

USC Postdoctoral Scholar: The Role of High School Math in Contributing to College Access and Success

The University of Southern California's Pullias Center for Higher Education is seeking a postdoctoral scholar to work in collaboration with the UCLA Luskin School of Public Affairs and Loyola Marymount University School of Education on a research-practice partnership project of the Los Angeles Education Research Institute (LAERI). This position provides a unique opportunity to collaborate with practitioners at the Los Angeles Unified School District (LAUSD) to understand disparities in students' secondary math course-taking patterns and how math course-taking, particularly in the senior year of high school, is associated with various college outcomes. Working in collaboration with the co-principal investigators of the project (Tatiana Melguizo, USC; Meredith Phillips, UCLA; Kyo Yamashiro, LMU), LAERI researchers, and practitioners from both the secondary and post-secondary sectors, the postdoctoral scholar will manage and analyze complex, longitudinal administrative datasets and draft presentations, reports, and policy briefs about the analyses. The postdoctoral scholar will also help secure data agreements with postsecondary institutions and assist with grant proposals.

The postdoctoral scholar will coordinate the research-practice partnership activities related to this project; conduct the data management and analysis for this project; conduct literature reviews; draft presentations, reports, and policy briefs; submit proposals to conferences (e.g., AEFPP, SREE, APPAM, AERA); and present at frequent meetings with practitioner partners. Specifically, project activities will involve communicating with LAUSD and postsecondary staff; developing a thorough understanding of administrative data from both the K-12 and postsecondary sectors; merging, managing, coding, and cleaning large, complex, longitudinal data sets; creating codebooks and well-organized, well-commented code; analyzing and graphing data; writing about results for both practitioner and research audiences; drafting reports and scholarly papers; assisting with grant proposals; and regularly attending planning and project meetings. The postdoc will also have the opportunity to devote time to pre-existing projects and, given the current COVID-19 conditions, may have the option to work remotely.

We are particularly interested in applicants who have:

- 1. experience coding, merging, and managing complex longitudinal datasets in education, ideally from both the K-12 and postsecondary sectors and ideally involving administrative data,*
- 2. experience using Stata to manage, analyze, and display data,*
- 3. experience using matching techniques to estimate causal effects from observational data*
- 4. the inter-personal skills needed for participating successfully in a collaborative research-practice partnership,*
- 5. experience and/or training in K-12 math/science education in the U.S. and/or in the postsecondary success of historically underserved students in the U.S. (e.g., first generation, English learners, and low-income students),*
- 6. a doctoral degree in the social and behavioral sciences or education,*
- 7. keen attention to detail and an excellent work ethic,*
- 8. genuine interest in research intended to help improve the quality and equity of students' educational experiences and outcomes,*

9. *experience conducting rigorous, high quality research, and publishing in academic journals, and*
10. *experience translating research findings into materials and presentations useful for practitioner audiences.*

The mission of the Pullias Center for Higher Education is to support the access and success of first generation and low-income students. The Center is located within the Rossier School of Education at USC. Since 1996 the Center has engaged in action-oriented research projects regarding successful college outreach programs, financial aid and access for low- to moderate-income students of color, use of technology to supplement college counseling services, effective postsecondary governance, emerging organizational forms such as for-profit institutions, and the retention of doctoral students of color. We seek individuals who are not only interested in conducting rigorous research but also intent on having their research translated in a way that enables multiple constituencies (e.g. policy-makers, administrators and teachers, parents and students) to make use of research findings.

LAERI conducts research to inform solutions to educational challenges facing Los Angeles and California. As part of LAERI's existing research-practice partnership work with LAUSD, this project contributes to a set of studies aimed at learning about LAUSD students' college readiness and post-secondary success.

The postdoctoral position will begin in July 2020. It is a temporary, fixed-term, one-year position. The candidate should have a PhD by the time of employment. The candidate will have active mentoring opportunities from all the collaborating institutions through workshops and conferences.

Applicants should include a letter of interest, curriculum vitae, a scholarly publication or dissertation chapter for which the applicant was the main author, an excerpt of code written for statistical software, and contact information for three references.

Please address the following questions when submitting your letter of interest:

1. *What are your current research interests and how do they relate to the purpose of this project?*
2. *What experience do you have with managing and using large datasets?*
3. *What methodological training and/or experience do you have in using matching methods to improve causal inference with observational data?*
4. *How will your expertise contribute to the project?*
5. *How will this position further your research and career goals?*

To submit an application for consideration, please submit your materials to: raad@rossier.usc.edu. If you have questions about the position, please email: melguizo@usc.edu.

The University of Southern California strongly values diversity and is committed to equal opportunity in employment. Women and men, and members of all racial and ethnic groups, people with disabilities, and veterans are encouraged to apply. Salary and benefits are competitive. For additional information about a specific position, please go to: <https://policy.usc.edu/equal-opportunities/>