



ENHANCING PEER REVIEW: GUIDE FOR REVIEW OF RESTRUCTURED GRANT APPLICATIONS





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 Inv. Applications



- **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

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



Page limits may vary for other funding mechanisms.

Check Funding Opportunity Announcement: http://enhancing-peer-review.nih.gov/page_limits.html



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.



Links of Interest

Enhancing Peer Review: The NIH Announces Enhanced Review Criteria for Evaluation of Research Applications Received for Potential FY2010 Funding

<http://grants.nih.gov/grants/guide/notice-files/not-od-09-025.html>

PageLimits: http://enhancing-peer-review.nih.gov/page_limits.html

Human subjects: <http://grants.nih.gov/grants/policy/hs/index.htm>

Vertebrate Animals: <http://grants.nih.gov/grants/olaw/olaw.htm>

SF424 guidelines for submission:

<http://grants.nih.gov/grants/funding/424/index.htm>

*** For any other questions contact your SRO**