Managing Multi-Disciplinary Science Programs

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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

- Excellent: 44%
- Very Good: 24%
- Good: 9%
- Fair: 4%
- Poor: 3%
- Non-Responsive: 2%
- Nonsense: 2%
- Other: 12%

Inter-American Institute (IAI)

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Results of an Average Call, cont’d

![Graph showing response and funds distribution]

- Response:
  - Other: 9
  - Nonsense: 24
  - Non-Responsive: 44
  - Poor: 12
  - Fair: 10
  - Good: 12
  - Very Good: 12
  - Excellent: 10

- Funds: 100%
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

- Objectives and Priorities
- Appropriate audience
- Proposal evaluation
- Proposal negotiation
- Grant administration
- Program evaluation

Community and Science Management
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