Bootcamp for Planning Grantees, Part 1:

*Resources for a Successful Planning Grant: An Evaluator’s Perspective*

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Overview
“Be careful what you wish for because you might get it”

- Purple Book
  - What it is and how to take advantage of an “oldie but goodie”

- Making use of your evaluator
  - Understanding the role of the IUCRC evaluators

- Lessons from a study on member recruitment
Motivation: Help collect and document IUCRC management “best practices”

- Director and evaluator collaboration: director best practice, evaluator authored (participant observer)

- Balance of big picture/conceptual and nitty gritty details and examples

- Caution: © 1998: best practices evolve

- See IUCRC website for sample agreement
Contents

1 Creating Win-Win Partnerships
2 Starting New Centers
3 Organizational Structure
4 Membership
5 Planning the Research Program
6 Implementing the Research Program
7 Communications
8 Control, Budgeting & Evaluation
9 Knowledge & Technology Transfer
10 Center Leadership
11 Expanding on the IUCRC Model
CHAPTER 2

Getting Started: Planning and Initiating a New Center

Introduction

The Center Development Process.

Government Funding

The NSF I/UCRC Program and Model

A Program Metaphor—Developing a Small Business.

Exploratory Stage: Do You Have What It Takes?

Beginning Self Assessment

Concept Paper.

Pre-Planning Stage: Developing a Preliminary Business Plan

Who's Involved in Developing a Pre-Planning Grant/Meeting Proposal

Preparing the Pre-Planning Proposal Review Criteria.

Planning Stage: Refining and Implementing the Business and Marketing Plan

Getting Ready: Developing Materials

Preliminary Marketing

The Pre-planning and Recruiting Meetings

The Operations Proposal

Summary

Exploratory Stage

Preplanning Stage

Planning Stage

Next Steps

References

Appendix 2-1: Checklist for Organizing an On-Campus Symposium for Industry

Appendix 2-2: Project Proposal or Progress Report Form

Appendix 2-3: Directions and Sample LIFE Form

Appendix 2-4: Level of Interest Feedback Evaluation Form

Appendix 2-5: Guide for Research Discussion Sessions

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Appendix 2-7: Debriefing an I/UCRC Research Planning Meeting for a New Center

Appendix 2-8: List of I/UCRCs 1996–1997

Appendix 2-9: Information Flow for New Research Missions, Themes, Projects

Appendix 2-10: Checklist for Organizing an On-Campus Symposium for Industry

Appendix 2-11: Project Proposal or Progress Report Form

Appendix 2-12: Directions and Sample LIFE Form

Appendix 2-13: Level of Interest Feedback Evaluation Form

Appendix 2-14: Guide for Research Discussion Sessions

Appendix 2-15: I/UCRC Organization Feedback Form

Appendix 2-16: Debriefing an I/UCRC Research Planning Meeting for a New Center

Appendix 2-17: List of I/UCRCs 1996–1997

Appendix 2-18: Information Flow for New Research Missions, Themes, Projects
Typical Center Planning Meeting

Day 1
Morning
• Welcome Introduction to the University
• Introduction of Participants
• Center Vision and Structure: presentation by Center Director assisted by a key industrial supporter
• Research Program: presentation by director or faculty—perhaps double teamed, a high-level overview of the proposed research of the center.
• Introduction to NSF I/UCRC Program
• Presentation by the evaluator regarding evaluation procedures and LIFE forms
• Coffee Break
• Research Area 1: Overview of research followed by 15 minute project presentations; LIFE forms (Appendices 2-2, 2-4).
• Lunch

Afternoon
• Research Area 2: (repeat as above)
• Research Area 3: (repeat as above)
• Coffee Break
• Breakout Sessions by Research Area (optional).
  – What they didn’t see but would like to see included
• Q&A Session on Policy and Organization issues (optional)
• 6:00–8:00 p.m. Cocktail Hour and Dinner

Day 2
Morning
• Breakfast
• Discussion of Project Feedback (Director/Eval/NSF): Review and discussion of feedback obtained via LIFE forms and during breakout sessions.
  – Focus on kinds of changes and refinements for which there is a consensus.
• Break
• Discussion of Organizational and Policy Feedback (Director).
• Prospective Member Feedback Session
  – NSF: What recommendation will you make when you go home?
• Closing Remarks, Action Items.
Project Level: LIFE Form Evaluation

Center for LIFE Learning

Level of Interest and Feedback Evaluation (LIFE) Form

Project Name: Project 1
Project ID: 1337
Project PI: Some Guy

To facilitate a dialogue between Center Faculty and Member Organizations, each representative is asked to indicate his/her organization’s level of interest in each project. (One form per organization, please.)

Level of Interest

☐ Very Interested
☐ Interested
☐ Interested with Change
☐ Not Interested
☐ Abstain

Comments? Please give your opinions about the progress since the last report, level of effort, offers to help and support, quality of research, scientific merit, suggested changes, pre-competitive applications, benefits to industry, and/or other comments here:

Note: This information will not be divulged during the review

Your Name: 
Your Organization: 

Submit  Clear

Web-based LIFE Forms:
http://isl.ucf.edu/LIFE/
→ Center name, date
→ Select Project; Select Evaluate Project
→ Submit
Project Level: LIFE Feedback

**Project A**
- Interested: 9
- Interested with change: 0
- Not interested: 2

Comments:
- Great project would like to follow closely
- Very close to our interests; suggest looks at work by Schwarzkopf et al

**Project B**
Interested: 5
Interested with change: 4
Not interested: 2

Comments:
- Interesting project but need to broaden temperature range
- Conditions do not reflect industrial parameters need to move from simulation to real experimental test
Using Your Evaluator

“Hello I am your IUCRC evaluator and I am here to …
Evaluate you?
Help you?
Both?”
IUCRC Evaluation

Principal
“Improvement-oriented evaluation”

Goal
1. To help NSF and local centers objectively evaluate their impact by documenting IUCRC outcomes and accomplishments
2. To promote continuous improvement by giving actionable, timely, data-based (formally collected and observational) feedback, analysis and advice to NSF and local centers;

Evaluators:
- Have many years experience working with centers
- Have been involved in multiple center start ups
- Newest planning grants have support in budget to pay for evaluators involvement in planning grant meeting
- Need an evaluator: Talk to Babu
Recruiting

(See Chapter 4)
Recruiting: Key to Successful Planning Grant

- Recruiting Research Project (Gray & Rivers)
  - Directors Perspective
    » What do you do? What works?
  - Members Perspective
    » How did you go about deciding to join?
    » Why did you join?
    » Why didn’t you join?
1) Consider how your center/site identifies potential industry members. How effective have you found the following activities in generating leads for new members?
### Marketing Tools

4) How effective are the following marketing materials, documents or similar information pieces at communicating the strengths of your center/site?

<table>
<thead>
<tr>
<th>ITEM TEXT</th>
<th>% use</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>d) Document with the mission/ vision of the center</td>
<td>100%</td>
<td>2.59</td>
</tr>
<tr>
<td>e) List of members/industry partners</td>
<td>100%</td>
<td>2.93</td>
</tr>
<tr>
<td>k) A website for the center</td>
<td>100%</td>
<td>2.79</td>
</tr>
<tr>
<td>a) Center brochure</td>
<td>93%</td>
<td>2.52</td>
</tr>
<tr>
<td>c) Document with an overview of member benefits</td>
<td>93%</td>
<td>2.59</td>
</tr>
<tr>
<td>b) Abstracts of current research projects</td>
<td>90%</td>
<td>2.73</td>
</tr>
<tr>
<td>f) List of primary investigators</td>
<td>90%</td>
<td>2.42</td>
</tr>
<tr>
<td>g) References to Center technical reports or publications</td>
<td>83%</td>
<td>2.42</td>
</tr>
<tr>
<td>h) Full text technical reports or publications</td>
<td>79%</td>
<td>2.35</td>
</tr>
<tr>
<td>j) Description and/or images of center facilities including equipment</td>
<td>62%</td>
<td>2.39</td>
</tr>
<tr>
<td>i) Center newsletters</td>
<td>45%</td>
<td>2.15</td>
</tr>
</tbody>
</table>

Scale
4= highly eff.
3= Moderately eff.
2= Somewhat eff.
1= Not at all eff.
0= Do not use
6) For those organizations interested in learning more about your center/site, how effective have you found the following approaches at securing new members?

<table>
<thead>
<tr>
<th>ITEM TEXT</th>
<th>% use</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Visiting the organization</td>
<td>97%</td>
<td>3.54</td>
</tr>
<tr>
<td>c) Hosting organization representatives at your site during non-IAB meeting times</td>
<td>93%</td>
<td>3.44</td>
</tr>
<tr>
<td>f) Holding conference calls with organization representatives</td>
<td>79%</td>
<td>2.30</td>
</tr>
<tr>
<td>b) Visiting the organization with some of your scientists</td>
<td>76%</td>
<td>3.32</td>
</tr>
<tr>
<td>d) Hosting organization representatives at your site during an IAB meeting</td>
<td>76%</td>
<td>3.00</td>
</tr>
<tr>
<td>e) Meeting with organization representatives at a neutral location (e.g., breakfast, lunch venue)</td>
<td>76%</td>
<td>2.55</td>
</tr>
</tbody>
</table>
Recruiting Success Rates

• Lead generation
  – On average, centers generate about 11 new leads over a 12 month period.
  – About 7 in every 10 new leads for membership emerge from existing relationships

• New member commitments
  – On average, for every 10 firms actively pursued by centers:
    » 3 will join
    » 2 will decline
    » 5 will be undecided
## Center Marketing Study-Reported decision factors

### Factors that directors believe account for joining:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Selected as a Top 3 reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance of research to organization needs</td>
<td>78.7%</td>
</tr>
<tr>
<td>High probability of future knowledge and technology transfer benefits</td>
<td>61.7%</td>
</tr>
<tr>
<td>Success of past Center/PI research accomplishments</td>
<td>40.4%</td>
</tr>
<tr>
<td>Quantity and/or quality of graduate students to recruit</td>
<td>21.3%</td>
</tr>
<tr>
<td>High financial leveraging provided by your center/site</td>
<td>21.3%</td>
</tr>
</tbody>
</table>

### Factors that directors believe account for NOT joining:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Selected as a Top 3 reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of membership fee</td>
<td>51.1%</td>
</tr>
<tr>
<td>Lack of relevance of research to organization needs</td>
<td>38.3%</td>
</tr>
<tr>
<td>Concerns about IP and licensing rights</td>
<td>38.3%</td>
</tr>
<tr>
<td>Organization research priorities are very short term</td>
<td>34.0%</td>
</tr>
<tr>
<td>Organization rep did not have access to real decision makers</td>
<td>29.8%</td>
</tr>
</tbody>
</table>
Firm Perspective
Why do firms join/not join CRCs?

- Strategic analysis of anticipated benefits versus possible risks
  - CRCs present a diverse portfolio of both benefits and risks
  - The calculus for doing this assessment can vary widely from firm to firm
    - Firm A join for benefit Y
    - Firm B join for benefit Z
  - No one mentioned corporate goodwill or charity
Why do firms join/not join CRCs?

• Strategic Research Relevance (or lack thereof)
  – Research related to firm’s core competency
    » Strategic fundamental research that supports firm’s technology road map
    » Nearer-term research that provides “cost avoidance” or research leveraging
  – Research related to emerging or competitive technologies
    » Provides an efficient means for monitoring and exploring promising new technological avenues
Strategic Research Relevance

Why they joined

- “We don’t do in house very much theoretical work to advance the state of the art. However, sometimes we get right at the edge of or beyond our ability to do certain kinds of calculations or certain kinds of analyses. It's good to have an internationally recognized entity that you can go to get support in these kinds of situations.” (large construction)

Did not Join:

- “...We already had a program in place [in a very critical area] and all the mock ups; there really wasn’t much they could contribute to that really. They were behind us in this particular area. Some of the projects they do weren’t really that relevant exactly to what we were doing” (manufacturing company)
Lessons from Firm Study

- Firms join/not join for different reasons
  - Join: Strategic research relevance; leveraging; students; strategic alliances
  - Not join: Lack of strategic research relevance; IP; lack of absorptive capacity

- “Champion’s” recommendation carries a lot of weight but decision is influenced by multiple people at different levels (mean=4)
  - Need to arm champion with data and information to overcome objections others will raise

- Timing matters: it is a lot easier to join if the money for it is in the budget than if it has to be found in a set budget
  - Budgets get set before calendar year
Drew Rivers’ Conclusion

• “Network ties were found to influence mainly the initial consideration of IU center membership. The ultimate membership decision followed more closely strategic management and transaction cost models: the IU Center’s technical qualities and its strategic alignment with the organization, as well as membership cost and IP considerations, were among the strongest predictors of membership. Further, the gatekeeper’s recommendation regarding membership exerted significant influence over the decision.”
Parting words of wisdom from directors

• “Only a dedicated and active effort produces positive results.”

• “The most important factor in recruiting membership is the one-on-one interaction with potential members - especially at conferences and symposia”

• “For a multi-university site such as ours - coordination between existing sites to avoid overlapping contact was essential - we presented a unified program which showed how membership at one university was really a membership at all universities -- we split the potential members into targeted groups for each site university that were then actively pursued.”

• “If one wants to sell shoes you must have the best shoes in the world. We have to not only sell memberships but we have to have something to sell. We have always recruited PIs from all over the country - the best science and the best PIs! - that is what sells!”