FIU STEM Transformation Institute
FLORIDA INTERNATIONAL UNIVERSITY

MULTIPLE POSTDOCTORAL POSITIONS IN DISCIPLINE-BASED EDUCATION RESEARCH

Florida International University's STEM Transformation Institute is seeking to fill at least ***six post-doctoral researcher positions*** for multiple projects, including, but not limited to:

- NSF-funded project "Beyond Active Learning: Learning Assistant (LA) Supported Pedagogies in Large Lecture Science Courses." Our work will investigate how active learning methods and undergraduate Learning Assistant support contribute to the learning gains, achievement, retention, and persistence of learners and is in collaboration with University of Colorado Denver and North Dakota State University.
- Curricular reform initiatives underway in introductory general chemistry courses, including implementing an alternative general chemistry course (Chemistry, Life, the Universe and Everything – CLUE). The research will involve administering and analyzing various assessments within the courses to measure the impact of the alternative curriculum at FIU on both cognitive and affective domains.
- [NSF-funded research project "American Physical Society (APS) Bridge Program". The research involves survey development and deployment, interview and other qualitative research on graduate students (including periodic travel to APS Bridge Sites), analysis of primary and secondary data sources, and dissemination activities within the APS and the broader PER/graduate education communities.
- FIU's Project UP:LIFT (University Paradigm: Learn, Interact, Facilitate, Transform) that is an institution-wide initiative to deploy state of the art evidence-based instruction and advanced classroom assessment throughout critical Gateway and STEM courses. The project will employ both research-focused and teaching post docs to implement and study classroom practices.

The primary objective of all post-doctoral researchers will be STEM education research; however, we will instantiate several teaching postdocs, a hybrid design that integrates teaching experience with research activities to facilitate implementation of evidence-based practice while preparing the candidate for an academic career. We invite candidates to apply to one or more of the initiatives above from all STEM disciplinary backgrounds, with preference given to those with significant experience in education research.

FIU's STEM Transformation Institute is dedicated to advancing research and educational change that utilizes evidence-based instructional practices and engages in multidisciplinary collaborations across the Colleges of Arts, Sciences & Education, and Engineering & Computing. Hallmark programs include a Learning Assistant (LA) program that impacts over 20,000 student enrollments in 10 STEM disciplines annually; Modeling Instruction at the high school and college levels; and multiple HHMI- and NSF-funded research projects. STEM Institute faculty leadership includes Laird Kramer, Eric Brewe, Maria Fernandez, Zahra Hazari, Geoff Potvin, Rita Teutonico, and Sonia Underwood. The STEM Institute is also in the midst of hiring additional DBER hires across the STEM disciplines. These faculty are joined by 12 postdocs and staff, over 60 Faculty Fellows across campus, as well as dozens of graduate and undergraduate researchers.

Candidates for these positions should have completed their PhD in a science education research field (e.g. science education, or biology, chemistry, or physics education) or in a STEM field with significant interest in developing education research expertise. The ideal candidates will have experience working in undergraduate science education research, and have strong quantitative research skills and experience, including survey and concept inventory data collection and analysis, classroom observation, and HLM. Experience with the R software package and network analysis would be an added benefit.

To apply, please send a cover letter, CV and the names of three references to stem@fiu.edu. Please indicate which project you are specifically interested in pursuing and how your qualifications specifically suit you for that position. For more information, please email stem@fiu.edu or contact any of the faculty listed above.