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 Inv. Applications

January 25, 2010 Submissions

Priority Area 2 – Improve the Quality and Transparency of Review

- Restructured Applications
- Shorter Page Limits and New Instructions
Goals of Restructured Applications

Aligns structure and content of the forms with review criteria

Focuses applicants and reviewers on the same elements

Ensures a more efficient and transparent review process
Goals of Shortened Page Limits

- Reduces burden / maximize reviewer time
- Focuses on the essentials of the science
- Emphasizes impact
- Avoids information overload
What are the Major Changes in Application Forms?

Summary:

• Shortened page limits
• Application reorganized to align with review criteria
• New Research Strategy section
• Biosketch limits publications; includes personal statement re: ability to do the research
• Facilities and Resources focuses on aspects that specifically contribute to accomplishment of the research
## Shorter Page Limit Guide

<table>
<thead>
<tr>
<th>Section of Application</th>
<th>Page Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction for Resubmission Application</td>
<td>1</td>
</tr>
<tr>
<td>Specific Aims</td>
<td>1</td>
</tr>
<tr>
<td><strong>Research Strategy:</strong> R03, R13/U13, R21, R36, R41, R43, Fellowships (F), SC2, SC3</td>
<td>6</td>
</tr>
<tr>
<td><strong>Research Strategy:</strong> R01, single project U01, R10, R15, R18, U18, R33, R24, R34, U34, R42, R44, DP3, G08, G11, G13, UH2, UH3, SC1</td>
<td>12</td>
</tr>
<tr>
<td>Biographical Sketch</td>
<td>4</td>
</tr>
</tbody>
</table>

*Page limits may vary for other funding mechanisms.*

Reviewers Benefit from Shorter Applications

- **Old Practice**
  - Too much focus on how to “do” the research
  - Significant mentoring on how to revise
  - Long, detailed application/too much to read

- **New Focus**
  - Impact: Is research worth doing
  - Clear signal via criteria whether to resubmit
  - Streamlined applications (easier to validate, less to read)
What to Look for in a Shorter Application:

New Research Plan Components:

- **Specific Aims**
  - Includes new language about the *impact* of the proposed research

- **Research Strategy**
  - New section includes current Background and Significance, Preliminary Studies/Progress Report, and Research Design and Methods

**Facilities and Equipment**

- Reflects the Environment criterion
- For ESIs describes the institutional investment in the success of the investigator

**Biographical Sketch**

- Requires Personal Statement; no more than 15 pubs based on recency, importance to field, and /or relevance to the application
What to Look for in the Revised Criteria: Investigators

- **Personal Statement:**
  - Why their experience and qualifications make them particularly well-suited for their roles in the project

- **Publications:**
  - Recommended: no more than 15—up to five of the best; up to five of the most relevant to the proposed research; up to five of the most recent

- If *Early Stage Investigators or New Investigators*, do they have appropriate experience and training?

- If *Established*, have they demonstrated ongoing record of accomplishments that have advanced their field(s)?
What to Look for in the Revised Criteria: Innovation

• Does application challenge/seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions?

• Concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense?

• Refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

• Not all applications need to be innovative!
What to Look for in the Revised Criteria: Approach

• Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project?

• Are potential problems, alternative strategies, and benchmarks for success presented?

• If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?
What to Look for in the Revised Criteria: Approach

*If the Project Involves Clinical Research:*

Are plans justified for:

- protection of human subjects
- inclusion of minorities, both sexes/genders, and children
What is the Difference Between Impact and Significance?

**Impact** addresses:
- Probability of whether the research will exert a sustained, powerful influence on the research field.

**Significance** addresses:
- Does the project address an important problem or a critical barrier to progress in the field?
- If the aims are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved?
What is the Policy for Enforcing Compliance with Page Limits?

- Applications exceeding page limits for required sections will not be forwarded to review.

How Should Reviewers Consider Application Sections Without Page Limits When They Include Information That Should Have Been Part of Sections With Page Limits?

- Inappropriate material in the animal, human subject, or resources sections is not allowed and should be brought to the SRO’s attention.

  - For example, the Resource Sharing section should focus on the plan for sharing, not how organisms or data were generated.
What Should You Do if the Principal Investigator Has Not Used the New Form for the Biosketch?

- Both old and new forms are permitted but may not exceed four pages.
- The Biosketch should contain a personal statement, positions/honors and research support sections, and no more than 15 publications.

What Should You Do When the Personal Statement in the Biosketch is Missing?

- Nothing
Where in the Application Can You Find Preliminary Data?

- Approach section of the Research Strategy.
  - May be as a separate section within Approach or distributed throughout that section.

If the Application is a Renewal, Where Do You Find the Progress Report?

- Approach section of the Research Strategy.
  - It may be presented as a separate section or incorporated into the individual specific aims.

How Should Resubmissions be Handled?

- The applications will be in the short format and will include an introduction.
  - Reviewers should address how well the investigator(s) responded to the concerns of previous reviewers.
What to Look for in the New Facilities and Equipment Section?

- Limited to those resources directly applicable to the proposed work:
  - ESIs describe institutional investment, e.g., start-up funds and mentoring arrangements.
  - For multiple sites, resources at each site should be described.
  - Special facilities that handle biohazards, etc., included.
  - Major items of equipment already available for the proposed studies listed under Equipment.
Enhancing Peer Review: The NIH Announces Enhanced Review Criteria for Evaluation of Research Applications Received for Potential FY2010 Funding


SF424 guidelines for submission:

For any other questions contact your SRO