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I. AN OVERVIEW OF THE LIBRARY SUPPORT PROCESS USED AT THE JOINT GENOME INSTITUTE PRODUCTION GENOMICS FACILITY

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Library support is the first step in production sequencing at the Joint Genome Institute's (JGI) Production Genomics Facility (PGF). The goal of library support is to generate 384 well glycerol stock plates of each library for a given project. These plates are then passed on to the Sequencing Prep group for Rolling Circle Amplification. Transformation stocks of the 3, 8, and 40kb libraries for a given project are received into library support from cloning technology. The stocks are stored at -80 C until plated. Libraries are plated according to priority. The colonies produced from a plating event are then picked using robotic colony pickers and are inoculated into 384-well destination plates containing LB/glycerol + antibiotic. The destination plates are grown overnight and visualized on a Spectramax Optical Density reader to identify wells without growth. Wells containing no growth are aspirated and replaced with colony growth from a "fix source" plate generated from the same library. The destination plates are then sealed and stored at -80 C until sent to the Sequencing Prep area for Rolling Circle Amplification (RCA). This poster will elaborate on these steps in the library support process and detail further the project tracking and management, plating and picking procedures and the instruments that are utilized throughout these steps.

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