

EXECUTIVE SUMMARY [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. New advances in DNA typing have revolutionized the field of forensics over the past 8 years. "Cold cases" can now be solved and trace evidence can be profiled, leading to faster and more accurate arrests and convictions. In addition, the passage of Prop 69 in California has greatly expanded the population of criminals from whom DNA samples must be obtained and databased. As a result, there is currently a shortage of criminalists who specialize in serology and DNA evidence (forensic biologists) and the job market is predicted to grow rapidly in coming years. In response to this need, and to meet the demand of our students for training in this area, I developed a new course in Forensic Biology at Sacramento State (BIO 150), which is currently being offered for the first time. However, in order to incorporate the state-of-the-art technology and procedures that criminalists currently employ, the course needs several new pieces equipment. Therefore, the two main goals of this project are to properly equip the BIO 150 lab and to update the laboratory manual, which – in revised form - has the potential for widespread dissemination. A third goal is to provide students with the laboratory equipment needed to perform independent research projects that use modern techniques to address forensic biology problems.