DISCOVERY MISSIONS: UNIQUE APPROACHES TO EDUCATION AND PUBLIC OUTREACH. Shari Asplund, Jet Propulsion Laboratory, 4800 Oak Grove Drive, Mail Stop 156-230, Pasadena, CA 91109 (shari.e.asplund@jpl.nasa.gov).

ABSTRACT

Introduction: NASA's Discovery Program is comprised of a series of low-cost, highly focused, competitively selected planetary science investigations. Discovery missions aim to enhance our understanding of the solar system by exploring the planets, their moons, and other small bodies using innovative approaches to assure the highest science value for the cost. Discovery, which began in 1992, represents a breakthrough in the way space exploration is conducted.

Description: Discovery was among the first NASA programs to require that an education and public outreach plan be part of every investigation. One of Discovery's supporting objectives is to increase public awareness of, and appreciation for, solar system exploration through exciting education and public outreach (E/PO) activities. Each mission is expected to spend one to two per cent of its total budget on E/PO. The Office of Space Science (OSS), which funds Discovery missions, strongly encourages space science researchers to engage actively in education and public outreach as an important component of their NASA-supported professional activities.

The Missions: Each of the eight Discovery missions selected to date has developed a unique approach to formal and informal education and outreach to the public. Our posters highlight some of the notable E/PO activities that have been conducted and are being planned by the six current Discovery missions: Near Earth Asteroid Rendezvous, or NEAR, the first spacecraft to orbit and land on an asteroid, spent one year gathering scientific data from Eros, 160 million miles from Earth; Stardust, the first mission dedicated to studying a comet, will capture interstellar dust particles and comet dust from Comet Wild 2 and return samples to Earth; Genesis, a mission to collect solar wind samples and return them to Earth to answer questions about the birth and evolution of the solar system; Comet Nucleus Tour, or CONTOUR, will encounter at least two diverse comets, taking high resolution images and analyzing dust and gas to answer fundamental questions about their composition; MESSENGER, the Mercury Surface, Space Environment, Geochemistry, and Ranging mission, is a focused scientific investigation of the planet Mercury and the forces that have shaped it; and Deep Impact, the first experiment to crash a large object into the surface of a comet, creating a huge crater and revealing never before seen interior material for extensive study.

BIOGRAPHY

Shari Asplund is the Outreach Manager for the NASA Discovery Program. Her responsibilities include coordinating E/PO activities among the Discovery missions, the Discovery Program, and the Office of Space Science to assure that all Discovery mission E/PO activities are consistent with the OSS education and outreach strategy. She joined JPL in 1982 as a technical writer and editor, and has also been a project and program administrator. Previously she was a publications editor in the Division of Geological and Planetary Sciences at Caltech.