SPA EDU: 
Practical Ways to 
Support Faculty Proposal 
Development

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The University of Vermont
Overall Objectives

• Learn how to “deconstruct” an FOA (funding opportunity announcement)

• Learn practical project management tools specific to proposal development

• Become more aware of proposal/research development resources on campus
How to Deconstruct a Funding Opportunity Announcement (FOA)

• What is a Funding Opportunity Announcement?
  • Guidelines for the proposal to which you are applying
  • Most often, they are a supplement to “standard instructions”

• Common Elements

• Read with attention to detail

• Utilize the FOA to create a ‘checklist’ for the PI (and you!)
Common Elements of FOAs & What to Look For

- Deadlines
- Eligibility (PI & institutional)
- Program Description
- Submission specifications
- Review Criteria
- Example:

Deadlines

- “Hard” vs. “Soft”
- Some agencies use “standard” deadlines (e.g., NIH, 3x/year)
  - Does the FOA differ from the standard dates?
- Are there earlier deadlines for:
  - pre-proposals/concept papers or Letter of Intent (LOI)?
  - Open question period (common with DOD, DOE)
- What time and time zone is the deadline?
- UVM SPA is not open at midnight
Confirm Eligibility

• Who is eligible to serve as the PI (principal investigator)?
  • Restricted to career stage (e.g., new or early-stage investigator?)
  • Restricted to U.S. citizens?
• Institutional eligibility requirements – can UVM serve as the awardee?
• Is it a **limited submission** funding opportunity?
Submission and document specifications

• Required and optional documents/components
• Page limits – what sections of the proposal are included/excluded?
• Document formatting
  • Fonts, margins, spacing, headers/footers, page numbers
• Submission method
  • Electronic – via UVM SPA
  • Electronic – via PI/delegate (after SPA route/approval)
  • Email a pdf? Mail hard copies (how many?) ?
Budget specifications

• Are there budget caps?
  • Overall cap? (on total directs, or total costs inclusive of F&A?)
  • Salary cap?
  • Cap on indirect cost rate?

• Cost sharing requirements

• Forms required - “modular” vs fully itemized, narrative justification

• Requirements and constraints:
  • PI must travel to Bethesda, MD annually to attend meeting
  • Line item X must not exceed 10% of total direct costs
Program Description

• PIs use this section to determine alignment of their research with the funding agency’s goals and objectives

• What information can you help with?
  • Required components – standard to this funder or mechanism? Are they different? Any *unusual* sections required? **Alert the PI.**
  • Structure of the proposal - required or suggested subheadings within narrative
  • References to Publications, Reports, Workshops – find and send these to the PI and research team
  • References and hyperlinks to *agency templates, help documents*
Review Criteria

• Are they the “standard” review criteria for that funding agency?
• Are there additional or special review criteria for that specific FOA?
• Why should I care? Isn’t that the PI’s job?
  • Alert the PI to differences from standard criteria
  • Use when creating templates/outlines
Project Management Tools and Tips

- Intake email
- Checklists
- Timeline/deadline management
- Budget development
**Project Management Tools & Tips – Intake email**

**What do you need to know to get started?**

Specific PA/RFA or Parent Announcement: 
Type of Grant: 
Proposal title: 
Will this project include:  
- Vertebrate Animals (IACUC)  
- Human Subjects (IRB) (additional questions)  
- Human or simian cells, tissue, blood or body fluids  
- Human Embryonic Stem Cells  
- Biohazardous Materials (IBC)  
- Radioactive substances, lasers and/or x-rays  
- Select Agents or Purchase of Genomic Arrays  
Will this project be utilizing:  
- VT Advanced Computing Center  
- DNA/Microarray/Sequencing  
- Microscopy Imaging  
- Flow Cytometry/Cell Sorting  
- Center for Biomedical Imaging  
- Instrumentation & Model Facility (IMF)  
- Proteomics Core Facility (VGN)
Create a Checklist for each Proposal

• Useful tool for communicating with the PI (and their collaborators)
• Useful tool for yourself – particularly when you have multiple, overlapping proposal deadlines to support
• You can create a “standard” checklist for common grant mechanisms/funders
What Should Be Included in a Checklist?

• Hyperlink to the FOA, instructions
• Funder deadline
• Internal deadline(s)
• List of all required components
• Responsible party for each item
• Column for completion status
Checklist Examples

- Link to Forms/Instructions
- Forms to complete
- Required components (Narrative & Budget)
- If applicable
# Checklist Examples

**NIH Shared Instrumentation Grant (SIG) (S10) – Submission CHECKLIST**

**Funding Opportunity:** [PAR-18-600](https://grants.nih.gov/grants/how-to-apply-application-guide.html)

**Application due date:** May 31, 2018 (by 5:00 pm EST)

This document is designed only to serve as a project management tool. It does NOT replace the detailed information available within the relevant funding opportunity announcement (FOA), the funding agency’s forms, instructions, or review criteria. For any questions, please refer directly to the FOA or contact your program officer.


* Follow the Research (R) Instructions

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<thead>
<tr>
<th>Forms</th>
<th>Notes</th>
<th>Assigned Roles</th>
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<tr>
<td>SF424 (R&amp;R) Cover form</td>
<td>See notes on pp. 9-10 of RFA for special instructions</td>
<td>Data entry: Bridget</td>
</tr>
<tr>
<td>PHS398 Cover Page Supplement</td>
<td>Data entry: Bridget</td>
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</table>
| R&R Other Project Information | Data entry, and upload:  
  - Project Summary/Abstract  
  - Project Narrative  
  - Bibliography & References Cited  
  - Facilities & Other Resources  
  - Equipment (*see special instructions below)  
  - Other Attachments (*see special instructions below) | Edit w/PI:  
  Proofread/format:  
  Upload final:  
  Jeralyn  
  Gwen |
| Project/Performance Site Location(s) | Data entry: Bridget |
| SF424 (R&R) Senior/Key Person Profiles | Biographical sketches are required for:  
  - PD/PI  
  - Major Users  
  - Minor Users  
  - Technical personnel, as applicable  
  Current and Pending: required for PD/PI | Obtain list of users:  
  Request:  
  Track Receipt:  
  Check for compliance:  
  Prepare Weiss C&P:  
  Jeralyn  
  Jeralyn  
  Gwen  
  Bridget |
| PHS Assignment Request Form | (optional) request assignment to institute/Center and study | |

*Completion Status*

- [ ]
- [ ]
- [ ]
Tip/Trick - Checklist

Maintain folder for each grant – staple/clip checklist to front of folder
Folder tab should contain snapshot of specific project
• PI
• InfoEd number
• Due Date
• Type of Grant
• Any subaward institutions involved
Timeline/Deadline Management

• How can you help the PI... and selfishly, how can you help yourself?
• Create an idealized timeline for proposal “deliverables”
  • 12 weeks before deadline – “kick off” meeting with team
  • 10 weeks before deadline – rough budget estimate
  • 6 weeks before deadline – collect and edit biosketches
• Use the idealized timeline as a tool to create a tailored timeline for the specific proposal - discuss and assign realistic dates with the PI
• Sometimes easier to work backwards from the deadline date
Tailored Timelines: Address Time-consuming Components

• Subawards
  • Some institutions need lots of time to gather approved documents – provide as much time as possible – aim for 2 months prior to deadline
  • Plan extra room into your timeline – many institutions will not meet deadlines – need final subaward documents at least 2 weeks prior to deadline

• Letters of support
  • Be sure PIs are requesting letters of support well in advance – ideally 2 months notice should be provided – the letter writers are very busy and this is not their top priority!

• Different information required per FOA
## What Does a Timeline Look Like?

### Cushman/Nelson COBRE Resubmission – Project and Core Leaders TIMELINE

<table>
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<th>Date</th>
<th>Deliverable(s)</th>
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<tr>
<td>(Oct 10 - tentative)</td>
<td>Kick-off meeting</td>
</tr>
<tr>
<td>Oct 10 – tent)</td>
<td>Revised Specific Aims and Introduction to PIs and mentors for review</td>
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<tr>
<td>Nov 15</td>
<td>Writing/revising Research Plan (Significance, Innovation, Approach)</td>
</tr>
<tr>
<td>Nov 1 – 15</td>
<td>Revised budget to PIs and mentors, and Gagan for review</td>
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<tr>
<td>Nov 1</td>
<td>Biosketch tailored to COBRE application due</td>
</tr>
<tr>
<td>Nov 15</td>
<td>Revised Research Plan to PIs and mentors (and Jeralyn, Gagan)</td>
</tr>
<tr>
<td>Nov 18 – Dec 6</td>
<td>Write/revise</td>
</tr>
<tr>
<td>Nov 18 – Dec 6</td>
<td>Protection of Human Subjects, Facilities &amp; Resources, Equipment, Resource Sharing, Project Summary (Abstract), and Narrative</td>
</tr>
<tr>
<td>Dec 6</td>
<td>Full, “near final” Project proposal due to PIs and mentors</td>
</tr>
<tr>
<td>Nov 1 – 15</td>
<td>Iterative Revisions to budget</td>
</tr>
<tr>
<td>Nov 15</td>
<td>Iterative Revisions to budget</td>
</tr>
<tr>
<td>Dec 6</td>
<td><strong>First draft of Full Research Plan for new PD</strong></td>
</tr>
<tr>
<td>Weeks of Dec 9 – 13</td>
<td>PIs/leadership team, mentors reviewed text</td>
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<tr>
<td>Dec 20</td>
<td>All Letters of Support &amp; Final project proposals due, i.e., “pens down”</td>
</tr>
<tr>
<td>Fri, Jan 17</td>
<td>ROUTE proposal</td>
</tr>
<tr>
<td>Fri, Jan 17</td>
<td>GOAL proposal submission</td>
</tr>
<tr>
<td>Fri, Jan 24</td>
<td>Write/revise</td>
</tr>
<tr>
<td>Nov 18 – Dec 6</td>
<td>Iterative revisions to Intro, Aims, and Research Plan</td>
</tr>
<tr>
<td>Nov 18 – Dec 6</td>
<td>Write/revise</td>
</tr>
</tbody>
</table>

### Week of Oct. 21-25
- PD and Core leaders individual meetings w/PIs, revise based on feedback
- Writing/revising Research Plan (Significance, Innovation, Approach)
- Request any letters of support from collaborators (due by Dec 15)
- Revised budget to PIs and mentors, and Gagan for review (**First draft for new PD)
- Biosketch tailored to COBRE application due
- Mentor letter and biosketch due
- Iterative Revisions to budget

### Week of Nov 18-22
- PD and Core leaders individual meetings w/PIs, revise based on feedback
- Second draft of budget to PIs, mentors, Gagan – integration of component budgets
- Revised Research Plan to PIs and mentors (and Jeralyn, Gagan) (**First draft of Full Research Plan for new PD)
- Write/revise

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*Jeralyn Haraldsen, PhD*
Tip/Trick – Keeping Things on Track

• Weekly Email Communication
  • Create “standard” email reminders based on your timeline
  • Use Outlook email scheduling to “automate” these reminders

• Status updates – use visual indicators

<table>
<thead>
<tr>
<th>Color</th>
<th>Status</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Red</td>
<td>Overdue</td>
<td>Significant issue/risk, cannot be handled without corrective action</td>
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<tr>
<td>Yellow</td>
<td>In progress</td>
<td>Problem/risk identified</td>
</tr>
<tr>
<td>Green</td>
<td>Complete</td>
<td>Everything fine, on track</td>
</tr>
</tbody>
</table>

You can also shade individual cells in a table to indicate status.
Budget Development

• Personnel – usually the biggest cost in the budget
  • Prepare draft budget with personnel effort/salary early – share with PI -- What’s left in terms of operating costs?

• Subawards – two approaches

• Your expertise – What things have they forgotten? Are costs realistic?

• **Proactive communication** between pre- and post-award staff - budget for re-occurring costs at the time of proposal submission (ex. animal housing costs, equipment maintenance, computer costs, etc.)

• TIME and Communication
Two Approaches for Subaward Budget Development

1. Collaborators estimate cost based on scope – PI develops prime budget to accommodate subrecipient costs

2. PI develops (or co-develops) prime budget - provides guidance to collaborators (i.e., do not exceed $100,000)

In practice, usually a **hybrid** approach with give and take

Subawards add complexity – Requires more TIME and Communication
How Can you Support the Writing When You Aren’t the Subject Matter Expert?

• Templates
• Text repository
• Style Guide / Compliance Matrix
• Outlines for narrative sections
• Proofreading tips
Templates

• Work well for “standard” proposal components for a particular funding agency

• Work well for the “supplementary” sections of the proposal

VERTEBRATE ANIMALS

Include a "Vertebrate Animals" attachment if you answered "Yes" to the question "Are Vertebrate Animals Used?" on the R&R Other Project Information Form.

1. Description of Procedures
   • Provide a concise description of the proposed procedures to be used that involve vertebrate animals in the work outlined in the "Research Strategy" attachment. The description must include sufficient detail to allow evaluation of the procedures.
     o Examples of the types of procedures that should be described include blood collection, surgical procedures, administration of substances, tumor induction and post-irradiation procedures, etc.
   • Identify the species, strains, ages, sex, and total numbers of animals by species, to be used in the proposed work. If dogs or cats are proposed provide the source of the animals.

2. Justifications
   • Provide justification that the species are appropriate for the proposed research.
   • Explain why the research goals cannot be accomplished using an alternative model (e.g. computational, human, invertebrate, in vitro).

3. Minimization of Pain and Distress
   • Describe the interventions including analgesia, anesthesia, sedation, palliative care and humane endpoints that will be used to minimize discomfort, distress, pain, and injury.
     o Describe procedures or circumstances that may result in more than momentary discomfort, distress, pain or injury.
     o Describe methods to alleviate discomfort, distress, pain or injury.
     o If pharmacological agents are used, the agent(s) should be specified by name or class. Include...
Text Repository for Common Components

• **Facilities and Resources**
  • Maintain a repository of details describing internal facilities used frequently by your PIs

• **Biosketches**
  • Keep updated biosketches on shared drive if there are multiple administrators working with PIs; update research support each time a grant ends or a new grant is awarded.

• **Other Support (current & pending support)**
  • Update each time a new grant is submitted or awarded.
Create and Use a Style Guide/Compliance Matrix

- **Useful when** **multiple writers** contributing to a proposal
- **Consistency** – formatting, capitalization, highlighting, numbering/outlining style
- **Important for large, complex proposals**
- **Prevention at the beginning saves time at submission crunch**

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<tr>
<td><strong>1st level Major Headings:</strong></td>
</tr>
<tr>
<td><strong>2nd level Subheadings:</strong></td>
</tr>
<tr>
<td><strong>3rd level subheadings:</strong></td>
</tr>
</tbody>
</table>

**Example:**

- **RESEARCH STRATEGY**
  - (1st level: BOLD, CAPS, no numbering, 6-12 point space after)
- **Significance**
  - (2nd level: Bold, lowercase, 6 point space after, text on next line)
  - **Subheading A:**
    - (3rd level: italicize, colon at end, text on **same** line)
- **Innovation**
  - (2nd level: Bold, lowercase, 6 point space after, text on next line)
  - **Subheading B:**
    - (3rd level: italicize, colon at end, text on **same** line)
Outlines for Narrative Components

• Synthesize the info from multiple resources to create a narrative outline

• What to include:
  • Required headings
  • Instructions
  • Review criteria
  • Page limits

• Use your style guide to format “correctly” at the beginning
# What Does a Proposal Outline Look Like?

## A. Background
- **Provide the rationale** for the proposed research program, the relevant background history, and the need for the proposed research.
- **Indicate how** the proposed program relates to current training activities at the applicant institution.
- The proposed institutional research training program may complement other ongoing research training and career development programs at the applicant institution, but the proposed program must be clearly distinct from related programs currently receiving Federal support.
- **Summarize the research training activities of the major participating unit(s) and department(s) represented in the proposed program.**
- If required, complete Tables 1-3 (these tables will be included in the Data Tables attachment), and summarize the data here using the guidance below. In your narrative, refer to specific tables as applicable.

### Table 1. Census of Participating Departments and Interdepartmental Programs:
- **Describe the organization** of the proposed training program, the participating departments and interdepartmental programs, and the extent to which faculty, graduate students, and/or postdoctoral fellows from those departments/interdepartmental programs participate in the programmatic activities to be supported by the training grant.

### Table 2. Participating Faculty Members:
- **Describe the distribution** of participating faculty by academic rank, department, or interdepartmental program and areas of research emphasis.
- **Describe the rationale for** the faculty selected to participate in the training grant.
- **Analyze the data** in terms of the overall experience of the faculty in training predoctoral and/or postdoctoral.
- **Comment on the inclusion** of faculty whose mentoring records may suggest limited, recent training experience at either training level (predoctoral or postdoctoral).

### Table 3. Federal Institutional Research Training Grant and Related-Support Available to Participating Faculty Members:
- **Summarize the level** of research training support at the institution.
- **Comment on instances** where the tabular data indicate that there may be substantial overlap of participating faculty.

## B. Program Plan
### a. Program Administration
#### i. Program Director/Information
- **Describe the program director's qualifications** for providing leadership of the program, including:
  - relevant scientific background,
  - current research areas, and
  - experience in research training.
- **Indicate** the program director's percent effort in the proposed program.

#### ii. Special Instructions for Multiple PDPs:
- If multiple PDPs are proposed, explain, in this section your rationale for how this will facilitate program administration.

#### iii. Administrative Information
- **Describe the administrative structure** of the program and the distribution of responsibilities within it, including the means by which the program director will obtain continuing advice with respect to the operation of the program.

### b. Program Faculty
Proofreading and Final Review Tips

• Use a style guide from the beginning
• Run a spell check
• Have someone with “fresh eyes” do final proofread – sleep on it
• Find and replace – be consistent (*assume the mistake is everywhere)
• Don’t forget: headings, numbering, tables, captions

Trick your brain:
• Look at the document at different times of the day
• Proofread from a printed copy - *red pen
• Read it out loud to yourself
• Read backwards!
• Turn OFF full justification
How to “Scale Up” for Large/Complex Proposals

Large, complex proposals can overwhelm

- Small problems become big problems - Prevention of pitfalls
- Role and responsibilities – critical to define
  - Point person for: timeline management, document tracking
- Need extra support? Pull other people onto the team temporarily
  - OVPR Grant Proposal Manager
  - ** think outside the box **
- Recurring meetings – science/scholarship, budget development, administrative aspects
How to “Scale Up” for Large/Complex Proposals

Allow enough TIME

- “Pens down” deadline further in advance – no last minute edits
- Final review – who? Avoid too many cooks
- Leave extra time for administrative tasks
  - proofreading, combining pdfs, uploading, administrative stuff
  - Google docs / SharePoint – sharing info among admins
- SPA review takes longer
  - Document quirky things that you’ve already worked out – provide info to SPA in advance of their review
### Status columns

- **Drafted?**
- **Requested?**
- **Received final?**

### Create a worksheet for each component/major section
### Example “Tracking Worksheet” – Center proposal

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<tr>
<th>Specific Aims</th>
<th>Checklist</th>
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Grant Proposal Development Resources at UVM

• Sponsored Project Administration: https://www.uvm.edu/spa

• Office of the Vice President for Research
  • Grant Proposal Manager - Jeralyn Haraldsen:
    https://www.uvm.edu/ovpr/grant-proposal-manager-services

• UVM Foundation:
Additional Questions?

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