Everything but the Science:
The importance of supporting documentation in your research grant application

April 14, 2014
Presenters

• Cindy Parry, BFA, CRA—Sponsored Research Administrator, Pre-Award Lead

• Andi L. Shane, MD, MPH, MSc—Assoc Prof of Pediatrics (ID)

• Stacy Heilman, PhD—Research Program Director, Pediatrics
Outline

1. Budgets/Budget Justifications
2. Letter of Support & Letters of Reference
3. Facilities & Other Resources
4. NIH Biosketches
   - Brief Anatomical Review
   - Group Activity
Outline

1. **Budgets/Budget Justifications**
2. Letter of Support & Letters of Reference
3. Facilities & Other Resources
4. NIH Biosketches
   - Brief Anatomical Review
   - Group Activity
Key Element of the Proposal

- What it reveals about your project:
  - Carefully Planned
  - Feasible
Budget

Should be Complete

- Include all costs
- Project is feasible within the budget
Budget

Should be Reasonable

- Based upon actual costs
  - Good faith estimate will do

- Reviewers will know!
The Purpose of a Budget

- Blueprint of spending (pre-award)
- Financial plan (post-award)
Budget

Kinds of Budgets

➢ Cost Reimbursable
  ✓ i.e. Clinical Trials

➢ Fixed Price
  ✓ i.e. Grants
Budget

Cost Groups

- Direct Costs
  - Directly allocable to the project

- Indirect Costs
  - Not directly allocable to the project
  - Building, utilities, custodial service, accounting, etc.
Budget

Indirect Costs

*Also referred to as F&AC (Facilities and Administrative Costs), Overhead, Dean’s Tax*

Organized Research

- On Campus 56%
- Off Campus (<50 mi) 28.2%
- Off Campus (>50 mi) 26%

Other Sponsored Activities

- On Campus 39%
- Off Campus (<50 mi) 27.8%
- Off Campus (>50 mi) 26%

Industry Sponsored Clinical Trials 30% minimum
Budget

Cost Limitations – Depend on the Sponsor

- Federal Agencies (cost principles)
  - NIH
  - FDA
  - NSF

- Foundations and Non profits
- Industry

Carefully read the funding announcement of application package
**Budget**

**Cost Principles**

- **Allowable**
  - ✓ Within the applicable regulations for the funding agency

- **Reasonable**
  - ✓ Would you spend your own money this way?

- **Necessary**
  - ✓ Required to successfully complete the project
Common Budget Categories

- **Personnel**
  - PI, Co-investigator, Postdoc, Technician, Coordinator, etc.

- **Consultants**

- **Materials & Supplies**

- **Travel**

- **Other**
  - Publication costs
  - Animals per diem

- **Subcontracts** (need separate budget)

- **Indirect Costs**
## W.M. Keck Foundation Research Program
### Phase I Application
#### Project Budget Form

**Organization Name:** Emory University

<table>
<thead>
<tr>
<th>Category</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Cumulative</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personnel (Salary + Fringe Benefits)</strong></td>
<td>WMKF</td>
<td>Other Sources*</td>
<td>WMKF</td>
<td>Other Sources*</td>
<td>WMKF</td>
</tr>
<tr>
<td>Principal Investigators (1)</td>
<td>$20,602</td>
<td>$21,572</td>
<td>$22,360</td>
<td>$64,734</td>
<td>$64,734</td>
</tr>
<tr>
<td>Postdoctoral Fellows (2)</td>
<td>$143,702</td>
<td>$148,304</td>
<td>$153,054</td>
<td>$445,060</td>
<td>$445,060</td>
</tr>
<tr>
<td>Graduate Students (Specify #)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Other (1/2 Technician)</td>
<td>$29,125</td>
<td>$30,035</td>
<td>$31,021</td>
<td>$90,005</td>
<td>$90,005</td>
</tr>
<tr>
<td><strong>Personnel Subtotal</strong></td>
<td>$193,730</td>
<td>$199,955</td>
<td>$206,355</td>
<td>$600,000</td>
<td>$600,000</td>
</tr>
</tbody>
</table>

| Equipment                                     | WMKF            | Other Sources*  | WMKF            | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* |
| (List major pieces and/or categories)         | $0              | $0              | $0              | $0           | $0            |

| **Equipment Subtotal**                        | $0              | $0              | $0              | $0           | $0            |

| Operations                                    | WMKF            | Other Sources*  | WMKF            | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* | WMKF          | Other Sources* |
| Consumable Supplies                           | $200,000        | $200,000        | $200,000        | $600,000      | $600,000      |
| Animal Costs                                  | $0              | $0              | $0              | $0           | $0            |
| Travel/Symposiums                             | $0              | $0              | $0              | $0           | $0            |
| Contracted Services                           | $0              | $0              | $0              | $0           | $0            |
| Renovations                                   | $0              | $0              | $0              | $0           | $0            |
| Facilities/Overhead                           | $0              | $0              | $0              | $0           | $0            |
| Other (Microfabrication, Lab User Fees)       | $100,000        | $100,000        | $100,000        | $300,000     | $300,000      |

| **Operations Subtotal**                       | $300,000        | $300,000        | $300,000        | $900,000     | $900,000      |

| **Totals**                                    | $493,730        | $499,955        | $506,355        | $1,500,000   | $1,500,000    |

* Other includes institutional and external forms of support
## PHS 398 Modular Budget, Periods 1 and 2

**Budget Period: 1**

<table>
<thead>
<tr>
<th>Start Date:</th>
<th>End Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/01/2013</td>
<td>08/31/2014</td>
</tr>
</tbody>
</table>

### A. Direct Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Funds Requested ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Cost less Consortium F&amp;A</td>
<td>250,000.00</td>
</tr>
<tr>
<td>Consortium F&amp;A</td>
<td>7,661.00</td>
</tr>
<tr>
<td>Total Direct Costs</td>
<td>257,661.00</td>
</tr>
</tbody>
</table>

### B. Indirect Costs

<table>
<thead>
<tr>
<th>Indirect Cost Type</th>
<th>Indirect Cost Rate (%)</th>
<th>Indirect Cost Base ($)</th>
<th>Funds Requested ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research On Campus</td>
<td>56.00</td>
<td>257,661.00</td>
<td>144,290.00</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>

**Cognizant Agency (Agency Name, POC Name and Phone Number):** DHHS, Steven Zuraf, (301) 492-4855

**Indirect Cost Rate Agreement Date:** 07/13/2012

**Total Indirect Costs:** 144,290.00

### C. Total Direct and Indirect Costs (A + B)

<table>
<thead>
<tr>
<th>Funds Requested ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>401,951.00</td>
</tr>
</tbody>
</table>
Cumulative Budget Information

1. Total Costs, Entire Project Period

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Section A, Total Direct Cost less Consortium F&amp;A for Entire Project Period</td>
<td>$1,250,000.00</td>
</tr>
<tr>
<td>Section A, Total Consortium F&amp;A for Entire Project Period</td>
<td>$38,305.00</td>
</tr>
<tr>
<td>* Section A, Total Direct Costs for Entire Project Period</td>
<td>$1,288,305.00</td>
</tr>
<tr>
<td>* Section B, Total Indirect Costs for Entire Project Period</td>
<td>$675,695.00</td>
</tr>
<tr>
<td>* Section C, Total Direct and Indirect Costs (A+B) for Entire Project Period</td>
<td>$1,864,000.00</td>
</tr>
</tbody>
</table>

2. Budget Justifications

- Personnel Justification
- Consortium Justification
- Additional Narrative Justification

[PersonnelJustification-]
[Ware_NIH_Emory_justification_final10127]
Sample Detailed “Internal Budget” for RO1 (two of five years shown)
Budget

Budget Justification

➢ Must match budget exactly

➢ Use this (unlimited) space to describe the outstanding credentials of the team

✓ Even Non Key Personnel
Credit

Much of this information was borrowed from:
http://vpr.utsa.edu/osp/proposal_budget.htm
UTSA The University of Texas at San Antonio
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Letters of Support versus Letters of Reference

• What are the differences between a letter of support and a letter of reference?

Letter of Support

Letter of Reference
Children’s Healthcare of Atlanta | Emory University

Letters of Support and Letters of Reference

When requesting letters of reference or support:

1. Offer to write a draft
2. Read, reread, and reread requirements
3. Vary style if writing more than one letter of recommendation
4. Give referees plenty of time to edit and revise
5. Letters of support should specifically state what collaborators are offering/contributing
Letters of Support and Letters of Reference

• Highlight accomplishments – do not hold back
• Emphasize unique aspects of your candidacy or the collaboration
• Ensure that statements in letters conform to those in the biosketch
Outline

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Facilities & Other Resources

• Describe everything needed to accomplish your research
• Highlight the rich institutional infrastructure
• Use resources to describe your resources – POP Disco
• Don’t reinvent the wheel
• Emory Commons…coming soon
Outline

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   - Group Activity
The Importance of the Biosketch

• A mini CV

• It conveys to the NIH grant reviewer the experience of the investigator and the investigative team
  – Education
  – Positions held
  – Peer-reviewed publications
  – Funded research projects over last three years

• Reviewers look carefully to see whether the PI and other key personnel have the right background and enough experience with the techniques to execute the Research Plan
Key to the Biosketch

Each of the 5 sections has a purpose

Use it to your advantage!!
Biosketch Sections

Header followed by these 4 sections:
A: Personal Statement
B: Positions and Honors
C: Selected Peer-reviewed Publications
D: Research Support
Biosketch Sections A - D

Header

A: Personal Statement
B: Positions and Honors
C: Selected Peer-reviewed Publications
D: Research Support
A: The Personal Statement

NIH SF424 Instructions:

“Briefly describe why your experience and qualifications make you particularly well-suited for your role (e.g., PD/PI, mentor) in the project that is the subject of the application.”
A: The Personal Statement

• According the NIAID, this key section is a major determinant of your score on the Investigator peer review criterion. **Showcase your skills and convince reviewers why you are the right person to lead the research**
A: The Personal Statement

• As part of the biosketch, all key personnel will include a personal statement tailored for the specific application stating how their experience qualifies them for their role on the project.

• This section will likely change for EVERY proposal you submit to highlight your expertise and credentials specific to the work proposed.
A: The Personal Statement

• Focus tightly on information relevant to your research career and your project, reiterating details reflected elsewhere in the application and weaving in other specific supporting information.
A: The Personal Statement

Other uses and considerations for this important section:

• Cite evidence for your experience, expertise, leadership and motivations not reflected elsewhere in the application

• Clearly state commitment to research and highlight how clinical expertise supports competencies in research endeavors

• Showcase consistent interactions/collaborations among entire mentor/research team
Excerpts from a Personal Statement

- As PI of NIH funded grants, I have the expertise to evaluate the effects of oxidative stress induced by chronic ethanol ingestion.

- As Co-Project Leaders of a NIAAA funded NIH Alcohol Center Program, Dr. C. Michael Hart and I are examining the effects of alcohol-induced glutathione depletion on the upregulation of NADPH oxidases.

- The current application builds on this research in that this project will specifically investigate the role of chronic ethanol ingestion in the upregulation of a NADPH oxidase positive feed-forward loop.

*Modified example from Lou Ann Brown*
Outline

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Biosketch Example

• What are some of the good attributes of Hope I. Succeed’s Biosketch?

• What are some of the troublesome attributes of this Biosketch?
Questions
Appendices

Additional slides with information regarding other Biosketch sections not addressed in this K-Club session
The Biosketch Header

Applicant must have an eRA Commons User Name associated with current institution and position title to submit NIH awards.

Title must be appropriate for the opportunity:
K = usually faculty
F = usually postdoc

List prior education/training in chronological order beginning with baccalaureate degree and include postdoctoral training and residency training as appropriate.

<table>
<thead>
<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE (if applicable)</th>
<th>MM/YY</th>
<th>FIELD OF STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of California, Berkeley</td>
<td>B.S.</td>
<td>05/90</td>
<td>Psychology</td>
</tr>
<tr>
<td>University of Vermont</td>
<td>Ph.D.</td>
<td>05/96</td>
<td>Experimental Psychology</td>
</tr>
<tr>
<td>University of California, Berkeley</td>
<td>Postdoctoral</td>
<td>08/98</td>
<td>Public Health and Epidemiology</td>
</tr>
</tbody>
</table>
Biosketch Sections A - D

A: Personal Statement

B: Positions and Honors

C: Selected Peer-reviewed Publications

D: Research Support
B. Positions & Honors

• List in chronological order previous positions, concluding with the investigators present position.

• List any **honors & awards** relevant to professional career
  – Select with care
  – Begin with college
  – Do not include trivial awards
  – Describe award if implications may be unclear to an outside observer

• “**Positions**” may go beyond your primary job appointment, if it is relevant to application
  – Secondary appointments
  – Advisory boards
  – Some other experience and activities (e.g. teaching, certain community activities)
Positions & Honors – Pitfalls to Avoid

Not positions, these belong in the header only under education/training

1986-1990 Undergraduate Student, University of Phoenix
1990-1996 Doctoral Student
1998 - present Postdoctoral Fellow, Emory University

If this is not a commonly known abbreviation, spell it out.

1995- Member, XYZPDQ

Honors
Accepted to 5/5 PhD programs applied to
1986 Voted most likely to succeed by Woodrow Wilson Senior High School Class
1985 Outstanding Online Learner, University of Phoenix

Trivial, do not include.
Biosketch Sections A - D

A: Personal Statement
B: Positions and Honors
C: Selected Peer-reviewed Publications
D: Research Support
C: Selected Peer-Reviewed Publications

- NIH suggests listing no more than 15 publication or manuscripts in press
- Publications should be in chronological order
- Including published case reports is okay, since it illustrates your productivity
- “In preparation” or “submitted” manuscripts do not count and should not be listed here
C: Selected Peer-Reviewed Publications

• Articles arising from NIH support from your own research must include the NIH Manuscript Submission reference number or the PubMed Central (PMC) reference number.
Paring Down Your List of Publications (if you are so fortunate…)

First: If you have more publications than allowed, use an opening statement

“Selected from a total of X publications”

Second: How to select when you have more than 15:

Base on:

• How recent
• Importance to the field
• Grant focus – relevance to the proposed research
• NIH funded work being published
• Journal “impact factor”
• Co-Authors (publications with other members of proposed research/mentor team look good and should be highlighted)
• Authorship position
What the Author Position List Tells the Reviewer

- **Authorship position**
  - Middle author/ITM (in the middle) = you were part of a research team
  - First author = you wrote the publication and/or were the lead conductor of the research (counts towards tenure and promotion)
  - Last author = you are the senior author/mentor and drove the research (counts towards tenure and promotion)
Publications:

Disclaimers/Additional Strategies to Employ

• If you have only fewer than 15 publications, include them all

• Separate into categories of publications
  – Include one category of “Most relevant to the current application”
  – Include line item of “Additional publications of importance to the field”
Biosketch Sections A - D

A: Personal Statement
B: Positions and Honors
C: Selected Peer-reviewed Publications
D: Research Support
Section D: Research Support

• List both selected ongoing and completed (during the last 3 years) research projects
• Include both Federal and non-Federally-supported
• Begin with the projects that are most relevant to the research proposed in the application
• Briefly indicate the overall goals of the projects and responsibilities of the key person identified on the Biographical Sketch
• Do not include number of person months or direct costs
Research Support ≠ “Other Support”

• Do not confuse "Research Support" with "Other Support."

• Other Support is required for all funded grant awards and includes detailed financial information that should not be included in a bioskech.

• **Section D of the Biosketch: "Research Support"**
  highlights the investigator’s accomplishments so think about what information is important to convey to the reviewers at the application stage:
  – Scientific accomplishments
  – Qualifications for the role specified in the proposed project
  – Actual effort and current grant dollars are not important to know at the application stage
D: Research Support - example

**Ongoing Research Support**

**NIH R01 AA12197**  Chronic ethanol: mitochondrial dysfunction and apoptosis.
09/01/00 – 08/31/11  Role in project: P.I.
The goal is to determine if chronic ethanol ingestion potentiates cytoxoin-induced mitochondrial dysfunction in adult alveolar type II cells is preceded by endoplasmic reticulum stress.
Overlap: None

**NIH R01 HL096924**  Polarity of redox control and risk of injury in the alveolar epithelium.
09/01/09 – 08/31/11  Role in Project: PI (Brown/Jones PD/PI)
The goals are to determine if the extracellular redox states of the thiol pairs promote oxidative stress in subcellular compartments and increase the risk of injury in alveolar type I and alveolar type II cells.
Overlap: None

**Completed Research Support**

**R21 AA015335 (Brown)**  Noninvasive breath condensate: ARDS risk in alcoholics.
06/01/2005 – 05/31/2008  Role in Project: P.I.
The goal of this study was to determine if markers of oxidant stress in the exhaled breath condensate can be developed as predictors of which alcoholic subjects are at risk for morbidity and mortality from ARDS.

**NIH R21 AA016271**  HIV-1 and ethanol-induced alveolar epithelial and macrophage dysfunction
10/01/2006-09/30/10  Role in Project: Co-PI (P.I: D.M. Guidot)
The goals of this project were to determine if chronic ethanol ingestion compounds alveolar epithelial cell and alveolar macrophage dysfunction when it is superimposed on HIV-1.

Example courtesy of Lou Ann Brown (entry has been truncated)