focus on earlier engagement among sophomores, engaging new faculty, increased extramural funding and through improved data collection.

INTRODUCTION

The University of California, Riverside (UCR) and the Office of Undergraduate Education (UE) provide undergraduate students with multiple opportunities to participate in faculty-mentored research and creative activities. Guided by the Council on Undergraduate Research (CUR, 2014), we define undergraduate research as "an inquiry or investigation conducted by an undergraduate student that makes an original intellectual or creative contribution to the discipline." We further define undergraduate research as involving supervision or guidance from a faculty mentor. Students benefit from working with a faculty mentor in terms of learning research skills (e.g.: conducting literature reviews, designing and conducting experiments, learning to analyze data), communication skills (e.g.: developing skills in written and oral presentations), and personal or professional skills (e.g.: mentor relationship, peer interactions, learning to work independently, clarifying career goals) (Lopatto, 2003). Moreover, faculty mentorship and sustained involvement in activities for more than one academic term lead to increased workplace engagement after graduation (Gallup, 2014).

At UCR, colleges, academic programs, and the Office of Undergraduate Education facilitate different types of undergraduate research and creative activities. For example, the colleges offer courses specifically designed to provide students with research, internship, and creative experiences. Also, many colleges coordinate sponsored research programs, such as the Gluck Fellows Program of the Arts, Minority Access to Research Careers (MARC-U), and Future Physician Leaders. Individual faculty members offer

paid research positions for undergraduate students to engage in research activities (e.g., laboratory research, data analysis, and archival research). Furthermore, the Office of Undergraduate Education (UE) coordinates the Chancellor's Research Fellowships, Undergraduate Research Mini Grants, Undergraduate Research Journal, the Annual Undergraduate Research, Scholarship, and Creative Activity Symposium, and most recently the Sophomore STEM Success Fund (launched in 2016).

METHODOLOGY

For this report we, analyzed data from the summer 2014, fall 2014, winter 2015, and spring 2015. We focus on four categories of undergraduate research and creative activities where participation can be verified through university or program records:

i. Research courses for academic credit (e.g., 190-199 courses, capstone courses, senior design, internships, and research seminars) were identified in the UCR catalog and we sought verification of these selected courses from college personnel (e.g., Associate Deans and individual faculty members). (See Appendix 1.)

ii. Sponsored research programs (e.g., Gluck Fellows, Chancellor's Research Fellows), where records were gathered directly from programs and from administrators in each of the undergraduate colleges. (See Appendix 2.)

iii. Paid undergraduate research positions were identified through UCR's Payroll and Personnel System (PPS). We counted student with the job title "Student Helper I" and "Student Helper II" who worked in academic settings.

iv. Annual Undergraduate Research, Scholarship, and Creative Activity Symposium, Undergraduate Research Journal Submission, and Research Mini-grants. This was a way to identify students who were clearly involved in research but may not have been identified though any of the above sources.

Student demographics, like gender and major, were taken from databases maintained by the Office of Institutional Research.

Additionally we reviewed UCUES survey data from the spring 2014 administration to examine self-reported measures of undergraduate participation in research and creative activities and compare those rates to the rates derived from other records of participation collected for this report.

FINDINGS

Participation

Table 1 provides a summary of the number of undergraduates who participated in research, scholarly, or creative activities for academic year 2014-15, by college and type of involvement. The first four columns allow students to be counted more than once if they participated in more than one way. (So, for example, a student who submitted a paper to the Undergraduate Research Journal that they worked on with faculty member in an independent study 190-level course would be counted in two columns.) However, this is not very common with just 10% (or 410 students) being counted in more than one category. The columns for unduplicated headcount and fall 2014 enrollment only count a student one time.

Table 1: Undergraduate Research Participation by Type and College

College	Type of Undergraduate Student Research Involvement						
	Research Courses	**Sponsored Research Programs**	**Paid Positions**	**Annual Symposium**	**Total Individuals** (unduplicated headcount)	**Fall 2014 Enrollment** (unduplicated headcount)	**Percent Engaged in Research**
SOBA	536	2	18	2	548	1,028	53.3%
BCOE	537	72	133	8	646	2,330	27.7%
CNAS	472	119	306	46	768	4,915	15.6%
CHASS	1,634	69	189	41	1,798	10,613	16.9%
Total	**3,179**	**262**	**646**	**97**	**3,760**	**18,886**	**19.9%**

Across all four quarters, 3,760 students participated in undergraduate research under faculty mentorship, which represents about 20% of enrolled undergraduate students for fall 2014. The vast majority of students participated in research through courses for academic credit (86%). Overall, undergraduate research participation was similar to, although slightly less than, in AY 2014-15 than in AY 2012-13 (19.9% vs. 21.9%), primarily due to lower enrollment in research courses as well as higher enrollment in Fall 2014.

Participation by College

Figure 1: Photographs from 2015 Annual Symposium

Students across all disciplines are encouraged to present their research outcomes at the spring Undergraduate Research Symposium. Since its inception in 2006 the symposium has increase the number of participants. In spring 2015 the total participants were 132 (63 oral/69 posters).

Figure 2 depicts total undergraduate research participation by college. CHASS students represented nearly half (or 47.8%) of all students participating in undergraduate research. Both CHASS and SOBA students were primarily involved through research courses. CNAS students had the second largest research participation (20.4%), representing all forms of involvement (e.g., research courses, sponsored research programs, paid positions, and Annual Symposium). BCOE students represented 17.2% of undergraduate research participation, mostly through research courses and paid positions.

Figure 2: Total Undergraduate Research Participation by College

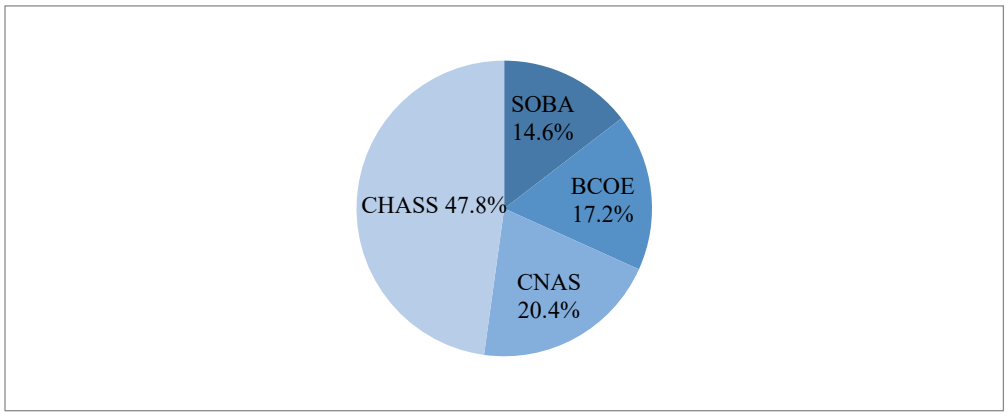


Figure 3 compares undergraduate research participation for AY 2012-13 and 2014-15. Fewer students in SOBA, CNAS, and CHASS participated in undergraduate research (primarily due to lower enrollment in research courses), and BCOE demonstrated higher participation in research courses, sponsored research programs, and the annual symposium.

Figure 3: Undergraduate Research Participation by College in AY 2012-13 and 2014-15

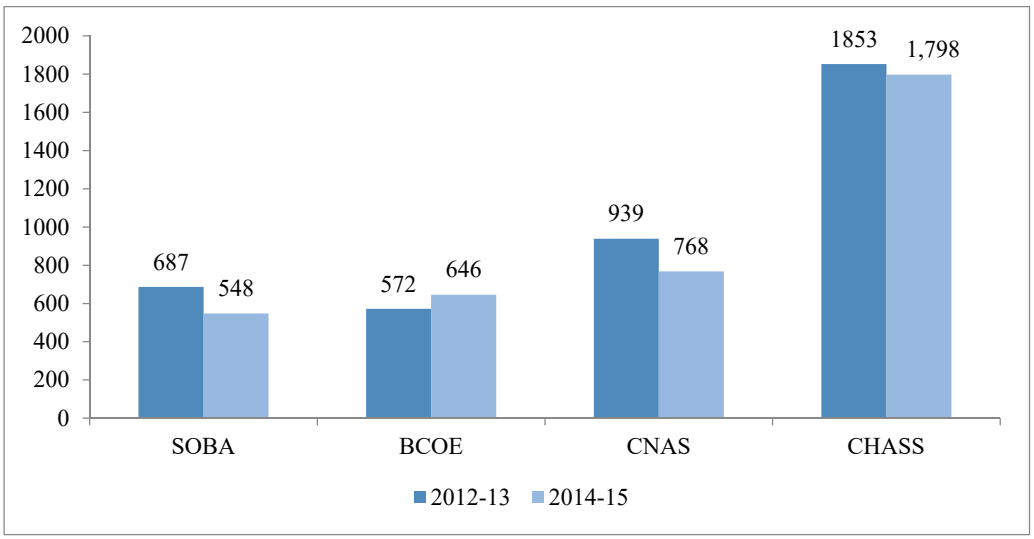
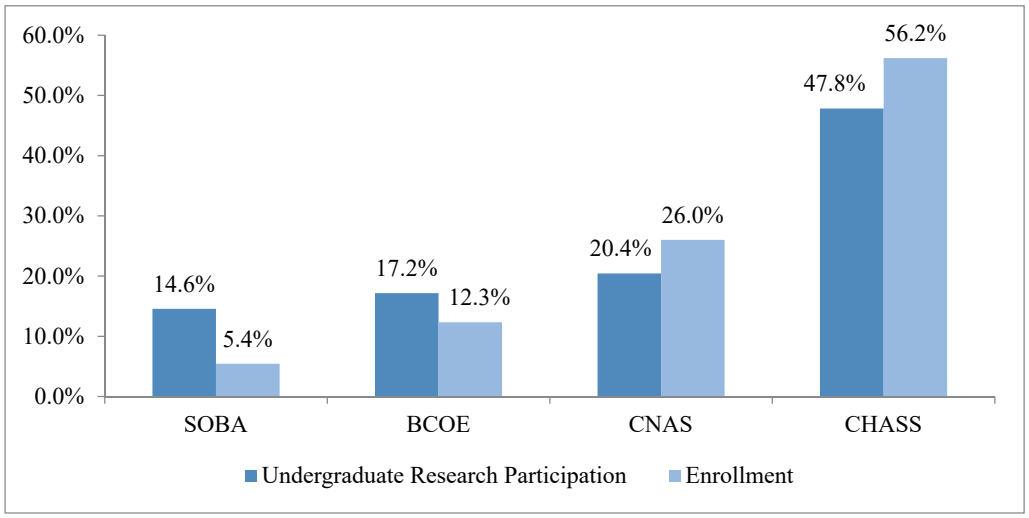


Figure 4 compares college representation in undergraduate research to college representation in total enrollment (Fall 2014). SOBA and BCOE students demonstrated higher proportions of research participation as compared to their proportion of campus enrollment. CNAS and CHASS students demonstrated lower proportions of research participation, as compared to their campus enrollment.

Figure 4: Total Undergraduate Research Participation by College



Participation by Class Level

Figure 5 depicts undergraduate research participation by class level. The chart demonstrates the high rates of involvement among upper-division undergraduate students. The largest proportion (60.1%) of undergraduate research students were seniors. There was an increase in participation among juniors (28.6%) in AY 2014-15, as compared to 23.2% in AY 2012-13.

Figure 5: Percent Undergraduate Research Participation by Class Level

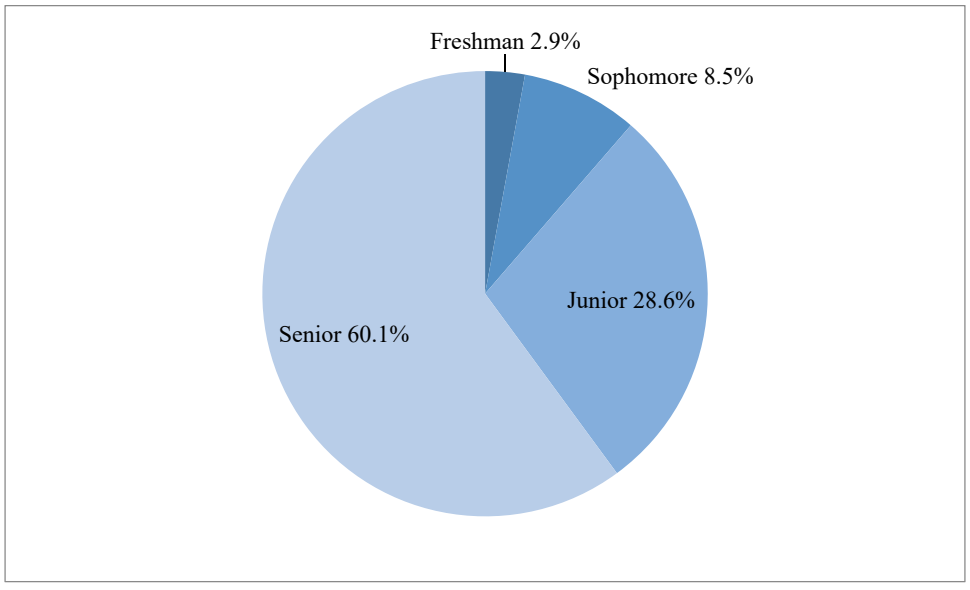


Table 2: Undergraduate Research Participation by Class Level and College

College	Class Level				Total Individuals
	Freshman	Sophomore	Junior	Senior	
SOBA	0	2	171	379	552
BCOE	4	28	135	479	646
CNAS	27	107	207	430	771
CHASS	77	182	560	970	1,789
Total	**108**	**319**	**1,073**	**2258**	**3,758***

* Note, two participants were limited enrollment student and had missing information on class status.

Participation by Student Demographics

Figure 6 depicts undergraduate research participation by gender and first generation college student status. The outcomes show that the differences between men's and women's rates of participation are small. Men make up about 2% more of the researcher group (49.9%) than they do all students (48.1%); women, in turn, make up about 2% less of the researcher group (50.1%) than they do all students (51.9%). First generation college students made up a slightly larger share of undergraduate researchers (53.9%) than is true for all students at UCR in AY 14-15 (51.7%).

Figure 6: Student Demographics, Student Researchers and All Students

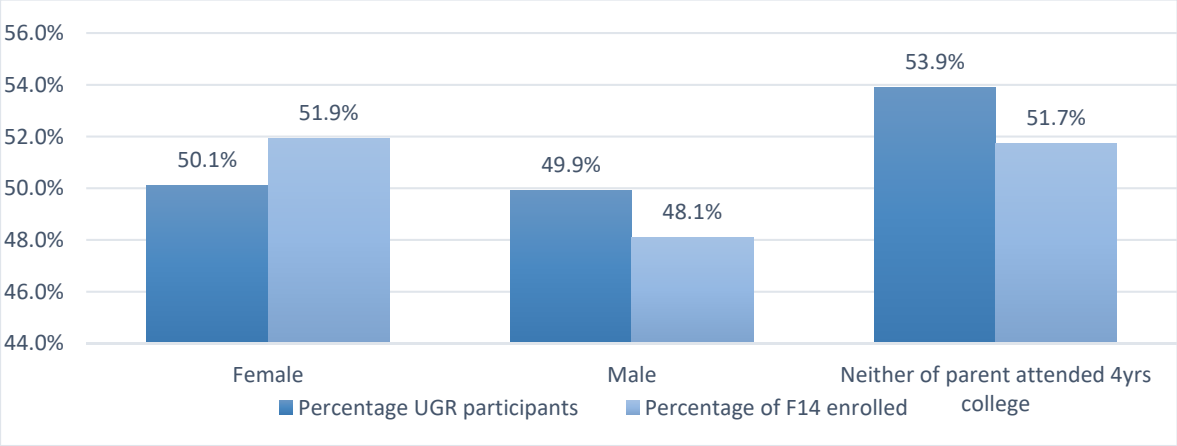
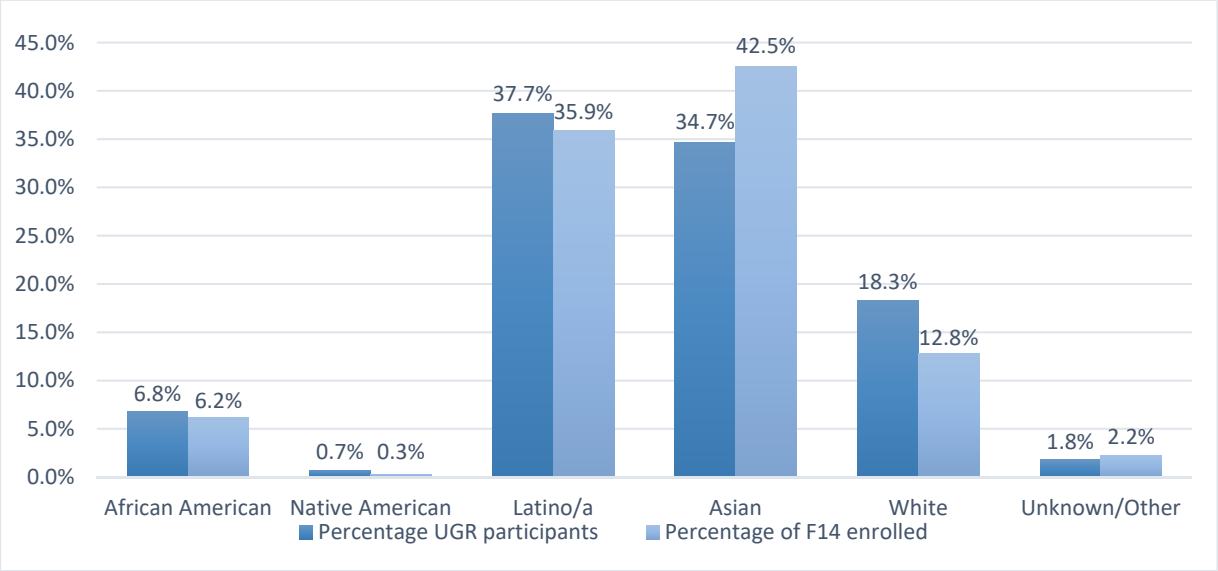


Figure 7 demonstrates that African American, Native American, and Latino/a students participated in research at rates very similar to their percentage of campus enrollment. Asian students make up a lower percentage of researchers (34.7%) than their percentage of campus enrollments would suggest (42.5%);

Caucasian students (18.3%) participated at rates slightly higher than their proportion of campus enrollment (12.8%).

Figure 7: Percent Undergraduate Research (UGR) Participation and Campus Enrollment by Race/Ethnicity



UCUES Survey Data

The University of California Undergraduate Experience Survey (UCUES) provides additional insight about undergraduate research participation. The UCUES Survey was taken by approximately 4,500 undergraduates at UCR in the spring of 2014 and nearly 50,000 undergraduates across UC undergraduate campuses (http://ucues.ucr.edu/).

Table 3 shows student responses on nine questions related to undergraduate research and creative activities, by college, at UCR, and across the nine UC undergraduate campuses. For questions 4-6 and 8-10, which explicitly point to faculty involvement, UCR student participation ranged from 5.9% to 19.7% (e.g., "assist faculty in research for course credit" or "work on creative projects under the direction of faculty without course credit"). Questions 1-3 and 7 do not align with our working definition of undergraduate research or creative activities, nor do they specify faculty-mentored activities but are provided for context.

Our finding that 19.9% of students participated in undergraduate research most closely matches the rate reported to the question "assist faculty in research with course credit" (19.7%). These figures are also consistent with the all-UC rate (19.7%). However, in regard to paid positions, our findings illustrate that only 3.4% (646 students; see Table 1) of UCR students engaged in this form of undergraduate research in AY 2014-15, whereas UCUES survey data indicated that 9.7% of UCR students answered yes to "assist

faculty in research for pay without course credit". These comparisons should be taken as illustrative as the UCUES items is worded "currently . . . or completed" and we look only at activity that occurred in AY 2014-15 and, as with all surveys, there are issues of response rate and representativeness.[1]

Table 3: 2014 UCUES Self-Report Survey Data on Undergraduate Research Participation by College, UCR, and All UC Campuses.

Indicate the following research and creative activities that you are currently doing or have completed as a UCR student:	SOBA	BCOE	CNAS	CHASS	UCR	all-UC
1. A research project, creative activity, or research paper as part of your coursework	78.9%	56.6%	61.6%	78.6%	71.3%	74.6%
2. At least one student research course	62.2%	46.4%	49.8%	63.7%	57.7%	59.2%
3. At least one independent study course	28.5%	17.1%	18.3%	24.1%	22.0%	22.3%
4. Assist faculty in research with course credit	13.6%	11.4%	20.6%	21.8%	19.7%	19.7%
5. Assist faculty in research for pay without course credit	3.0%	14.2%	13.7%	7.4%	9.7%	8.5%
6. Assist faculty in research as a volunteer without course credit	8.4%	21.6%	22.1%	13.2%	16.4%	16.1%
7. Work on a creative activity as part of your coursework	53.6%	42.9%	33.2%	52.4%	46.2%	51.5%
8. Work on creative projects under the direction of faculty with course credit	30.4%	22.6%	15.5%	28.0%	24.2%	25.8%
9. Work on creative projects under the direction of faculty for pay without course credit	5.7%	6.7%	5.0%	6.1%	5.9%	4.6%
10. Work on creative projects under direction of faculty as volunteer without course credit	6.2%	10.3%	8.6%	9.3%	9.1%	8.9%
Number of students (N)	**263**	**583**	**1,168**	**2,456**	**4,470**	**49,302**

DISCUSSION

Our analysis indicated that about one in five UCR undergraduates participated in a faculty-mentored research or creative activity during the 2014-15 academic year. A typical participant is a senior involved in course-based research, internship, design, and creative activities. UCUES data indicates UCR's rates of undergraduate research participation were relatively consistent with other UC campuses (see Table 3) and national trends. According to National Survey of Student Engagement (NSSE) data analyzed by the

[1] UCR's response rate to the UCUES Survey was 26% and respondents may not have fully represented the entire UCR population. For example, UCUES survey participants had a higher mean GPA (2.96), as compared to non-participants (2.82).

Council of Undergraduate Research (Wilson, 2012), about 25% of undergraduate seniors at research universities responded that they had participated in research.

We observed varying rates and forms of undergraduate research participation by college. For example, the large majority of CHASS and SOBA students participated in course-based activities, suggesting there were fewer paid opportunities to engage in undergraduate research. In BCOE and CNAS, a larger proportion of these students engaged in sponsored research programs and paid positions, likely due to greater availability of external funds for undergraduate research in science and engineering disciplines (e.g., National Science Foundation, USDA, and NIH). SOBA and BCOE students demonstrated higher proportions of undergraduate research participation, as compared to their proportion of campus enrollment.

Although research participation by many URMs groups parallels their representation on campus, there is room for continued growth and through resources like the Undergraduate Research Portal and workshops to help student understand how to get started in research and how to optimize the experience through conferences, publications, and funding opportunities.

Though we were able to examine various metrics of undergraduate research, our analysis did not verify the quality or faculty contact hours associated with these activities. Further, we likely missed students participating in research activities without pay or course credit, as there was no reliable metric for counting these students. We also did not include the number of senior theses completed in the University Honors Program. Future reports might collect student volunteer data, capstone outcome records from the University Honors program, and submissions to external conference or journals to obtain a better estimate of overall participation. The development of an undergraduate research tracking system, for example an online portal to pair students and faculty with similar interests, might also aid in getting a better estimate of the rate of participation.

Based on our findings, we offer several recommendations to enhance undergraduate research participation at UC Riverside:

- Colleges should increase outreach to lower division students, particularly in CHASS to help students understand the diversity of research activates conducted by faculty and encourage early involvement in research.
- Undergraduate Education can continue to conduct presentations at events like Highlander Orientation and classroom presentations that highlight the benefits of research. There may also be value in collaborating with ethnic and cultural student groups within Student Affairs to raise awareness of undergraduate student research benefits and opportunities
- UE Ambassadors will be trained to give presentations on High Impact Programs to student clubs, organizations, classes, residence halls, athletics, and fraternity & sororities.

- UE will work with ethnic and gender programs to recruit diverse student ambassadors to represent high impact programs to students in clubs, organizations, residence halls, fraternity/sorties, student government, and athletics.
- Reinforce the value of undergraduate research and faculty mentorship to students in regard to professional and graduate school outcomes (Gallup, 2014; Hunter et al., 2007; Lopatto, 2003).
- Work to ensure that UCR's new faculty understand the value of undergraduate involvement and are engaging undergraduate researchers as they begin their research and creative activities.
- Develop a system for counting unpaid or volunteer undergraduate research activities (e.g., zero-credit course or volunteer forms).
- Examine rates of undergraduate research participation among low-income and transfer students.
- Collaborate with departments and programs to develop course-based opportunities for undergraduate research (e.g., School of Public Policy, capstone courses).
- Provide more opportunities for students to publish or present undergraduate research and creative activities (e.g., separate tracks for emerging and completed research with in the Annual Symposium).
- Develop a certificate or workshop series for students to gain exposure to theories, principles, and methods associated with undergraduate research and creative activities (e.g.: see UC Irvine's Research Education Advancement Program).

As part of UC Riverside's goal to attain the profile of an AAU (Association of American Universities) institution, we must continue to provide more high-quality, faculty-mentored research experiences for undergraduate students. By 2020, UCR should seek to raise undergraduate research participation by 50%, engaging at least 1 in 3 students (33%) in faculty-mentored undergraduate research and creative activities. This is certainly a worthy and achievable goal, likely to be attained through focused student outreach and support services, new faculty hiring, and increased extramural funding and improved data collection.

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Appendix 1. List of research courses, summer 2014 and AY 2014-2015

Course Number	Course Title	Summer	Fall	Winter	Spring
AHS 192	Junior & Senior Seminar		X	X	
AHS 195H	Senior Honors Thesis			X	X
AHS 198I	Individual Internship	X	X	X	X
ANTH190	Special Studies	X	X	X	X
ANTH191	Seminar in Anthropology				
ANTH195A	Senior Thesis	X	X	X	X
ANTH195B	Senior Thesis	X	X	X	X
ANTH195C	Senior Thesis	X	X	X	X
ANTH198I	Internship in Anthropology	X	X	X	X
ANTH199H	Senior Honors Research	X	X	X	X
ART 190	Special Studies	X	X	X	X
ART 198I	Individual Internship	X	X	X	X
BCH 102	Introductory Biochemistry Laboratory				X
BCH 190	Special Studies	X	X	X	X
BCH 197	Research for Undergraduate Students	X	X	X	X
BIEN175A	Senior Design		X		
BIEN175B	Senior Design			X	
BIEN197	Research for Undergraduates			X	X
BIOL190	Special Studies	X	X	X	X
BIOL194	Independent Reading	X	X	X	X
BIOL197	Introduction to Research	X	X	X	X
BIOL199	Junior/Senior Research	X	X	X	X
BMSC197L	Research for Undergraduates	X	X	X	X
BPSC190	Special Studies	X	X	X	X
BPSC193	Senior Seminar			X	
BPSC197	Research for Undergraduates	X	X	X	X
BPSC199	Senior Research	X	X	X	X
BUS 109	Competitive and Strategic Analysis	X	X	X	X
BUS 190	Special Studies	X	X	X	X
BUS 198I	Individual Internship		X	X	X
BUS 199H	Senior Honors Research		X	X	X
CBNS194	Independent Reading	X	X	X	X
CBNS197	Research for Undergraduates	X	X	X	X
CBNS199	Senior Research	X	X	X	X
CEE 197	Research for Undergraduates		X	X	X
CHE 175A	Chemical Process Design			X	
CHE 175B	Chemical Process Design				X
CHE 190	Special Studies	X	X	X	X
CHEM191	Seminar in Chemistry				X
CHEM197	Research for Undergraduates	X	X	X	X
CHEM198I	Individual Internship	X	X		X
CHEM199	Senior Research	X	X	X	X
CHEM199H	Senior Honors Research	X	X		X
CHFY198I	CHASS F1RST Individual Internship				
CHN 190	Special Studies		X	X	X
CLA 190	Special Studies		X	X	X
CPLT190	Special Studies	X	X	X	X
CPLT193	Capstone Research Seminar		X	X	
CPLT196	Senior Research Paper		X		
CRWT190	Special Studies	X	X	X	X
CRWT195	Senior Thesis		X	X	X
CRWT198I	Individual Internship	X	X	X	X
CS 190	Special Studies		X		X

CS 193	Design Project	X	X	X	X
CS 194	Independent Reading				
DNCE167	Dance Production			X	
DNCE168	Dance Touring Ensemble		X		
DNCE180G	Dance Practicum - Adv. Choreography			X	
DNCE180J	Dance Practicum - Repertory				X
DNCE190	Special Studies	X	X	X	X
ECON190	Special Studies		X	X	X
ECON198I	Individual Internship		X	X	X
ECON199H	Senior Honors Research		X	X	
EDUC190	Special Studies	X	X	X	X
EE 175A	Senior Design Project		X		
EE 175B	Senior Design Project			X	
EE 175C	Senior Design Project				
EE 190	Special Studies			X	X
EE 197	Research for Undergraduates	X	X	X	X
ENGL190	Special Studies	X	X	X	X
ENGL193A	Senior Seminar				X
ENGL193B	Senior Seminar				
ENGR198I	Individual Internship	X	X	X	X
ENSC190	Special Studies	X	X	X	X
ENSC191	Seminar in Professional Development		X	X	X
ENSC197	Research for Undergraduates	X	X	X	X
ENSC198I	Individual Internship	X	X	X	X
ENTM190	Special Studies	X	X	X	X
ENTM197	Research for Undergraduates	X	X	X	X
ENTM199	Senior Research	X	X	X	X
ENVE175A	Senior Design Project			X	
ENVE175B	Senior Design Project				X
ENVE190	Special Studies		X	X	
ETST190	Special Studies	X	X	X	X
ETST191R	Seminar - Research Methodology				X
ETST198G	Group Internship	X	X	X	X
ETST198I	Individual Internship	X	X	X	X
FREN290	Directed Studies		X	X	X
GBST191	Seminar in Global Studies		X	X	X
GBST193	Senior Seminar				X
GBST198I	Individual Internship	X	X	X	X
GEO 190	Special Studies	X	X	X	X
GEO 195A	Senior Thesis	X	X	X	X
GEO 195B	Senior Thesis	X	X	X	X
GER 190	Special Studies	X	X	X	X
GSST190	Special Studies	X	X	X	X
GSST191A	Seminar: Feminist Epistemologies				
GSST191B	Seminar: Feminist Research Methods	X	X	X	X
GSST195	Senior Thesis	X	X	X	X
GSST198G	Group Intern. in Gender & Sexuality Studies		X	X	X
HASS190	Special Studies		X	X	X
HASS191W	Seminar in Wash. DC		X	X	X
HIST190	Special Studies		X	X	X
HIST197	Research for Undergraduates		X	X	X
HNPG190	Special Studies	X	X	X	X
HNPG195H	Senior Honors Thesis		X	X	X
HNPG197H	Honors Research for Undergraduates				X
HNPG198I	Honors Individual Internship		X	X	X
JPN 190	Special Studies		X	X	X

LABR198I	Individual Internship			X	X	X
LGBS190	Special Studies					X
LGBS193	Senior Seminar			X		
LING190	Special Studies				X	
LING192	Tutorial Activities					X
LWSO193	Senior Seminar				X	
MATH145B	Introduction to Topology					X
MATH146A	Ordinary and Partial Differential Equations		X	X	X	X
MATH146B	Ordinary and Partial Differential Equations			X	X	X
MATH146C	Ordinary and Partial Differential Equations	X		X	X	X
MATH151B	Advanced Calculus			X	X	X
MATH151C	Advanced Calculus		X	X	X	X
MATH190	Special Studies		X	X	X	X
MATH197	Research for Undergraduates			X	X	
MATH198I	Internship in Mathematics					X
MCBL197	Research for Undergraduates			X		
MCS 190	Special Studies			X	X	
MCS 198I	Individual Internship				X	X
ME 170B	Experimental Techniques			X	X	X
ME 174	Machine Design		X	X	X	X
ME 175A	Professional Topics in Engineering			X	X	X
ME 175B	Mechanical Engineering Design					
ME 175C	Mechanical Engineering Design				X	X
ME 190	Special Studies			X	X	X
ME 197	Research for Undergraduates			X	X	X
MUS 170	Rondolla Ensemble			X	X	X
MUS 172	Chamber Orchestra			X	X	X
MUS 174	Latin American Music Ensemble			X	X	X
MUS 175A	Beginning Mariachi Ensemble					
MUS 175B	Intermediate Mariachi Ensemble					
MUS 176	Bagpipe Ensemble					
MUS 177	Bluegrass Ensemble		X		X	X
MUS 190	Special Studies		X	X	X	X
MUS 191K	Seminar in Music			X	X	X
MUS 191U	Seminar in Music		X	X		X
MUS 194	Independent Reading			X	X	X
MUS 198I	Individual Internship		X	X	X	X
NASC198I	Individual Internship		X	X	X	X
NEM 197	Research for Undergraduates		X		X	X
NEM 199	Senior Research					
PBPL191	Seminar		X	X	X	X
PBPL198I	Individual Internship					X
PCST197	Research for Undergraduates		X	X	X	X
PHIL190	Special Studies		X	X	X	X
PHIL193	Senior Seminar		X	X	X	X
PHIL198I	Individual Internship		X	X	X	X
PHYS142L	Advanced Physics Laboratory		X	X	X	X
PHYS190	Special Studies		X	X	X	X
PHYS195A	Senior Thesis		X	X	X	X
PHYS195B	Senior Thesis		X	X	X	X
PHYS197	Research for Undergraduates		X	X	X	X
PHYS198I	Individual Internship		X	X	X	X
PLPA197	Research for Undergraduates		X	X	X	X
POSC190	Special Studies		X	X	X	X
POSC197	Research for Undergraduates		X	X	X	X
POSC198I	Individual Internship					X

PSYC195H	Senior Honors Thesis	X	X	X	X
PSYC197	Research for Undergraduates		X	X	X
PSYC198I	Individual Internship	X	X	X	X
RLST190	Special Studies	X	X	X	X
RLST193	Senior Seminar		X	X	X
SOC 190	Special Studies	X	X	X	X
SOC 195	Senior Thesis	X	X	X	X
SOC 197	Research for Undergraduates		X	X	X
SOC 198I	Individual Internship	X	X	X	X
SOC 199H	Senior Honors Research				X
SPN 190	Special Studies	X	X	X	X
SPN 192	Tutorial Activities	X	X	X	X
SPN 193	Senior Seminar		X	X	X
SPN 199H	Senior Honors Research				X
STAT183	Statistical Consulting				
STAT198I	Individual Internship				X
TFDP170	Performance Production, Studio	X	X	X	X
TFDP190	Special Studies		X		
TFDP191E	Seminar in Theatre				
TFDP191J	Seminar in Theatre	X		X	
TFDP198I	Individual Internship		X		

*Due to departmental changes: WMST changed to GSST (2016AY) and THEA changed to TFDP (2016AY).

Report updated to reflect course prefixes at the time of publication.

Appendix 2. Sponsored Research Programs

Undergraduate Education
- Chancellor Research Fellowship (CRF)
- Undergraduate Research Mini-Grants
- University Honors

Bourns College of Engineering (BCOE)
- California Alliance for Minority Participation (CAMP)
- Hispanic Serving Institution (HSI) Undergraduate Research Program
- NASA California Space Grant Consortium (CaSGC)
- National Science Foundation (NSF), International Research Experience for Students (IRES) – China
- National Science Foundation (NSF), MY BEST BRIDGE
- Undergraduate Research Opportunities

College of Humanities, Arts & Social Sciences (CHASS)
- Gluck Fellows Program of the Arts
- Mellon-Mays Undergraduate Fellowship Program

College of Natural & Agricultural Sciences (CNAS)
- California Alliance for Minority Participation (CAMP)
- Chemistry - Kuwana-Sawyer Award
- Chemistry – United States Department of Agriculture (USDA)- Eichler Award
- CNAS Dean's Fellowship
- Hispanic Serving Institution (HSI) STEM Pathways-Bridge to Research
- Minority Access to Research Careers (MARC-U*)
- Research in Science and Engineering (RISE)- Dynamic Genome Scholars (DG)
- Research in Science and Engineering (RISE) –Scholars Fellows Program

School of Medicine
- Future Physician Leaders
- Medical Scholars Program

Graduate Division
- Mentoring Summer Research Internship Program (MSRIP)
- University of California Leadership Excellence through Advanced Degrees (UC LEADS)