Imminent changes in the NIH grant submission and review process

The impact from an applicant’s point of view

Harald Paganetti PhD
Director of Physics Research
Department of Radiation Oncology

MASSACHUSETTS GENERAL HOSPITAL

HARVARD MEDICAL SCHOOL
Changes in submission and review

Only one resubmission (amendment)

January 2009 (not for applications submitted previously)
Previously, more and more awards came after at least 2 submissions (average number of submissions per application is increasing)

- Fund good research earlier
- Less burden on reviewers

Motivation for NIH
Only one resubmission (amendment)

Potential Impact

- Quicker turnaround (+)
- More carefully written applications? (+)
- Fewer different reviewers (-)
Changes in submission and review

Scoring system

May 2009
Scoring system

Motivation for NIH

- Too many rating discriminations suggests unrealistically high precision
Increased likelihood for identical scores among applications (might require NIH internal decisions not driven by scientific merit) (-)

Transition period will have old (resubmitted) grants on old system and new grants on new system raising issue of fair review (-)
Changes in submission and review

Summary statement

May 2009
Summary statement

**Motivation for NIH**

- More emphasis on impact and less emphasis on technical details
- Succinct, well-focused critiques that evaluate, rather than describe, applications
- Bullet lists of major strengths and weaknesses (easier for reviewer and applicants)
Summary statement

Potential Impact

- More feedback (criteria scores) for lower half applications will help resubmission (+)

- Overall score plus criteria scores for discussed applications will help (potential) resubmission (+)
Summary statement

Potential Impact

- Critique might be unclear to the applicant due to short (bullet list) sentences (-)

- Not changed: With the big emphasize on investigator and environment, are we supporting established groups at big institutions favorably? (-)
Changes in submission and review

New/early investigator

February 2009 (may depend on grant mechanism)
New/early investigator

Motivation for NIH

- Duration of postdoctoral training is increasing
- Average NI age is increasing
- Small number of R21 lead to R01; R21 success rate is lower than R01; R21 limited scope may not be ideal to launch research career
New/early investigator

Potential Impact

- Increases chances of new investigators (+)
- Less competition between new and established investigators during review process (+)
In general: What is NIH’s mission (funding more NI) versus trend in the field (more full time researchers)? (+-)

Why does NIH encourage RO1 for new investigators (R21 needs less preliminary data)? (-)
Changes in submission and review

Shorter applications

January 2010
Shorter applications

**Motivation for NIH**

- Less burden for the reviewers
- Less work for the applicants
Shorter applications

Potential Impact

- Applicants will most likely shorten the Background and Significance section, referring to peer-reviewed literature.
  - Saves time when writing applications (+)
  - Makes the peer-review process more difficult for reviewers (-)
- Re-alignment of the application sections with the review criteria.
  - Can make applications more sound (+)
  - Helps to identify strengths and weaknesses (+)
Shorter applications

Potential Impact

- Hopefully (?) the emphasize is going to be on new ideas instead of methodology (+)