

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.

Genomics is a tool now very widely used in the pharmaceutical, agricultural and biotechnology arenas in order to develop and modify strains, develop diagnostics, design or develop drugs, and a plethora of other applications. Many companies either outsource sequencing needs or have such high volume needs that they develop their own in-house genomics and sequencing programs. Research institutions operate their own sequencing core facilities, and need qualified "man-power" to run them. Sequence information is only as good as the quality of the material being sequenced, and the libraries being constructed, but relatively few students are appropriately trained to perform this task. The workshop is designed not just to train undergraduate or graduate students how to build sequencing libraries, perform and troubleshoot automated sequencing, and analyze sequence data, but also to train faculty so that they will be able to train students and teach similar workshops.