WRITING FOR PROPOSAL REVIEWERS
Our Experience as Project Manager: NASA EPSCoR

• Goal -- provide seed funding that will enable states to develop an academic research enterprise directed toward long-term, self-sustaining, nationally-competitive capabilities in aerospace and aerospace-related research.
Kind of Proposals…

- Research Infrastructure Development (RID)
  - Enable jurisdictions to build and strengthen relationships and improve contacts with NASA researchers; develop ideas for future proposals
  - $125,000/year, 3 + 2 year award

- Research Awards
  - Topic-specific proposals targeted at high-priority NASA research and technology development needs
  - Annual solicitation providing opportunity for 20’s awards/year
  - Max $750,000 for a 36-month award
Eligibility determined by National Science Foundation EPSCoR
Review Process and Evaluation Criteria

• Review of proposals submitted in response to the EPSCoR Research CAN followed a two-step process: Online Peer Review and Internal Panel Review.
Full Proposal Evaluation Criteria

• Intrinsic Merit (35%) -- Evaluation of Intrinsic Merit addresses proposed research and existing research.

• NASA Alignment and Partnerships (35%) -- Evaluation of NASA Alignment and Partnerships addresses relevance to NASA and jurisdiction, partnerships/sustainability, NASA interactions, and diversity.
Full Proposal Evaluation Criteria

• Management and Evaluation (15%) -- Evaluation of Management and Evaluation addresses results of prior research support, personnel, research project management, project evaluation, tracking of program progress, and continuity.
Full Proposal Evaluation Criteria

• Budget (15%) -- Evaluation of Budget addresses the following: adequate, appropriate, reasonable, realistic, demonstration of effective use of funds in alignment with the proposed project, and cost-sharing.
Step 1: Online Peer Review (Example)

- Each proposal was assigned to a minimum of three online peer reviewers (Mean of approx. 5 reviewers/proposal)
- Each proposal including at least one NASA reviewer
- 115 reviewers participated in the online peer review
Step 2: Panel — Internal Review

• Full proposal submissions underwent review during the Internal Panel Review

• The panelists represented the four Mission Directorates (This is before 2011):
  – Aeronautics Research
  – Exploration Systems
  – Science
  – Space Operations
Research:
- In vivo robots to support surgery during long-duration space missions.
- Natural Orifice Transluminal Endoscopic Surgery.

Current Achievements:
- Start-up company Virtual Incision Corporation (VIC).
- $2.1 M investment from two venture capital groups.
- $2.7 M grant from Human Research Program at JSC.
- It is expected to be used in humans in early 2012.

NEBRASKA
University of Nebraska

http://www.youtube.com/watch?v=QlQk95D-XwE
Lessons learned from that experience I

• Proposers did not read well the solicitation
  – Active Reading (not passive reading)
  – Very basic errors
  – Format (font, etc.)
  – Missing Sections
  – Using formats of other agencies…

• Recycling ideas from other proposals
  – Equal to other proposals…
  – NSF type of proposals
  – Talking of collaborations without references or letters of support
Lessons learned from that experience II

• Too much technical writing
  – Equations without meaning
  – Technical jargon
  – Capabilities of the Team – not well expressed (and evidence) and matching the proposal
  – Problem statement in just plain words…

• Plan/Methodology/Budget
  – Missing Plan
  – Not a realistic plan (not enough time to accomplish the different proposed tasks)
  – Not a realistic plan (not enough resources to accomplish the different proposed tasks)
  – Not a realistic plan (budget…)
Lessons learned from that experience III

• Validation of conclusions
  – Not a clear methodology
  – Did not include this part?
  – What to do with them?

• Intrinsic Merit
  – State of the art missing
  – Literature survey missing the most important work
  – Capabilities of proposers
Lessons learned from my experience

• Success
  – Simplicity
  – Introducing new ideas to the field with good metrics
  – Clear Goals, Outcomes, Objectives, Measurements

• Rejections
  – Time management
  – Red team missing
  – Confusion… in particular when we are writing as a team