

## **Biomolecular Research Center interdisciplinary training and student success**

### **Core Administration**

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The Biomolecular Research Center (BRC) (RRID:SCR\_019174) at Boise State University (BSU) is a core facility that supports interdisciplinary science and manages interdisciplinary programmatic grants, the Idaho Institutional Development Award (IDeA) Network of Biomedical Research Excellence (INBRE) (P20GM103408) Block Grant and the Center of Biomedical Research Excellence (COBRE) (P20GM109095) in Matrix Biology among other equipment grants and individual research awards. The center supports ongoing growth of interdisciplinary research infrastructure, research, and training for students. Undergraduate and graduate student research training is supported through various intensive mentored research experiences that include access to specialized equipment and training. We hypothesized that an interdisciplinary science center or core facility could facilitate student success through student research experiences and training, thus providing students with greater opportunities than they might otherwise have. To test this hypothesis, we conducted Institutional Review Board (IRB)-approved human-subjects research on students who participated in BRC-funded research experiences 2002 – 2019. We collected individual participant degree information from the National Student Clearinghouse, and also surveyed students who participated in our programs. We found that of 452 student participants, 247 completed their bachelor's degrees, 46 continued their education to complete their master's degrees, and 50 received doctoral degrees. 101 students were actively continuing their education at the time of this study. Survey responses indicated that most students continued or planned to continue their education beyond the bachelor's degree and were pursuing careers in Science, Technology, Engineering, Math, and Medicine (STEMM). These results support our hypothesis and indicate that authentic mentored research experiences lead to student-perceived benefits and integration into the scientific community, therefore leading to high graduation rates and continued education beyond the bachelor's degree. These opportunities help prepare students for competitive placement in the workforce and emphasize the important role that core facilities can play in student success in interdisciplinary science.