



Oregon State University

Postdoctoral Scholar Opportunity in Mathematics Education Department of Mathematics Oregon State University, Corvallis, Oregon

Position: Full-time, 12-month Postdoctoral Scholar position located in the Department of Mathematics, Oregon State University, Corvallis, Oregon. The position is funded by the National Science Foundation ([DUE-2013563](#)). The position is renewable annually on a fiscal year basis for up to two years, so long as the postdoctoral scholar is within five years from receipt of the doctoral degree.

Job Description and Responsibilities: The Department of Mathematics at Oregon State University seeks a postdoctoral fellow for the NSF-funded project *Collaborative Research: Mathematics Graduate Teaching Assistant Professional Development Focused on Implementation of Evidence-based Teaching Practices*. The project aims to serve the national interest by preparing mathematics graduate teaching assistants (MGTAs) to implement teaching practices designed to improve the success of students in undergraduate mathematics courses. The project will develop a multi-year professional development program to help MGTAs implement evidence based teaching practices, including active learning. This is a collaborative project that will be implemented at Oregon State University (OSU), Virginia Commonwealth University (VCU), and San Diego State University (SDSU). As a result, the project will have multiple contexts for examining the impact of the professional development on MGTA teaching attitudes and practices, as well as on the success of the undergraduates in the MGTAs' classes. The project will compare outcomes at the three institutions to generate new knowledge about MGTA professional development, to explore what works in which contexts, and to develop an explicit theory of change related to MGTAs' teaching practices.

The postdoctoral fellow will play an integral role in collaboratively developing the PD program and engaging in data collection and analysis. Duties include, but are not limited to:

- Regularly collaborating, both in person and virtually, with members of the research team at OSU, VCU, and SDSU;
- Conducting semi-structured interviews with graduate students and department faculty and analyzing the interview data;
- Administering surveys and analyzing survey data;
- Conducting classroom observations and analyzing the observation data;
- Presenting results at conferences, symposia, or similar events;
- Teaching graduate seminars and courses that are developed for the professional development program.

The primary responsibility of the postdoctoral fellow will be conducting mathematics education research; however, this position also involves teaching up to one or two seminars per term that is part of the PD program. Candidates for these positions should have completed their PhD in mathematics, education, or a related field. A master's degree in mathematics or a closely related field is required in order to teach courses in the department.

This is a two-year position with the expectation of working in person at Oregon State University in Corvallis, Oregon (dependent upon state and university guidance related to COVID-19). A start date of July 1, 2023 is preferred, but flexible (through the summer of 2023). The postdoctoral scholar will receive a \$55,000 yearly salary plus benefits (with a potential raise during the second year) and travel reimbursement for presenting project-related findings at conferences.

Required Qualifications:

- A PhD in mathematics, education, or a closely related field.
- A master's degree in mathematics or closely related field.
- Experience in conducting quantitative and/or qualitative educational research.
 - Quantitative research might include study design, calculating descriptive statistics, hypothesis testing, factor analysis, hierarchical linear modeling, etc.
 - Qualitative research might include conducting analyzing qualitative data with thematic analysis, grounded theory, inductive/deductive theory, etc.
- The ability to assume leadership responsibilities in conducting educational research.
- The ability to work in a collaborative research team in a collegial fashion.
- Demonstrated effectiveness in teaching mathematics using active, inclusive, and equitable teaching practices.

Preferred Qualifications:

- Experience conducting semi-structured interviews, working with the X-PIPS-M survey suite, and/or using the TRU observation tool.
- Lived experience and/or service that informs worldviews and/or perspectives about minority group status, to include race, ethnicity, gender, sexuality, religion, and disability.

Position Begins: Between July 1, 2023 and August 1, 2023

Application:

Applications should include a curriculum vita/resume and a letter of application describing 1) experience implementing active, inclusive, and equitable teaching practices, 2) research experience in education (include information on qualitative and/or quantitative research experience). In addition, candidates shall provide three professional and/or academic letters of reference – two of which address the candidate's research experiences, one of which addresses the candidate's teaching experiences, particularly as they relate to equitable and inclusive teaching practices.

For best consideration, apply by **December 1, 2022**. To apply, email application materials to Dr. Mary Beisiegel, mary.beisiegel@oregonstate.edu with the subject line **MGTA PD POSTDOC APPLICATION**.

For more information, contact Mary Beisiegel (the PI at OSU) at mary.beisiegel@oregonstate.edu.

OSU commits to inclusive excellence by advancing equity and diversity in all that we do. We are an Affirmative Action/Equal Opportunity employer, and particularly encourage applications from members of historically underrepresented racial/ethnic groups, women, individuals with disabilities, veterans, LGBTQ community members, and others who demonstrate the ability to help us achieve our vision of a diverse and inclusive community.