

Post-Doctoral Mentoring Plan

One post-doctoral researcher with expertise in science education, educational psychology, or social psychology will be hired and supported by this project at SDSU to conduct research on social and cultural influences within research laboratories on research experiences, interest and persistence for underrepresented students. The PI, Dr. Dustin Thoman, will serve as the designated faculty mentor for the SDSU located post-doctoral researcher. Co-PIs Smith and Villodas will also provide mentorship. The goal of the proposed mentoring plan is to provide a supervised, yet flexible design of activities that will expand the knowledge and skill base of the individual, and provide preparation for career opportunities in their respective field.

- Upon initiation of the research project, the postdoc will engage in a structured meeting with Dr. Thoman to discuss career goals that will inform the direction of the mentoring plan. A written mentoring plan will be discussed and agreed upon, following guidelines from the National Research Mentoring Network (both Thoman and Smith participate in various capacities with this NIH funded Mentor Training Core).
- In the postdoc's first two weeks, Dr. Thoman will provide an orientation to SDSU policies and procedures in grants management and guidelines, and to practices relevant to the project including topics related to (a) field study methodology and (b) recruitment procedures outlined in the Project Description. Dr. Thoman will provide an orientation to best practices that are critical to success in collaborative, interdisciplinary research projects including topics (a) communication and (b) methodologies.
- Dr. Thoman will meet with the postdoc on a weekly basis to discuss project details, including participant recruitment and tracking, data, and project management. The postdoc will work directly with the entire team to design measurement instruments and oversee data collection, management, and analysis in all project years. The postdoc will meet regularly (virtually and in-person) with the team to discuss these processes and plans, and to participate in the outcomes of the project.
- To facilitate development of the postdoc's data analysis skills needed for this project, Dr. Villodas will provide internal statistics workshops during year 1, tailored to the postdoc's skills and needs. During the summer between project years 1-2, the project will support travel to and attendance at an advanced data analysis workshop led by national experts in qualitative or quantitative data analysis.
- The project PI team will seek the participation of the postdoc in dissemination of project results through presentations at national conferences. The postdoc will also be invited to contribute to and lead the preparation of professional paper submissions to top-tier peer reviewed journals.
- Dr. Thoman will facilitate travel to a relevant academic conferences per project year to foster expansion of knowledge and networking with prominent professionals in the field, and work with the postdoc to identify external funding opportunities.
- The postdoc will receive training in the performance of ethical research involving human subjects through SDSU's Collaborative Institutional Training Initiative (CITI).
- The postdoc will be expected to mentor graduate and undergraduate students working on the project through the PI's and co-PIs' research laboratories. Dr. Thoman and the postdoc will meet monthly to discuss strategies and potential issues related to the postdoc's teaching and mentorship development skills.
- In years 2 and 3, Dr. Thoman will meet with the postdoc to discuss job application preparation (for academic or non-academic jobs) based on the postdoc's career goals. Dr. Thoman will help the postdoc identify appropriate job search notification outlets, structure application materials, and plan job talk presentations and start-up budget documents.