

## Lessons for Proposers: Observations from the 2003 Sea Grant NSI Competitions

Sea Grant received 125 proposals for its NSI competitions in ANS research and outreach, oyster diseases, and the Gulf oyster industry. Technical evaluation panels read each of these proposals and associated peer reviews, and then discussed and scored them in panel meetings. At the close of each of the meetings, the panelists were asked if they had any general comments about the proposals that might be of use to the researchers when preparing for their next competition.

The panels observed that many of the unsuccessful proposals shared certain characteristics, some of which are listed below.

**INSUFFICIENT EXPERIMENTAL DETAIL.** This was perhaps the most commonly heard comment from the evaluation panels. Many of the proposals provided too few details about how the proposal's objectives would be achieved. This prevented the panels from being able to fully evaluate the merit of the experimental design. Exactly how was sampling to be done? How many samples would be taken? Where? When? How would the results be analyzed? How would confounding factors be avoided or controlled?

**ATTENTION TO STATISTICS.** The panels felt that one particular example of where additional detail was warranted was the description of the project's statistical design. A justification of how and why the number of experiments, replicates, and samples were selected, and detail about the statistical techniques used to evaluate the experimental data, should be included. Panelists suggested that many proposals would benefit from a review by a statistician.

**TOO MUCH "SALES PITCH."** In a related comment, panels felt many of the proposals spent too much space touting the importance of the proposed work and the expected benefits of a successful outcome. Discussions of the need for the work and the potential impact of the proposed activity are always appropriate and necessary. BUT, given the strict size restrictions, when there is so much "sales pitch" that there is insufficient space to adequately describe the experimental approach, the rationale for the experimental design, and a detailed methodology, the proposal may not convincingly make the case that the outcome will be successful.

**PROOFREADING ERRORS.** The panel noted with some surprise that there were a great many proposals that contained a large number of typographical errors. Occasionally, there were sufficient errors to make it hard for the panel to concentrate on the content of the proposal. In some cases, what appeared to be cut-and-paste errors resulted in text, tables, or figures that were different from the narrative text. This made it difficult for the panel to determine which information was correct. In other cases, while the errors may not have made it impossible to

discern the intended message, they did provide a significant enough distraction that the power of the message was diluted or lost. In at least one case, an otherwise well-regarded proposal was plagued by such an abundance of typographical errors that its score may have been lowered enough that it was not selected for funding. Several panelists recommended that all researchers should have their proposals read through once by someone not involved in its preparation before they are submitted for consideration.

**INSUFFICIENT SELF-EVALUATION BUILT INTO THE PROJECT DESIGN.** Especially in projects with outreach efforts, a common problem noted by the panelists was the lack of methodology to determine how well the intended audience was identified, how well the outreach message was reaching that intended audience, and (if this was the intent of the project) to what extent the message was changing the behavior of that audience.

**INSUFFICIENT COORDINATION BETWEEN RESEARCH AND OUTREACH COMPONENTS.** In cases where a proposed project contained both a research component and an outreach component, the panels sometimes found that there was little coordination between these two aspects of the proposal. Proposals where research and outreach components were well-coordinated and acted to enhance both the research and outreach results generally scored better than those where the components had little in common. Some proposals were written to contain both research and outreach components; however, often the panel felt that one or the other component was actually very small and incidental to the overall goals of the proposal. In such cases, it might have been better if the proposal had been written as either pure research or pure outreach.

**LESS IS SOMETIMES MORE.** Several ambitious proposals were scored relatively poorly precisely because the panels felt they were overly ambitious. The panel noted several cases where proposals would have been improved if they had a reduced number of objectives and had directed more attention towards the achievement of those objectives. When preparing a proposal, researchers should make sure that they are in a position to plan, and carry out, the highest quality work on all aspects of the proposal; otherwise, PIs should consider reducing the scope of the proposal. Significantly more proposals were criticized by the panels for being too large, rather than for being too small.

**UNCONVINCING ENDORSEMENTS.** Several panelists commented that they had read a number of letters of endorsement included with the proposals that were very vague. The panelists were not convinced that these endorsers really knew anything about the proposal they were endorsing. While these endorsements, depending on their source, may be of value in assessing programmatic or other considerations, they did little to sway the technical evaluations of the panels.