

David R. Brown

Nine Twenty-Four Strategies, Chula Vista, CA
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Professional Preparation

Southern Illinois University, Edwardsville	Chemistry	B.A. 1982
University of Illinois at Urbana-Champaign	Chemistry	Ph.D. 1990
University of California, San Diego	Chemistry	Postdoctoral 1990-1992

Employment and Appointments

July 2019-present	Principal, Nine Twenty-Four Strategies
August 2000-2019	Professor of Chemistry, Southwestern College (retired)
August 2012-August 2015	Program Director, NSF Division of Undergraduate Education
January 2000-August 2002	Physical Sciences Department Chair, Southwestern College
August 1996-August 2000	Assistant Professor of Chemistry, Southwestern College

Publications

Five Publications Most Closely Related to Proposed Project

D.R. Brown, S. Brydges, S.M. Lo, M.E. Denton and M.J. Borrego, "A Collaborative Professional Development Program for Science Faculty and Graduate Students in Support of Education Reform at Two-year, Hispanic-serving institutions," in *Best Practices in Chemistry Teacher Education*; S.B. Boesdorfer, Ed.; ACS Symposium Series, American Chemical Society: Washington DC, **2019**, Chapter 10, 119-134.

D.R. Brown, "Diversifying the STEM Professional Workforce by Building Capacity at a Two-year College on the U.S.-Mexico Border," in *Diversity in the Scientific Community Volume 2: Perspectives and Exemplary Programs*; H.N. Cheng and D.J. Nelson, Eds.; ACS Symposium Series 1256, American Chemical Society: Washington, DC, **2017**, Chapter 7, 79-90.

H. Ungar and **D.R. Brown**, "Strengthening Relationships between Chemistry Faculties at Two-Year and Four-Year Institutions," *J. Chem. Educ.* **2010**, 87, 885-886. [Invited editorial]

H. Ungar and **D.R. Brown**, "ChemEd Bridges: Building Bridges between Two-Year College Chemistry Faculty and the National Chemical Education Community," *J. Chem. Educ.* **2010**, 87, 572-574.

D.R. Brown, "Engaging Undergraduates in Chemical Research at Southwestern College." In *Undergraduate Research at Community Colleges*; Cejda, B.D., Hensel, N., Eds.; Council on Undergraduate Research: Washington, DC, **2009**; pp 41-51.

Additional Relevant Publications Related to Proposed Project

D.R. Brown, "Infrared Spectroscopy as a Preview of Coming Attractions: Teaching Chemistry with Instrumental Methods at Two-Year Colleges," *J. Chem. Educ.* **2010**, 87, 570-571.

D.R. Brown and K.L Tyner, "Leading the Way: Creating an Institutional Undergraduate Research Culture," in *Broadening Participation in Undergraduate Research: Fostering Excellence and Enhancing the Impact*; M.K. Boyd and J.L. Wesemann, Eds.; Council on Undergraduate Research: Washington, DC, **2009**, 230-233.

D.R. Brown, T.B. Higgins and P. Coggins, "The Increasing Presence of Undergraduate Research in Two-Year Colleges," *CUR Quarterly* Winter **2007**, 24-28.

D.R. Brown, "Undertaking Chemical Research at a Community College," *J. Chem. Educ.* **2006**, 83, 970-972.

Synergistic Activities

NSF grant-supported activity regarding faculty professional development, advancing STEM education and broadening participation in STEM, with a focus on two-year colleges

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| 2019-present | Co-PI on "Capacity-Building Workshops for Competitive S-STEM Proposals from Two-Year Colleges in the Western U.S.," (Grant No. DUE 1826514). This project is supporting personnel from two-year colleges in the development of competitive proposals for the NSF S-STEM program. |
| 2017-present | PI, "EAGER: Implementing Active Learning Strategies in Two-Year Hispanic-Serving Institutions: Impacts on Faculty Change and Student Success in STEM Courses," NSF IUSE Program (Grant no. DUE 1645083). This project is providing professional development for science faculty members from two-year Hispanic-Serving Institutions to implement and assess active-learning pedagogy. |
| 2011-2012 | Co-PI, "Project TUESTYC: A Workshop and Mentoring Program for Two-Year College Faculty," (Grant no. DUE 1129271). This project provided personnel from two-year colleges with professional development and mentoring support to develop competitive NSF TUES proposals. |
| 2010- 2012 | Co-PI, "Broadening Participation in CCLI: a Workshop and Mentoring Program for Two-Year College Faculty," (Grant no. DUE 1029031). This project offered professional development and mentoring to faculty from two-year colleges to prepare and submit competitive NSF CCLI proposals. |
| 2007-2012 | Co-PI, "Bridging Community College Chemistry Faculty into the National Educational Community," (Grant no. DUE 0737166). This project forged connections between community college faculty and resources in the national chemical education community in order to improve teaching and learning in foundational chemistry courses. |