STEM Engagement Updates
Transformation
Meeting Agency and CoSTEM Strategies
Members Questions, Feedback, Input
Current Team:

Aimee Kennedy
Vice President, Education STEM Learning & Philanthropy
Battelle Memorial Institute

Michael Lach
Director, STEM Policy & Strategic Initiatives
University of Chicago

Ray Mellado
Founder & Chairman
Great Minds in STEM

Carl Person
Undergraduate Research Preceptor
Fayetteville State University

New Members:

Cristin Dorgelo
President & CEO
Association of Science-Technology Centers

Daniel Dumbacher
Executive Director
American Institute of Aeronautics & Astronautics

Norman Fortenberry
Executive Director
American Society for Engineering Education

Darryl Williams
Senior Vice President of Science and Education
The Franklin Institute
MISSION-DRIVEN STRATEGIC ENGAGEMENT

Engaging the nation in NASA’s mission

EXPLORATION
EARTH
FLIGHT
SPACE
TECH
SOLAR SYSTEM & BEYOND
MOON TO MARS
HUMANS IN SPACE

MISSION DIRECTORATE OFFICE

STEM ENGAGEMENT

PUBLIC ENGAGEMENT

FIELD CENTERS

INSPIRE - ENGAGE - EDUCATE - EMPLOY
The Next Generation of Explorers
Mission-Driven Programs Enabling STEM Engagement

**SPACE GRANT**
- National network of 52 Consortia with 850 Affiliate members
- Stimulates cooperative programs among universities, industry, federal/state/local governments
- Encourages interdisciplinary education and research programs
- Incorporates State priorities, needs, and goals

**MUREP**
- Limited to Minority-Serving Institutions
- Increases retention of underserved and underrepresented groups in STEM
- Enhances infrastructure at MSI institutions
- Portfolio with 7 funded elements

**EPSCoR**
- 27 eligible jurisdictions (States and Territories)
- Contributes to development of research infrastructure and capabilities
- Fosters partnerships between NASA research entities, industry, and academic institutions
- Incorporates state priorities, needs, and goals

**Next Gen STEM**
- Informal education and K-12 STEM engagement initiatives aligned to mission priorities
- Richer, more comprehensive STEM engagement opportunities
- NASA’s museum alliance

**STEM ENGAGEMENT BENEFICIARIES**
- Graduate
- Undergraduate
- High School
- Middle School
- K-Elementary School
NEW ARCHITECTURE ENABLING STUDENT OPPORTUNITIES & CONTRIBUTIONS

**Focus Areas**

- Evidence-based strategies
  - Create unique opportunities for students to contribute to NASA’s work.
- Rigorous planning
  - Build a diverse future STEM workforce by engaging students in authentic learning experiences.
- Integrated operational model
  - Strengthening public understanding by enabling powerful connections to NASA’s mission and work.

**Strategic, balanced portfolio**

- NASA-unique learning experiences
- Student contributions to NASA’s work in action

**Scalability to magnify NASA’s reach and impact**

**Beneficiaries of NASA’s STEM Engagement Portfolio**

- K-Elementary
- Middle School
- High School
- Undergraduate
- Graduate
Purpose:
Coordinate federal STEM education strategy and investment, and serve as a ‘North Star’ to guide state and local STEM education initiatives

Opportunity for Agency Input:
• FC-STEM Agency Meetings: August, September and October
• Co-STEM Meeting: Thursday, November 15th
• FC-STEM Meeting: Friday, November 16th
• Agencies/OMB Review: November 2018
• Roll-out of Strategic Plan: December 4
## STEM Engagement Transformation
### FY18 Accomplishments

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<tr>
<th>Systemic</th>
<th>Programmatic</th>
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<td>✓ Chartered and established STEM Engagement Council. (03/30/18) Convened inaugural session of the Council. (04/12/18)</td>
<td>✓ Put in place an integrated program management approach for EPSCoR, MUREP and Space Grant, with corresponding staff changes.</td>
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<td>✓ Completed development of new STEM Engagement NASA Policy Directive. (02/21/18) Will undergo formal agency process. (Sep-Oct 2018)</td>
<td>✓ Overhauled SEAP, incorporating significant changes to approach for awards to informal education institutions (TEAM II) and innovative new mission-driven pilot initiatives.</td>
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<td>✓ Established new Office of STEM Engagement. (effective 08/29/18)</td>
<td>✓ Achieved improvements in interfaces and relationships with Space Grant Consortia and their key stakeholders.</td>
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<td>✓ Completed definition of new performance measurement and assessment approach. (07/15/18)</td>
<td>✓ Streamlined MUREP with more focused, strategic award initiatives.</td>
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<td>✓ Conducted analysis of existing infrastructure, tools &amp; systems. (03/15/18)</td>
<td>✓ Incorporated more rigorous, systematic program and fiscal management practices.</td>
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<td>✓ Developed NASA Strategy for STEM Engagement. (Council approval 08/22/18)</td>
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