

THE UNIVERSITY OF TEXAS AT DALLAS

"The important thing about being a scientist or an engineer is learning how to think critically, learning how to be creative, learning problem solving and learning how to learn so that you get a fundamental understanding of things so you can attack new problems you've never seen before."

-Tracy Drain

FEBRUARY 15, 2017
4:30 P.M. – 5:30 P.M.
TI AUDITORIUM (ECSS 2.102)

DEPUTY CHIEF ENGINEER - JUNO MISSION
NASA - JET PROPUSSION LABORATORY

A CONVERSATION WITH TRACY DRAIN: HIGHLIGHTING DIVERSITY AT NASA



Tracy Drain
Invited Speaker

NASA

Tracy Drain is a systems engineer at NASA's Jet Propulsion Laboratory in Pasadena, CA and is currently Deputy Chief Engineer for the Juno Mission to Jupiter.

Tracy graduated Summa Cum Laude with a bachelor's degree from the University of Kentucky and earned a master's degree from the Georgia Institute of Technology, both in the field of mechanical engineering. As an undergrad at UK, she completed four rotations as an engineering co-op student at NASA's Langley Research Center in Hampton, VA. Upon graduating from Georgia Tech in 2000, she officially joined the NASA family as a Systems Engineer at JPL.

In her 16 years at the lab, Tracy has been involved in the development, testing and operation of three missions: Mars Reconnaissance Orbiter (a science and relay orbiter at Mars), Kepler (a space based observatory searching for Exoplanets) and Juno (an orbiter at Jupiter). Her work on these missions included tasks such as generating and refining requirements, leading the development of mission system fault trees, running and analyzing faulted test cases and coordinating the operations team response to in-flight anomalies. Her roles on these projects have included serving as Transition Phase Lead and Lead Systems Engineer for MRO, Mission Readiness Lead for Kepler, and now Deputy Chief Engineer in operations for Juno. During part of her time on Juno, Tracy split her time between Juno operations and management, serving as Technical Group Supervisor for Flight System Systems Engineering group. While in that role, she provided guidance and oversight to other systems engineers supporting a variety of JPL missions.

Tracy is passionate about space exploration and STEM fields in general and loves taking every opportunity to share her enthusiasm with students, their parents and teachers.

Agenda

Master of Ceremony..... **Narcely Ruiz**
Assistant Director
Women's Center

Welcome..... **Mark Spong**
Dean
Erik Jonsson School of Engineering &
Computer Science

Introduction of Speaker..... **Racheal Hill**
Board Member
DFW NSBE Professionals Chapter
Ambassador
NASA Jet Propulsion Laboratory

Speaker..... **Tracy Drain**
Systems Engineer
NASA

Questions and Answers

Remarks

Acknowledgements & Close..... **Jacqueline A. Long**
Advisor
UTD Chapter of NSBE
Project Supervisor
Academic Bridge Program



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The Erik Jonsson School of Engineering and Computer Science is one of the fastest-growing and most vigorous engineering and computer science schools in the United States. Since 2008, the Jonsson School has doubled in size with the creation of four new departments and nine new degree programs.

National Society of Black Engineers

The National Society of Black Engineers (NSBE) is one of the largest student-run organizations in the United States, with core activities centered on improving the recruitment and retention of Black and other minority engineers in both academe and industry.

Special Thanks

Dr. George Fair, Dr. Mark Spong, Rosie Peterson, Jerry Alexander, Racheal Hill, Shaemekia Jamison, UT Dallas NSBE Chapter and the Academic Bridge Program



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For more information contact Rosie Peterson at rpeterson@utdallas.edu.

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