Upcoming Changes to the NIH Grant Application and Peer Review Format:

AN OVERVIEW FOR NIH INVESTIGATORS AND GRANT SUPPORT STAFF AT UNL*

*Adapted from NIH’s “Enhancing Peer Review: What Applicants Need to Know” and “Enhancing Peer Review: Changes to Application Forms and Instructions,” available at http://enhancing-peer-review.nih.gov/training_communication.html.

Goal of this Presentation

- Review changes to Peer Review scoring, processes
- Describe Peer Review changes
- Describe major application changes effective Jan. 25
- Highlight relevant NIH and UNL resources
Scoring Changes: Summary and Timeline

January 2009
- Phase out of A2 applications
- Identification of Early Stage Investigator (ESI) R01 applications

May/June 2009 Reviews
- Enhanced review criteria
- New scoring system
- Criterion scoring
- Structured critiques
- Score order review
- Clustering of New Investigator Applications

January 25, 2010 Submissions
- Restructured Applications
- Shorter Page Limits and New Instructions

Goals of the Scoring Changes

- Clearer understanding of the basis of application ratings
- More emphasis on impact and less emphasis on technical details
- Succinct, well-focused critiques that evaluate, rather than describe, applications
- Routine use of the entire rating scale
Changes to Review (effective during May/June 2009 meetings)

- **Enhanced Review Criteria**
  - Significance, Investigator(s), Innovation, Approach, Environment
- **Templates for Structured Critiques**
  - Bullets, major strengths/weaknesses
  - ¼ page each
- **Scoring of Individual Review Criteria**
- **New 1-9 Scoring Scale**
  - 1 = exceptional, 9 = poor for the five "core" review criteria

### Scoring Descriptions

<table>
<thead>
<tr>
<th>Impact</th>
<th>Score</th>
<th>Descriptor</th>
<th>Strengths/Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Impact</td>
<td>1</td>
<td>Exceptional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Outstanding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Moderate Impact</td>
<td>4</td>
<td>Very Good</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Satisfactory</td>
<td></td>
</tr>
<tr>
<td>Low Impact</td>
<td>7</td>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Marginal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Poor</td>
<td></td>
</tr>
</tbody>
</table>

Non-numeric score options: NR = Not Recommended for Further Consideration; DF = Deferred; AB = Abstention; CF = Conflict; NP = Not Present; ND = Not Discussed
Application Scoring and Discussion

- Assigned reviewers will discuss strengths and weaknesses of each application
  - Discussed in order of initial average of overall priority score, grouped by mechanism
  - ~50% not to be discussed
- Overall impact/priority scores of discussed applications will be the mean of scores voted by all eligible reviewers, multiplied by 10
  - Final scores will range from 10-90, in whole numbers
- Summary statements include the criterion scores and critiques for all applications

Format Changes: Summary and Timeline

- Phase out of A2 applications
- Identification of Early Stage Investigator (ESI) R01 applications
- Enhanced review criteria
- New scoring system
- Criterion scoring
- Structured critiques
- Score order review
- Clustering of New Investigator Applications
- Restructured Applications
- Shorter Page Limits and New Instructions
Major Application Changes (effective Jan. 25)

- Restructured Application Forms
- Shorter Page Limits and New Instructions
- Changes necessary for ALL competing applications: new, renewal, revision, and resubmission

Goals for Restructured Applications

- Align the structure and content of the forms with review criteria
  - Focus the applicants and reviewers on the same elements
  - Help ensure a more efficient and transparent review process
- Shorter application
  - Reduce burden
  - Focus on the essentials of the science
  - Avoid information overload
Overview of the Application Changes

- Application forms will be revised in three sections:
  - Research Plan
  - Biographical Sketch
  - Resources and Facilities

Major Changes to the Research Plan

- Specific Aims will include new language about the impact of the proposed research
- Research Strategy will be created as a new section and will include three of the current sections:
  - Background and Significance
  - Preliminary Studies/Progress Report
  - Research Design and Methods
New Research Plan Components

- Introduction
- Specific Aims
- **Background and Significance**
- Preliminary Studies/Progress Report
- Research Design and Methods
- Inclusion Enrollment Report
- Bibliography and References Cited
- Human Subjects Sections….
  - protections, women/minorities, enrollment, children
- Other Research Plan Sections….
  - animals, select agents, multiple PD/PI, consortium, support, resource sharing
- Appendix

Changes to Biographical Sketch

- Personal Statement added:
  - “Briefly describe why your experience and qualifications make you particularly well-suited for your role in the project”
- Publications revised:
  - Limit the list of publications or manuscripts to no more than 15
  - Applicant is encouraged to make selections based on recency, importance to the field, and/or relevance to the application
Changes to Resources and Facilities

- Instructions added to Resources:
  - Provide a description of how the scientific environment will contribute to the probability of success of the project
  - For Early Stage Investigators (ESIs), describe the institutional investment in the success of the investigator

Application Alignment with Review Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significance</td>
<td>Research Strategy</td>
</tr>
<tr>
<td></td>
<td>a. Significance</td>
</tr>
<tr>
<td>Investigator(s)</td>
<td>Biosketch</td>
</tr>
<tr>
<td>Innovation</td>
<td>Research Strategy</td>
</tr>
<tr>
<td></td>
<td>b. Innovation</td>
</tr>
<tr>
<td>Approach</td>
<td>Research Strategy</td>
</tr>
<tr>
<td></td>
<td>c. Approach</td>
</tr>
<tr>
<td>Environment</td>
<td>Resources</td>
</tr>
</tbody>
</table>
Overview of Shorter Page Limits

<table>
<thead>
<tr>
<th>Current Page Limit (Section 2-5 of the Research Plan)</th>
<th>New Page Limit (Research Strategy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;25</td>
<td>6</td>
</tr>
<tr>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td>&gt;25</td>
<td>Follow FOA Instructions</td>
</tr>
</tbody>
</table>

Note: Follow FOA page limit requirements if different from the application instructions

A full table of page limits is available at:
http://enhancing-peer-review.nih.gov/page_limits.html

Steps for Success – Part 1

- Read about the requirement changes!
- Information available on the Enhancing Peer Review Web site includes:
  - Policy Announcements
  - Details of Application Changes
  - Training & Communications Resources
- http://enhancing-peer-review.nih.gov/
Steps for Success – Part 2

- Access the updated FOA or reissued Parent Announcement
- For both electronic and paper, choose the correct application package and instructions to download:
  - SF 424 (R&R): ADOBE_FORMS_B
  - PHS 398: Revision date “June 2009”
- Applications submitted using incorrect forms will be delayed and may not be reviewed!

Steps for Success – Part 3

- Read the new application instructions carefully
- For due dates on or after January 25, submit your electronic and paper applications using the new application forms
What Has Not Changed

- Have a good idea about how to answer an important question
- Help reviewers understand WHAT you want to do, WHY it is important, and how YOU will do it
- Align YOUR goals with NIH goals (e.g., the NIH Roadmap) and institute/center priorities

For Additional Information

Enhancing Peer Review at NIH Web Site:
http://enhancing-peer-review.nih.gov
For Additional Information

- UNL’s NIH application changes Web page:
  - Summarizes the information you need to know
  - Features six- and 12-page research strategy outlines
  - Provides a template for and examples of the new biosketch format
  - Links to additional information

Proposal Development Assistance at UNL

- For assistance with narrative elements, contact the Office of Proposal Development (Nathan Meier, 472.1808 or nmeier2@unl.edu)
- For budget development or submission assistance, contact the pre-award staff in the Office of Sponsored Programs (Suzan Lund, 472.1930 or slund2@unl.edu)
Questions?

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