

Abstract Submitted
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STAR: Preparing future science and math teachers through authentic research experiences at national laboratories¹ JOHN KELLER, BRYAN REBAR, Cal Poly San Luis Obispo — The STEM Teacher and Researcher (STAR) Program provides 9-week paid summer research experiences at national research laboratories for future science and math teachers. The program, run by the Cal Poly Center for Excellence in Science and Mathematics Education (CESaME) on behalf of the entire California State University (CSU) System, has arranged 290 research internships for 230 STEM undergraduates and credential candidates from 43 campuses over the past 6 years. The program has partnered with seven Department of Energy labs, four NASA centers, three NOAA facilities, and the National Optical Astronomy Observatory (NOAO). Primary components of the summer experience include a) conducting research with a mentor or mentor team, b) participating in weekly 2-3 hour workshops focused on translating lessons learned from summer research into classroom practice, and c) presenting a research poster or oral presentation and providing a lesson plan linked to the summer research experience. The central premise behind the STAR Program is that future science and math teachers can more effectively prepare the next generation of science, math, and engineering students if they themselves have authentic experiences as researchers.

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