

**EXECUTIVE SUMMARY [NON-CONFIDENTIAL, NON-TECHNICAL ABSTRACT FOR PUBLIC INFORMATION OR PROGRAM PROMOTION]:** State in layman's terms the application's broad, long-term objectives and specific aims, making reference to the potential public benefits of the project relevant to California. Do not include proprietary or confidential information. This may be distributed before the funding decision has been finalized.

Through a combination of support from CSUPERB and the National Science Foundation, the Core DNA Analysis Facility at Sonoma State University has been able to obtain and maintain new high-end genetic analysis equipment. The equipment upgrades greatly enhance the capabilities of the users of this facility to conduct DNA based analyses in wide range of fields related to biotechnology. Currently the Core DNA Analysis Facility plays a key role in university curriculum and student training, research projects for students and faculty and staff, and community K-12 teacher and student training in biotechnology. Projects affiliated with this facility include genetic mapping, disease detection, wildlife genetics and conservation, analysis of gene expression, molecular systematics, ecological genetics, and microbial genetics. In addition, curriculum developed through the use of this facility is used extensively in training opportunities for high school students and teachers interested in biotechnology and biomedical sciences.