

EXECUTIVE SUMMARY [NON-CONFIDENTIAL, NON-TECHNICAL ABSTRACT FOR PUBLIC INFORMATION OR PROGRAM PROMOTION]: State 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 California State University, Fresno is proposing to take its 14 year-old Biotechnology Program to the next level by considering the development of an interdisciplinary professional master's degree in biotechnology, with an emphasis on agricultural biotechnology themes. The professional master's degree represents a means of workforce development, looking to provide educational opportunities that will promote regional employment in biotechnology, as opposed to promoting more strictly academic aspects of the discipline—the emphasis of most current master's degrees. This project proposes to survey companies to assess the regional workforce needs in order to modify and expand the current graduate level Biotechnology Certificate Program into a Professional Master's Degree. Additions of coursework are anticipated from business and agricultural production disciplines, complementing the current, largely science-based program. The established connection in the biotechnology program between the College of Science & Mathematics and the College of Agricultural Sciences & Technology should be strengthened through the feasibility study itself, and new links are anticipated with the Craig School of Business and the College of Engineering & Computer Science as well. Agricultural biotechnology is not limited to food production and environmental concerns, but also offers opportunities in pharmaceutical production through plant and animal modification to produce rare medicines. Building a workforce trained to further expand California's primacy in both agriculture and biotechnology represents a crucial long-term investment.