

PMC-EF2a

(20402)

**U.S. DEPARTMENT OF ENERGY  
EERE PROJECT MANAGEMENT CENTER  
NEPA DETERMINATION**



RECIPIENT: J. Craig Venter Institute

STATE: CA

**PROJECT TITLE :** Maximizing Multi-enzyme Synergy in Biomass Degradation in Yeast

<b>Funding Opportunity Announcement Number</b>	<b>Procurement Instrument Number</b>	<b>NEPA Control Number</b>	<b>CID Number</b>
DE-FOA-0000719	DE-EE0006109	GFO-0006109-001	EE6109

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

**CX, EA, EIS APPENDIX AND NUMBER:**

Description:

<b>A9 Information gathering, analysis, and dissemination</b>	Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
<b>B3.6 Small-scale research and development, laboratory operations, and pilot projects</b>	Siting, construction, modification, operation, and decommissioning of facilities for smallscale research and development projects; conventional laboratory operations (such as preparation of chemical standards and sample analysis); and small-scale pilot projects (generally less than 2 years) frequently conducted to verify a concept before demonstration actions, provided that construction or modification would be within or contiguous to a previously disturbed or developed area (where active utilities and currently used roads are readily accessible). Not included in this category are demonstration actions, meaning actions that are undertaken at a scale to show whether a technology would be viable on a larger scale and suitable for commercial deployment.

**Rational for determination:**

The U.S. Department of Energy (DOE) is proposing to provide federal funding to the J. Craig Venter Institute (JCVI) to research and develop combinations of enzymes that more effectively deconstruct lingo-cellulosic biomass into process-able components such as fermentable sugars. Funding would be used for bench-scale laboratory research and development (R&D) and analysis activities that would develop a technology based on synthetic biology approaches that greatly reduces the cycle time in developing organisms appropriate for lignocellulose processing.

Laboratory R&D work would involve synthetic biology, micro-biology and yeast genome engineering processes and would be conducted in laboratories at JCVI's research facility located at 10355 Science Center Drive in San Diego, California. JCVI has completed an R&D questionnaire addressing the protocols for laboratory and facility safety, risk management and waste disposal. The laboratories and facility comply with standard safety procedures and all processes and procedures are monitored by JCVI's Office of Environmental Health and Safety staff. The laboratory and facility have all applicable permits in place, and would not need additional permits for the proposed activities. All handling and disposal of gases, chemicals, wastes and liquid effluents comply with appropriate regulations. All laboratories adhere to the guidelines in Biosafety in Microbiological and Biomedical Laboratories published by The National Institutes of Health (NIH) and the Centers for Disease Control and Prevention (CDC). JCVI has an internal Institutional Biosafety Committee (IBC) that oversees all research and determines the level of review and approval required for each project to be in compliance with all local, state and federal regulations. Genetically modified organisms would not be used in this project.

Based on review of the project information and the above analysis, DOE has determined the research, development and analysis activities would not have a significant individual or cumulative impact to human health and/or environment. DOE has determined the proposed project is consistent with actions contained in DOE categorical exclusions A9 "information gathering, analysis and dissemination" and B3.6 "small-scale research and development, laboratory operations and pilot projects" and is categorically excluded from further NEPA review.

**NEPA PROVISION**

DOE has made a final NEPA determination for this award

Insert the following language in the award:

If you intend to make changes to the scope or objective of your project you are required to contact the Project Officer identified in



Block 11 of the Notice of Financial Assistance Award before proceeding. You must receive notification of approval from the DOE Contracting Officer prior to commencing with work beyond that currently approved.

Note to Specialist :

Obadiah Broughton 2/27/2013

**SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.**

NEPA Compliance Officer Signature: [Signature]  
NEPA Compliance Officer

Date: 2/20/2013

**FIELD OFFICE MANAGER DETERMINATION**

Field Office Manager review required

**NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REASON:**

- Proposed action fits within a categorical exclusion but involves a high profile or controversial issue that warrants Field Office Manager's attention.
- Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's review and determination.

**BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :**

Field Office Manager's Signature: \_\_\_\_\_  
Field Office Manager

Date: \_\_\_\_\_