Strategies for Planning, Developing, and Writing Large Team Grants

Part 1: Strategic Planning & Proposal Planning

Karen Eck, PhD
Assistant Vice President for Research
Large Team Grants (LTGs)

Represent premier agency investments

Require candid self-assessment

Built on strategic configuration of successful small research grants

Major commitment of time and resources
HUD-NDRC Timeline

- September 17: NOFA Released
- October: Resources & Webinars Available
- November 3: Threshold Review Deadline
- November 24: HUD Threshold Review Response Deadline
- March 27: Phase 1 Application Deadline
- March-June: HUD Review & Phase 2 Invitations Extended
- June-October: Phase 2 Applications Prepared
- October: Phase 2 Application Deadline
- December: Phase 2 Winners Announced
### NSF – ERCs - 2014

<table>
<thead>
<tr>
<th>Advanced Manufacturing</th>
<th>Biotechnology &amp; Health Care</th>
<th>Energy Sustainability &amp; Infrastructure</th>
<th>Microelectronics, Sensing &amp; Information</th>
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<tbody>
<tr>
<td><strong>CBiIRC</strong></td>
<td><strong>Quality of Life Technology Center</strong></td>
<td><strong>FREEDM systemscenter</strong></td>
<td><strong>EUV Center for Extreme Ultraviolet</strong></td>
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<tr>
<td>BEACON</td>
<td>SynBERC</td>
<td><strong>QESST</strong></td>
<td><strong>TANMS</strong></td>
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<td>SynBERC</td>
<td><strong>NSF Engineering Research Center for Sensorimotor Neural Engineering</strong></td>
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<td><strong>TRANSMET</strong></td>
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<td><strong>Structured Organic Particulate Systems (C-SOPS)</strong></td>
<td>Revolutionizing Metallic Biomaterials</td>
<td><strong>BiomimeticMicroElectronicSystems</strong></td>
<td><strong>MIRTHE</strong></td>
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<tr>
<td>NASCENT</td>
<td>Advanced Self-Powered Systems of Integrated Sensors and Technologies</td>
<td><strong>Reinventing America’s Urban Water Infrastructure</strong></td>
<td><strong>Translational Applications of Nanoscale Multiferroic Systems</strong></td>
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**Map:** NSF – STC map 2005-13
Part I: OUTLINE

- Asking yourself the right questions
- Understanding the funding agency
- Strategies for developing competitive partnership proposals
- The support role the Office of Research can play
- Developing a schedule and task assignment table for proposal planning and production
Asking the right Questions

The Right Reasons

The Right PI

Analyze the Agency and the Solicitation
Successful LTG Research Team

• History of successful collaborations
• History of team performance and trust
• Shared research vision
• Understanding of each team member’s role
• Collaborative working style – each member deepens synergy and contributes value-added benefits to project
What Makes a Good Team Member?

• Effective communicator
• Experienced researcher in individual expertise
• Successful recipient of an agency’s funds
• Careful reader of the solicitation
• Skilled and prompt producer of contributions to group projects
Understanding the Funder

Agency mission, culture, investment priorities, strategic plan

Understand the agency language in the solicitation
Strategies for Competitive Partnership Proposals - 1

- Take significantly more development time
- Must determine early on who will write the grant – “integrating author”
- Capacity to develop performance-based budget
- Configuration of LTG research partnership key to its competitiveness
- Development & writing of the proposal serves long-term interests of an emerging research partnership or affinity group
Strategies for Competitive Partnership Proposals - 2

• Who will read all the documents cited by the sponsor in the solicitation?
• Who will be the lead author of the education & outreach component?
• Who will be responsible for assessment & evaluation?
• Who will gather required institutional data, e.g., awarded STEM degrees?
• Visuals are key to a strong partnership proposal
## Virginia’s Approach

### THRIVE: Resilience In Virginia

<table>
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<tr>
<th>Unite The Region</th>
<th>Create Coastal Resilience</th>
<th>Strengthen Vulnerable Neighborhoods</th>
<th>Improve Economic Vitality</th>
<th>Build Water Management Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Create an alliance of local governments</td>
<td>• Leverage existing studies and projects</td>
<td>• Emphasize known vulnerable populations</td>
<td>• Concentrate expertise, resources, innovation</td>
<td>• Generate cross-discipline impacts</td>
</tr>
<tr>
<td>• Build public/private outreach, connectivity and consensus</td>
<td>• Incorporate physical, social, economic effects</td>
<td>• Align with HUD’s Livability Principles</td>
<td>• Focus on: Maritime, Storm, Flood, &amp; Rising Water Resilience</td>
<td>• Reduce emergency response burdens</td>
</tr>
<tr>
<td>• Focus on common challenges and opportunities</td>
<td>• Build a Coastal Resilience Lab/Accelerator</td>
<td>• Create micro-neighborhood preparedness plans</td>
<td>• Build businesses and a labor force to manage water</td>
<td>• Measure improvement quantitatively</td>
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NSF ERC Three Plane Diagram
Renewable Energy System Research & Education
Help from RD Professionals & the Office of Research

• Project Management: Planning, scheduling, strategizing

• Reading, clarifying, outlining the RFP

• Narrative production skills, integrating, polishing

• Comprehensive corporate memory – engaged team member on numerous proposals to a broad range of agencies

• Can do some of the gathering & compiling, seek institutional resources, draft letters, keep track of grant components, act as a liaison
Development of a STAT

Schedule and Task Assignment Table

Generic Research Center Proposal

- Activity, Responsible Individual(s), Completion date(s)
- Description of Center Research
- Description of Management Plan
- Education & Outreach
- Plan for Mentoring Post-docs
- Diversity Objectives
- Knowledge Transfer Objectives
- Facilities & Equipment
- Budget, budget justification & subawards
- Other Documents & Appendices
P2 Narrative Sections: ~100 pages

Exhibit A - Executive Summary
Exhibit B - Threshold Requirements
Exhibit C - Capacity
Exhibit D - Need
Exhibit E - Soundness of Approach
Exhibit F – Leverage
Exhibit G - Long-Term Commitment
P2 Attachments (Appendices):

Attachment A - **Partner documentation**
Documents also required under Appendices C and D for each Partner, if applicable.

Attachment B - **Leverage documentation**

Attachment C – **CDBG-NDR Application Certifications**

Attachment D – **Consultation Summary**
For Phase 2, provide a separate updated Consultation Summary with your application. The Consultation Summary should also include a summary by topic of all comments received on the Application or amended submission and a list of commenters by name or organization.

Attachment E – **Maps and Drawings**

Attachment F – **Benefit-Cost Analysis** (Required in Phase 2 for all Covered Projects)

Attachment G – **Waiver Requests** (optional)

Attachment H – **Crosswalk Checklist**

Attachment I – **MID-URN Checklist A or B**