Break it Down to Build it Better

Pacing yourself for the RO1 submission

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Workshop Agenda

- Introductions and workshop objectives
- Topics of interest expressed in questionnaires
- NIH updates; submission/resubmission cycles
- Form peer accountability groups; hold initial discussion
- Background and context
- Timelines and milestones (explanation and group work)
- Work breakdown—components (explanation and group work)
- Work breakdown—activities (explanation and group work)
- Building your timeline
- Implement, monitor, evaluate
- Why do this?
- Common pitfalls
- Brief evaluation (time permitting)
Objectives of workshop

• Establish peer accountability groups
• Provide a process for:
  – breaking large amount of work (RO1 proposal) into component parts
  – identifying associated activities
• Develop a timeline for organizing work and tracking progress
• Identify common pitfalls and discuss ways to avoid them
Topics of interest
(from questionnaires)
NIH updates

• Summary of changes—handout: 2016 NIH updated Resources v3

https://nexus.od.nih.gov/all/category/blog/open-mike/
Submission and resubmission cycles
NIH submission cycles

• Cycle 1—all proposals with submission dates of January 25 through May 7
• Cycle 2—all proposals with submission dates of May 25 through September 7
• Cycle 3—all proposals with submission dates of September 25 through January 7
## NIH review cycles

<table>
<thead>
<tr>
<th>Cycle 1</th>
<th>Due Jan 25 thru May 7</th>
<th>Review</th>
<th>Council</th>
<th>Earliest start dates: Sep/Dec</th>
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<td></td>
<td></td>
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<td>Due May 25 thru Sep 7</td>
</tr>
<tr>
<td></td>
<td>Council</td>
<td></td>
<td></td>
<td>Earliest start: Jun</td>
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<tr>
<td>Cycle 3</td>
<td>Jan 7</td>
<td>Review</td>
<td>Council</td>
<td>Earliest start: Jul</td>
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**Standard resubmission dates**

<table>
<thead>
<tr>
<th>Cycle 1</th>
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</tr>
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<tr>
<td>Cycle 2</td>
<td>Jul 5</td>
</tr>
<tr>
<td>Cycle 3</td>
<td>Nov 5</td>
</tr>
</tbody>
</table>
Resubmission timing example

2017

Submit 02/05/17
Review 06/17
Re-submit 07/05/17
Review 10-11/17
Council 01/18
Earliest start 06/18

2017

Submit 02/05/17
Review 07/17
Re-submit 11/05/17
Review 02-03/18
Council 05/18
Earliest start 07/18

Version 6.1
Resources for NIH cycles
Submissions and resubmissions


Peer Accountability Groups

• Groups of 2-3
• Purpose for today: support each other in developing a timeline for your submission
• Ongoing purpose: provide peer support, share insights and tips from mentors, and hold each other accountable
• Schedule and hold your own interim meetings through submission and evaluation
Peer Accountability Groups

Form groups
Discuss Pre-work Part II
Context for workshop—big picture

Vanderbilt internal process for NIH grant submissions (handout)
Context for workshop

- Borrowing from project management
- What is project management?
  - A structured and organized approach to accomplishing a specific effort (your project)
- What might the effort be?
  - Plan, write, and submit a manuscript
  - Conduct a research study
  - Implement a major program or intervention
  - Write and submit a grant proposal
Phases of project management

• Project management has five phases
  – Assessing feasibility
  – Planning
  – Implementing
  – Monitoring
  – Evaluating
Assessing feasibility

**Scope:** boundaries of what must be done to produce the project’s end result

**Cost:** what it will cost to complete the project

**Time:** amount of time to complete the project

None of the three is unlimited. Scope, cost, and time exist in a dynamic relationship; altering one will likely alter the other two.
Phases of project management

- Project management has five phases
  - Assessing feasibility
  - Planning
  - Implementing
  - Monitoring
  - Evaluating
Planning: Elements

• Elements of a plan
  – Goals and objectives
  – Timelines and milestones
  – Components and activities (work breakdown)
  – Resources
  – Budgets
Planning: Goal for this project

• Write and submit a proposal that:
  – Fits with the mission and direction of the Institute to which you are applying
  – Clearly contributes to the Institute’s mission and direction
  – Is well-organized, coherent, and engaging
  – Is formatted correctly and submitted by specified date
  – Meets all **internal** requirements and deadlines
Planning: Timelines and Milestones

• Elements of a plan
  – Goals and objectives
  – Timelines and milestones
  – Components and activities (work breakdown)
  – Resources
  – Budgets
Timelines versus milestones

• **Milestones**: key events in the project that tell you whether you are proceeding as planned; once set, they should be moved only with extremely good reason to do so.

• **Timeline**: describes how work on the project plays out over time; defines where tasks happen along a time continuum. Tasks can be moved, but you must understand consequences.
Planning: Setting up the timeline

• Identify end date of project (submission date)
• Break time between then and now into units (can be days, weeks, months, quarters, or combination)
• Line the paper with a column for each unit of time
• Write time units at top of each column
• Blank timeline provided for this workshop
Your timeline

Add dates to your timeline
Planning: Milestones and Key Dates

• Write on tablet (or your computer)
  – Dates that can not be moved (submission date and internal deadlines)
  – Add key dates that apply to everyone
    • Holidays
    • Mock review date
    • Times your peer accountability group will meet
  – Add key dates for you as individual
    • On call times
    • Vacation or time away (yours, a member of your team, or someone critical to your proposal)
    • Kid’s birthday, anniversary, other dates of importance to you
    • When will you send drafts out for review other than Edge review?
    • When will you get documents to editor if using one?
Constructing your individual timeline

• Work in your groups, but focus on your individual timeline
• Select single color of post-it note for all milestones and key dates
• Write each milestone/key date on separate post-it notes
• Place under the appropriate column on your timeline
Milestones

Demonstration
Group work
Reconvene
A daunting task

This is really exciting, but how am I gonna eat the WHOLE THING????

Obviously, one bite at a time!
Planning: Elements

• Elements of a plan
  – Goals and objectives
  – Timelines and milestones
  – Work packages and activities (create work breakdown structure)
  – Resources
  – Budgets
Schematic of work breakdown structure

Write and submit a grant proposal

Work package

Activity

Activity

Activity

Activity

Work package

Activity

Activity

Activity

Work package

Activity

Activity

Activity

Work package

Activity

Activity

Activity

Work package

Activity

Activity

Activity

Activity
Work packages

• Work packages are a unit of work that needs to be done; they provide a logical basis for defining activities or assigning responsibility to a specific person or organization.

• Dividing the big chunk of watermelon into slices that can then be cut into bite-sized chunks.
Write and submit a grant proposal

Work Package 1
- Task 1-A
- Task 1-B
- Task 1-C
- Task 1-D
- Task 1-E

Work Package 2
- Task 2-A
- Task 2-B
- Task 2-C
- Task 2-D

Work Package 3
- Task 3-A
- Task 3-B
- Task 3-C
- Task 3-D
- Task 3-E
- Task 3-F

Work Package 4
- Task 4-A
- Task 4-B
- Task 4-C
- Task 4-D
- Task 4-E
Planning: Work Packages

• Identify **all** components required for submission (use checklist, SF424, Program/Parent Announcement PA, RFA)

• Develop your **own** list of components

• Each component or combination of components becomes a **work package** (recommend no more than 10 work packages)
Planning: Work Packages

- Individually
  - Assign each work package a color of post-it
  - Write the work package name on the post-it and place it in the last column (legend)
Write and submit a grant proposal

Work Package 1
- Task 1-A
- Task 1-B
- Task 1-C
- Task 1-D
- Task 1-E

Work Package 2
- Task 2-A
- Task 2-B
- Task 2-C
- Task 2-D

Work Package 3
- Task 3-A
- Task 3-B
- Task 3-C
- Task 3-D
- Task 3-E
- Task 3-F

Work Package 4
- Task 4-A
- Task 4-B
- Task 4-C
- Task 4-D
- Task 4-E
Components/work packages

- Demonstration
- Group work
- Reconvene
Relationships among components/work packages
## Page limits

<table>
<thead>
<tr>
<th>Section of Application</th>
<th>Activity Codes</th>
<th>Page Limits * (if different from FOA, FOA supersedes)</th>
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<tr>
<td>Introduction to Resubmission and Revision Applications</td>
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<td>For Activity Codes [<strong>R01</strong>, others]</td>
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<tr>
<td>Biographical Sketch</td>
<td>For all Activity Codes</td>
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Activities

• Specific tasks within each work package that need to be done to complete that package
• Activities are your bite-sized chunks that you plan to do in the time period you allocate for them
Activities

• Start with a verb, signifying action

• Examples: **write** (first draft of Innovation section), **send** (version 1 to reviewers), **draft** (letters of support), **call** (biostatistician for consultation), **review** (document returned by reader), **incorporate** (comments from readers and reviewers)
Schematic of work packages and associated tasks

Write and submit a grant proposal

- **Work Package 1**
  - Task 1-A
  - Task 1-B
  - Task 1-C
  - Task 1-D
  - Task 1-E

- **Work Package 2**
  - Task 2-A
  - Task 2-B
  - Task 2-C
  - Task 2-D

- **Work Package 3**
  - Task 3-A
  - Task 3-B
  - Task 3-C
  - Task 3-D
  - Task 3-E
  - Task 3-F

- **Work Package 4**
  - Task 4-A
  - Task 4-B
  - Task 4-C
  - Task 4-D
  - Task 4-E

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Planning: Activities

• Select one of your work packages
• Brainstorm all activities that will need to be done to complete this package of work; record on tablets at your tables (or on your computer)
• Combine activities so no more than 8 to 10 activities per work package
• Number sequentially
• Repeat until all work packages have a list of associated activities
Planning: Activities

- All packages of work must be done; you decide how much time to spend on each
- Select a work package; write each activity associated with it on a separate post-it note of same color
- Repeat until all activities are on post-its of the appropriate color
- Arrange post-its for a given work package in reverse order
- For each set of activities, work backward from the final activity and place post-its along the timeline
- Repeat until all activities are on your timeline
Activities

Demonstration
Group work (Handout)
Reconvene
Planning: Reality check

- Vet your timelines with each other
- Review post-its in a forward direction
- Review components in relation to each other; does sequencing fit?
- Rearrange accordingly, but remember that milestones should not be moved unless absolutely necessary
Activities, Timeline, and Reality Check

Groups
Vet with peers
Reconvene
Use of Checklists

• List what you need from others—example:
  – Advisory Board members
  – Core Investigators
  – Dept chairs (ObGyn and Surgery)
  – Dept Chair, Dean SOM, OSR

  Letters of commitment and biosketches
  Bio blurb, biosketch
  Letters of departmental support
  Letters of budgetary agreement

• Make a checklist that allows you to track what you have done and monitor who owes you what by when

• Customize to meet your needs and ways of work
## Example of Checklist

### Biosketches and LOS

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Asked and Agreed</th>
<th>Biosketch in hand</th>
<th>LOS Draft emailed</th>
<th>LOS returned</th>
<th>Comments</th>
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<td>8/17/06</td>
<td>Received</td>
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<tr>
<td>Daniel Clarke-Pearson</td>
<td>Department Chair</td>
<td>Requested</td>
<td>N/A</td>
<td>8/17/06</td>
<td>Received</td>
<td>LOS as department chair</td>
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<tr>
<td>James Lui</td>
<td>Adv Board</td>
<td>Yes</td>
<td>Yes</td>
<td>8/17/06</td>
<td>Received</td>
<td>S. Young will write and mail to Dr. Lui</td>
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<tr>
<td>Julie Sharpless</td>
<td>Core Investigator</td>
<td>Requested</td>
<td>LOS</td>
<td>Need</td>
<td>8/21/06</td>
<td>Received</td>
</tr>
<tr>
<td>Stan Beyler</td>
<td>Core Investigator</td>
<td>Requested</td>
<td>LOS, info on labs</td>
<td>Need</td>
<td>8/21/06</td>
<td>Received</td>
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<tr>
<td>Anthony A. Meyer</td>
<td>Department Chair</td>
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Electronic Alternatives

- Excel (template available on VU depot)
- Trello at https://trello.com/
- Lino.it http://en.linoit.com/
- Outlook calendar or other calendaring system
- Smartsheet https://www.smartsheet.com/cu1
- Meistertask https://www.meistertask.com/
- SmartDraw (mind mapping; also touted as replacement for Visio)  https://www.smartdraw.com/?id=264352
Phases of project management

- Project management has five phases
  - Assessing feasibility
  - Planning
  - Implementing
  - Monitoring
  - Evaluating

Look down a given week and identify tasks that need to be completed; check off as you complete each one
Phases of project management

- Project management has five phases
  - Assessing feasibility
  - Planning
  - Implementing
  - Monitoring
  - Evaluating

Review at scheduled peer accountability group meetings; hold yourselves and each other accountable
Phases of project management

- Project management has five phases
  - Assessing feasibility
  - Planning
  - Implementing
  - Monitoring
  - Evaluating

Periodically, but especially after the submission, talk about what worked well and what could be improved
Why do this?

- Divide a large amount of work into smaller pieces that you can do
- Stay on track and on target
- Build a sense of accomplishment
- Soften crises of confidence
- Organize work so that others can assist—facilitates delegation
- Other thoughts
Common pitfalls

• Scope creep
• Doing a timeline and ignoring it
• Failure to reflect on what worked (or is working) and what did not
• Being the Lone Ranger
• Procrastination
• Letting the work manage you
• Not allowing time for review of your work
• Others
Quick evaluation

Plus/Delta
THANK YOU and HAPPY WRITING