



# Review and assessment of current process for adding Co-Is and IDSs to long-duration missions

Presentation to the Planetary Science Subcommittee  
by

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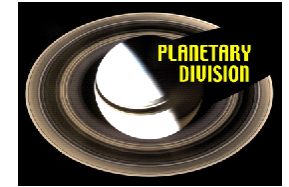
# Managing the Science Team Roster



- At the most basic level, managing the science team roster (i.e., Co-Investigators) is the responsibility of the PI
  - PI creates her team roster at time of proposal
  - During mission lifetime PI requests changes to her roster to SMD via the Project
- NASA approval is needed for changes because the roster was a factor in the selection of the investigation
- Managing the science team roster becomes more complex as you depart from this paradigm: different selection methods, long-lived missions, unique mission opportunities (e.g., Cassini)



# Managing the Science Team Roster: The Cassini Example



- Cassini AO divided the science team into four categories
  - Facility instrument teams: comprised of a single Team Leader and multiple Team Members who have been individually selected by NASA via a competitive process to operate a NASA-built instrument (4 instrument teams)
  - PI instrument teams: comprised of a PI leading a group of Co-Investigators who have been competitively selected as a single team by NASA to operate a PI-built instrument (8 instrument teams)
  - Interdisciplinary scientists: individually selected scientists requiring use of the data from a set of complementary instruments and who also wish to participate in all phases of the mission. IDS's are intended to foster cross team collaboration.
  - Participating scientists: individually selected scientists who wish to participate only in the data collection and analysis phases of the mission. This category has not been solicited.
- The science team was selected nearly 20 years ago and slots in all three categories have become vacant due to retirement and other factors
  - ~6 out of 43 (~14%) US Team Member slots have become vacant
  - 18 out of 83 (22%) US COI slots have become vacant
  - 1 out of 7 (14%) US IDS slots has become vacant
- PSD wishes to replace vacancies following competitive philosophy used in original selection
  - AA recently approved 19 funding neutral replacements to fill COI slots based on PI nomination and endorsement by the Project and Program Scientist
  - PSD considering how to address remaining vacancies and community's desire for increased participation in the mission; this will NOT be funding neutral



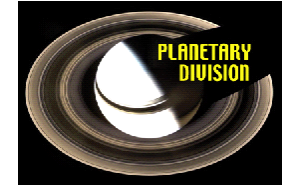
# Managing the Science Team Roster: Lessons Learned from Cassini



- Roster must be kept current since it forms the basis for significant decisions
- Periodic opportunities for infusion of new team members may refresh the science team
- Adding new team members can stress the project budget in unanticipated ways
- Impact to mission operations and science of adding new and/or retaining existing science team members
- Length of tenure for selected science team members should be established
- Traditional forms of community involvement in missions should be reexamined
- Archiving requirements and timeline profoundly affect broader community involvement
- Science team members need adequate time and resources for their own research



# Managing the Science Team Roster: Philosophical Issues for EJSM



- 1) This is a long-lived flagship mission and should be managed as such
  - 2) Science team members are performing a service to their community
- These two guiding philosophies have implications spanning the mission, including:
    - Science team structure and selection process
    - Succession planning
    - Data access rights and archiving
    - Broad community involvement
  - This in turn generates some philosophical issues
    - What is the most efficient avenue for broad community involvement?
    - How can the mission train the next generation of planetary scientists?
    - How can the science team be kept fresh over the 18 year lifetime of the mission?
    - Etc.