





















#### **Elaine Seasly**

**Contamination Control & Planetary Protection Lead Systems Integration & Test Branch NASA Langley Research Center** elaine.e.seasly@nasa.gov

2017 Contamination, Coatings, Materials, and Planetary Protection Workshop

http://engineering.larc.nasa.gov/



# Why Outreach?

#### Opportunity to share and pass on knowledge

Inspire the next generation of scientists and engineers

#### Engage students in learning about unique career fields

Hence "Rocket Surgery" and "Guardians of the Galaxy"

#### Students can be a valuable addition to project support

- No task is too small
- Students are eager to gain experience, especially hands-on work











#### New Cleanroom Training Video: 4 Weeks & All Work Completed by VA Governor's School HS Students





# <image>

# Completed by students:

- Research
- Script writing
- Video production planning
- Acting
- Voice over narration
- Video editing





#### Virginia Earth Systems Science Scholars (VESSS) http://vsgc.odu.edu/VESSS/

Students design an Earth System Science satellite mission in 1 week

Contamination Analyst added as a student team position





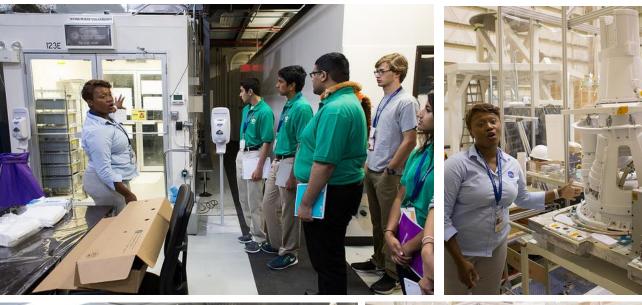
#### Glovebox Activity – Fun, Interactive, & Teaches About Contamination using Simple Household Items

Students assemble "hardware" (puzzles) that have been "contaminated" (flour)





#### **Showcasing NASA Labs and Capabilities**







# Job Shadowing: Sharing the Real-World Science & Engineering Life

NA GI





# Getting out of the Office & Lab and Telling Your Story



No one knows your story unless you tell it!



### Video on student cleanroom video project:

 <u>https://www.youtube.com/watch?v=-</u> fqOsYeWyEY&list=PLOuu0akB6CSizCF8XBoLyvA1w5NFG12Ci&index=3

# List of All NASA Student Grades K-12 and Higher Education Projects

 <u>https://www.nasa.gov/offices/education/programs/descriptions/Students-</u> <u>rd.html#V</u>

# Virginia Earth Systems Science Scholars (VESSS):

- <u>http://vesss16.weebly.com/</u>
- http://vesss17.weebly.com/