

California State University, Monterey Bay: Institutionalizing Undergraduate Research

William Head and Jessica Brown, California State University, Monterey Bay

History

Established in 1994, Cal State Monterey Bay is a Hispanic Serving Institution (HSI) with a student enrollment of 4,790, 92% of whom are undergraduates.

The university has a history of supporting undergraduate research as part of its commitment to finding the most effective mechanisms to engage, inspire, and connect our students to their academic experience. In Cal State Monterey Bay's 2008-2018 Strategic Plan, undergraduate research was identified as a key initiative in the goal to "Increase Student Success."

To maximize and forge synergy between our campus-based undergraduate research efforts, **the university launched the Undergraduate Research Opportunities Center (UROC) in January 2009.**

UROC's Mission and Core Values

UROC is a cross-campus center that engages students in undergraduate research. These research experiences enable students to contextualize their academic work and develop the leadership, innovation, and personal skills for success in graduate school and their professional lives.

UROC's mission is to build students' educational ownership, intellectual vibrancy, and scholarly identity. We achieve this through mentored undergraduate research; rigorous, authentic, and calibrated scholarly activities; and the development of intellectual, personal, and social capital.

UROC's programming is centered on a set of core values:

Spark

- Expose students to their field of interest, tap into their passions, and arm them with strong foundational knowledge.

Development

- Support student development through intensive mentoring, training, and program services.

Challenge

- Enable students to apply and 'calibrate' their skills and knowledge through rigorous research, scholarly activities, conference presentations, and peer-review publications.

Achievement & Identity

- Empower students to develop self-efficacy and identity as scholars and researchers.

UROC's Key Achievements

Undergraduate Research Seminar Series (RSCH)

This four-semester, two-unit, graded seminar series provides rigorous training in identifying and evaluating literature, academic and professional communication, responsible conduct in research, professionalism, and graduate school and fellowship preparedness.

Institutional Support

The university now funds 45% of UROC staffing costs. The university also supports summer student housing, program evaluation, mentor funding, and some student and staff travel costs.

UROC has dedicated office and classroom space in the university library, a central hub of campus.

Assessment and Educational Research

UROC's university-funded Assessment and Educational Research Associate will design and implement UROC's research agenda, assess our curriculum and programming, disseminate findings through conference presentations and peer-reviewed publications, and develop research proposals.

Mentor Training for Graduate Students and Faculty

UROC established the Monterey Bay Regional Mentorship Alliance in collaboration with the UC Santa Cruz's Research Mentoring Institute and Hartnell College. The Alliance hosts an annual graduate student mentor training workshop and will begin offering sessions for faculty in 2014-15.

Challenges and Next Steps

Challenge: Lack of non-STEM research opportunities.

Next Step: UROC is working with Humanities and Social Science leadership and faculty to expose more students to faculty scholarship and research opportunities. However, we still face the challenge of securing funding to support these students.

Challenge: Limited interaction between tenure-track faculty and second-year students (our target group for first engaging students in UROC).

Next Step: The university is hiring more tenure track faculty and UROC will engage them in mentoring students in undergraduate research.

Challenge: Systemic issues with student writing.

Next Step: UROC will hire a writing instruction specialist to develop training programs for writing in the context of research, fellowships, and graduate school applications.