

**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.

Exploration of molecular structure is a cornerstone of drug discovery efforts in the biotechnology industry and as such must lie at the core of the modern biochemistry curriculum. Yet many classrooms do not take advantage of current computational technologies. Recent developments in user-friendly molecular graphics tools make sophisticated analysis of biomolecular structures, and of structure-function relationships, accessible to advanced undergraduates. This three-day workshop will be facilitated by a panel of invited speakers will present biochemistry faculty from within the CSU and the regional academic and industrial community with contemporary, structure-based learning tools and teaching modules. Basic and advanced analysis tools will be presented, and Molsoft, Inc. will provide a demonstration of their powerful, user-friendly molecular graphics application, ICM. The keynote public lecture will be presented by Dr. David Goodsell, a celebrated artist and molecular biologist from the Scripps Research Institute. Participants will engage structure prediction and drug-design exercises that they may readily apply in their own lecture and laboratory curricula. Perhaps most importantly, faculty dedicated to biochemistry *education* will have a forum for building a community and communications network for development of pedagogy.