Respondent Profiles

Students Perform Mission Design Roles with JPL Team X Mentors

- 15 highly qualified post-doc/PhD candidates per session
- 6 weekly preparatory WebExs
- 1 week JPL concurrent design experience
- Student selection of engineering and science team roles
- Trade-offs to finalize design and make cost-cap

Outputs:

- Peer-reviewed mission concept for NASA Discovery/New Frontiers class mission
- Suite of instrumentation and science traceability matrix
- Student understanding of interconnectedness of systems and subsystems

Inputs:

- JPL Team X mentors

JPL Facility Tours Highlight End-to-End Mission Life Cycle

Summer 2012: VADER Mission
Venus Atmosphere, Descent, and Environmental Researcher

2013 Sessions: July 29-Aug 2, Aug 12-16
- Applications due April 5, 2013
- Selections made by NASA selection committee; announced May 6, 2013
- Based on relevance to student’s career goals and recommendation by Advisor
- Early-career science post-docs
- Science doctoral students
- Engineering graduate students
- Solar system exploration, earth science, astronomy
- US citizens or Legal Perm Residents

Alumni Impact Survey

JPL Team X model (began 1999)
- 487 alumni 1999-2012 (395 emails found)
- 212 respondents (54% response rate)
- Survey open Feb 1 - Mar 1, 2013

Indicators of Long-Term Success

- PSSS experience has a positive influence on career choice and on career progress
- PSSS feeds the employment pipeline for NASA, aerospace, and related academia
- PSSS alumni demonstrate leadership potential, ability, and/or experience in fields related to planetary science exploration

Career Impact

Usefulness of PSSS Skills

- Project Management
- Concurrent Engineering Design
- Systems/Subsystems Integration
- Science Traceability Matrix
- System Design

PSSS Effect on Career Choice

- Solidified/confirmed career choice
- Highlighted options available/try-on roles
- Directly affected career choice
- Added breadth/perspective to current work

Alumni Awards

- Urey Prize (DPS)
- Macelwane Medal (AGU)
- Napolitano Award (AIF)
- Biggs Award (GSA)

Employment

- 36 employed at NASA Centers
- 17 JPL Employees/Affiliates
- 60 previously at NASA or JPL

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