Broadening Participation
NASA Advisory Council
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Broadening Participation in STEM Fields

FY2015 MUREP Awards by Location

**Note: Some dots may represent more than one Institution for Institutions located in the same city.

MUREP FY2015 Investments by MSI Designation

**Note: Some Institutions have dual MSI designations.
Educator Professional Development
Key Goals

• **Leverage NASA Innovation to:**
  
  • *Advance understanding of Earth and develop technologies* to improve the quality of life on our home planet
  
  • *Advance the nation’s STEM education and workforce pipeline* by working collaboratively with other agencies to engage students, teachers and faculty in NASA’s missions and unique assets
  
  • *Improve STEM instruction* by preparing 100,000 excellent new K-12 STEM teachers by 2020 and supporting the existing STEM teacher workforce
Key Activities

1. Minority Teacher Education Network (Focused on faculty from participating MSIs)
   • Focus on culturally relevant STEM curriculum
   • Norfolk State University, North Carolina Central University, University of South Florida, Salish-Kootenai College, California State University, Northridge

2. Emerging Stars Network
   • Pipeline for MSI TEN

3. Multimodal Educator Professional Development
   • Reached 9,356 Educators through face-to-face and online mediums

“Every visit, our EPDC Specialist comes with supplies, materials, games and methodologies for inspiring teachers and students. At the end of every presentation, it is the teachers who are sorry to see her go. As the administrator, I am THRILLED to see her coming, knowing that my team and I will grow. … It is presentations such as these that allow us to take our students to the next level.”

- School principal in California
MUREP Educator Institutes (MEI)

- Summer Institutes – Planned and Completed
  - 343 Students
  - 66 Faculty
  - Total 409 Participants

- MSI Compliment
  - *24 HSI, 19 HBCU, 12 AANAPISI, 3 AIANSI, 3 PBI, 2 TCU

* Some schools have multiple MSI Designation

#NASAMEI2016
STEM Engagement
• University of New Mexico

• 12 teams for the Physical Competition and 22 teams for the Virtual Competition.

http://nasaswarmathon.com/
Institutional Engagement
NASA Internships, Fellowships, and Scholarship
Interns at Work
Changing the Landscape
MUREP Data on the White House Report

**HBCU**

- FY 12: $35M (12% of $285M), $215M (37%), $165M (16%)
- FY 13: $215M (7%), $165M (5%), $90M (2%)

**TCU**

- FY 12: $83M (83%), $50M (82%), $32M (91%)
- FY 13: $50M (7%), $32M (5%), $20M (2%)

**HSI**

- FY 12: $12M (12%), $15M (15%), $9M (9%)

**AAPI**

- FY 12: $7M (7%), $5M (5%), $2M (2%)
MUREP Strategic Focuses

MSI Goals

• Predominantly Black Institutions – FY14 0%
  • Get on the board
• HBCU – Reach 36% contribution
• TCU – Maintain 85% to 90% contribution
• Develop strategies to reach HSIs and AANAPISIs
  • JPL – Lead
# MUREP Education Performance Assessment

## ED 14 – 1: Higher Education Students

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<tr>
<th>Performance Goal</th>
<th>Annual Performance Indicator</th>
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<td><strong>2.4.1:</strong> Assure that students participating in NASA higher education projects are representative of the diversity of the Nation.</td>
<td><strong>ED-14-1:</strong> Provide significant, direct student awards in higher education to (1) students across all institutional categories and levels (as defined by the U.S. Department of Education); (2) racially or ethnically underrepresented students, (3) women, and (4) persons with disabilities at percentages that meet or exceed the national percentages for these populations, as determined by the most recent, publicly available data from the U.S. Department of Education’s National Center for Education Statistics for a minimum of two of the four categories.</td>
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### OEPM DATA POINT

Total # of NASA student participants that received significant direct awards.

![Figure 1. MUREP’s contribution to NASA Education total for Significant Awards in Higher education.](image)
Thank You