

**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.

The development of an interactive course entitled *Chemometrics in Biotechnology Research* is proposed to help produce students with a solid grounding in bioanalytical techniques and an expert grasp of chemometric methods to meet the increasing analytical demands of California's biotechnology sector. This course will be a combination of laboratory-based studies of modern bioanalytical techniques and computer/lecture-based studies of chemometric strategies. It will enable students to understand the time, resources and procedures necessary to successfully develop and utilize chemometrics in biotechnology-related research, and to properly use commercial software and follow the current literature. It is intended for a broad student audience including chemists, biologists, programmers, mathematicians, statisticians and engineers and aid in training well qualified students for a career in the biotechnology sector.