Demystifying the NEW NIH Biosketch

Presented by
Office of Research
Rollins School of Public Health
Emory University
February 20, 2015

Janet Gross, PhD
Gary W. Miller, PhD
FASEB Survey on Administrative Burden

• NSF and FASEB conducted large scale surveys/studies on the increased administrative burden associated with government-sponsored research. One recommendation was:

• “Get rid of the personal statement on the NIH Biosketch”
NIH’s response

• Quintuple the effort of the required personal statement by requiring descriptions of contributions to science, while keeping the personal statement for good measure
“As someone who has reviewed and been reviewed many many times…part of grantsmanship is to not annoy the reviewer and get dinged. We ding and get dinged for stuff like punctuation and grammar. If the new style biosketch seems exaggerated or even mistakenly perceived to be exaggerated on an application (and Lord help you if you are being evaluated by a competitor) then the “Investigator” score will be negatively impacted. So instead of being helpful, this new initiative could really hurt folks. “
Comments from Rock Talk

“There is only one possible way to agree with this policy: only if this statement of value is written not by the applicant, but by an independent authority in the field who has no publications in common with the applicant. Better yet, by two or three authorities. Better yet, from the future. “
“As a science fiction and grant writer, this new NIH biosketch format should generate lots of new business for me. I specialize in the sections that nobody wants to write and fewer folks want to review.”
“I would also be in favor of hearing why this is necessary. As a reviewer and grantee, this means more pages and additional work. As a reviewer, I like that applicants have to create their own biosketch, and that it is not completely pre-formatted. One can tell a significant amount about an investigator’s attention to detail in composing a biosketch.”
Advice: vent appropriately, then get over it

- It is appropriate and reasonable to dislike the changes. Informing program officers, posting on websites, etc. Are all reasonable actions.

- However, as of May 2015 the New NIH Biosketch is the new reality.

- Not embracing it is a fabulous example of cutting off one’s nose to spite one’s face (a needlessly self-destructive overreaction to a problem)
The New NIH Biosketch

Update: New Biographical Sketch Format Required for NIH and AHRQ Grant Applications Submitted for Due Dates on or After May 25, 2015

Notice Number:
NOT-OD-15-032

Key Dates
Release Date: December 5, 2014
What is the NIH Biosketch?

- Highly formatted component of a grant proposal that enables reviewers to evaluate the qualifications of the PI and scientific team that will be executing the research project.
Example posted by NIH for guidance
What do Reviewers look for in the Biosketch?

1. **Are you qualified to do the job?**
   - Is there a good match between your track record (Training + current activities + publications) and the proposed research aims?
   - Are you a good match for the type of grant you are submitting (e.g., F32 vs. K99/R00 vs. R01)?

2. **Do you have peer-reviewed publications relevant to the proposal or those that suggest that you are likely to publish good science in the future?**

3. **Do you have appropriate time/effort devoted to the project? (Research Support [+ Budget Justification])**
   - Too much time on a grant is as important as too little time
**NIH Review Criterion that relies on the Biosketch**

<table>
<thead>
<tr>
<th>F - Fellowship Grants</th>
<th>K - Career Development</th>
<th>Standard Grants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fellowship Applicant</strong></td>
<td><strong>Candidate</strong></td>
<td>Significance</td>
</tr>
<tr>
<td>Sponsors, Collaborators and Consultants</td>
<td>Career Dev Plan/Career Goals</td>
<td><strong>Investigator</strong></td>
</tr>
<tr>
<td>Research Training Plan</td>
<td>Research Plan</td>
<td>Innovation</td>
</tr>
<tr>
<td>Training Potential</td>
<td>Mentors, etc.</td>
<td>Approach</td>
</tr>
<tr>
<td>Institutional Environment and Commitment to Training</td>
<td>Environment Commitment to Candidate</td>
<td>Environment</td>
</tr>
</tbody>
</table>

*You are not your research but you are your biosketch*
What’s New for the Biosketch?

- Change occurs on May 25, 2015
- 5 pages (was 4 pages) maximum

Section C. Contributions to Science
- Describe up to 5 of your most significant contributions to science, and for each of these:
  - indicate the historical background that frames the scientific problem;
  - the central finding(s);
  - the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and
  - your specific role in the described work.
Section C. Contributions to Science (continued)

- List up to 4 four peer-reviewed publications or other non-publication research products
- Each of the 5 ‘contributions’ can be no more than ½ page each including figures and citations
- Provide a URL to a full list of your published work as found in a publicly available digital database such as SciENcv or My Bibliography, which are maintained by the US National Library of Medicine

New Biosketch Nuts & Bolts
Step #1 to making the transition

- There are 3 sets of Instructions and Samples
  - General
  - Predoctoral Fellowship
  - Postdoctoral Fellowship

- There are 2 new Blank Format Pages
  - General biosketch
  - Fellowship biosketch
    - (predoctoral and postdoctoral use same page)

- All can be found here: [http://grants.nih.gov/grants/funding/424/index.htm](http://grants.nih.gov/grants/funding/424/index.htm)
Tools:
SciENcv - Science Experts Network Curriculum Vitae

Instructional Video:
https://www.youtube.com/watch?v=PRWy-3GXhtU&feature=youtu.be

NIH Notice: NOT-OD-15-032

FAQ’s:
## Biosketch Web page


### Biosketches

Create your biosketch here!

![SciENcv](image)

**Biosketch FAQs**

<table>
<thead>
<tr>
<th>Biosketches</th>
<th>Date Posted</th>
<th>Blank Format Page</th>
<th>Instructions and Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong> Biographical Sketch Format Page - Forms Version C (use also for Fellowship Sponsor/Co-Sponsors)</td>
<td>11/25/2014</td>
<td>MS Word (29 KB)</td>
<td>MS Word (40 KB)</td>
</tr>
</tbody>
</table>
| **Fellowship** Applicant Biographical Sketch Format Page - Forms Version C (use only for individual predoctoral and postdoctoral fellowships, dissertation research grants [R36], and Research Supplements to Promote Diversity in Health-Related Research [Admin Suppl]) | 11/25/2014  | MS Word (33 KB)   | Predoctoral: MS Word (43 KB)  
Postdoctoral: MS Word (47 KB) |
### RESEARCH & RELATED Senior/Key Person Profile (Expanded)

**PROFILE - Project Director/Principal Investigator**

- **Prefix:**
- **First Name:**
- **Middle Name:**
- **Last Name:**
- **Suffix:**
- **Position/TITLE:**
- **Organization Name:**
- **Department:**
- **Division:**
- **Street:**
- **City:**
- **State:**
- **Country:**
- **ZIP / Postal Code:**
- **Phone Number:**
- **Fax Number:**
- **E-Mail:**
- **Credential:**
- **Other Project Role Category:**
- **Degree Type:**
- **Degree Year:**

**PROFILE - Senior/Key Person 1**

- **Prefix:**
- **First Name:**
- **Middle Name:**
- **Last Name:**
- **Suffix:**
- **Position/TITLE:**
- **Organization Name:**
- **Department:**
- **Division:**
- **Street:**
- **City:**
- **State:**
- **Country:**
- **ZIP / Postal Code:**
- **Phone Number:**
- **Fax Number:**
- **E-Mail:**
- **Credential:**
- **Other Project Role Category:**
- **Degree Type:**
- **Degree Year:**

To ensure proper performance of this form, after adding 20 additional Senior/Key Persons, please save your application, close the Adobe Reader, and reopen it.
Which Biosketch should I use?

- Depends **who** you are (educationally speaking) and **what** (funding opportunity speaking) you are applying for

- Complete the form for the particular grant application you are applying for (rather than what your status is now)
  - Today I’m a postdoctoral fellow and I’m applying to be Co-I on my mentor’s NIH R01 grant → **use Standard Biosketch**
  - Today I’m a Postdoc, and I’m applying for a fellowship grant (F, K99) → **use Fellowship Applicant Biosketch Format Page**

- Instructions for Foundations and non-NIH funder might be different
## Sections of the NIH Biosketch

Name, eRA commons, Position, Education & Training

| A. Personal Statement                              |
| B. Positions and Honors                           |
| C. Contributions to Science                      |
| D. Research Support                              |
NAME: Hunt, Morgan Casey

**eRA COMMONS USER NAME** (credential, e.g., agency login): huntmc

**POSITION TITLE:** Associate Professor of Psychology

**EDUCATION/TRAINING** *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

<table>
<thead>
<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE</th>
<th>Completion Date</th>
<th>FIELD OF STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of California, Berkeley</td>
<td>B.S.</td>
<td>05/1990</td>
<td>Psychology</td>
</tr>
<tr>
<td>University of Vermont</td>
<td>Ph.D.</td>
<td>05/1996</td>
<td>Experimental Psychology</td>
</tr>
<tr>
<td>University of California, Berkeley</td>
<td>Postdoctoral</td>
<td>08/1998</td>
<td>Public Health and Epidemiology</td>
</tr>
</tbody>
</table>

*eRA commons user name* – obtain this through Office of Sponsored Programs
A. Personal Statement

Briefly describe why you are well-suited to receive the award for which you are applying. The relevant factors may include aspects of your training; your previous experimental work on this specific topic or related topics; your technical expertise; your collaborators or scientific environment; and your past performance in this or related fields (you may mention specific contributions to science that are not included in Section C). Also, you may identify up to four peer-reviewed publications that specifically highlight your experience and qualifications for this project.

If you wish to explain impediments to your past productivity, you may include a description of factors such as family care responsibilities, illness, disability, and active duty military service.
Suggestions for Writing Personal Statements

1. Customize the personal statement for each grant proposal

2. Mention the name of the grant proposal (e.g., R15) and speak directly to the purpose of this funding mechanism

- E.g.: My goal for this proposed NIH Academic Research Enhancement Award (R15) is to conduct clinical research while further developing and expanding training with graduate students in nursing and psychology to study the etiology of adverse health outcomes associated with stress exposure in women, such as posttraumatic stress disorder (PTSD).
More Suggestions for Writing Personal Statements

- Length – generally no need to exceed Page 1
- Convey excitement and passion to do the proposed work
- Depending on the type of grant, emphasize your role for:
  - Leadership (PI of a R grant)
  - Training potential for you to advance in your field (F32 or K)
  - Are you a mentor?
  - Track record and experience to support the proposed aims
  - Tone should be confident but not arrogant
  - Don’t just walk us through your accomplishments but speak to the science in this proposal
If you are the PI of the grant....

• Even if you are a postdoctoral fellow, you need to read/review/edit the Personal Statement of all other contributors to this proposal

• WHY?
  • Because this is the PI’s job
  • Each Personal Statement must reflect that writer’s role on the project

• If someone is sponsoring/mentoring/collaborating with you, that should be mentioned in that person’s Personal Statement
B. Positions and Honors

• You can load info into My NCBI
  • online tool (via SciENcv) to support building/storing your personal data including linking to all your publications

• Be thorough

• Clarify what specific awards/honors were for

• Sometimes you might want to add an alternative (unique) subheader if the grant supports it
Example of creative subheader

**Consultant/Reviewer**

**Course Instructor/Director**

**Program Developer** *(could be an international program, or software)*

**External Advisor**
C. Contributions to Science

1. Topic #1…. (use an explanatory subheader)
   * Brief narrative (written in 1st person)
   * Abstracts (underline or bold your name)
   * Publications

2. Topic #2…. (use an explanatory subheader)
   * Brief narrative
   * Abstracts
   * Publications
C. Contribution to Science

2. Role of plasma membrane monoamine transporters response to psychostimulants

During postdoctoral training in the Caron laboratory I was able to contribute (as co-author) to several important papers on monoamine transporters, which were based on novel mouse gene knockout models including, dopamine transporter, the norepinephrine transporter, and the vesicular monoamine transporter. These papers have been very influential in our understanding of the function of these transporters.

D. Research Support

• List both selected ongoing and completed research projects for the past three years (Federal or 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.*
D. Research Support

Ongoing Research Support

R01 DA942367 Hunt (PI) 09/01/08-08/31/16
Health trajectories and behavioral interventions among older substance abusers

The goal of this study is to compare the effects of two substance abuse interventions on health outcomes in an urban population of older opiate addicts.
Role: PI

(Recommendation: follow this highly formatted presentation style as per the sample)
Thinking about my “Contributions to Science”

- What goes here?
- How do I organize this?
- What do I report?
- Some ideas
  ✓ In your previous research experiences, what did the team do and what exactly did you do?
  ✓ What did you learn from what you did?
  ✓ Can you reflect on what you found and how it may have led to the current proposal?
  ✓ Be aspirational – express your professional hopes and desires
Rules

- 5 pages maximum (used to be 4 pages max.)
- Follow the directions – use the example as a model
- Do not misrepresent any facts
  - List all publications as they would appear in PubMed or in any other searchable database
Recommendations

• Each new grant proposal should prompt you to revise your biosketch, especially the Personal Statement (and possibly Contributions to Science), so that it speaks *directly* to this particular grant proposal.

• Pay attention to aesthetics and layout – spacing, font, page break
  • Does your printed out biosketch look like the example?
  • Do you need to customize any subheaders to make a point – e.g., teaching or curriculum development?

• **Reviewers are looking for specific information in particular places** – make it easy for the reviewer by following the rules and the formatting.
Take Home Message...

• Along with the **Specific Aims** page, the **Biosketch** is arguably the most important part of the grant.

• **Aesthetics and layout matter**

• Sell your role in the proposed research in the **Personal Statement**
SciENcv

My NCBI – New NIH Biographical Sketch Available in SciENcv

2015 January 14 [posted]
2015 January 20 [Editor's note added]
Handcrafted vs. mass produced

- Beer, sushi, and furniture.
- When such goods are hand crafted one can see the attention and care that has gone into them.
- Your biosketch is your scientific autobiography. If you do not take care in its crafting it will reflect negatively upon you.
Contributions to Science

- Most of us get into this field so that we can make a contribution to science.

- Make a list. Reflect upon what you have actually accomplished.
Humility vs. arrogance

- Extraordinary evidence for extraordinary claims
- The magnitude of your supposed accomplishment must align with your tangible contributions
- Self-aggrandizing will certainly backfire. Probably better to lean towards humility to increase likability factor
Assistant Professors

• If you have 5 significant accomplishments, congratulations, you should be awarded tenure any minute.

• However, it is more likely that you have had time to make 2 or 3 significant contributions. Better to have fewer well-documented examples that 4-5 less-documented.
Associate Professors

- 3-4 Significant accomplishments should be used. If you have 5 you should probably be a Full professor.
Full Professors

- One would hope that Full Professors have 4-5 significant contribution backed by 4 strong papers.

- Full professors have had more time to lead initiatives. Including one contribution that involves programmatic development or national/international leadership is probably a good idea. I think it is better for more junior investigators to focus on research-oriented accomplishments.
Instructions

• It is important to follow them, but the instructions are not that rigid. There is room to modify your biosketch to best reflect you.
Strategy

- Introduce yourself to the guidelines
- Sketch out your accomplishments (dedicate time for reflection)
- Discuss in mid-size groups within your discipline
- Set up small peer working groups (3-4) to share, review, and exchange ideas
- Revise, revise, revise

http://www.sph.emory.edu/research/grant-writing-tools/index.html
Help within RSPH

- This Grand Rounds
- Department-level meetings to address discipline-specific issues
- Facilitate peer working groups
- Review of individual biosketches through the Office of Research
- Also, the PhD grant writing workshop series addresses biosketches