National Aeronautics and Space Administration

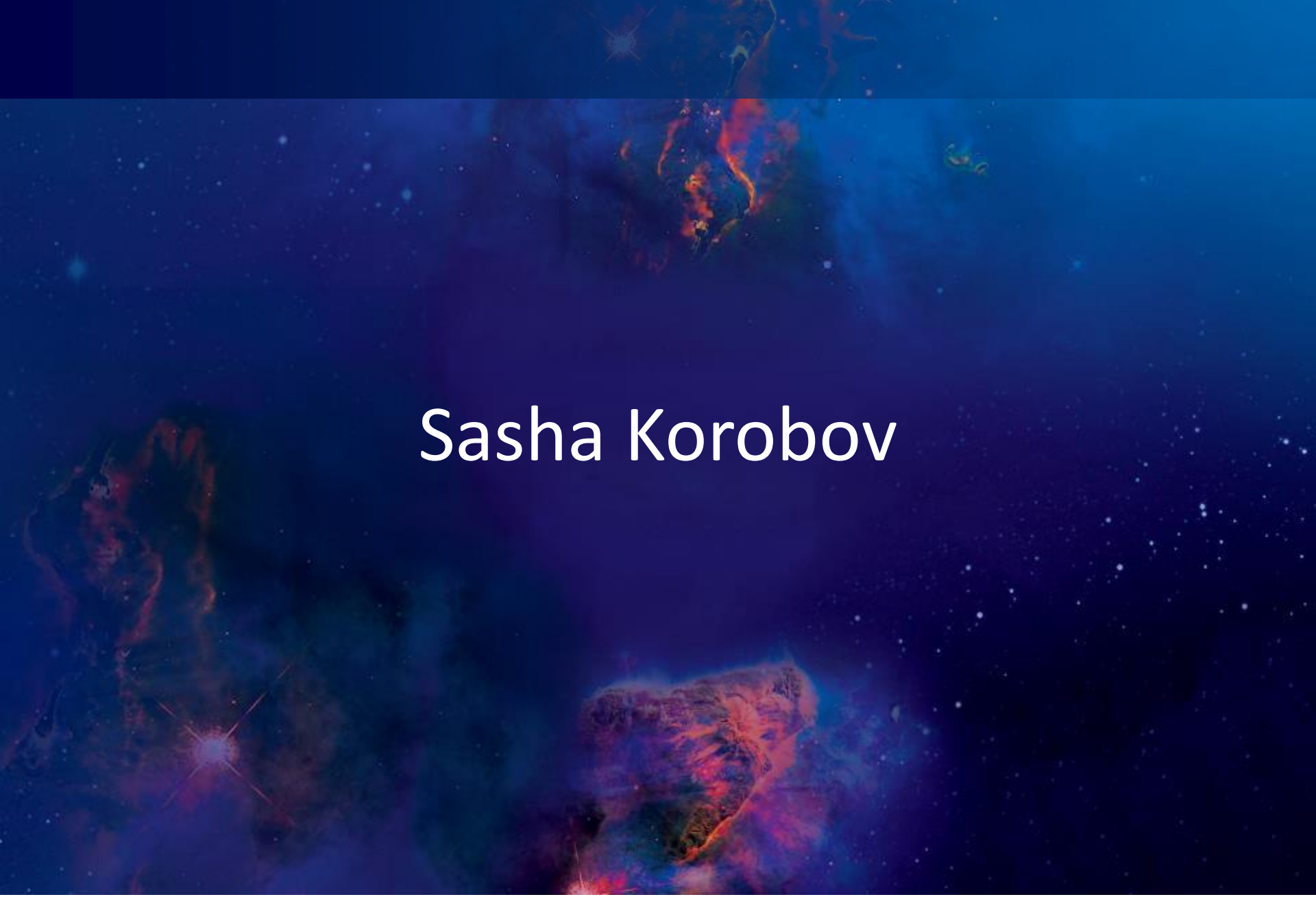
National Council of Space Grant Directors Meeting

October 2, 2015

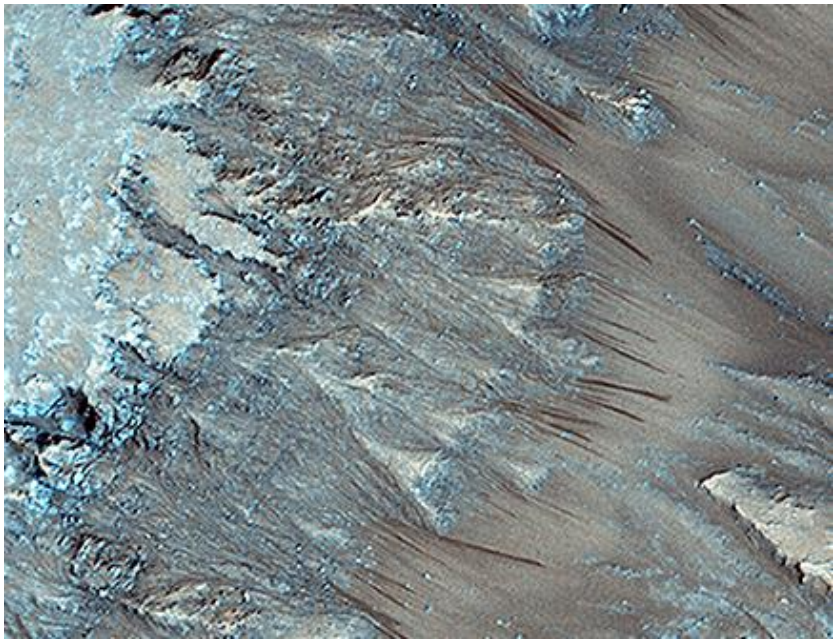
NASA Space Grant Program Office Staff

Overview

- NASA in the News
- Telling Your Story
- NIFS/Space Grant Update
- Data and Reporting
- Grants Monitoring and Management
- Success Stories


Sasha Korobov

NASA in the News



Mars Reconnaissance Orbiter (MRO)

- Findings yield strongest evidence yet that liquid water flows intermittently on present-day Mars
- HiRISE Imaging

New Horizons

- Pluto Fly-By – July 14, 2015
- Expected to explore ancient, icy mini-worlds a billion miles past Neptune's orbit

Meanwhile, Aboard the ISS…

Space Lettuce!

- NASA's plant experiment, called Veg-01, is being used to study the in-orbit function and performance of the plant growth facility and its rooting "pillows," which contain the seeds
- Planted and harvested after 33 days of growth period

#YearinSpace

- Just passed half-way point of Year in Space mission
- NASA astronaut Scott Kelly and cosmonaut Mikhail Kornienko in space for one year
- Researchers hope to better understand how the human body reacts and adapts to long-duration spaceflight

#JourneyToMars

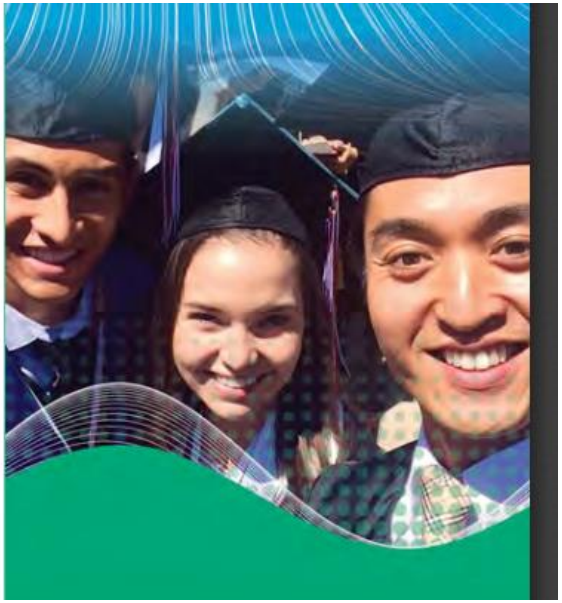
- Ongoing experiments on ISS and on Earth to determine necessary resources, protections and conditions for manned Martian missions

www.nasa.gov/journeytomars

- Images/Videos
- Space Launch System
- The Real Martians
- Orion Updates

Inspire Engage, Educate, Employ.

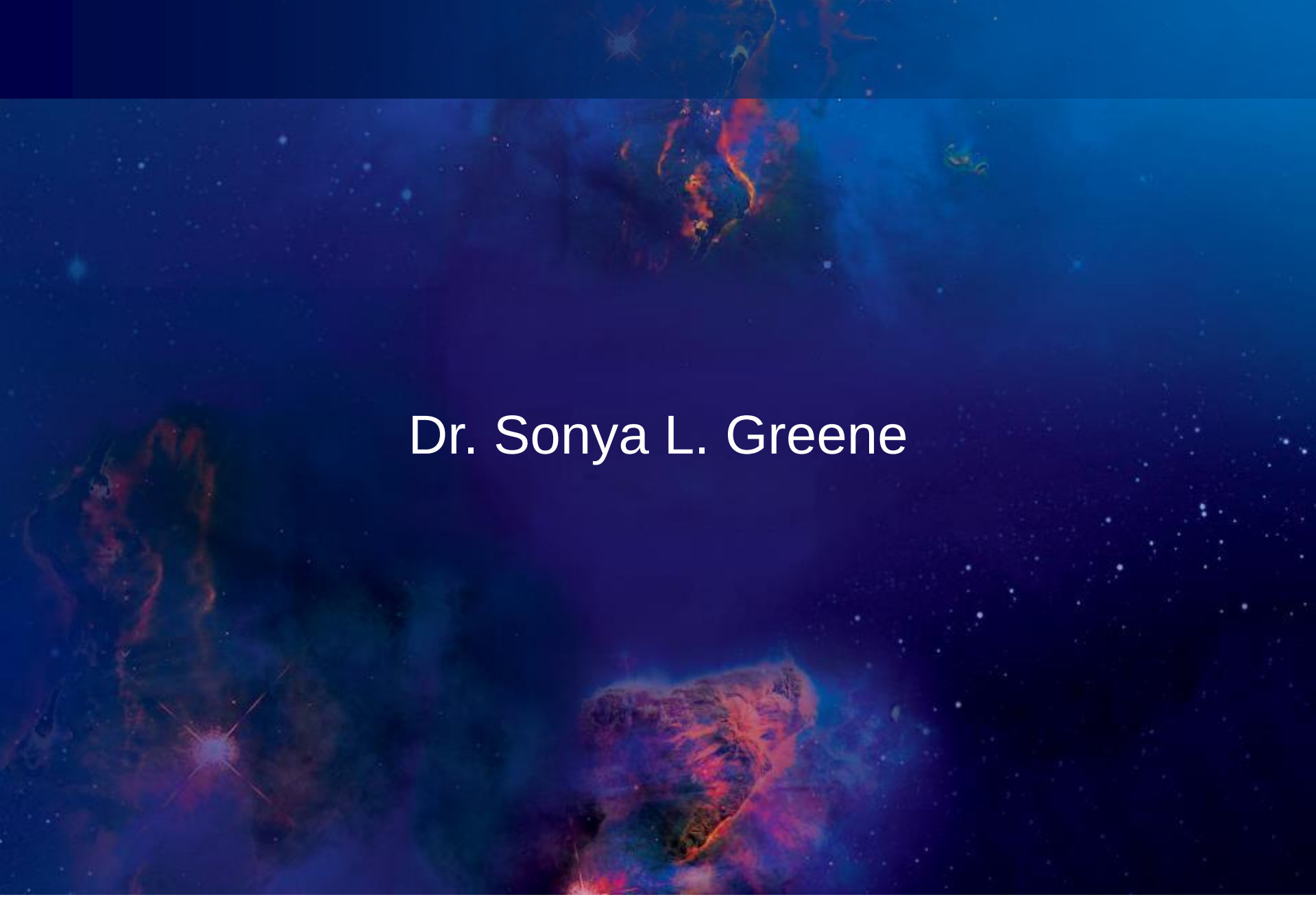
Telling Your Story



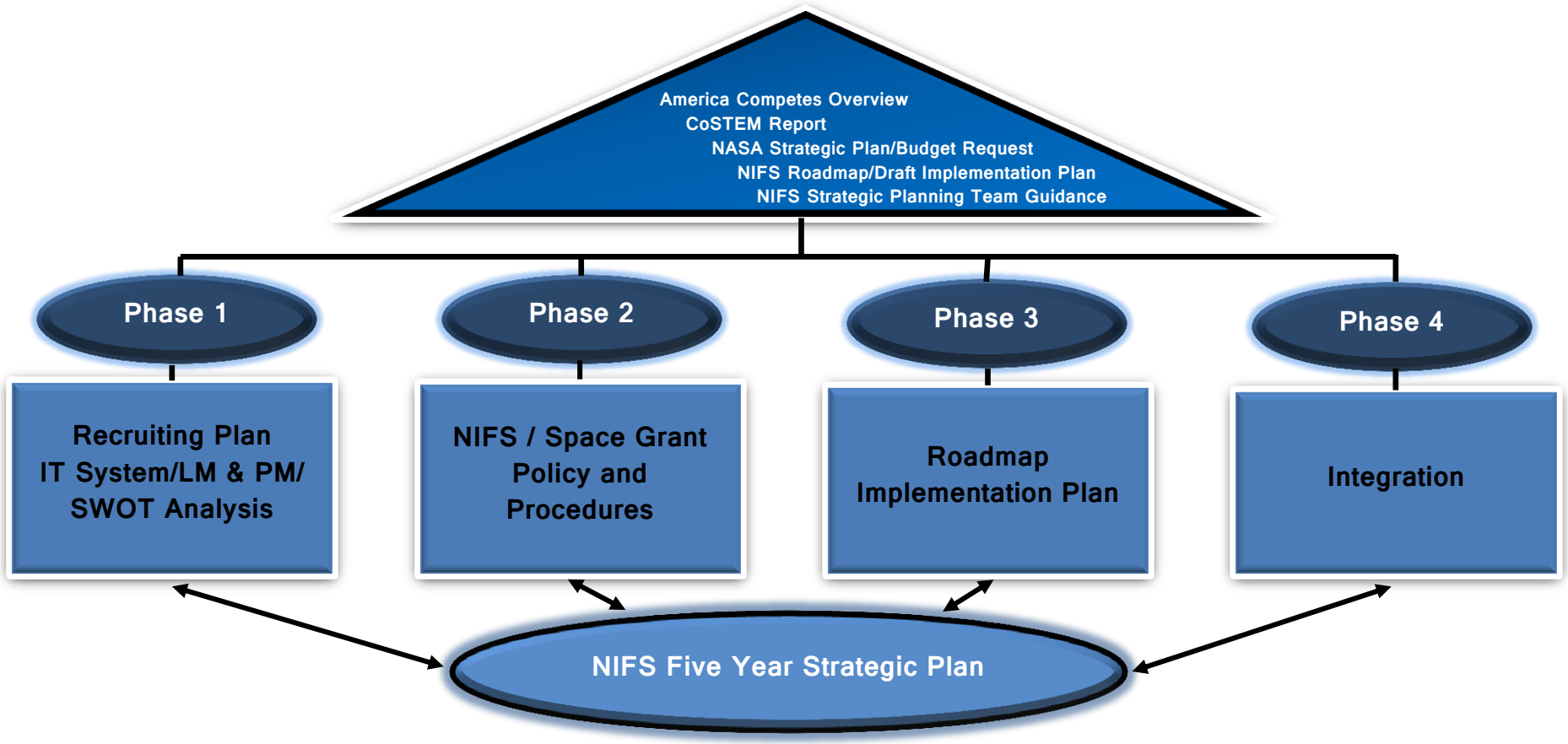
NASA Education Implementation Plan
(submitted from New Mexico Space Grant)

Space Grant Web Page
(submitted by California Space Grant)

- Congressional Justifications
- Materials for Senior Management (Presentations, White Papers)
- Weekly Activity Reports (to Charles Bolden)
- Promotional Materials/Social Media


Dr. Sonya L. Greene

NIFS Strategic Planning Working Group



Space Grant Funded NASA Center Internship Placement Process

- NIFS/Space Grant Subcommittee formed to recommend an efficient process as a part of the NIFS Strategic Working Group.
- Members from both the NIFS Community (NASA Centers) and Space Grant Community are a part of the subcommittee.
- All NASA Center placed students **MUST** apply through OSSI.
- OSSI Training for Directors/Coordinators will be provided as necessary Q1 FY16.
- Full implementation of adopted process anticipated to begin January 2016 (for Summer 2016 placement).

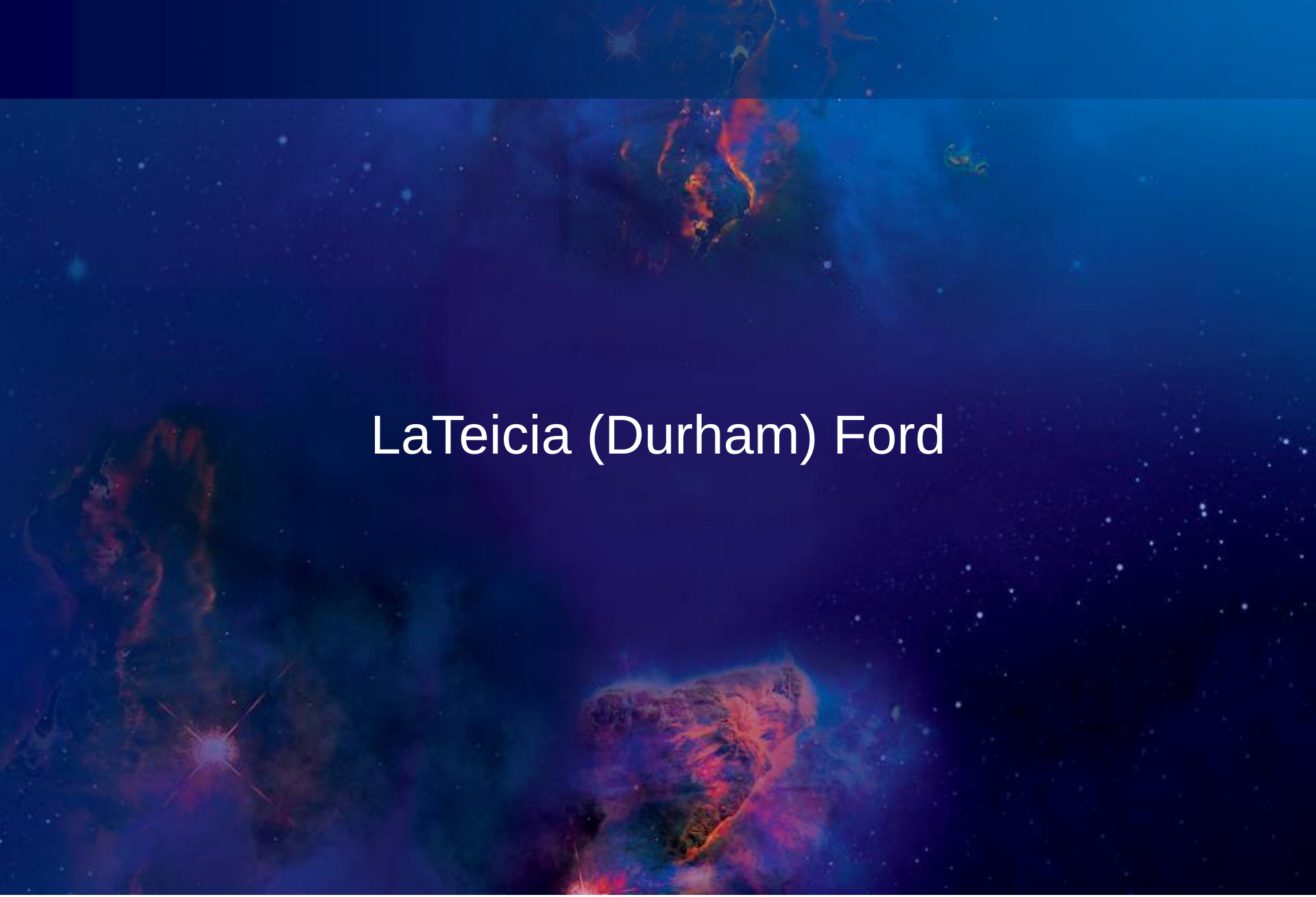
Current OSSI Application Cycle:

Session	Fall	Spring	Summer
Application Period	Mar 1st – May 31st	Jun 1st – Nov 9th	Nov 10th – Mar 1st
Application Deadline	May 31st	Nov 9th	Mar 1st

Michael Cherry

Data and Reporting

- **IT Security Training**
- **OEPM**


LaTeicia (Durham) Ford

Grants Monitoring and Management

- **The Importance of Annual Performance Documents**- *narrative reports that go to the NASA Shared Services Center and NASA Grants Officer for approval*
- **Budget Changes/No-cost Extensions**
- **Audits**- *Increased scrutiny on institutions of higher education receiving grants*
- **Costing/Drawing Down Funds**

Dr. Warfield Teague

An honored student

Montana

<u>The William (Bill) A. Hiscock Memorial award is given annually to the applicant who best embodies Bill's passion for aerospace-related education</u>

Space Grant Success Stories

Pipeline

Hawai'i

- Undergrad fellowship from Connecticut SG
- Rhode Island SG fellow at Brown Univ.
- Post-doc researcher at U. Hawai'i SFL
- NASA EPSCoR Research Award
- Working for SkyBox Imaging, division of Google

Diversity emphasis

Pennsylvania

- A pre-college team of six student from the Iroquois school district
- Experiment will be on ISS – one of 25 SSEP's Mission-7
- Winning design over 70 student teams, 400 students

Research success

Utah

- BYU student grad fellow using a planet-hunting satellite to observe a supermassive black hole
- Determined rotation and mass
- Will soon receive Master of Science degree
- Recently earned admission to the University of Heidelberg in Germany for a Ph.D. program in astrophysics

Collaborative teamwork

Rhode Island

- *International Genetically Engineered Machine (iGEM) Competition*
- Stanford—Brown—Spelman team collaborated with Ames to conduct synthetic biology research
- Used standardized sequences of DNA
- 245 schools from six continents competed
- Earned one gold medal and one honorable mention

Multi-disciplinary teamwork

New York

- Undergrad multi-disciplinary, multi-institutional team interning at Lockheed Martin
- Computer, ME, and EE majors from CUNY City College of New York, SUNY Binghamton, and the Univ. of Rochester
- Designed, built, and tested a wireless underwater rover
- Mentored by professional engineers

Cross-disciplinary

Arizona

- A triple major at NAU in science journalism, astronomy, and physics, Space Grant Intern worked as a student science reporter at the *Arizona Daily Sun*
- science writer for the American Institute of Physics, one year
- Senior reporter at the Daily Sun for three years
- Mentored NAU Space Grant science writing interns at the Daily Sun until August 2014
- Now an Associate Editor for *Astronomy Magazine* with worldwide readership

Successful student teams

West Virginia

- NASA Robotic Mining Competition held in Cocoa Beach, Florida. first place Mining Competition; first place Outreach Activity Award; and first place overall and winner of Joe Kosmo Award
- WVU's robotics team, sponsored by WVSGC, won the top award among the eight teams selected to participate in the competition at the Johnson Space Center in Houston
- PRISM (PISCES Robotic International Space Mining competition) WVU won first place in the "best in mining" and "best in operations" competition

Teacher preparation

Ohio

- FY2014 Education Scholar, graduated May, 2014
- B.S., Biology, Ohio Northern University
- Included research experience
- Currently a Science Teacher at Liberty-Benton High School
- *"I learned a lot from my research and will be able to use the NASA lesson I created in my classroom."*

Path to NASA

South Dakota

- SDSM&T student, Space Grant fellow, and US Army veteran, B.S. degree in Computer Engineering in December 2014
- NASA JSC's Mission Control for training period as a flight controller operating the computer console called CRONUS
- CRONU manages communications systems with the International Space Station and communication satellites orbiting Earth
- Soon, an SDSM&T graduate and Space Grant fellow will be sitting at the control center of the world's only international orbiting outpost

A special case

Delaware

- Graduate student in Math Education at Wilmington is a veteran of the Armed Services, and is disabled as a result of a bomb blast during his time in battle
- as a student at Delaware Technical Community College, he participated in NASA's Reduced Gravity program
- summer 2014, DESGC summer internship award to an aeronautics academy at NASA/Langley
- *"I learned about NASA, air planes, teamwork, leadership, problem solving, and most importantly that though my brain injury has changed the path of my life, and left me with some challenges, that I can still reach my life long dreams, and that working with/for NASA is not out of my reach."*

High-level offers

South Carolina

- South Carolina intern
- “This internship has provided me with the opportunity to meet and network with a diverse group of people from all sectors of the professional engineering world. Through this program, I have received and accepted a full time offer from the LORD

(continued on next slide)

High-level offers

South Carolina (continued)

- Corporation as a Systems Engineer, conditional on my graduation in December of 2014 from NCSU."

Space Grant Success Stories

“Giving back to Space Grant”

Space Grant Directors and staff with past Space Grant support as students or researchers

(excludes current students)

Please stand!

Questions?

Thank You!