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JGI SEQUENCING PROJECTS – THE PROCESS OF ENSURING EFFICIENCY AND QUALITY FROM INITIATION TO COMPLETION

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The Department of Energy's (DOE) Joint Genome Institute (JGI) is one of the major publicly funded high throughput sequencing centers. The current capacity of the Production Genomics Facility (PGF) in Walnut Creek, California is approximately three billion bases per month and this year will generate up to 52 million lanes. JGI sequencing projects are initiated through several programs (<http://www.jgi.doe.gov/programs/index.html>). The three main programs for peer review of genome project proposals are the Community Sequencing Program (CSP), the DOE Microbial Program and the Laboratory Science Program (LSP). This year, the JGI processed a collection of DOE mission relevant sequencing projects ranging from prokaryotes to eukaryotes as well as several microbial communities. Data is released publicly on the JGI website and deposited in Genbank for all projects. This poster will present current JGI sequencing projects and describe process steps necessary for executing a project from initiation to completion. We will present quality control measures and metrics that have been implemented at different steps in the process to evaluate projects prior to large scale sequencing. This will include project initiation and specification, project management, and sequencing data analysis. The ultimate goal is to ensure quality data, efficiency and the timely completion of projects.

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