

Managing Multi-Disciplinary Science Programs

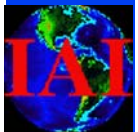
*Paul E. Filmer
National Science Foundation*

*Third IAI Summer Institute, July 2001
University of Miami Rosenstiel School
Miami, Florida*



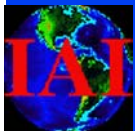
Preview

- **Managing Science Programs**
- **The Multi-Disciplinary Dimension**



Managing Science Programs

- **Resource Allocation Problem**
 - **Money**
 - **Time**
 - **Reputation**
- **All of these impact staff**
 - **At the Research Institution**
 - **At the Funding Institution**



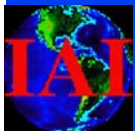
Managing Science Programs

- **Needs or Stages:**
 - **Objectives and Priorities**
 - **Appropriate audience**
 - **Proposal evaluation**
 - **Proposal negotiation**
 - **Grant administration**
 - **Program evaluation**



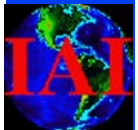
Defining Objectives

- **Clear vision of what is to be accomplished, who is to benefit**
 - **Often have to make an “internal sale” within the funding body**
- **Clear timelines**



Defining Objectives and Setting Priorities

- **WHO determines priorities?**
 - **Top-down**
 - **‘Science Policy’ or purely Political**
 - **Scientific Community**
 - **A mix**



Appropriate Audience

- **Identify your target audience**
- **Formulate a clear message to the potential proposing community**
- **Make help available**



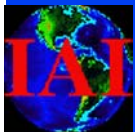
Proposal Evaluation

- **This is the most time-consuming element**
- **Receiving & tracking mechanism**
- **Clear review criteria (from your ‘clear message’)**
- **Review models**
 - **Peer-review**
 - **Officer decision**
 - **Political decision**

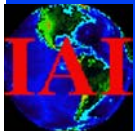
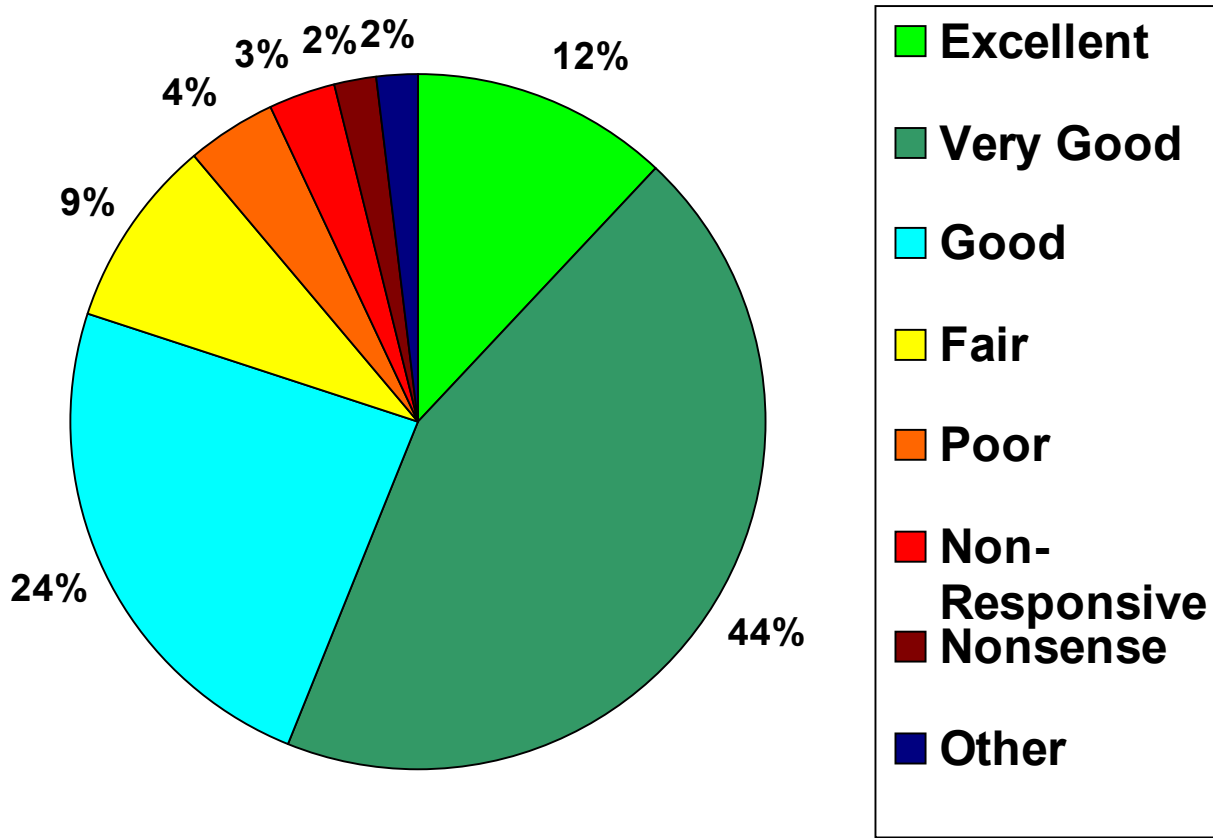


Proposal Evaluation, cont'd.

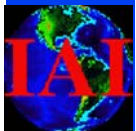
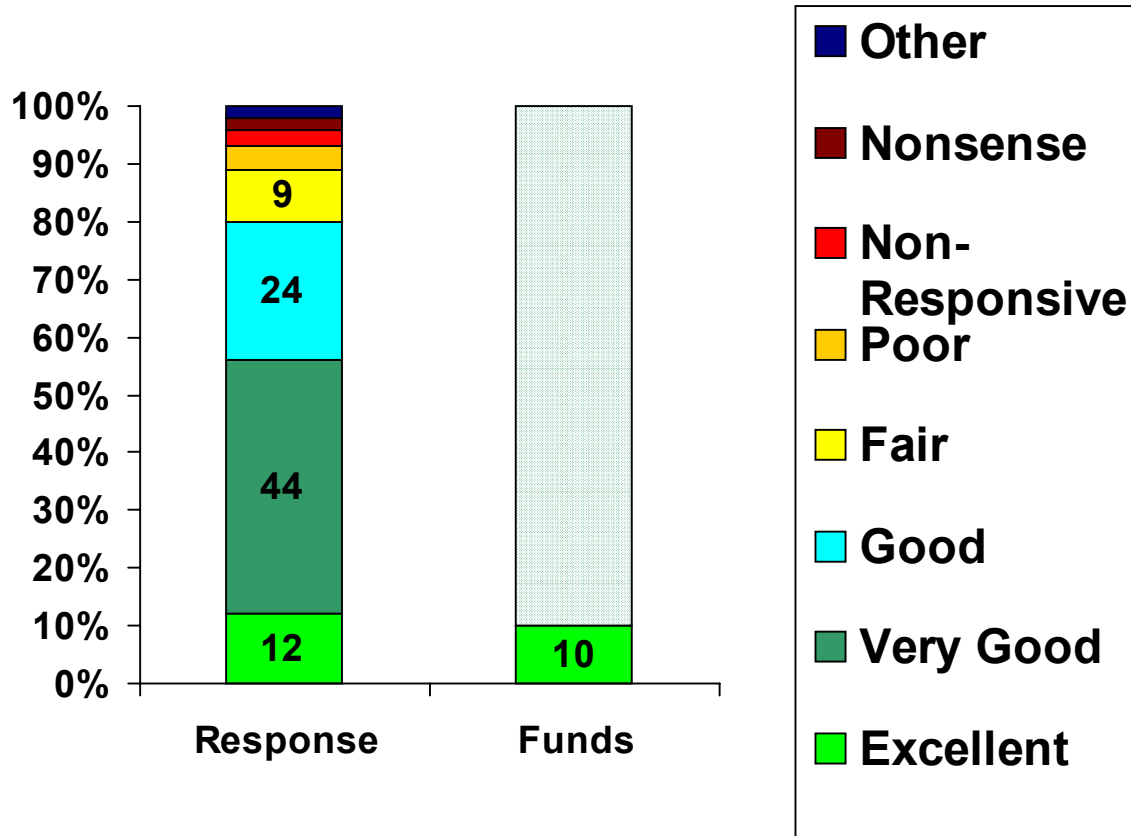
- **The Portfolio Idea**
 - **Need a Variety of:**
 - **Techniques**
 - **Teams**
 - **Risk levels**
- **Enhances chances of reaching objectives**



Results of an Average Call



Results of an Average Call, cont'd



Proposal Evaluation, cont'd

- **Declinations / Rejections**
 - **These are the most difficult element**
 - **Feedback from review**
 - **Needs to be handled very carefully**
 - **Privacy concerns**
 - **Different personalities**
 - **Personal stake**
 - **Repeat customers**
 - **Disputation possibility?**
 - **The largest part of Science Management**



Proposal Negotiation

- **Awards**
 - **These are the easiest element**
 - **Still need to be handled very carefully**
 - **Privacy concerns**
 - **Adjustments in**
 - **Science/methods**
 - **Budgets**



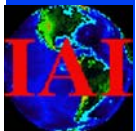
Grant Administration

- **Administration of ongoing projects**
 - **Scientific administration**
 - **Financial administration**
- **Administrative burden issues**
- **Adjudication of disputes**
- **Grants are to *institutions*, and not to people**

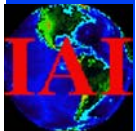


Program Evaluation

- **Results, but also their *dissemination***
 - **Publications by grantees**
 - **Publications by the funding institution**
 - **Data and information both available *and* accessible**

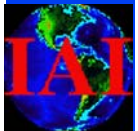


Program Evaluation, cont'd



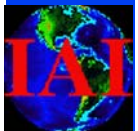
Program Evaluation

- **Phase-out**



The Multi-Disciplinary Dimension

- **Objectives and Priorities:**
 - **Less clear objectives**
 - **Priorities are more difficult to set**
 - **Multiple audiences with multiple vocabularies**
- **Does the target audience exist?**
 - **You might have to *form* it**
 - **You have to speak *clearly* to it**



The Multi-Disciplinary Dimension

- **Proposal Evaluation**
 - **Where to find the experts?**
 - **Need many more for each proposal**
 - **Clearly defined role for each team member**
 - **Clearly defined member for each team role**
 - **Declinations and the time & effort lost**
- **Negotiation**
 - **Intra- and Inter-institutional proposals: multiple schools, deans, etc.**



The Multi-Disciplinary Dimension

- **Administration**
 - **Intra- and Inter-institutional proposals: multiple schools, deans, accounting systems, etc.**
 - **Burden is often much higher**
- ***Program Evaluation***



International Problems

- **Financial:**
 - **Currency conversion/fluctuations**
 - **Accounting standards**
- **Political:**
 - **Extra-organizational Politics**
 - **Field hazards**
- **Logistical:**
 - **Permits/licences**
 - **Customs**



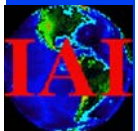
The Final Scarce Resource

- **Reputation**
 - **Easily lost**
 - **Affects funding**
 - **Affects participation**
- **Main elements**
 - **Privacy**
 - **Conflicts of Interest**



Privacy Concerns

- **For the people or institutions Proposing**
 - Valuable ideas, sometimes trade secrets
- **For the people Reviewing**
 - Ability to frankly and truthfully express views



Conflicts of Interest

- **Giving awards to oneself**
- **Giving awards to your family**
- **Giving awards to your friends**
- **Giving awards to your institution**
- **Giving awards as a favor**
- **Influencing decisions on awards**
- **Being involved in the decision process**
- **Others *think* you are involved**

