27 May 2020

Budgets, NSF Review, Wrapping Up

UNIVERSITY OF MEMPHIS | CAREER ACADEMY SEMINAR 4

Alix Norris, Ph.D.
Jessica Venable, Ph.D.
Deji Akanbi, Ph.D., P.E.

McAllister & Quinn
Your Facilitators

Alix Norris, Ph.D.
Carol Burdsal, Ph.D.
Deji Akanbi, Ph.D.
Jess Venable, Ph.D.
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>APRIL 13-17</td>
<td>Review concept papers</td>
</tr>
<tr>
<td>APRIL 21</td>
<td>Initial cohort office hours</td>
</tr>
<tr>
<td>APRIL 28</td>
<td>Education Plan Seminar</td>
</tr>
<tr>
<td>APRIL 30</td>
<td>Thesis 1 proposal due</td>
</tr>
<tr>
<td>MAY 4</td>
<td>Small cohort office hours</td>
</tr>
<tr>
<td>MAY 11</td>
<td>Poster required Document Seminar</td>
</tr>
<tr>
<td>MAY 14</td>
<td>Proposal 2 proposal due</td>
</tr>
<tr>
<td>MAY 18</td>
<td>Small cohort office hours</td>
</tr>
<tr>
<td>MAY 27</td>
<td>Budget &amp; Merit Review Seminar</td>
</tr>
<tr>
<td>JUNE 1</td>
<td>Small cohort office hours</td>
</tr>
<tr>
<td>JUNE 8-16</td>
<td>Red Team Review</td>
</tr>
<tr>
<td>JUNE 22</td>
<td>Small cohort office hours</td>
</tr>
</tbody>
</table>

**大学 MEMPHIS CAREER 学院**

**2020 年度规划时间表**

*请注意，此内容仅供大学 MEMPHIS 学院独家使用。未经书面许可，不得复制或分发。*
## Session 4: Guiding Questions

| Target | What are the elements of a competitive budget & justification? |
| Money | How big of a budget should I be considering? |
| Checklist | What types of costs are allowed? |
| Light Bulb | What will happen to my proposal after submission? |
NSF Faculty Early Career Development Program

BUDGET AND JUSTIFICATION
Reminder: Direct vs. Indirect Costs

**DIRECT COSTS**
- People
- Materials
- Travel
- Facility Use/Rental
- Equipment
- Consultants
- Research Computers
- Publication Costs

**INDIRECT COSTS**
- Costs for institution/facilities
- A percentage of direct costs
- Not tied to one, specific project
- University negotiates with federal government

**TOTAL COSTS**

Expenses needed to complete the project.
Reminder: NSF Budget Allowable Direct Costs

<table>
<thead>
<tr>
<th>PI SALARY</th>
<th>EQUIPMENT</th>
<th>TRAVEL</th>
<th>OTHER DIRECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited to &lt;2 mo regular salary/yr</td>
<td>Defined as &gt;$5,000</td>
<td>Specify, itemize, and justify by destination and cost.</td>
<td>Materials &amp; supplies</td>
</tr>
<tr>
<td>Includes all NSF-funded grants</td>
<td>Limited to research equipment (no general purpose)</td>
<td>Domestic vs foreign</td>
<td>Publications</td>
</tr>
</tbody>
</table>

No cost sharing!
Budget Guidelines

TOTAL 5-YEAR BUDGET

BIO, ENG, OPP: > $500,000
All other Directorates: > $400,000

Most NSF divisions fund projects not much over the minimum amount.
Typical CAREER Budget Considerations

**PERSONNEL**
- Primarily supports PI (2 summer mo/year)
- Co-PIs not allowed
- Senior personnel/consultants allowed, but must be justified with role

**OTHER**
- Postdoc fellows
- Grats/undergrads
- Education/outreach activities
- Travel
- Research materials/costs
Budget Justification

Personnel
- Name, role
- # person-months & requested salary comp.

Postdocs/Students
- Postdocs: list total # of persons, PMs, salary
- Students: only total # persons and salaries

Travel
- Domestic vs. foreign
- Be as detailed as possible (destination, name)
- Justify travel, registration, subsistence

Other
- Justify by subsection (materials, consultant, etc)
- Break down and justify costs to <$1k
NSF Faculty Early Career Development Program

MERIT REVIEW PROCESS
# NSF review criteria

<table>
<thead>
<tr>
<th>Principles</th>
<th>Criteria</th>
<th>Review Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects should be of the <strong>highest quality</strong> and have the <strong>potential to advance, if not transform, the frontiers of knowledge.</strong></td>
<td><strong>Intellectual Merit:</strong> Encompasses the potential to advance knowledge</td>
<td>Potential to advance knowledge and understanding within its own field or across different fields?</td>
</tr>
<tr>
<td>Projects, in the aggregate, should contribute more <strong>broadly to achieving societal goals.</strong></td>
<td><strong>Broader Impacts:</strong> Encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.</td>
<td>Potential to benefit society or advance desired societal outcomes?</td>
</tr>
<tr>
<td>Meaningful assessment and evaluation of NSF funded projects should be based on appropriate metrics.</td>
<td>Other criteria (as defined)</td>
<td></td>
</tr>
</tbody>
</table>
Review format

**Ad Hoc**
- Selected experts
- Submit reviews to PO
- No panel
- Often used: AGS, some DMS

**Panel**
- Generalized experts
- Convene in a group
- Come to consensus
- Often used: ENG, CISE, HER, AST, some DMS

**Combo**
- Often used: BIO, CHE, DMR, GEO (except AGS), SBE
Inside NSF peer review panels

Primary, Secondary, Scribe: Members of the committee assigned to your application.

Ad-Hoc Reviewers: Additional reviewers engaged to address content specialty areas, etc.

Program Officer: NSF Staffer

Source: NSF Proposal Review Panels.
NSF Reviewer Comments

Description of the context in which the proposal was reviewed

Panel summary

Individual feedback from 3-5 assigned reviewers

Rating

Source: John Bunce, PhD, Max Planck Institute for Evolutionary Anthropology. "Ethnic Boundaries and Cultural Change in an Amazonian Population." Funded 2012.
### NSF review criteria: Ratings

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>Outstanding proposal in all respects; deserves highest priority for support.</td>
</tr>
<tr>
<td>Very Good</td>
<td>High quality proposal in nearly all respects; should be supported if at all possible.</td>
</tr>
<tr>
<td>Good</td>
<td>A quality proposal, worthy of support.</td>
</tr>
<tr>
<td>Fair</td>
<td>Proposal lacking in one or more critical aspects; key issues need to be addressed.</td>
</tr>
<tr>
<td>Poor</td>
<td>Proposal has serious deficiencies.</td>
</tr>
</tbody>
</table>
Common strengths and weaknesses

• The **research plan is not detailed enough** to judge that it builds a foundation for a lifetime of contributions to research and education.

• The **education plan is a grab-bag list of activities** and not a coherent plan to significantly advance the research question.

• The research question is compelling, but the **plan to integrate research and education is weak**.

• The proposal **lacks appropriate assessment strategies** (including for the education plan and Broader Impacts).
Common strengths and weaknesses

- Lack of Impact
- Unclear, flawed hypothesis
- Lacking appropriate expertise
- Unclear, flawed rationale
- Weak track record
- Poor writing
Expectations after Review

PIs submit about **2.3 proposals** for every award they receive, on average.

In 2011, **31%** of new PIs received their first award on their first attempt.

Most proposals that are awarded do not receive all "Excellent" scores.
Responding to reviewer comments

**Do nothing for 7 days.**

Carefully read the review summary and comments.

Talk to your mentors, chair, Office of Research to discuss comments.

Contact the PO to understand discussion.

Remember: A new panel convenes to review each new submission.

Resubmit!
NSF Faculty Early Career Development Program

FINAL CONSIDERATIONS BEFORE SUBMISSION
60 DAY COUNTDOWN
# 60 Day Countdown: Internal Resources

<table>
<thead>
<tr>
<th>Question</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you contacted the Office of Sponsored Programs?</td>
<td>Set up your Cayuse Record: <a href="mailto:osp@Memphis.edu">osp@Memphis.edu</a></td>
</tr>
<tr>
<td>Do you need help with Broader Impacts?</td>
<td>Contact Cody Behles: <a href="mailto:cbehles@Memphis.edu">cbehles@Memphis.edu</a></td>
</tr>
<tr>
<td>Are you interested in leveraging the STEM Hub?</td>
<td>Contact Stephanie Ivey: <a href="mailto:research@Memphis.edu">research@Memphis.edu</a></td>
</tr>
<tr>
<td>Do you need help with assessment?</td>
<td>Contact CREP: <a href="http://www.memphis.edu/crep/">www.memphis.edu/crep/</a></td>
</tr>
<tr>
<td>Do you need someone to review your narrative?</td>
<td>Send a draft as ASAP: <a href="mailto:research@Memphis.edu">research@Memphis.edu</a></td>
</tr>
<tr>
<td>Would you like to join a CAREER peer review group??</td>
<td>Contact Cody Behles: <a href="mailto:cbehles@Memphis.edu">cbehles@Memphis.edu</a></td>
</tr>
</tbody>
</table>
60 Day Countdown: Final Checklist

INTEGRATE
Are the research and educational plans integrated?
Does the research impact education and vice versa?

FIT
Does it reflect the interests of:
• YOU (PI)
• Your discipline
• Your dept, school, and community

SCOPE
Are the objectives appropriate for 5 years?
Is the plan substantial, novel but not overambitious?

DETAILED
Are activities adequately detailed?
Are metrics, data collection, and evaluation described?
60 Day Countdown: Step away and ask...

Does this writing convey my motivations and enthusiasm?

Will reviewers get a strong picture of who I am as a PI and where I want to go?

Have I clarified enough for readers the integration and synergy in my plans?

Are my figures legible and eye-catching?

Have I conformed to all page limits and guidelines?
<table>
<thead>
<tr>
<th>30 Day Countdown: Program Officer’s Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finalize your aims, objectives</td>
</tr>
<tr>
<td>Make sure literature review is current, complete</td>
</tr>
<tr>
<td>Get feedback on plan to integrate research + edu</td>
</tr>
<tr>
<td>Finalize plans, contacts, commitments for BI</td>
</tr>
<tr>
<td>Discuss project with your Chair, prep Departmental Ltr</td>
</tr>
<tr>
<td>Confirm participation of any internal (campus) partners</td>
</tr>
<tr>
<td>Discuss, confirm delivery date of Letters of Collab.</td>
</tr>
<tr>
<td>Plan budget categories, estimate support needed</td>
</tr>
</tbody>
</table>
## 30 Day Countdown: Check attachments

<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>Fillable forms</td>
</tr>
<tr>
<td>Budget Justification</td>
<td>5 pages</td>
</tr>
<tr>
<td>Facilities, Equipment &amp; Resources</td>
<td>No Limit</td>
</tr>
<tr>
<td>Data Management Plan</td>
<td>2 pages</td>
</tr>
<tr>
<td>Biographical Sketch</td>
<td>2 pages</td>
</tr>
<tr>
<td>COA &amp; Current/Pending</td>
<td>NSF templates or tables</td>
</tr>
<tr>
<td>Letters of Collaboration</td>
<td>Scripted statement</td>
</tr>
<tr>
<td>Departmental Support Letter</td>
<td>2 pages, see solicitation</td>
</tr>
</tbody>
</table>

**CREATED FOR EXCLUSIVE USE BY THE UNIVERSITY OF MEMPHIS. DO NOT DUPLICATE OR DISSEMINATE WITHOUT WRITTEN PERMISSION.**
Well, just take a deep breath and know...
Questions?
Ask a former NSF Program Officer