

Let's Do It!: Strategies for Engaging Undergraduate Students in Research

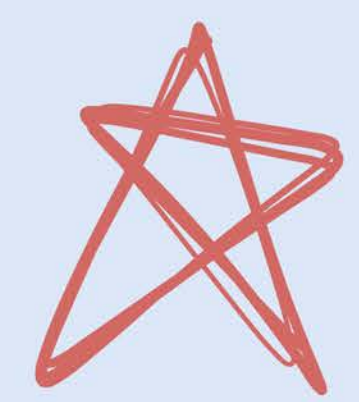


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NEED

- Engaging undergraduate students in research can be challenging
- Participation positively impacts studies, presentation skills, confidence, research efficacy, and out of class engagement (Little, 2020)
- Approach should be student-centered and consider prior knowledge (Splan et al., 2011)

NEED FOR A NOVEL APPROACH TO INFUSE THE TEACHER SCHOLAR MODEL INTENTIONALLY WHEN WORKING WITH UNDERGRADUATE STUDENTS AT A POLYTECHNIC INSTITUTION TO EXPAND RESEARCH OPPORTUNITIES TO UNDERGRADUATE STUDENTS.



KEY STEPS

- 1 Strategic Planning** MEET REGULARLY TO DISCUSS OPPORTUNITIES
- 2 Resource Identification** MAY LOOK LIKE FUNDING OR COURSE CREDIT
- 3 Opportunity Dissemination** MARKET OPPORTUNITIES BROADLY AND TARGET SPECIFIC STUDENTS
- 4 Leveraging Courses** LOOK FOR COURSE OVERLAPS TO INTEGRATE RESEARCH
- 5 Build on the Past** STUDENTS CAN PROMOTE TO OTHER STUDENTS

RESULTS TO DATE

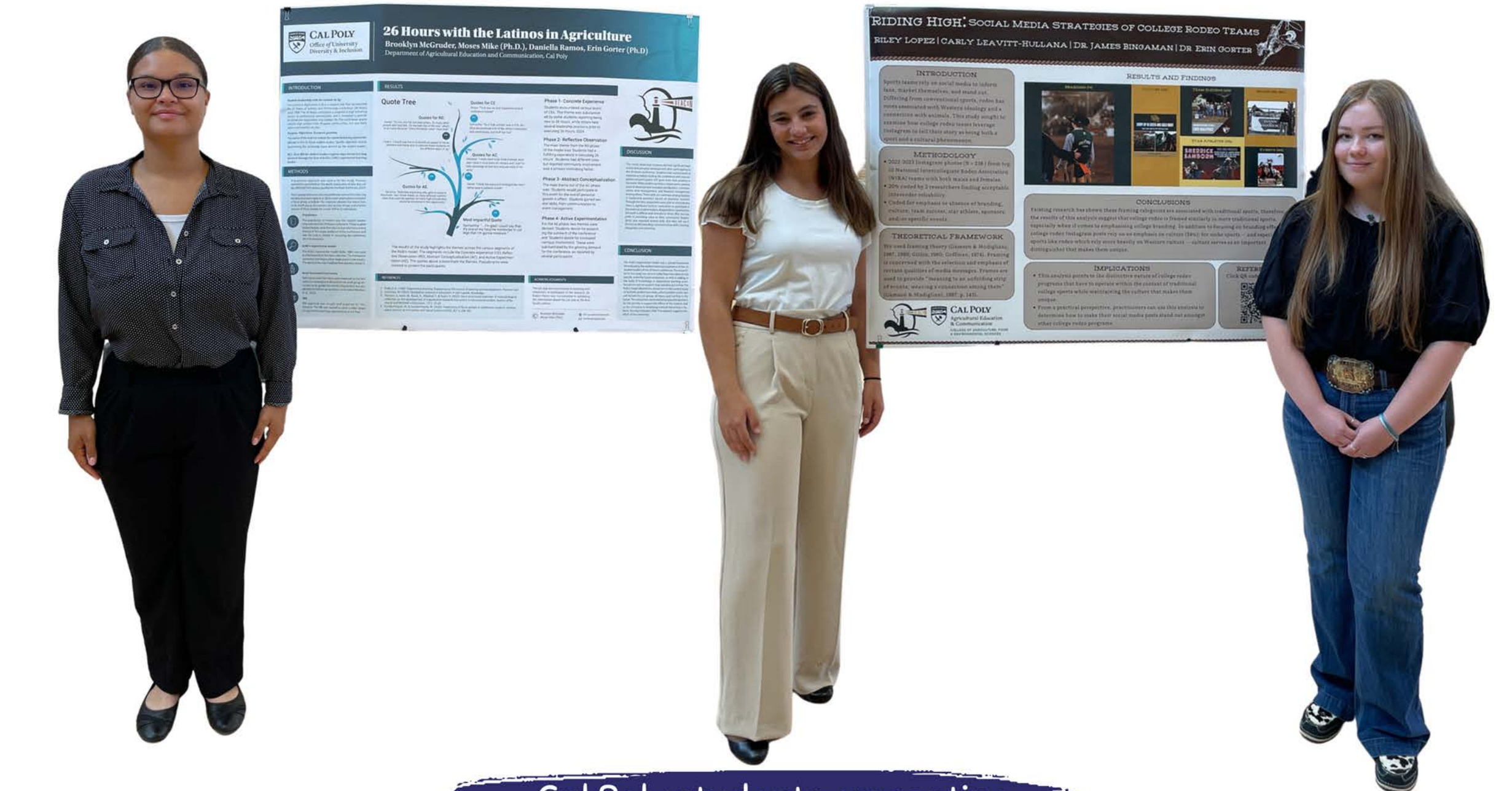
5 Faculty Engaged 11 Undergraduates Engaged
2 Journal Articles Submitted 16 Conference Posters Submitted



Cal Poly students at the 2024 AAEE National Conference

COSTS/RESOURCES

- Conducting the research itself
- Look for overlaps with projects under way
- Conference presentation/travel



Cal Poly students presenting research at the 2024 Cal Poly BEACoN Research Symposium

FUTURE PLANS

Look for opportunities for undergraduate and graduate students to collaborate

Explore additional funding opportunities to leverage resources for student research engagement

Collect data from undergraduate students to explore their perspectives on research activities

ADVICE TO OTHERS

Leverage existing funds to support undergraduate research efforts

Explore student interests to align research with student goals/interests

Diverse backgrounds and majors enhance experience

REFERENCES



Cal Poly students at a research session during the 2024 AAEE National Conference