# Agenda Item Details

**Meeting**
Jun 02, 2015 - Governing Board Regular Meeting, 5 p.m.

**Category**
10. CONSENT CALENDAR

**Subject**
O. Consider Ratification of National Aeronautics and Space Administration (NASA) Office of Education Minority University Research and Education Project (MUREP) Community College Curriculum Improvement (MC3I) Grant Application

**Type**
Action (Consent)

**Fiscal Impact**
Yes

**Dollar Amount**
900,000.00

**Recommended Action**
Ratify National Aeronautics and Space Administration (NASA) Office of Education Minority University Research and Education Project (MUREP) Community College Curriculum Improvement (MC3I) grant application, accept funding, if awarded, and authorize the administration to enter into agreements to execute the work.

**Goals**
6 - Partnerships with Industry, Business, Agencies, and Education
5 - Innovation and Relevance for Educational Programs and Services
2 - Student Access
II: Student Learning Programs and Support Services / IIA. Instructional Programs

**SUBMITTED BY:** Jackie Cruz, Executive Director, Institutional Advancement and Foundation

## BACKGROUND / SUMMARY

The MC3I proposal is expected to expand the STEM pipeline through the development of new or existing high school partnerships. HCCD has developed broad and strong collaborations with K-12 partners. This proposal will build on those collaborations to further develop the STEM pipeline. This project will increase the number of underrepresented students who enter into and persist in the STEM pipeline through partnerships and multifaceted student engagement strategies. HCCD will develop and expand partnerships with NASA AMES and underserved feeder high schools throughout the Salinas Valley to provide industry relevant curriculum and professional development for secondary teachers, make courses with NASA-related content available, and increase institutional capacity for preparing underrepresented students in STEM.

[2015 06 11 NASA MC3I HCGCF all sigs.pdf (2,188 KB)](http://www.boarddocs.com/ca/hccd/Board.nsf/Public)
These matters include routine administrative and financial actions and normally approved by a single majority vote.

Motion & Voting

Approval of Consent Calendar

Motion by Candi DePauw, second by Erica Padilla-Chavez.
Final Resolution: Motion Carries
Yes: Demetrio Pruneda, Bill Freeman, Pat Donohue, Elia Gonzalez-Castro, Ray Montemayor, Erica Padilla-Chavez, Candi DePauw, Hector Moya

Hartnell College Vision Statement: Hartnell College will be nationally recognized for the success of our students by developing leaders who will contribute to the social, cultural, and economic vitality of our region and the global community.

Hartnell College Mission Statement: Focusing on the needs of the Salinas Valley, Hartnell College provides educational opportunities for students to reach academic goals in an environment committed to student learning, achievement and success.
1. Title of the New/Renewal Grant Project
NASA MUREP Community College curriculum Improvement (MC3I)
Partnerships for STEM in the Salinas Valley: Building the STEM pipeline for women and Latinos through curriculum, student engagement and multi-level mentoring

Website:

Abstract: Briefly describe the proposed project and how it will directly benefit Hartnell College.

MUREP MC3I Executive Summary:
NASA's Office of Education Minority University Research and Education Project (MUREP) solicits proposals from Minority Serving Community Colleges (MSCCs), as identified by the US Department of Education and that align with the four White House Executive Orders for Minority Institutions, to strengthen curriculum and curricular pathways in STEM, and attract, retain, and support the success of underrepresented students in STEM degree programs. The MC3 I proposals will contain plans for and be guided by curriculum improvements, and address one of the following as a primary focus: (1) improving curriculum in STEM vocational certificate programs, Associate of Arts/Science degree programs, and/or transfer programs; (2) strengthening and diversifying the STEM pipeline through high school partnerships; or (3) expanding opportunities in engineering. Proposers are required to partner with a NASA center or facility, and are highly encouraged to partner with other institutions, such as K-12 school districts and 4-year colleges/universities. Successful proposals will be funded as multi-year cooperative agreements.

Objective:
Expand the STEM pipeline through the development of new or existing high school partnerships

Project Description and Supporting Activities:
This project will increase the number of underrepresented students who enter into and persist in the STEM pipeline through partnerships and multifaceted student engagement strategies. Hartnell Community College District will develop and expand partnerships with NASA AMES and underserved feeder high schools throughout the Salinas Valley to provide industry relevant curriculum and professional development for secondary teachers, make courses with NASA-related content available, and increase institutional capacity for preparing underrepresented students in STEM. Additionally, we will develop or strengthen pathways that would allow for high school students to earn credit toward a college degree or certificate. These pathways will be aligned with regional industry demand for STEM applications in agriculture, or Precision Ag.

Underrepresented students will participate in a series of scaffolded student engagement experiences to attract, retain, and support their success in STEM Programs. Through leadership training and multi-level mentoring, students will develop 21st Century skills and become invested in the future of STEM. This project will use research proven methods to engage underrepresented students and increase their participation and entrance into STEM fields. This project will provide supplemental experiences for high school students that provide opportunities for interaction NASA scientists and engineers who can share their knowledge and insight, and serve as role models for students seeking NASA careers. Activities for high school students will encourage their interest in pursuing STEM degrees and careers, support their awareness of the professional and scientific environment, and aid in their preparation for potential NASA internships during their undergraduate years. Examples of such activities will include, but are not limited to:

- Job shadow days at NASA Centers and facilities;
- in-person or virtual interactions with NASA scientists and engineers; or
- workshops on the scientific process, lab safety, and other related topics, or additional projects that would enable students to apply NASA content with the guidance of NASA personnel (i.e. creating their own "space vehicles.")
Hartnell College Office of Advancement and Development
Grant Concept Review Form
November 2014

50% Priority 1 – Student Access
% Priority 2 – Student Success
% Priority 3 – Employee Diversity and Development
% Priority 4 – Effective Utilization of Resources
25% Priority 5 – Innovation and Relevance for Programs & Services
25% Priority 6 – Partnerships with Industry, Business, Agencies & Education

List Strategic Goals (i.e. 5A.1, 6A.4)
Link to Hartnell College Strategic Plan

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<thead>
<tr>
<th>2. Grant Type</th>
<th>Due Date</th>
<th>3. Funding Source Commitments</th>
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<tbody>
<tr>
<td>☒ New</td>
<td>June 11, 2015</td>
<td>Fiscal Agent</td>
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<tr>
<td>☐ Continuation</td>
<td>LOI April 14, 2015</td>
<td>☒ College ☐ Foundation</td>
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<th>4. Funding Source</th>
<th>Agency/Org Name</th>
<th>4. Does proposed project require matching funds of in-kind contributions?</th>
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<tbody>
<tr>
<td>Public</td>
<td>NASA</td>
<td>☒ No ☐ Yes, please explain below:</td>
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<tr>
<td>☒ State ☐ Federal</td>
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<td>Does the proposed project require use of college facilities and/or technology and support services?</td>
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<tr>
<td>☐ Private</td>
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<td>☒ No ☐ Yes, please explain below:</td>
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<td>Aerospace lab at the Alisal Campus</td>
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6. Principal Investigator/Proposal Lead
Indicate the total number of investors
Proposal Lead: Bronwyn Moreno and Maggie Melone-Echiburu

Title: Directors MESA and NASA SEMAA
College Department: MSE
Phone: 770-6131 755-6970
Email: bmoreno@hartnell.edu
mmelone@hartnell.edu

7. Additional Partners
Will this project include other agencies
☐ No ☒ Yes, please explain below:
Feeder High School Districts; NASA Ames, UC Santa Cruz

8. Amount of Grant
Not to exceed $300,000 per year for three years
Number of expected awards: 3-4
9. Intellectual Property
Will proposed project result in the development of an intellectual property?

☐ No  ☑ Yes, please explain below:

10. Staffing Positions
What new/continuing positions will be created to meet the proposed project objectives?

Please list jobs below:
- Principal Investigator
- Project Director

11. Will proposed project require Hartnell to eventually absorb the cost of staffing for the project?

☐ No  ☑ Yes, please explain below:

12. Please list any additional benefits of proposed grant below:

This project will develop our partnerships with feeder high schools and increase student access by improving preparation amongst first time freshmen. We will also strengthen partnership with NASA Ames and local STEM industry.

13. Please describe sustainability plans:

This project will develop pathways and partnerships and increase student preparation for rising Hartnell students. Early college strategies will remain in place beyond the life of the grant.

14. Budget Plan

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<th>Grant – year one</th>
<th>Grant – total</th>
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<td>Personnel Non-Instructional</td>
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<td>TOTAL</td>
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Budget Notes:

15. Additional Info – Are any new programs or curriculum being developed? Which faculty members are involved?

Principal Investigator TBD – must possess a PhD in Engineering, Mathematics, or other STEM based discipline relevant to NASA interests

16. The proposed project supports the goals and objectives of Hartnell College.
The following signatures are the responsibility of the Proposal Lead:

Support ☑  Do Not Support ☐

Proposal Lead

Support ☑  Do Not Support ☐

Dean

Signature: BR
Date: 11/14/14

Signature: SB
Date: 5/4/15
17. The proposed project supports the goals and objectives of Hartnell College.
   The following signatures are the responsibility of the Office of Institutional Advancement:

<table>
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<th>Do Not Support</th>
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18. Approval The proposed project is approved and supports the goals and objectives of Hartnell College.

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