

# **NASA Education Stakeholders' Summit** **One Stop Shopping Initiative (OSSI)** for NASA Internship, Fellowship, and Scholarship Opportunities



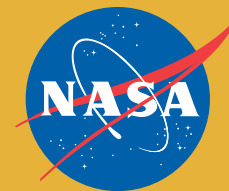
**AN INNOVATIVE SOLUTION  
TO SUPPORT THE  
STEM WORKFORCE  
OF TOMORROW**



**ENHANCING NASA'S INFRASTRUCTURE  
FOR THE STEM WORKFORCE OF TOMORROW**

**CONFERENCE PROGRAM**

**NOVEMBER 29 - DECEMBER 2, 2011**  
Marriott Westfields Conference Center at Chantilly, VA



## ABOUT NASA

NASA's vision is to reach for new heights and reveal the unknown so that what we do and learn will benefit all humankind. To do that, thousands of people have been working around the world -- and off of it -- for 50 years, trying to answer some basic questions. What's out there in space? How do we get there? What will we find? What can we learn there, or learn just by trying to get there, that will make life better here on Earth?

NASA Headquarters, in Washington, provides overall guidance and direction to the agency, under the leadership of Administrator Charles F. Bolden, Jr. Ten field centers and a variety of installations conduct the day-to-day work, in laboratories, on air fields, in wind tunnels and in control rooms. NASA conducts its work in three principal organizations, called mission directorates:

- **Aeronautics:** pioneers and proves new flight technologies that improve our ability to explore and which have practical applications on Earth.
- **Human Exploration and Operations:** focuses on International Space Station operations and human exploration beyond low earth orbit.
- **Science:** explores the Earth, solar system and universe beyond; charts the best route of discovery; and reaps the benefits of Earth and space exploration for society.



AN INNOVATIVE SOLUTION  
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Attendees at the NASA Education Stakeholders Summit are advised that video, photo and/or audio recording of all or part of the Summit may take place. By participating in the Summit, attendees hereby consent to this recording and to potential use of videos, photos or audio recording for documentation or other purposes.



Dear Participants,

I am pleased to welcome you to the second NASA Education Stakeholders' Summit. This year, NASA and the Federal Government face many challenges as we work to accomplish our missions in an environment of limited resources. Working in this environment offers us the challenge – and the opportunity – to optimize our infrastructure to achieve our goals in the most effective ways possible. As a result, “Enhancing NASA’s Infrastructure for the STEM Workforce of Tomorrow” is the theme of this year’s Summit. Central to building such an infrastructure are the collaborative efforts of NASA, other federal agencies, academia and industry. Together, we are building the foundations and bridges needed to create the road ahead so that students of today will become our scientists, engineers, and educators of tomorrow.

A key element to NASA’s Office of Education infrastructure is NASA’s One Stop Shopping Initiative (OSSI) for internship, fellowship and scholarship opportunities. We have now completed the first year of OSSI, and I am pleased to say that we are already seeing great results in recruiting, selecting and employing students in STEM opportunities across NASA. More than 7,500 students applied for NASA internships, fellowships and scholarships using the OSSI:SOLAR system, far exceeding our year-one goal of 2,000 applicants. Applicants represented all 50 states as well as Puerto Rico and the Virgin Islands. Eight hundred seventy students, or 12 percent of applicants, were ultimately selected through OSSI:SOLAR to fill NASA opportunities. During the Summit, we’ll hear more about the highlights, challenges and lessons learned from OSSI’s first year.

One reason I am so passionate about education is that it is an engine of innovation – and opportunity - for our nation and our people. My challenge to you is to consider how best to engage our students with the message that it is “cool” to pursue education in STEM disciplines and “cool” to pursue STEM-related careers. I believe we can do this by creating an infrastructure within each of our organizations that will attract and retain the next generation and allow them to thrive in their careers. It is with great pleasure that I welcome each of you to NASA’s second Education Stakeholders’ Summit. I look forward to working with you to build our infrastructure for the STEM workforce of tomorrow.

**Charles F. Bolden, Jr.**  
*Administrator*  
NASA

OSSI

WELCOME



Dear NASA Stakeholders, Colleagues and Friends:

I join Administrator Bolden in welcoming you to the second NASA Education Stakeholders' Summit and my first as associate administrator for education.

During this week of collaboration, I am pleased that you will have the opportunity to engage with NASA, other federal agencies and representatives of academia and industry to exchange ideas and information related to our major theme for the Summit this year: "Enhancing NASA's Infrastructure for the STEM Workforce of Tomorrow." As we work with the next generation of employees, we must refresh our ideas, our approach to communication and continue to impart the message that it is "cool" to work in science, technology, engineering and mathematics (STEM) fields.

We are implementing a number of structural changes to NASA's Office of Education designed to maximize our results in engaging, recruiting, selecting and retaining students in STEM disciplines for NASA's workforce and for the benefit of the nation. We recognize that the NASA One Stop Shopping Initiative and its role in the Office of Education's new Infrastructure Division play a key role in our ability to effectively develop the STEM workforce of tomorrow.

I hope you will enjoy this year's NASA Education Stakeholders' Summit. We look forward to your participation and feedback, so that we can learn from each other on how to build the optimal infrastructure for NASA's and the nation's STEM workforce of tomorrow.

**Leland D. Melvin**

*Associate Administrator for Education*  
NASA

WELCOMES

## Agenda At A Glance

DAY	SESSION	TIME
<b>MONDAY</b>	<b>Registration Available</b>	5:00 p.m. - 7:00 p.m.
<b>TUESDAY</b>	<b>Pre-Summit Workshops</b>	8:00 a.m. - 11:15 a.m.
	<b>Education Stakeholders' Summit</b>	8:00 a.m. - 7:00 p.m.
<b>WEDNESDAY</b>	<b>Education Stakeholders' Summit</b>	8:30 a.m. - 7:00 p.m.
	<b>OSSI Strategic Partners Meetings:</b>	
	OSSI Headquarters Team, Glenn Research Center and Goddard Space Flight Center	7:30 a.m. - 8:30 a.m.
	OSSI Headquarters Team, Ames Research Center and Dryden Flight Research Center	11:30 a.m. - 12:30 p.m.
	University Research Centers Annual Meeting	3:00 p.m. - 5:00 p.m.
<b>THURSDAY</b>	<b>Education Stakeholders' Summit</b>	8:30 a.m. - 7:00 p.m.
	<b>OSSI Strategic Partners Meetings:</b>	
	OSSI Headquarters Team, Jet Propulsion Laboratory, Kennedy Space Center	7:30 a.m. - 8:30 a.m.
	OSSI Headquarters Team, Johnson Space Center, Langley Research Center	12:00 p.m. - 1:00 p.m.
	University Research Centers Annual Meeting	3:00 p.m. - 4:00 p.m.
<b>FRIDAY</b>	<b>Education Stakeholders' Summit</b>	8:30 a.m. - 4:00 p.m.
	<b>OSSI Strategic Partners Meetings:</b>	
	OSSI Headquarters Team, Marshall Space Flight Center, Stennis Space Center	7:30 a.m. - 8:30 a.m.
	OSSI Headquarters Team, Broker- Facilitator Corps, Business Management Organization	11:45 a.m. - 12:45 p.m.
	<b>NASA Education Updates: Transitioning Through FY12</b>	9:00 a.m. - 4:00 p.m.
	<b>Funding Opportunity Announcements:</b>	
	- International Space Station (ISS) National Laboratory Project	8:30 a.m. - 2:30 p.m.
	- Summer of Innovation	2:30 p.m. - 4:00 p.m.

## MONDAY - NOVEMBER 28, 2011

**5:00 P.M. - 7:00 P.M. REGISTRATION AVAILABLE FOR EARLY ARRIVALS**  
 (Lower Rotunda)

## TUESDAY - NOVEMBER 29, 2011

**7:00 A.M. - 5:00 P.M. REGISTRATION**  
 (Lower Rotunda)

**7:00 A.M. - 7:45 A.M.**  
**Continental Breakfast**

**8:00 A.M. - 11:15 A.M.**  
**PRE-SUMMIT WORKSHOPS**

*Concurrent Workshops*

**8:00 A.M. - 9:30 A.M.**

**Workshop I: Paperwork Reduction ACT (PRA) Clearance Process and the Office of Education (OE) Journey to Compliance**  
*(Grand Dominion 3/5)*

**Workshop Abstract:** This session will include a detailed discussion of the PRA Clearance Process and how it impacts Education Project Evaluation, Assessment and Data Collection. Presenters will highlight project planning, implementation, challenges and best practices for compliance and the use of Office of Education Performance Measure (OEPM) system to achieve compliance in FY13.

**Presenters:**

- Lori Parker**, Agency Paperwork Reduction Act (PRA) Officer – NASA Headquarters
- Fatima Senghore**, Office of Education Data Manager – NASA Headquarters
- Richard Gilmore**, Summer of Innovation (Sol) Senior Project Coordinator – NASA Glenn Research Center

## Workshop II: Millennials: A New Generation

Introduction from an Industry Perspective:

**Harold Stinger**, Chairman –Stinger Ghaffarian Technologies  
(Grand Dominion 4/6)

**Workshop Abstract:** Millennials are coming into the workforce in droves, with very different expectations, motivations and work styles than their predecessors. Millennials are the first true 'Digital Natives.' That is, the first generation to be immersed by cable and internet in their homes. They have grown up in a truly global, connected and participatory culture. To remain competitive in the future, it is imperative that companies create a culture and work environment that attracts, motivates and retains this generation of workers. This session will explore this generation of employees and how best to attract and retain them.

### • Presenters:

**Marc Detampel**, Partner, Talent & Organization Performance Group – Accenture Management Consulting

**Matthew Dobbin**, Manager, Talent & Organization Performance Group – Accenture Management Consulting

9:30 A.M. - 9:45 A.M. **BREAK**

Concurrent Workshops

9:45 A.M. - 11:15 A.M.

## Workshop III: OSSI: SOLAR What's New on the LaunchPad

(Grand Dominion 3/5)

- OSSI Information Center
- Student On-Line Research Journal
- NASA Student Ambassador Program
- New Tools
- Next Steps for FY12

**Workshop Abstract:** NASA, industry/contractor and academic attendees will learn about new features of the NASA LaunchPad as they pertain to each constituency's role in OSSI. Other federal agency attendees will gain knowledge of the LaunchPad and its features as a possible model for implementation within their respective organizations.

### • Presenters:

**Leo Geiger**, Project Manager, OSSI LaunchPad – International Code Design Inc.

**Ann Heyward**, Principal Investigator, OSSI Business Management Organization – Ohio Aerospace Institute

**Dr. M. David Kankam**, University Affairs Officer – NASA Glenn Research Center

**Dr. Ben O. Oni**, Professor, Electrical Engineering – Tuskegee University

**Fawn Stanton**, OSSI Co-Coordinator and NASA Student Ambassador Coordinator

## Workshop IV: Using iPad and iPhone Apps for Effective Student Recruiting At Career Fairs

(Grand Dominion 4/6)

**Workshop Abstract:** NASA, industry/contractor, academic and other federal agency attendees will learn about the effective use of iPhone and iPad apps to gather student information and transmit pertinent info at student career fairs.

### • Presenter:

**Steve Tiufekchiev**, Chief Strategy Officer – RECSOLU

11:30 A.M. - 1:30 P.M.

## NASA OSSI Collaboration Panel Discussion and Luncheon

(Washingtonian)

**Dr. Mabel J. Matthews**, Higher Education Program Manager, Office of Education – NASA Headquarters, Presiding

**Theme:** "Enhancing NASA's Infrastructure for the STEM Workforce of Tomorrow"

### • Cultural Welcome from Hispanic College Fund – Reflections on Collaboration

**Dr. Carlos Santiago**, Chief Executive Officer – Hispanic College Fund

11:30 A.M. - 12:30 P.M.

## Collaboration Panel Discussion and Luncheon

### • Facilitator:

**Dr. Adrian Gardner**, Chief Information Officer and Director of the Information Technology and Communications Directorate – NASA Goddard Space Flight Center

### • NASA Headquarters Panelists:

**Jane Datta**, Director, Workforce Strategy Division, Office of Human Capital Management – NASA Headquarters

**Brenda Manuel**, Associate Administrator for Diversity and Equal Opportunity

**David Weaver**, Associate Administrator for Communications

**Leland Melvin**, Associate Administrator for Education

LUNCH WILL BE SERVED AT 12:30 P.M.

1:30 P.M. - 1:45 P.M.

### • Closing Remarks and Expected Outcomes of the Week

**Ann Heyward**, Principal Investigator, OSSI Business Management Organization – Ohio Aerospace Institute

2:00 P.M. - 5:00 P.M.

## OPENING PLENARY SESSION

(Grand Dominion)

**James Stofan**, Deputy Associate Administrator for Education Integration, Office of Integration – NASA Headquarters, Presiding

### • Remarks and Introduction of Keynote Speaker:

**David Noble**, White House Liaison/Deputy Chief of Staff – NASA Headquarters

### • Keynote Speaker:

**John Berry**, Director – United States Office of Personnel Management  
**"Why Working for the Federal Government is Cool"**

2:45 P.M. - 3:45 P.M.

## Collaborating Stakeholders' Remarks

**Dr. Gilbert L. Rochon**, President – Tuskegee University  
**"Why Working for Academia is Cool"**

**Wanda Sigur**, Vice President, Engineering – Lockheed Martin Space Systems Company  
**"Why Working for the Science and Technology Industry is Cool"**

**Dr. Woodrow Whitlow**, Associate Administrator for Mission Support – NASA Headquarters  
**"Why Working for NASA is Cool"**

**Leland Melvin**, Associate Administrator for Education – NASA  
**"Why Working for NASA Education is Cool"**

3:45 P.M. - 4:00 P.M. BREAK

4:00 P.M. - 5:00 P.M.

### NASA Student Ambassador Panel

• **Facilitator:**

**Liv Detrick**, Project Director – Institute for Broadening Participation

“Why Being a NASA Intern is Cool”

• **Panelists:**

**Marsha Cole**, Chemistry, Louisiana State University

**Ethan Brewer**, Aeronautical and Astronautical Engineering, The Ohio State University

**Kody Ensley**, Computer Engineering, Salish Kootenai College

**Denisse Aranda**, Mechanical Engineering, Florida International University

**Ivy Jones**, Physics, Hampton University

5:00 P.M. - 7:00 P.M.

### OPENING RECEPTION AND WELCOME TO THE SUMMIT

*(Grand Dominion)*

**Carolyn Knowles**, Executive Officer to the Associate Administrator for Education, Office of Education – NASA Headquarters, Presiding

• **Greetings:**

**Leland Melvin**, Associate Administrator for Education – NASA

**Dr. Christopher S. Brown**, Director, North Carolina Space Grant – North Carolina State University

**Dr. Boyce Williams**, Senior Vice President and Chief of Staff – National Association for Equal Opportunity in Higher Education

**Dr. Lorelle Espinosa**, Director of Policy and Strategic Initiatives – Institute for Higher Education Policy

**William Mendoza**, Executive Director – White House Initiative on Tribal Colleges and Universities

**Akil Vohra**, Senior Advisor – White House Initiative on Asian Americans and Pacific Islanders

**Dr. Renata Engel**, Immediate Past President, American Society for Engineering Education (ASEE) and Associate Dean for Undergraduate Studies and International Programs, College of Engineering, Pennsylvania State University

### OSSI Networking Hour:

#### Fun Interactive Technology Games and Challenges

• **Facilitators:**

**Joeletta Patrick**, Project Manager – NASA Johnson Space Center

**Fatima Senghore**, Office of Education Data Manager – NASA Headquarters

**Dr. Diane Clayton**, Education Specialist – NASA Headquarters

## WEDNESDAY - NOVEMBER 30, 2011

7:00 A.M. - 5:00 P.M. REGISTRATION  
*(Lower Rotunda)*

*Concurrent Sessions*

7:30 A.M. - 8:30 A.M.

**Continental Breakfast**  
*(Upper Rotunda)*

**OSSI Strategic Partners Meeting:  
OSSI Headquarters Policy Team and GRC/GSFC**  
*(Adams)*

8:30 A.M. - 12:00 P.M.

### PLENARY SESSION II

**ENHANCING OUR INFRASTRUCTURE:  
CREATING THE FOUNDATIONS:  
FOCUS ON FORMAL AND INFORMAL EDUCATION**  
*(Grand Dominion)*

**Dr. Carl S. Person**, Minority Research and Education Program Manager, Office of Education – NASA Headquarters, Presiding

8:30 A.M. - 9:45 A.M.

**Panel Discussion:**

**The New NASA Education:  
Creating the Foundations for NASA's Future Workforce**  
*NASA Education Working Group Reports*

• **Moderator:**

**James Stofan**, NASA Deputy Associate Administrator for Education Integration – NASA Headquarters

**Coordination and Integration Working Groups**  
*(Co-Chairs: James Stofan, HQ and Katie Pruzan, HQ)*

**Vision and Oversight**

*(Dr. Robert Gabrys, GSFC; Tony Springer, ARMD HQ)*

1. Programmatic Implementation  
*(Leads: Katrina Emery, DRFC; Leslie Fletcher, KSC; David Seidel, JPL)*
2. Communication  
*(Leads: Nora Normandy, HQ; Judith Carrodegua, HQ)*
3. Partnership  
*(Leads: Alotta Taylor, HEOD HQ; Stephanie Stockman, SMD HQ)*
4. Staff Development: Staffing *(Leads: Tammy Rowan, MSFC; Dr. Shelley Canright, HQ; Carolyn Knowles, HQ)*
5. Staff Development: Policy  
*(Lead: Dr. Lisa Guerra, HQ)*

9:45 A.M. - 10:00 A.M. BREAK

10:00 A.M. - 12:00 P.M.

### Impacting the Foundations

• **Moderator:**

**Frank Prochaska**, University Affairs Officer – NASA Johnson Space Center

10:00 A.M. - 11:00 A.M.

### NASA OSSI Implementation Successes and Challenges

• **Panelists:**

**Denise A. Davis-Konopka**, Human Capital Strategist for Education - NASA Goddard Space Flight Center

**Dr. Valerie A. Casasanto**, Program Coordinator - NASA Goddard Space Flight Center

**Janet E. Sellars**, EEO Director - NASA Langley Research Center

**Greg Hajos**, Mentor, Aerospace Engineer - NASA Langley Research Center

**Dr. W. Lance Richards**, University Affairs Officer and Aerospace Research Technical Manager - NASA Dryden Flight Research Center

**Amy Scott-Williams**, Higher Education Lead - NASA Dryden Flight Research Center

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**11:00 A.M. - 12:00 P.M.**

**OSSI Year-One Update and Transition for FY12**

**Dr. Mabel J. Matthews**, Higher Education Program Manager, Office of Education – NASA Headquarters

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*Concurrent Sessions*

**12:00 P.M. - 1:00 P.M.**

**Lunch Buffet/Roundtable Discussions**

*(Fairfax)*

**OSSI Strategic Partners Meeting:  
OSSI Headquarters Policy Team and ARC/DFRC**  
*(Treaty, Westcott)*

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**1:00 P.M. - 5:00 P.M.**

**PLENARY SESSION III**

**ENHANCING OUR INFRASTRUCTURE:  
BUILDING THE ON-RAMPS**

*(Grand Dominion)*

**Jerry Hartman**, Education Lead, Human Exploration and Operations Mission Directorate – NASA Headquarters

**1:00 P.M. - 2:00 P.M.**

**Presentation: Building the On-Ramps**

**STEM: Good Jobs Now and for the Future**

**Dr. David Beede** and **David Langdon**, Office of the Chief Economist, Economics and Statistics Administration – U.S. Department of Commerce

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**2:00 P.M. - 3:30 P.M.**

**Panel Discussion: New Approaches and Tools to Build the On-Ramp: NASA Human Capital Management Updates—Workforce Plan and the Pathways Program**

• **Moderator:**

**Shannon O'Connor-Jobe**, Pathway Program Manager, Office of Human Capital Management – NASA Headquarters

• **Panelists:**

**Bryan Grant**, Co-Op and Recruiting Manager – NASA Johnson Space Center

**Keith Lowe/Steve Chesley**, Workforce Planning Program Specialists – NASA Headquarters

**Linwood Smith**, Recruitment Program Manager – NASA Langley Research Center

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**3:45 P.M. - 5:00 P.M.      OPEN DISCUSSION**

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*Concurrent Session*

**3:00 P.M. - 5:00 P.M.**

**University Research Center Annual Meeting**  
*(Hamilton)*

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**5:00 P.M. - 7:00 P.M.**

**Dinner/Roundtable Discussions**

*(Fairfax)*

**THURSDAY - DECEMBER 1, 2011**

**7:00 A.M.-12:00 P.M.      REGISTRATION**  
*(Lower Rotunda)*

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**7:30 A.M. - 8:00 A.M.**

**Continental Breakfast**

*(Upper Rotunda)*

**OSSI Strategic Partners Meeting:  
OSSI Headquarters Policy Team and JPL/KSC**  
*(Adams)*

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**8:30 A.M. - 12:00 P.M.**

**PLENARY SESSION IV**

**ENHANCING OUR INFRASTRUCTURE:  
BUILDING BRIDGES**

*(Grand Dominion)*

**Dr. Shelley Canright**, Program Manager, Elementary and Secondary Education, Office of Education – NASA Headquarters

**8:30 A.M. - 9:15 A.M.**

**Opening Presentation: Building Bridges**

**Expanding Underrepresented Minority Participation: America's Science and Technology Talent at a Crossroads**

**Dr. Earnestine Psalmonds**, Senior Program Officer, Policy and Global Affairs Division – National Academies

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**9:15 A.M. - 10:15 A.M.**

**Panel Discussion:**

**How Will We “Build Bridges” to All Sources of STEM Talent?**

• **Moderator:**

**Mervyn Jones**, Equal Employment Specialist, Office of Diversity and Equal Opportunity – NASA Headquarters

• **Panelists:**

NASA Model EEO Agency Plan – **Sharon Wagner**, Assistant Director – Program Planning and Evaluation Division, NASA Headquarters Office of Diversity and Equal Opportunity

Outreach and Recruitment Efforts – **Veronica R. Hill**, Equal Opportunity Director – Office of Equal Opportunity Programs, NASA Goddard Space Flight Center

External Equal Opportunity Compliance – **David Chambers**, Senior Civil Rights Analyst – Program Planning and Evaluation Division, NASA Headquarters Office of Diversity and Equal Opportunity

Diversity-Inclusion – **Barbara L. Spotts**, Agency Diversity Manager – NASA Headquarters Office of Diversity and Equal Opportunity

10:15 A.M. - 10:30 A.M. **BREAK**

10:30 A.M. - 11:30 A.M.

**Panel Discussion:**

**How Will We “Build Bridges” to Increase the Participation of STEM Students with Disabilities in NASA Higher Education Programs?**

• **Moderator:**

**Kathleen C. Powell**, Special Internship Program Manager – NASA Langley Research Center

• **Panelists:**

**Lynne M. Weston**, Executive Director, Higher Education for Learning Problems (H.E.L.P.) – Marshall University

**Janet E. Sellars**, EEO Director - NASA Langley Research Center

**Dr. Clark Shingledecker**, Disability Services - Wright State University

11:30 A.M. - 12:00 P.M.

**Building Bridges: How Do We Communicate with the Next Generation?**

**Nick Skytland**, Open Government Initiative – NASA Johnson Space Center

12:00 P.M. - 1:30 P.M.

**Lunch/Roundtable Discussions**

*(Fairfax)*

**OSSI Strategic Partners Meeting:**

**OSSI Headquarters Policy Team and JSC/LARC**

*(Treaty, Westcott)*

1:30 P.M. - 5:15 P.M.

**PLENARY SESSION V**

**ENHANCING OUR INFRASTRUCTURE:**

**THE ROAD AHEAD**

*(Grand Dominion)*

**Dr. William Harvey**, Dean, College of Education – North Carolina A&T State University, Presiding

1:30 P.M. - 2:30 P.M.

**Panel Discussion: The Road Ahead for NASA: Mission Directorate Perspectives**

**Tony Springer**, Lead – Communication in Education, Aeronautics and Research

**Allotta Taylor**, Lead – Human Exploration and Operations

**Theresa Schwerin**, Lead, Earth Science Forum – Science Directorate

**Dr. Harry Partridge** – Office of the Chief Technologist

2:30 P.M. - 3:00 P.M.

**Road Ahead for Industry**

**Larry H. Williams**, Vice President of Strategic Relations – Space Exploration Technologies (SpaceX)

3:00 P.M. - 4:00 P.M.

**Panel Discussion:**

**The Road Ahead for Federal Agencies**

**Federal Interagency Working Group on STEM Graduate Fellowships**

**Dr. Brandon Jones**, Fellowship Program Manager – Environmental Protection Agency

• **Panelists:**

**Dr. Ray A. Ali**, National Education Program Leader – National Institute of Food and Agriculture, U.S. Department of Agriculture

**Dr. Gisèle Muller-Parker**, Program Director – Division of Graduate Education, National Science Foundation

*Concurrent Session*

3:00 P.M. - 4:00 P.M.

**University Research Center Annual Meeting**

*(Hamilton)*

4:00 P.M. - 5:00 P.M.

**Panel Discussion: The Road Ahead for Academia**

• **Moderator:**

**Dr. William Harvey**, Dean, College of Education – North Carolina A&T State University

• **Panelists:**

**Dr. Christine Grant**, Associate Dean, College of Engineering – North Carolina State University

**Dr. Eugene DeLoatch**, Dean, School of Engineering – Morgan State University

**Dr. Tim Olson**, Chairman, Division of Sciences – Salish Kootenai College

**Dr. Ahsan Choudhuri**, Professor and Chair of the Mechanical Engineering Department and Director NASA Center for Space Exploration and Technology Research – University of Texas at El Paso

5:00 P.M. - 5:15 P.M. **OPEN DISCUSSION**

5:15 P.M. - 7:00 P.M.

**Dinner/Roundtable Discussions**

*(Fairfax)*

## FRIDAY - DECEMBER 2, 2011

*Friday's Summit day will include two activities that will run in concurrence. Attendees have the opportunity to move between sessions as their interest dictates.*

7:30 A.M. - 8:30 A.M.

### Continental Breakfast

(Upper Rotunda)

### OSSI Strategic Partners Meeting: OSSI Headquarters Policy Team and MSFC/SS

(Adams)

8:30 A.M. - 4:00 P.M.

### ACTIVITY I:

### NASA EDUCATION UPDATES: TRANSITIONING THROUGH FY12

Diane DeTroye, Manager, Space Grant and EPSCoR Programs, Office of Education – NASA Headquarters, Presiding

8:30 A.M. - 9:30 A.M.

### OSSI:SOLAR Enhancements: Readiness for Year-Two

(Grand Dominion 1/3)

**Darla Jones**, OSSI Coordinator – NASA Headquarters

**Fawn Stanton**, OSSI Assistant Coordinator – NASA Headquarters

**Russell Dare**, OSSI Co-Project Manager, Information Technology and Communications Directorate (ITCD) – NASA Goddard Space Flight Center

**Bobbie Dofflemyer**, OSSI:SOLAR Sustainment Manager, Information Technology and Communications Directorate (ITCD) – NASA Goddard Space Flight Center

9:30 A.M. - 10:30 A.M.

### Employment Recruiting Best Practices – OHCM Prospective

#### • Moderator:

**Krystal Hall**, Recruitment Program Manager, Office of Human Capital Management – NASA Headquarters

#### • Panelists:

**Sharon Burks**, Deputy Division Director for HR Policy and Programs - NASA Headquarters

**Dan Fusco**, Staffing and Recruitment Program Manager - NASA Headquarters

**Linwood Smith**, Recruitment Program Manager - NASA Langley Research Center

**Bryan Grant**, Co-Op & Recruiting Manager, NASA Johnson Space Center

10:30 A.M. - 11:30 A.M.

### Student Recruitment and Retention Best Practices – OSSI Broker-Facilitator Corps Prospective

**Valdon St. John**, American Indian Higher Education Consortium

**Cathalina Juarez**, Hispanic College Fund

**Liv Detrick**, Institute for Broadening Participation

**Sondra Lancaster**, United Negro College Fund Special Programs

11:45 A.M. - 1:00 P.M.

### Lunch Buffet/Roundtable Discussions

(Fairfax)

### OSSI Strategic Partners Meeting: OSSI Headquarters Policy Team and BFC/Business Management

(Treaty, Westcott)

1:00 P.M. - 2:00 P.M.

### Infrastructure Building Model: NASA Explorer Schools

**Robert Lasalvia**, Deputy Education Director – NASA Glenn Research Center

2:00 P.M. - 2:30 P.M.

### NASA Education Budget Update: FY12 Readiness

**Andrew Hubbard**, NASA Education Budget Manager, NASA Headquarters

2:30 P.M. - 3:30 P.M.

### Doing Our PART for the Next Generation

**Kendra Perkins Norwood**, Strategic Portfolio and Policy Manager, Office of Education – NASA Headquarters

3:30 P.M.

### Closing Remarks

**Dr. Mabel J. Matthews**, Higher Education Program Manager, Office of Education – NASA Headquarters

8:30 A.M. - 2:15 P.M.

## ACTIVITY IIA: INTERNATIONAL SPACE STATION (ISS) NATIONAL LABORATORY EDUCATION PROJECT

(Grand Dominion 2/4)

### FUNDING OPPORTUNITY DISCUSSION

The International Space Station (ISS) National Laboratory Education Project (NLEP) will pursue partnerships with industry, academia and government agencies. This is in an effort to respond to the part of the 21st Century Competitiveness Act 2007 Conference Report to fully utilize the International Space Station as a national laboratory offering unique opportunities for education activities and providing a unique resource for research and development in science, technology, engineering, and mathematics (STEM), which can enhance the global competitiveness of the United States. In an effort to foster understanding of NASA's unique ISS technological capabilities, the parties desire to disseminate information on its unique capabilities through forums such as conferences, research workshops and technology development workshops. This effort is consistent with NASA's goal to form strategic partnerships that leverage NASA's critical functions, infrastructure, and expertise to advance technology for exploration and the benefit of humankind. The ISS NLEP's mission is to serve as an education resource that enables ISS-related education activities onboard the ISS, in the classroom and through Web and mobile media, thus strengthening the link between the unique venue of the ISS and science, technology, engineering and mathematics (STEM) education.

The ISS NLEP's portfolio is comprised of three categories of activities that include: a) K-12 (i.e. primary and secondary education), b) Higher Education (i.e. university-level education); and c) Informal Education (i.e. education outside of a classroom setting) This inaugural activity will be focused on the Higher Education category and seeks to: 1) build connections through partnerships and consortium awards, which provide institutions of higher education and other educational entities better bridges for students; 2) catalyze institutional development to improve the ability of colleges and universities to compete for NASA research awards; 3) increase the candidate pool of qualified faculty who can compete for NASA research awards; and 4) facilitate improved coordination between NASA-sponsored university research activities and teacher preparation projects to expose teachers-in-training to NASA research and discoveries, thus furthering their understanding of STEM disciplines.

As a key feature of the 2011 NASA Education Stakeholders' Summit, the ISS NLE funding opportunity discussion is scheduled on Friday, December 2. Planned opportunities will include a variety of frameworks to execute STEM-related proposals including flying experiments onboard the Space Station, using reduced gravity facilities at various NASA centers, and performing ground-based activities using Space Station resources. Opportunities will range from simple plant growth experiments to a flight week experience using the reduced-gravity facility at the Johnson Space Center. Additionally, several funding strategies will be offered that include full "seed" funding for a pilot year, partial partnered funding, and full partnered funding with NASA's endorsement.

8:30 A.M.

### Welcome & Introduction

**Dr. Mabel J. Matthews**, Higher Education Program Manager,  
Office of Education – NASA Headquarters

8:40 A.M.

### Funding Opportunity 1: ISS Objectives & Outcomes

**Dr. Regina B. Blue**, Manager, ISS National Lab Education  
Project – NASA Johnson Space Center

### ISS National Lab Education Project Funding Opportunities Discussions

*Note: Each presenter is asked to allow for a 10-minute Q&A and/or Brainstorming at the end of his/her presentation*

8:50 A.M.

### MSI Nanoracks Flight Experiment

**Jeffrey Manber**, Managing Director – Nanoracks, LLC

9:20 A.M.

### Hunch Projects

**Dr. Florence Gold**, Program Coordinator – NASA Johnson Space  
Center Payloads Office

9:45 A.M.

**BREAK**

10:00 A.M.

### ISS Attitude Determination Schemes Support

**Henry Pickard** – NASA Johnson Space Center  
**Vijayanand Kowtha** – NASA Johnson Space Center

10:30 A.M.

### ISSLive!

**Monica Trevathan**, Education Lead – Tietronix/NASA Education

10:55 A.M.

### Global Science Fair

**Kris Kimel**, Founder – Kentucky Space LLC

11:15 A.M.

### ISS NLEP Facility

**Stephanie Countryman**, Manager, Bioserve Space  
Technologies – University of Colorado

11:45 A.M.

### Lunch, Budget/Roundtable Discussions

(Fairfax)

12:45 P.M.

**STK-Based Mission Planning Support**

**Debbie Biggs**, Lead – NASA Johnson Space Center ISS NLEP  
Higher Education Coordination

1:10 P.M.

**ISS/NLEP Ground Activities Guidelines/Examples**

**Sara Malloy**, Lead Program Coordinator –  
NASA Johnson Space Center Reduced Gravity Facility

1:35 P.M.

**ISS/NLEP Onboard Activities Guidelines/Examples**

**Teresa Sindelar**, Education Specialist – NASA Johnson Space  
Center Teaching From Space Office

2:00 P.M.

**Summary/Forward Strategy**

**Dr. Regina B. Blue**, Manager, ISS National Lab Education  
Project – NASA Johnson Space Center

2:10 P.M.

**Closing Remarks – ISS Funding Opportunity**

**Bob Musgrove**, Deputy Director – NASA Johnson Space Center  
Office of Education

2:15 P.M. **BREAK**

**ACTIVITY IIB: INTERNATIONAL  
SUMMER OF INNOVATION  
FUNDING OPPORTUNITY DISCUSSION**

2:30 P.M. – 4:00 P.M.

NASA's Summer of Innovation project was launched in direct response to President Obama's Education to Innovate initiative. Through a combination of competitive funding and collaboration with summer providers, NASA engaged more than 40,000 students in 46 states, the District of Columbia and Puerto Rico in FY2011. NASA seeks to continue the development of relationships with organizations targeted at providing high-quality, outside-the-classroom engagement opportunities for underserved and underrepresented students in STEM field. The Summer of Innovation provides highly engaging content, staff development opportunities, technical assistance and competitive funding to organizations committed to providing enriching experiences for middle school students. Learn about the Summer of Innovation implementation model and potential upcoming collaboration and funding opportunities.

2:30 P.M.

**Funding Opportunity 2: Summer of Innovation**

**Robert Lasalvia**, Deputy Education Director – NASA Glenn  
Research Center

4:00 P.M.

**ADJOURN**

BIOGRAPHIES

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# Keynote Speakers AND Stakeholder Presenters



## John Berry

*Director*

United States Office of  
Personnel Management



John Berry is the federal government's chief people person. As the Director of the United States Office of Personnel Management, he is responsible for recruiting, hiring, and setting benefits policies for 1.9 million federal civilian employees. Calling this a new day for the civil service, he is reinvigorating the federal workforce to meet the challenges of the 21st century.

Berry is working closely with partners both inside and outside of government to fulfill President Obama's charge to "make government cool again" by developing flexible, results-oriented HR policies and working to change how Americans view their public servants. His goal: build a workforce of dynamic innovators who put serving the American people at the heart of everything they do.

With more than 20 years of experience in the federal government, Berry is a passionate and aggressive advocate for public service and federal workers. He first developed expertise in federal employee and retirement issues during 10 years as legislative director for Congressman Steny Hoyer of Maryland, now the House Democratic Whip.

During the Clinton Administration, Berry served as deputy assistant secretary and acting assistant secretary for law enforcement at the Department of the Treasury, where he had direct-line authority over 40 percent of the federal law enforcement community, including the Secret Service and the ATF. He then served as assistant secretary for policy, management and budget at the Department of the Interior.

From 2001 to 2008, Berry pursued his interest in conservation as director of the National Fish and Wildlife Foundation and then as director of the National Zoo, where John the Lion is named after him.

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**Gilbert Rochon, Ph.D.**

*President*  
Tuskegee University



Gilbert Rochon, Ph.D., assumed his responsibilities as Tuskegee University's president on Nov. 1, 2010. He is the sixth president of the institution since its founding by Booker T. Washington in 1881. He was also named University professor.

Previously, Rochon served as director of the Purdue Terrestrial Observatory, senior research scientist for the Rosen Center for Advanced Computing and associate vice president for Collaborative Research and Engagement at Purdue University (West Lafayette, Ind.). He had courtesy faculty appointments in Purdue's Department of Earth and Atmospheric Sciences, Department of Agronomy, and Department of Agricultural and Biological Engineering. He is currently an adjunct professor in natural resources and environmental management at the Mae Fah Luang University, Chiang Rai, Thailand.

Rochon's formal training includes the Ph.D. from the Massachusetts Institute of Technology (MIT) in urban and regional planning, Master of Public Health degree in health services administration from Yale University School of Medicine, and bachelor's degree from Xavier University of Louisiana. Rochon's prior fellowships included: United Nations University (UNU) Fellow in Sudan, Visiting Faculty Fellow at the University of Oxford's Environmental Change Unit, NASA/ASEE Fellow at Goddard Space Flight Center and at Stennis Space Center, and NASA/JOVE Fellow at the Jet Propulsion Lab (JPL)/Caltech. His peer-reviewed publications have appeared as book chapters, as an entry in the Encyclopedia of Geography, and in Clean Technologies & Environmental Policy, International Journal of Climatology, Journal of Hydrologic Engineering, and Journal of Terrestrial Observation. He has delivered more than 100 presentations at conferences worldwide. He was a Fulbright Senior Specialist-Environmental Science in Thailand and was awarded a NATO Science for Peace grant for real-time remote sensing for early warning of disasters and epidemics in Morocco. Rochon served as principal investigator (PI) for the USGS Indiana View grant, co-PI for an NGA grant to develop a real-time predictive framework for mosquito-borne diseases and was co-PI for a FEMA grant to develop 100-year flood models for 800 U.S. counties.

Prior to joining Purdue, Rochon was a research team leader — land use and hydrology with U.S. EPA NRMRL and adjunct professor of urban planning at University of Cincinnati. From 1982-2000, Rochon was director/chair for urban studies and public policy at Dillard University in New Orleans, where he was a tenured associate professor and appointed to a Conrad Hilton Endowed Professorship. His joint appointments included: NASA, USDA Forest Service, EPA, NAVOCEANO and DOD HPCMO PET Program, under Northrop Grumman/Logicon sub-contracts. Previously, he held adjunct faculty appointments at Tulane University's School of Public Health and Tropical Medicine, and at Indiana University Medical School and at Miami University Ohio. He served on the User Working Group for NASA's SEDAC, on the Science Review Panel for the Arctic Region Supercomputer Center and is currently on the Technology Advisory Committee for South Africa's Center for High Performance Computing in Cape Town.

**Wanda A. Sigur**

*Vice President, Engineering*  
Lockheed Martin Space Systems Company



Wanda Sigur is the vice president for the Space Systems Engineering organization with responsibility for engineering personnel development, engineering process development and deployment, engineering tools and training, and product technical validation, with emphasis on ensuring operational excellence and first-time-right engineering.

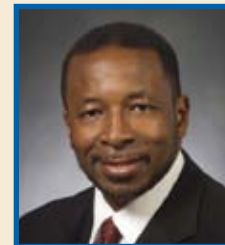
Her immediately previous assignment was vice president of the Space Shuttle External Tank Project for Space Systems, at NASA's Michoud Assembly Facility in New Orleans. She was responsible for the build, delivery, design enhancement and flight of the large cryogenic system, the largest element and structural backbone of the Space Shuttle.

She has received numerous awards, including the Black Engineer of the Year award for Career Achievement in 2008 and the 2007 Rotary National Award for Space Achievement (RNASA) Stellar Award, the National Space Club award for Manned Space Flight and Outstanding Rice University Engineering Alumnus. New Orleans CityBusiness named her one of the "Women of the Year" in the New Orleans area.

A native of New Orleans, Sigur graduated from Rice University with a mechanical & materials sciences and engineering Bachelor of Science degree. She also holds a master's in business administration from Tulane University and is a member of the Society for Women Engineers. She has published papers on a variety of subjects.

**Woodrow Whitlow, Jr., Ph.D.**

*Associate Administrator for Mission Support*  
NASA Headquarters



Woodrow Whitlow, Jr. was named the associate administrator for mission support at NASA Headquarters in Washington by NASA Administrator Charles F. Bolden on Feb. 3, 2010. Whitlow will continue to serve as the director of NASA's Glenn Research Center in Cleveland until a successor is named.

Whitlow is responsible for most NASA management operations, including human capital, budget and systems support as well as a variety of other vital cross agency business, institutional and contract support functions.

As director of the Glenn Research Center, he is responsible for planning, organizing and directing the activities required to accomplish the missions assigned to the center.

From September 2003 through December 2005, Whitlow served as the deputy director of the NASA John F. Kennedy Space Center. There his duties included assisting the director in determining and implementing center policy and in managing and implementing the

center's missions and agency program responsibilities in the areas of processing, launch, and recovery of launch vehicles; processing of spacecraft; and acquisition of launch services. Prior to this appointment as deputy director, he served as the director of research and technology at the Glenn Research Center.

Whitlow began his professional career in 1979 as a research scientist at the NASA Langley Research Center, Hampton, Virginia. He assumed various positions of increasing responsibility before moving to the Glenn Research Center in 1998. In 1994, he served as director of the critical technologies division, Office of Aeronautics, at NASA Headquarters.

Whitlow earned his B.S., M.S. and Ph.D. in aeronautics and astronautics from the Massachusetts Institute of Technology. He has written nearly 40 technical papers, most in the areas of unsteady transonic flow and aeroelasticity.

Whitlow has received numerous awards, including U.S. Black Engineer of the Year in Government, NASA Exceptional Service Honor Medal, NASA Equal Opportunity Honor Medal, the (British) Institution of Mechanical Engineers William Sweet Smith Prize and the Presidential Rank of Meritorious Executive. The American Institute of Aeronautics and Astronautics named him an associate fellow in 1993.

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### **Christopher S. Brown, Ph.D.**

*Director, North Carolina Space Grant  
Chair, National Space Grant Alliance*

Chris Brown, Ph.D., is the director of the North Carolina Space Grant and serves as the chair of the National Space Grant Alliance. At North Carolina State University, he is the associate vice chancellor for the Research Development Office and a professor of plant biology.



Following his doctoral work at NC State University in botany and postdoctoral training in biochemistry at the University of Missouri-Columbia, he became the manager and senior scientist of the Plant Space Biology Lab at the Kennedy Space Center in 1989. He returned to NC State University in 1996 as part of the leadership team for the NASA Specialized Center of Research and Training (NSCORT) in gravitational biology. He taught a graduate/undergraduate on-line course in space biology for 15 years and has interacted with thousands of members of the general public on the excitement of space exploration.

Brown has been published in more than 70 publications on topics in gravitational and space biology, development of technology for spaceflight and plant physiology and has had several experiments on the Space Shuttle and the International Space Station (ISS). He is part of a team that sent plants to the ISS aboard STS-135 this summer and is eagerly awaiting their return to Earth for analysis.

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### **Lorelle Espinosa, Ph.D.**

*Director of Policy and Strategic Initiatives  
Institute for Higher Education Policy*



Lorelle L. Espinosa, Ph.D., is the director of policy and strategic initiatives at the Institute for Higher Education Policy (IHEP). She establishes and manages collaborative external partnerships and initiatives to meet key organizational objectives for advancing college access and success for all students, with particular attention paid to underrepresented groups at the pre-college and college levels. Included in this directive is her management of the Pathways to College Network and National Coalition for College Completion.

An expert on various higher education topics, Espinosa is well versed—as both a practitioner and researcher of higher education—on issues of postsecondary access and persistence of underrepresented groups. She has published on the transition and advancement of underrepresented minority students in science, technology, engineering, and mathematics (STEM) postsecondary education, with a current emphasis on women of color in STEM. Espinosa is a featured blogger for *Diverse: Issues in Higher Education* (“STEM Watch”), where she writes about the national imperative of building and sustaining a diverse STEM pipeline. Her doctoral dissertation, *Pipelines and Pathways: Women of Color in STEM Fields and the Experiences that Shape Their Persistence*, was “Cited for Excellence” by the Association for the Study of Higher Education in 2010 and was published this summer in the Harvard Educational Review Symposium, *Unraveling the Double Bind: Women of Color in STEM*.

Espinosa holds an M.A. and Ph.D. in education from the University of California, Los Angeles. She received her B.A. from the University of California, Davis and her A.A. from Santa Barbara City College. Prior to her graduate work and arrival at IHEP, Espinosa worked in the areas of student affairs and undergraduate education at the University of California, Davis, Stanford University and the Massachusetts Institute of Technology.

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**William Mendoza**

*Executive Director*  
White House Initiative on  
Tribal Colleges and Universities



William (Bill) Mendoza was appointed by the White House as executive director of the White House Initiative on Tribal Colleges and Universities in September 2011. Mendoza, an enrolled member of the Oglala Sioux Tribe, is Oglala-Sicangu Lakota and grew up on the Pine Ridge and Rosebud Sioux reservations in South Dakota.

He previously served as the deputy and acting director of the Initiative. Prior to coming to Washington, D.C., he was working towards a doctorate in education leadership at Montana State University (MSU). He earned his Bachelor of Arts in humanities from Fort Lewis College in 2005 and a Master of Education from MSU in 2010.

Mendoza has experienced, firsthand, through his professional and life experiences, the multitude of challenges facing American Indian students, educators and tribes. In addition to being a teacher and principal, he has worked at the school, professional and community level to help foster leadership development and civic engagement among American Indians. Integral to Mendoza's professional and academic capacity has been his experiences as a tribal college student at Haskell Indian Nations University, Sinte Gleska University and Oglala Lakota College.

**Akil Vohra**

*Senior Advisor*  
White House Initiative on Asian Americans Pacific Islanders

Akil Vohra serves as senior advisor in the White House Initiative on Asian Americans and Pacific Islanders. At the Initiative, Vohra will be working with the President's Advisory Commission on AAPIs, leading the communications effort, handling the anti-bullying campaign, and improving efforts of AAPI representation in federal government.

Prior to the Initiative, he was counsel at Muslim Advocates, where he focused on anti-terrorism financing, strengthening the nonprofit sector, and civil rights and civil liberties issues. Before Vohra's tenure at Muslim Advocates, he practiced international trade and customs law in Washington D.C. He is currently an Ariane de Rothschild Fellow, which is an Edmond de Rothschild Foundation initiative in partnership with the Columbia Business School and the University of Cambridge. He has previously served on the board of the South Asian Bar Association of Washington D.C. and the Bay Area Association of Muslim Lawyers.

Vohra holds a B.A. in political science from the University of California Irvine, and a J.D. from the George Washington University Law School, where he received the Michael Dillon Cooley Award for service to the law school community. He has also completed a program in international human rights and immigration at Oxford University (U.K.).

**Renata Engel, Ph.D.**

*Immediate Past President*  
American Society for Engineering Education  
*Associate Dean for Academic Programs*  
Pennsylvania State University



Renata Engel, Ph.D., is associate dean for academic programs in the College of Engineering at Penn State. A member of the Penn State faculty since 1990, she is a professor of engineering design and engineering science and mechanics, and she has served as executive director of the Schreyer Institute for Teaching Excellence.

Through various collaborative efforts, she has affected changes in the engineering curriculum at Penn State, primarily to incorporate elements of design in fundamental engineering courses. Engel's discipline-specific research couples her interest in design and manufacturing with advanced materials, with a focus on computational modeling of fiber reinforced polymer manufacturing and powder metal compaction and sintering.

For her individual and collaborative contributions to engineering education, she has received several awards including the University's George W. Atherton Award for Excellence in Teaching and the Dow Outstanding Young Faculty Award. In addition, she was a member of the team that won the 1998 Boeing Outstanding Educator Award and is a Fellow of the American Society for Engineering Education. She has held several leadership positions in the American Society for Engineering Education, including president from 2010-2011. She currently serves on its board of directors and as their representative to the International Federation of Engineering Education Societies.

Engel earned a Bachelor of Science in engineering science from Penn State and a doctorate in engineering mechanics from the University of South Florida.

## Leland Melvin

Associate Administrator for Education  
NASA



Leland D. Melvin, NASA associate administrator for education, is responsible for the development and implementation of the agency's education programs that strengthen student involvement and public awareness about its scientific goals and missions. In this role, he leads the agency in inspiring interest in science, technology, engineering, and mathematics, or STEM, through NASA's unique mission, workforce, facilities, research, and innovations.

As associate administrator for education, Melvin chairs the Education Coordinating Committee, or ECC, an agency-wide collaborative structure that maximizes NASA's ability to manage and implement its education portfolio. The ECC works to ensure that the agency's education investments are focused on supporting the nation's education efforts to develop the skilled workforce necessary to achieve NASA's goals and objectives.

Melvin currently serves on the White House National Science and Technology Council's Committee on Science, Technology, Engineering and Mathematics Education, or CoSTEM. CoSTEM coordinates the STEM education activities and programs for all federal agencies, encourages the teaching of innovation and entrepreneurship as part of STEM education, reviews STEM education activities and programs to ensure they are not duplicative within the Federal government and develops and implements a five-year STEM education strategy for all Federal agencies. He is the United States representative on the International Space Education Board, or ISEB, a global collaboration in space education between NASA, the Canadian Space Agency, the European Space Agency, the Japan Aerospace Exploration Agency and the Centre National d'Études Spatiales. The ISEB shares best practices and unites efforts to foster interest in space, science, and technology among the student community worldwide.

Melvin began his NASA career in 1989 as an aerospace research engineer at the agency's Langley Research Center in Hampton, Va. He entered NASA's astronaut corps in 1998 and served as a mission specialist operating the robotic arm on two space shuttle missions to the International Space Station: STS-122 in 2008 and STS-129 in 2009.

Melvin earned a Bachelor of Science degree in chemistry from the University of Richmond, where he also excelled as a wide receiver for the Spiders' football team. He became a National Collegiate Athletic Association Division I Academic All American and University of Richmond Athletic Hall of Fame Inductee. He was then drafted into the National Football League, or NFL, by the Detroit Lions in 1986 and also spent time with the Dallas Cowboys and the Toronto Argonauts. After injuries sidelined his football career, he returned to academia and earned his Master of Science degree in materials science engineering from the University of Virginia in Charlottesville. He holds honorary doctorates from Centre College, St Paul's College, and Campbellsville University.

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## James Stofan

Deputy Associate Administrator for  
Education Integration  
NASA



As the Deputy Associate Administrator for Education Integration, James Stofan reports to the shares responsibility for providing executive leadership, functional management and coordination of NASA's education programs and activities. The agency's goal is to meet national education needs and ensure a sufficient talent pool to preserve U.S. leadership in space exploration, aeronautical technology and science.

From September 2003 to March 2006, Stofan applied his technical and education expertise by serving as NASA's informal education division director. Prior to joining NASA, Stofan served as the senior vice president for education programs at the National Wildlife Federation (NWF). In this role, Stofan oversaw all of NWF's educational endeavors, including the award-winning Ranger Rick, Your Big Backyard and Wild Animal Baby magazines; community education efforts like the Backyard Wildlife Habitat, Earth Tomorrow and Habitat Stewards programs; and classroom projects such as Schoolyard Habitats and Campus Ecology.

Subsequent to joining NWF, Stofan was a faculty member and director of distance education at Johns Hopkins School of Hygiene and Public Health. There he pioneered the use of the World Wide Web as an educational tool. Johns Hopkins is the first university to offer the master of public health degree to a global audience via the Internet. Stofan is a recognized speaker on the educational uses and opportunities presented by the Internet and other technologies.

Stofan has served on the National Partners Council of the Points of Light Foundation, Board of Directors of National Wildlife Productions and on the Executive Committee of the Board of Directors of eNature.com. He is also the past chair of the Environmental Education Coalition. He is a member of the honor societies Kappa Delta Pi and Phi Kappa Phi. He is an active member of the North American Association for Environmental Education, the Association for Educational Communications and Technology, and the International Council for Educational Media.

A native of San Francisco, Stofan graduated in 1989 from Johns Hopkins University with a degree in behavioral biology and sociology, and earned a master's degree in instructional technology from the University of Central Florida.

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## BIOGRAPHIES

# NASA Student Ambassador Panel



### Liv Detrick

*Project Director*  
Institute for Broadening Participation



As the Project Manager for Institute for Broadening Participation's (IBP) NASA One Stop Shop Initiative (OSSI) project, Detrick coordinates OSSI-related recruitment activities, assists students in completing their applications and coordinates activities to increase faculty networking and student/faculty awareness of OSSI. She works closely with IBP's project managers and regional specialist team to coordinate recruitment and outreach and plays a leading role in designing and creating IBP materials. Additionally, she contributes to grant writing and project development at IBP and serves as IBP's web developer.

Detrick has a Bachelor of Science in environmental studies from Mount Holyoke College and a Master of Science in geography from Penn State University.

### Marsha Cole

Louisiana State University



Marsha Cole is a doctoral candidate in the Louisiana State University's Department of Chemistry, scheduled to graduate in May 2012.

Despite her disadvantaged background, she has become an esteemed student that graduated with honors from a magnet high school in 3.5 years, attained eight national recognitions for her accomplishments as both an undergraduate and graduate student and is currently a NASA/ UNCFSP Harriet Jenkins Fellow and NASA Student Ambassador.

Cole graduated from Grambling State University's Department of Chemistry and continued into the LSU Ph.D. Chemistry program the following semester. Under the tutelage of her advisor, Dr. Isiah M. Warner, she has co-authored two papers in refereed journals and has followed in his footsteps in taking opportunities to incorporate initiatives that provide mentoring to young students via her membership in several professional and social organizations and as a NASA Student Ambassador.

She has also participated in a research experience at the Jet Propulsion Laboratory under Dr. Adrian Ponce via the Harriett G. Jenkins Mini-Research Award. While there, Cole investigated the effects of different germinants on the selective inhibition of germination processes that occurs within sporulating bacteria, namely *Clostridium* and *Bacillus* species, using fluorescence spectroscopy to monitor the presence of bacteria spores on contaminated surfaces and quantify sterility levels. The research's aim was to accomplish the missions of planetary protection in that both forward and backward contamination can be quantified and eliminated within sterility assurance levels.

Cole is a member of Alpha Kappa Alpha Sorority, Incorporated, Iota Sigma Pi, National Organization for the Professional Advancement of Black Chemists and Chemical Engineers, American Society of Microbiologists and the American Chemical Society.

### Ethan Brewer

The Ohio State University

Ethan Brewer is a senior undergraduate student in aeronautical and astronautical engineering at The Ohio State University, graduating in the spring of 2012. Growing up in a small town near Cleveland, he was influenced early on to pursue a career in aerospace.

While in high school, Brewer worked at a civil engineering company in Cleveland, where he experienced the field first-hand. Following his freshman year of college, he had an internship at NASA Glenn Research Center. Brewer has since interned at the NASA Langley Research Center and is currently employed as a student research assistant at the Aeronautics and Astronautics Research Lab at Ohio State.



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### Kody Ensley

Salish Kootenai College

Kody Ensley is a senior majoring in computer engineering at Salish Kootenai College. He completed a 16-week internship at NASA Johnson Space center in 2010 and returned for a 35-week internship in 2011.

In addition to working with the Lunar Electric Rovers on his first tour, he met Robonaut 2, the most dexterous humanoid robot in the world. For his second internship, Ensley worked exclusively with Robonaut 2. During his 35 weeks at Johnson Space Center, he was able to work on hardware and software that has gone to the International Space Station.

Ensley, who comes from the Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation of Pablo, Montana, plans to graduate in June of 2012 and then return to work at NASA.



### Denisse Aranda

Florida International University

Denisse Aranda is a research engineer at NASA Langley Research Center in Hampton, Virginia working on NASA's flight project IRVE 3, which is a flight test that uses an inflatable heat shield to slow down and protect itself as it enters the atmosphere at hypersonic speeds. Aranda graduated from Florida International University with a bachelor's in mechanical engineering and a minor in mathematics in May 2010.

As an undergraduate, she participated in a wide variety of NASA student programs across the country. In 2008, she participated in the NASA Undergraduate Student Research Program (USRP) at NASA Glenn Research Center in Cleveland. While there, she conducted research into high-temperature aerogels (the world's lowest density solid) as an insulative material for hypersonic, supersonic and space applications. She was also part of the NASA Space Academy at NASA Kennedy Space Center, where she instrumented and launched a weather balloon off Cape Canaveral.

In the summer of 2009, she obtained a position as a technical assistant to Mission Manager Bob Ess for NASA's high-profile flight project Ares IX. This project developed, manufactured and launched a rocket capable of reaching low earth orbit with an impressive GNC system and ingenious systems integration.

During her senior year, Aranda was nominated and selected by NASA Headquarters to be a NASA Student Ambassador, the highest honor for NASA Students. As an ambassador, she leads and facilitates discussions on current NASA events and research programs through participation in conferences, NASA recruitment efforts and educational outreach.

Currently, Aranda is a graduate co-op at NASA Langley Research Center and is working towards completing her graduate degree in material science engineering from Virginia Tech.



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### Ivy Jones

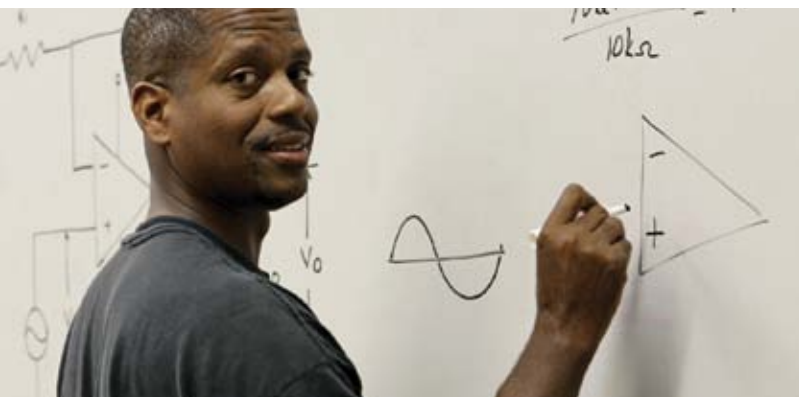
Hampton University

Ivy Jones is a physics doctoral student at Hampton University. Her research currently involves the synthesis and spectroscopic studies of solid-state laser crystal material development. Specifically, laser crystal fabrication and spectroscopic studies: transmission, absorption, emission, and room-and-low-temperature photoluminescence transient decay measurements of rare-earth ion doped low phonon energy halide host material for eye-safe laser applications.



## BIOGRAPHIES

# Workshop Presenters, Session Panelists AND Session Speakers



### Adrian Gardner

*Chief Information Officer  
Director of Information Technology  
and Communications Directorate  
NASA Goddard Space Flight Center*



Adrian R. Gardner's federal career is distinguished by more than 20 years of federal service enabling mission capability and readiness within the scientific and defense-related sectors in an innovative and secure manner. Gardner was the recipient of 2005 Federal 100 award, which honors individuals from government, industry and academia whose ideas and accomplishments had the greatest impact in shaping the missions, solutions and results achieved by the government information technology community.

Gardner is a member of the Senior Executive Service and currently serves as the director of the Information Technology and Communications Directorate (ITCD) and chief information officer (CIO) for the Goddard Space Flight Center. As such, he has the responsibility, authority and accountability for ensuring that Goddard's information assets are acquired and managed consistent with agency and federal policies and procedures, and legislation; and that the center's Information Resource Management (IRM) strategy is aligned with NASA's vision, mission and strategic goals.

Other recent IT leadership positions Gardner has held include:

- Chair of POC Working Group for DATA.GOV, May '10 to present
- Chief Information Officer for the National Weather Service, Jan. '07 to Feb. '10
- Deputy Associate CIO for IT Reform, Department of Energy, Oct. '06 to Jan. '07
- Deputy Associate CIO for Cyber Security, Department of Energy, Sep. '05 to Sep. '06

Also, from January 2004 to September 2005, Gardner led the Department's Cyber Security Program through a major expansion in size and scope, incorporating many new missions and security initiatives.

Gardner is a doctoral candidate at the University of Southern California, School of Public Policy and Planning, where he holds a masters degree in public administration. He also holds a Master of Science degree in environmental studies from Hood College and a Bachelor of Science in biological science and ecology from the esteemed Tuskegee Institute. Gardner serves on the board of the District of Columbia Urban League and is a volunteer and mentor to several academic and youth programs.

An Air Force veteran, Gardner was commissioned as a launch control officer in 1986 and served with distinction until he separated in 1989 and was honorably discharged in 1994. He received the Air Force Achievement Medal in 1987.

## Jane Datta

*Director of Workforce Planning*  
NASA Headquarters

Since 2009, Jane Datta has been director of workforce planning at the National Aeronautics and Space Administration (NASA) headquartered in Washington D.C.

As head of workforce planning at the Agency, she integrates workforce forecasting and analysis with strategic and budget planning activities, and coordinates workforce planning processes, practices and systems across the Agency's 10 field centers. Prior to joining NASA in 2007, Datta was an associate with Booz Allen Hamilton, focused on strategic workforce planning, and held roles in a variety of human resources disciplines at United Technologies Corporation.

Datta has an M.M. (MBA) from the Kellogg Graduate School of Management at Northwestern University and a B.A. from Yale University.



## David Weaver

*Associate Administrator for the Office of Communications*  
NASA

David Weaver became NASA's associate administrator for the Office of Communications on July 18, 2010. Weaver is a senior public administration professional with 25 years of experience in government, politics, media relations and public policy.

At NASA, Weaver directs internal and external communications for the agency and serves as a senior advisor to NASA leadership. He is responsible for managing an agency-wide staff of 350 that implements all aspects of NASA's external and internal communications. Under Weaver's direction, NASA's Office of Communications also produces content for the agency's Internet homepage and NASA Television; prepares and distributes print and broadcast news releases, brochures, and speeches for the NASA administrator and deputy administrator; makes video and photographic records of NASA mission activities and special events; and drafts internal publications.

Immediately prior to coming to NASA, Weaver was the chief of staff to U.S. Rep. Chris Van Hollen, D-Md., where he oversaw the congressman's personal and district office staff and budget. He ran the office's legislative, communications, scheduling and constituent services operations and served as a senior adviser to Van Hollen, who was a member of the House's leadership.

Weaver earned a Bachelor of Arts degree in government and politics from the University of Maryland.



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## Brenda Manuel

*Associate Administrator for Diversity and Equal Opportunity*  
NASA

Brenda R. Manuel, NASA's associate administrator for diversity and equal opportunity, is responsible for developing and directing the agency's equal opportunity, civil rights compliance, and diversity strategies, programs and processes. In this capacity, she establishes agency-wide policies on diversity and equal opportunity to ensure statutory, regulatory and fiduciary compliance with internal and external equal opportunity laws; and ensures consistency of approach to improve functional performance across the agency and create an open and inclusive workplace.

Since her return to NASA in October 2006, Manuel has focused on carrying out her responsibilities through the development and implementation of multifaceted, comprehensive and proactive agency-wide programs and initiatives such as the Conflict Management Program, the Agency Diversity Framework and an integrated system for equal opportunity research and risk analysis. She has also implemented a fully realized external civil rights enforcement program, including an unprecedented Title IX onsite compliance review program for science, technology, engineering and mathematics (STEM), recognized by the Department of Justice Civil Rights Division as a model for other federal agencies. The Title IX program, and other NASA external civil rights programs, e.g., Title VI, are designed to provide NASA grant recipients with a balanced approach to compliance, including meaningful technical assistance, program assessments and identification of promising practices.

She holds a bachelor's degree in business management from Howard University, Washington, D.C., and juris doctor degree from the George Washington University Law Center, Washington, D.C., and is a member of the Pennsylvania and District of Columbia bars.



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## Harold Stinger

*Chairman of the Board*  
Stinger Ghaffarian Technologies

Harold Stinger is an accomplished engineering professional and entrepreneur who has more than 40 years of experience in systems engineering, specializing in satellite telemetry reduction systems, photographic laboratory processors and communications equipment.

Prior to founding SGT in 1994, Stinger held progressively responsible management positions in the engineering field with companies that included Computer Sciences Corporation, Lockheed Martin and Swales Aerospace. He has held key positions on numerous NASA missions, beginning in the late 1960s, and continues to provide guidance and insight to SGT's engineers supporting NASA projects underway today.

He served as an electronics technician in the U.S. Air Force from 1963 to 1967. He later attended The University of Oklahoma, Howard University and Capitol College in Kensington, Maryland, where he majored in electronics engineering. Stinger holds a Bachelor of Science degree in engineering and an honorary doctorate from Capitol College.

Stinger is the former president of the Maryland Space Business Roundtable. He is also on the board of trustees at Capitol College in Laurel, Maryland and is chairman of the board of directors at the Washington Bible College/Capitol Bible Seminary in Lanham,



Maryland. He previously served on NASA's Minority Business Resource Advisory Committee for four years. He serves in the Maryland DLLR as director of the aerospace sector for the Maryland Governor's Workforce Investment Board, and in the Maryland Department of Economic Development as commissioner for science and technology. He is also chairman of the board for the Maryland Science, Exploration and Education Center (SEEC), which is a non-profit organization that is in the process of building a new visitors/ education center at NASA Goddard.

### Marc Detampel

*Partner*

Accenture Management Consulting



Marc Detampel is a partner within Accenture's Management Consulting group. He leads the talent and organization performance practice for the communications and high tech industry in the Central and Atlantic regions, which provides an integrated suite of assets involving organizational design, recruiting, leadership development, performance management, training, onboarding, career pathing, rewards and incentives and collaboration.

Detampel has led many engagements in the areas of talent management, leadership development and strategic change management with many of the world's largest companies. His experience also crosses several industries including energy, A&D, consumer and industrial markets, public services and financial services.

He has written numerous articles on human capital and organizational effectiveness and has been featured in CNN, Business Finance Magazine and others. Detampel has authored whitepapers on such topics as "Winning the Reheating War for Talent" and "What CIOs Can Do to Confront the Talent Shortage."

### Matthew Dobbin

*Manager, Talent & Organizational Performance Group*

Accenture Management Consulting



Matthew Dobbin is a manager based in New York City in Accenture's Management Consulting practice specializing in talent strategy, talent management and organizational change management. As a member of Accenture's think tank, Workforce of the Future, Dobbin recently completed a paper on the future of global talent sourcing and is currently researching a paper on talent production and multiplication.

In terms of project experience, Dobbin has worked in various areas of Accenture's Talent & Organization Performance (T&OP) practice, primarily in the communications, high tech and retail sectors and in a variety of geographies including Canada, the United States and Asia.

Outside of project work, he is a lecturer at the Queen's School of Business in Kingston on the topics of economics of mass collaboration and social media; attracting and retaining the net generation; and innovation and creative thinking.

### Ben Oni, Ph.D.

*Professor of Electrical Engineering*  
Tuskegee University



Ben O. Oni, Ph.D., is a professor of electrical engineering at Tuskegee University, where he teaches and conducts research in electrical power systems and renewable energies.

Oni has served as a member of technical staff at Bell Laboratory; visiting professor at the General Electric R&D unit and Cornell University, respectively; and as a NASA Administrator Fellow (NAFP) at the NASA Marshall Space Flight Center. Additionally, he served as program manager at NASA HQ and as project manager at NASA Ames Research Center, CA. He has also served as dean of the College of Engineering, Architecture and Physical Sciences at Tuskegee University.

He received the Bachelor of Science degree from Western Michigan University, his Master of Science degree from Wayne State University and doctorate from the University of Missouri. Oni is a member of American Society for Engineering Educators (ASEE) and a senior member of the Institute of Electrical and Electronics Engineers (IEEE).

### Steve Tiufekchiev

*Chief Strategy Officer*  
RECSOLU



After 20 years of working in the university relations space, Steve Tiufekchiev asked a question. "Why is it that so little technology has found its way into university recruiting?" Campus teams were still using the same outdated tools and processes from 20 years ago and this just didn't sit well with him. So, building on his previous experience with CRM, he decided to combine his inner geek with his passion for university recruiting. The resulting combination landed him at RECSOLU, where he now helps drive the development of cutting-edge solutions for university focused talent acquisition.

Tiufekchiev joined RECSOLU in 2009, and he is currently the chief strategy officer. In this role, he guides RECSOLU's development of technology and professional services solutions, enabling talent acquisition teams to gain significant efficiencies in knowledge management and metrics based decision capabilities. He's focused RECSOLU on two primary areas of technology development: reducing recruiter administrative time and increasing metrics through easily accessible data.

Prior to RECSOLU, he led and managed college recruiting programs at SRA, Deloitte, CompuCom and EDS. This exceptionally deep knowledge of all facets of college recruiting enable him to keep RECSOLU laser focused on developing solutions that resonate with talent acquisition professionals.

### **David Beede, Ph.D.**

*Senior Economics and Statistical Researcher*  
U.S. Department of Commerce's  
Economics and Statistics Administration



David Beede, Ph.D., is a senior economics and statistical researcher and team leader with 25 years of experience in both the public and private sectors. His professional interests include empirical analysis, applied econometrics and microeconomics.

At the U.S. Department of Commerce's Economics and Statistics Administration, Beede regularly conducts complex data analysis, authors research and policy papers, and briefs senior officials from a number of federal agencies and the White House. He also serves as a technical advisor to the Secretary of Commerce as a member of the board of Pension Benefit Guaranty Corporation (PBGC).

Beede has a doctorate in economics from Columbia University and an A.B. in economics from Cornell University.

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### **David Langdon**

*Senior Economist*  
Office of the Chief Economist, U.S. Department of Commerce's  
Economics and Statistics Administration

David Langdon is a senior economist in the Office of the Chief Economist within the U.S. Department of Commerce's Economics and Statistics Administration (ESA). He joined ESA last February after working five years in the U.S. Department of Labor's Office of the Chief Economist and Office of the Assistant Secretary for Policy.

Previously, Langdon worked seven years in the U.S. Bureau of Labor Statistics' Current Employment Statistics program. Langdon has extensive experience conducting data analysis for senior federal officials on the topics across the fields of labor economics and macroeconomics. His most recent long-term research projects have been focused on the STEM labor market and intellectual property-intensive industries.

Langdon received a B.A. in economics from the University of North Carolina at Chapel Hill and a M.A. in applied economics from Johns Hopkins University. He also was a recipient of a Fulbright grant for graduate studies at the Universidad de Sevilla, Spain, where he spent several years as a student and research assistant.

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### **Ernestine Psalmonds, Ph.D.**

*Senior Program Officer,*  
*Policy and Global Affairs Division*  
National Academies



Ernestine Psalmonds, Ph.D., is a senior program officer in the Policy and Global Affairs Division, National Academies, and visiting scholar from the National Science Foundation (NSF), where she managed a \$96 million program.

She served as study director for a 2009 Academies report entitled "Partnerships for Emerging Research Institutions" and is currently co-study director of a congressionally mandated study focused on the underrepresentation of minorities in science and engineering.

She has represented the NSF on interagency science and engineering workforce initiatives including the Education and Workforce Development Subgroup of the National Science and Technology Council and consultation committee for the Department of Education Jacob K. Javits Fellowship Program.

Psalmonds served on the board of directors for Oak Ridge Associated Universities and is a member of the North Carolina Board for Science and Technology, NASA Minority Business Resource Advisory Council and the executive committee of the Council on Research Policy and Graduate Education of the Association of Public and Land-Grant Universities.

She has held administrative positions at the Georgia Institute of Technology and Georgia State University, and she became the first vice chancellor for research at North Carolina A&T State University. Psalmonds served as principal investigator for projects funded by the National Science Foundation, National Institutes of Health, Department of Agriculture, Martin Marietta Energy Systems, Caterpillar Foundation, Environmental Protection Agency and Department of Energy.

She has made numerous presentations and is the co-author of copyrights to two software systems. She was honored by the Republic of Senegal through acceptance into the Order of the Lion. Psalmonds received her baccalaureate and master's degree in education from Tuskegee University and Ph.D. in higher education leadership with a concentration in management information systems from Georgia State University.

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**Lynne Weston**

*Executive Director,  
Higher Education for Learning Problems  
Marshall University*



Lynne Weston received her undergraduate degree in special education and elementary education from Marshall University. Her master's degree in education was obtained from the University of North Carolina. She later returned to Marshall University and became certified in learning disabilities. She holds an ED.S. degree in higher education administration/leadership studies.

Weston has taught many grades in the public school system but loves working most with adult learners. She has worked the M.U. H.E.L.P. program for the past 25 years and has enjoyed being part of the growth process.

**Clark Shingledecker, Ph.D.**

*Research Professor  
Wright State University  
Director  
Ohio's STEM Ability Alliance*



Clark Shingledecker, Ph.D., is a human factors psychologist and a research professor at Wright State University. His current work centers on a multidisciplinary initiative to increase the representation of persons with disabilities in STEM fields. He serves as director of Ohio's STEM Ability Alliance (an NSF Regional Alliance on Disability Education supporting college students) in the Dayton region and is conducting a related research program to develop STEM college preparation webcasts and internet resources for middle school students with disabilities. He also teaches and advises graduate fellows in an NSF Integrated Graduate Education and Research Training (IGERT) program focused on assistive technology and conducts sponsored research on advanced aircraft displays for air traffic control data communications.

Shingledecker has 30 years of research and development experience in university, government and industry settings. His research interests include alternative/unconventional human-systems interfaces, aviation human factors and STEM education. He has held prior positions at the University of Nottingham, the Air Force Research Laboratory and in industry, where he conducted research on non-visual travel skill; measures of human performance and mental workload; cognitive test batteries; and human factors in military, aviation and air traffic control systems.

**William B. Harvey, Ph.D.**

*Dean, School of Education  
North Carolina A&T State University*



William B. Harvey, Ph.D., brings four decades of experience in the academic and non-profit sectors to his position as dean of the School of Education at North Carolina A&T State University. A distinguished researcher and administrator, Harvey's scholarly activity has been focused on the cultural and social factors that affect underserved populations, with particular emphasis on college and university settings.

His extensive list of publications includes books, book chapters, refereed journal articles and professional and technical reviews. Among his recent scholarly contributions are a commissioned paper for the Kirwan Institute for the Study of Race and Ethnicity at The Ohio State University entitled, *Higher Education and Diversity: Ethical and Practical Responsibility in the Academy*, and two co-edited volumes, *Footprints to Success in the Academy and Perspectives on Change in the American System of Higher Education*, which were published in both English and Chinese by the Ocean University Press of China. Harvey serves as an executive editor of the *Negro Education Review*; associate editor of the *Journal of Multicultural Learning and Teaching*; and as an editorial board member for the *Journal of Diversity in Higher Education*, the *Journal of the Professoriate* and *Effective Practices for Academic Leaders*.

Harvey's previous administrative positions include appointments as the provost/vice president for academic and student affairs at Rosemont College; vice president for diversity and equity at the University of Virginia, where he directed the Virginia-North Carolina Alliance for Minority Participation and secured a \$5 million grant from the National Science Foundation; vice president and director of the Center for Advance of Racial and Ethnic Equity at the American Council on Education; and dean of the School of Education and deputy chancellor for education partnerships at the University of Wisconsin-Milwaukee. He has also served as the chief executive officer of the International Reading Association.

In addition to having served as chair of the Education Advisory Committee of the National Aeronautics and Space Administration, Harvey has been a visiting associate at the Smithsonian Institution; an American Council on Education fellow; an Institute for Educational Leadership fellow; and a summer research fellow at the Center for Advance Study in the Behavioral Sciences at Stanford University. He is the founding president of the National Association for Diversity Officers in Higher Education and a member of the board of the American Association for Blacks in Higher Education and the National Council for Research on Women. He has previously served on the board of the Yale-Howard Center on Health Disparities; the W.E.B. DuBois Scholars Program at Princeton University; the Study of New Scholars Project at Harvard University; the Site Support for Schools Project at Johns Hopkins University; the Martin Luther King Living History and Public Policy Center; and the board of visitors at the University of Pittsburgh School of Education.

Harvey received a bachelor's degree in English from West Chester University, a master's degree in social and philosophical foundations and doctoral degree in anthropology of education from Rutgers University.

## Larry Williams

*Vice President for Strategic Relations*  
Space Explorations Technologies (SpaceX)

Larry Williams' responsibilities include managing governmental affairs and developing the base of international customers and strategic partners. Prior to SpaceX, he served as senior vice president for business development for the satellite communications company ICO Global Communications and vice president of international and government affairs for Teledesic Corporation. His government experience includes having served as a special assistant to the administrator of the U.S. National Telecommunications and Information Administration (NTIA), a member of the Presidential transition team for the White House Office of Science and Technology Policy and a legislative assistant to U.S. Rep. Ray Thornton on the House Committee on Science, Space and Technology.

He is currently a member of the U.S. Council of Foreign Relations and has served on the board of directors of the United States Telecommunications Training Institute (USTTI) and the Satellite Industry Association (SIA). He received his bachelor's degree from the University of Colorado and Masters in Business Administration from Georgetown University's International Executive MBA program.



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## Brandon Jones, Ph.D.

*Fellowship Programs Manager*  
U.S. EPA's National Center for Environmental Research

Brandon Jones, Ph.D., is the program manager for EPA's higher education training efforts including the STAR Graduate and GRO Undergraduate Fellowship programs, which have supported more than 1,600 students since its inception in 1995.

Since 2003, Jones has held several positions at EPA's National Center for Environmental Research (NCER) including ecological research team member, global ecology program manager and most recently as the NCER liaison for EPA's Office of Research and Development's Sustainable Ecosystem Services program.

He is the co-lead for the inter-agency workgroup for STEM graduate fellowships and is also serving as the EPA representative for the Office of Science and Technology Policy's (OSTP) STEM Strategic Plan Task Force. In conjunction with the STEM Inventory Task Force, this high-level group is creating a five-year strategic plan for federal STEM education efforts.

Jones has served as an adjunct professor of environmental science at Trinity University in Washington D.C. He is also an active mentor in several programs that focus on support and professional development for underrepresented students interested in the sciences.

Jones received a Bachelor of Arts in biology from Lincoln University (PA - 1991) and a Master of Science (1994) and doctorate (2003) in marine biology and biochemistry from the University of Delaware's College of Earth, Ocean and Environment (CEOE).

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## Gisèle Muller-Parker, Ph.D.

*Program Director for the Graduate Research Fellowship Program*  
National Science Foundation

Gisèle Muller-Parker, Ph.D., joined NSF as program director for the Graduate Research Fellowship Program in October 2008.

From 2004-2006, she served as associate program director at NSF in GEO, Division of Ocean Sciences, Ocean Education Program, as a rotator from Western Washington University.

She was a professor of biology at Western Washington University from 1990-2010, where she taught courses in marine biology, symbiosis, and botany and served as the assistant director of Shannon Point Marine Center. She received her Bachelor of Science in biology from SUNY at Stony Brook, her Master of Science in marine studies from the University of Delaware and her doctorate in biology from UCLA.

She has served on the editorial boards of the Biological Bulletin, Coral Reefs, and the Journal of Phycology. Her research on algal symbiosis in sea anemones and corals has engaged many undergraduate and graduate students. Her current research focuses on the benefits of algal symbiosis to temperate intertidal sea anemones on the Pacific coast.



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## Ray Ali, Ed.D.

*National Education Program Leader*  
National Institute of Food and Agriculture  
U.S. Department of Agriculture

Ray Ali, Ed.D., serves as the national education program leader at the National Institute of Food and Agriculture (NIFA) providing leadership to the multicultural scholars, national needs fellows and NIFA fellowships grant programs.

Prior to joining the USDA-NIFA, he served as the associate director for field operations of Virginia Cooperative Extension at Virginia Tech, where he was also the diversity coordinator for the College of Agriculture and Life Sciences. In addition, he was the inaugural science and financial affairs teacher at the first public K-12 charter school in Pittsburgh. With the re-designation of West Virginia State University as an 1890 Land-Grant Institution, Ali joined its Cooperative Extension Program as an associate director and department head, where he led 4-H, youth, family, adult and community education initiatives.

Ali received a Bachelor of Science in biology with minors in chemistry, history and philosophy of science and a Masters of Arts in teaching - secondary science education from the University of Pittsburgh. He obtained an Ed.D. in higher education leadership from Marshall University.

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**Eugene M. DeLoatch, Ph.D.**

*Professor and Founding Dean, School of Engineering  
Morgan State University*

Eugene M. DeLoatch, Ph.D. is professor and founding dean of the Clarence M. Mitchell, Jr. School of Engineering at Morgan State University in Baltimore.

Prior to beginning his service at Morgan in 1984, DeLoatch completed 24 years of affiliation with Howard University in Washington, D.C. During that time, he led a department that granted baccalaureate degrees to more African American engineers than any school in the country.

DeLoatch holds B.S. degrees in mathematics and electrical engineering (E.E.) from Tougaloo College and Lafayette College, respectively. In addition, he holds the M.S.E.E. and Ph.D. in bioengineering from the New York Polytechnic University. In recognition of his many years of effective service to engineering education, DeLoatch was awarded Honorary Doctorates by Lafayette College (PA) and Binghamton University (NY) in 1988 and 2004, respectively.

DeLoatch had the distinction of being elected and served as president of the American Society of Engineering Education (ASEE), the world's most populous and prestigious engineering organization, during the ASEE's 2002-2003 activity year. Since its founding in 1893, DeLoatch is the only African American to have been elected to the position of president of the ASEE. He is now a fellow and life member of the Society.

Among his additional activities he is: a member of the Maryland's governor-appointed board of directors of the state's Technology and Economic Development Corporation (TEDCO); an associate editor of the ASEE Journal of Engineering Education; chairman of the Council of Dean's of Engineering of the Historically Black College and Universities; and co-founder of the Annual Black Engineer of the Year Awards Program.

**Timothy Olson, Ph.D.**

*Chairman, Division of Sciences  
Salish Kootenai College*

Timothy Olson, Ph.D., is chairman of the Division of Sciences at Salish Kootenai College, a four-year tribal college on the Flathead Indian Reservation in northwest Montana. He teaches computer engineering, physics and astronomy and leads the four STEM academic departments of the division.



Since 2004, Olson has engaged tribal college engineering and science students in NASA flight missions. He is also a co-investigator on the MAHLI/MARDI/Mastcam instrument team for the NASA Mars Science Laboratory mission. He led the SKC Wide Field Camera team, which flew two cameras on NASA High Altitude Student Platform Flight #5 in August 2011, and he leads the SKC CubeSat project under development for launch in Earth orbit by 2014.

He is the principal investigator for the NASA-funded project "Attracting Tribal College Students to NASA-focused STEM Careers Through Participation in Flight Missions."

**Ahsan Choudhuri, Ph.D.**

*Professor and Chair,  
Mechanical Engineering Department  
Director, Center for  
Space Exploration Technology  
University of Texas at El Paso*



Ahsan Choudhuri, Ph.D., is a professor and chair of the Mechanical Engineering department and director of the NASA Center for Space Exploration Technology Research (cSETR) at the University of Texas at El Paso (UTEP). He leads a department of more than 550 graduate and undergraduate students.

In past years, the Mechanical Engineering department has had more than \$8 million in funded research, including the cSETR, a Group 5 NASA University Research Center. Under his direction, the cSETR performs frontier research in aerospace and energy engineering, while training underrepresented minorities in the fields of science, technology, engineering and mathematics (STEM). cSETR supports an average of 60 students.

Choudhuri has received numerous awards and recognitions including the Faculty Award for Research Innovation from NASA and an Outstanding Leadership Award from UTEP. In addition, he has published 90 peer-reviewed articles and has supervised 40 graduate students. Many of these students have been recruited to the job market obtaining positions within academia, federal agencies, and the aerospace and defense industries.

Choudhuri received a Bachelor of Science in engineering from Khulna University of Engineering and Technology. He also holds a Master of Science and doctorate from the University of Oklahoma School of Aerospace and Mechanical Engineering.



# OSSI Team Messages

## Mabel Jones Matthews, Ed.D.

Manager, Higher Education Program  
NASA Office of Education



The One Stop Shopping Initiative (OSSI) for NASA internship, fellowship, and scholarship opportunities is an agency-wide collaboration that provides centralized and standardized processes for reaching undergraduate and graduate students, from all institutions of higher education (IHE), who seek to engage in NASA mission-related research, education, and space exploration.

OSSI processes include student:

- Recruitment, retention and development;
- Selection, placement and mentoring;
- Workforce entry; and
- Longitudinal study.

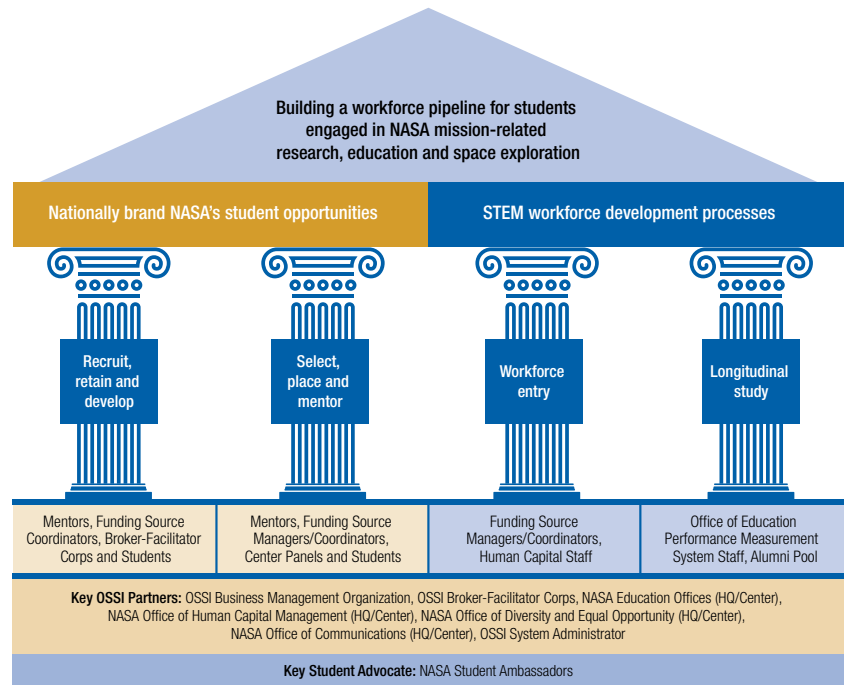
The OSSI LaunchPad at [intern.nasa.gov](http://intern.nasa.gov) provides students and other stakeholders with a one stop shopping experience and easy access to the:

- Integrated Student Application, SOLAR
- NASA Student Ambassadors Virtual Community
- Student Communication Module
- Student Domestic and International STEM Outreach Module
- Online NASA-related Student Research Journal
- Modules that include student features stories and videos; STEM awareness events and opportunities
- Student driven NASA-intern and fellow social networks
- Module that allows interns, fellows and alumni to continuously update their contact information

The over-arching mission of the Initiative is to provide NASA-related competency-building research and education opportunities that prepare highly qualified undergraduate and graduate students for employment in the science, technology, engineering, and mathematics (STEM) workforce, including NASA, industry and academia. To ensure expected performance outcomes, key OSSI partners: NASA Headquarters and Center Offices of Education, Human Capital, Diversity and Equal Opportunities; Mission Directorates; the OSSI System Administrator-Information Technology and Communication Division, GSFC; the OSSI Business Manager-Ohio Aerospace Institute; and the OSSI Broker-Facilitator Corps that includes the American Indian Higher Education Consortium, Hispanic College Fund, Institute for Broadening Participation and UNCF Special Programs Corporation work together to help strengthen the development, management and analysis of NASA's workforce pipeline.

**“It is my distinct honor and privilege to serve as lead for OSSI. I wish to extend my thanks to the energetic team members that shaped the OSSI Strategic Model; their efforts have been above and beyond the call of duty. There is much yet to be done, but we look forward to moving forward collaboratively as we address new phases of OSSI’s development.”**

### One Stop Shopping Initiative (OSSI) for NASA Internship, Fellowship and Scholarship Opportunities Strategic Model



**Carl S. Person, Ph.D.**

*Manager, Minority University  
Research and Education Program (MUREP)  
NASA*



In my role as the MUREP Project Manager, I am excited to be a part of launching a new “culture” at NASA: the One Stop Shopping Initiative (OSSI). As NASA and the nation strive to increase the participation of underrepresented and underserved students in STEM disciplines and careers, OSSI levels the playing field for all qualified students by centralizing and standardizing the process for recruitment and selection. OSSI’s Broker-Facilitator Corps will help to ensure the increased participation of STEM students from all institutions with a special emphasis on students from minority institutions. This Stakeholders’ Summit will provide us an opportunity to become more knowledgeable about OSSI and what we as individuals or organizations bring to the table to support this effort. The collaborative relationships established and driven by the mission of OSSI will strengthen the development, management and analysis of NASA’s workforce pipeline.

May you all have a successful and enjoyable experience this week as we prepare to “break new ground” in the development of NASA and the nation’s future STEM workforce.

**Ann O. Heyward**

*Vice President, Research and  
Educational Programs  
Ohio Aerospace Institute*



The Ohio Aerospace Institute (OAI) is very proud to support NASA’s One Stop Shopping Initiative in the role of Business Manager.

OAI’s mission is enhancing our partners’ aerospace competitiveness through research and technology development, workforce preparedness, and engagement with global networks for innovation and advocacy. We are excited by the opportunity to collaborate with such outstanding strategic partners in NASA and the OSSI Broker-Facilitator Corps. We are especially proud to play a role in broadening access - for as many students as possible from as many different institutions as possible - to the outstanding student opportunities for internships and fellowships in NASA.

**Diane D. DeTroye**

*Manager  
National Space Grant College  
and Fellowship Program and  
Experimental Program to  
Stimulate Competitive Research*



The One Stop Shopping Initiative (OSSI) will provide students from around the country easier access to NASA internship, fellowship, and scholarship opportunities. The integrated student application available through the Student Online Application for Recruiting (SOLAR) Interns, Fellows, and Scholars system plays a key role in connecting students to those available opportunities.

Beyond the benefits of a simplified, streamline application process, the OSSI brings together key aspects that will enable students to stay engaged with NASA throughout their academic career as they build the competencies necessary to prepare themselves for a career in science, technology, engineering, or mathematics (STEM). OSSI will significantly benefit the students from the 52 consortia of the National Space Grant College and Fellowship Program and the 28 jurisdictions of the Experimental Program to Stimulate Competitive Research, as well as all interested students, through the features and modules built into the system.

This Stakeholders’ Summit will benefit all of us through the development of a common understanding of the national STEM policy agenda, the NASA contributions to the solution, and the specific implementation of tools for the higher education community.

**Michele Wockenfuss**

*IT Project Manager  
NASA Goddard Space Flight Center*



It is a truly rewarding experience providing project management and systems development support for the creation and future enhancement of the One Stop Shopping Initiative on-line tool. Goddard Space Flight Center is truly honored to have been selected to develop and maintain this extraordinary system that has resulted in providing a central place for NASA interns to secure job opportunities. We look forward to a continued partnership with the Office of Education in furthering their vision with the use of new technologies. Our thanks go to the Office of Education for this great opportunity.

**Carrie Billy, J.D.**

*President and CEO*  
American Indian  
Higher Education Consortium



The nation's 36 Tribal Colleges and Universities (TCU), which collectively are the American Indian Higher Education Consortium (AIHEC), are pleased to be part of NASA's One Stop Shopping Initiative. As a member of the Broker-Facilitator Corps, AIHEC is providing the personal and social mechanisms to support communication and linkages between TCU students and faculty and NASA science, engineering, education and outreach personnel. This collaboration will enhance the education and career development of TCU students and increase the effectiveness of NASA education, research and workforce development programs. This innovative project should become a model for all federal agencies. We are confident that our collaborative efforts will encourage significantly increased student interest and participation in NASA science and careers.

**Ashanti Johnson, Ph.D.**

*Executive Director*  
Institute for Broadening Participation



The Institute for Broadening Participation (IBP) is supporting NASA OSSSI with extensive recruitment and retention efforts at Predominantly White Institutions (PWI) across the country. IBP is a non-profit organization created to design and implement strategies to increase access to STEM (science, technology, engineering and mathematics) education and careers for diverse underrepresented groups.

**Carlos Santiago, Ph.D.**

*Chief Executive Officer*  
Hispanic College Fund



The Hispanic College Fund is proud to be a Broker-Facilitator for NASA's One Stop Shopping Initiative (OSSSI). Our role is to support and engage students at Hispanic-Serving Institutions in NASA's higher education opportunities. Our contribution will increase the representation of students from underserved communities earning degrees in STEM, aerospace and education resulting in a robust and diverse workforce pipeline for NASA and the nation.

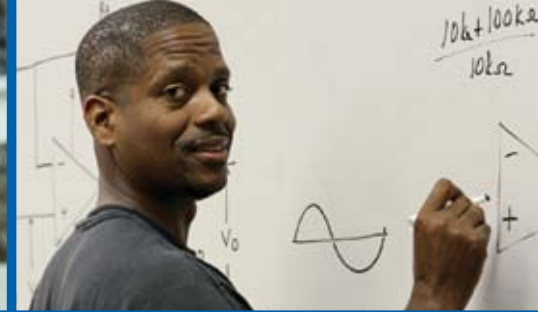
**Sonya L. Greene, Ph.D.**

*Director, Workforce Development*  
UNCF Special Programs  
Corporation (UNCFSP)



UNCF Special Programs Corporation (UNCFSP) serves as one of NASA's primary recruiting organizations (a.k.a. Broker-Facilitator) to Predominantly Black Institutions (including HBCUs) for internships, fellowships and scholarships as part of the new NASA One Stop Shopping Initiative (OSSSI). Through various grant programs and federal contracts, UNCFSP has built an extensive partnership network supporting federal agencies, international governments, non-governmental organizations, professional organizations and private industry. UNCFSP's minority constituents consist of Historically Black Colleges and Universities (HBCUs), Hispanic-Serving Institutions (HSIs), Tribal Colleges and Universities (TCUs) and Other Minority Institutions (OMIs).

UNCFSP is uniquely positioned to connect the diverse technical talent found in the Minority Institution (MI) community to the Federal Government. We serve as the portal to opportunity by using our experience to manage strategic partnerships with our constituents and customers that build capacity opportunities for our MIs.



## NASA ONE STOP SHOPPING INITIATIVE (OSSI) STRATEGIC PARTNERS

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James L. Stofan, Deputy Associate Administrator  
for Program Integration  
Mabel J. Matthews, OSSI Sponsor

### NASA Office of Human Capital Management

Jeri Buchholz, Assistant Administrator for  
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Krystal Hall, OSSI Liaison

### NASA Office of Diversity and Equal Opportunity

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Mervyn A. Jones, OSSI Liaison

### NASA Office of Communications

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Tony Springer, Education Lead

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### OSSI Center Administrators

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### OSSI System Administrator:

**Information Technology and Communication  
Division, NASA Goddard Space Flight Center**  
Michele E. Wockenfuss, Chief, PIMD

### OSSI Business Management Organization

#### Ohio Aerospace Institute

Ann Heyward, OSSI Business Manager, Principal Investigator

### OSSI Broker-Facilitator Corps

#### American Indian Higher Education Consortium (AIHEC)

Carrie Billy, Tribal Colleges and Universities (TCU),  
Principal Investigator

#### Hispanic College Fund (HCF)

Carlos Santiago, Hispanic Serving Institution (HSI),  
Principal Investigator

#### Institute for Broadening Participation (IBP)

Ashanti Johnson, Predominately White Institutions (PWI),  
Principal Investigator

#### UNCF Special Programs Corporation (UNCFSP)

Sonya Greene, Predominately Black Institutions,  
including HBCU (PBI) Principal Investigator



**NASA Education Stakeholders' Summit**  
**One Stop Shopping Initiative (OSSI)**  
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