Behind the Curtain

An Inside Look at Peer Review

Peer review video

- Two F32 postdoc NRSA applications, seven faculty reviewers

- Applications were de-identified and modified slightly

- Process mirrors a real review!

- Minor departures from reality:

  - Only 7 people on this study section (usually ~20)

  - Only 2 proposals reviewed (usually a few dozen)

  - All reviewers from VU (not normal)

  - It was videotaped.

- First 4½ minutes gives overview of process

Session Overview

- Watch video review of Ramos proposal

- NRSA "F" fellowship evaluation criteria

- Watch video review of Clark proposal

Handouts

F CRITIQUE

1. Fellowship Applicant
2. Sponsor, Collaborators, and Consultants
3. Research Training Plan
4. Training Potential
5. Institutional Environment and Commitment to Training

SPONSOR INFORMATION

- Research support available
- Previous trainees
- Training plan, environment, and research facilities
- Number of fellows to be supervised during fellowship
- Applicant's qualifications and potential for a research career

Criteria for F fellowship reviews

1. Fellowship applicant

2. Sponsors, collaborators, and consultants

3. Research training plan

4. Training potential

5. Institutional environment and commitment to training

1. Applicant

- Looking for
  - High quality academic and research experience
  - Potential for productive, independent career

- As evidenced by
  - Strong letters
  - Career goals and previous research
  - # and quality of publications
  - Grades/GREs/MCATs
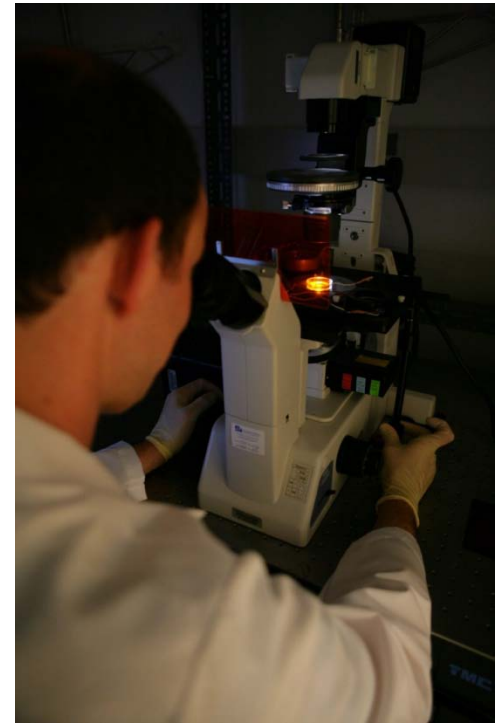
2. Sponsor

- Looking for
  - Sponsor's qualifications
  - Training track record
  - Match between applicant and sponsor interests
  - Ability and commitment to training

- As evidenced by
  - Publications (biosketch)
  - Ongoing research support
  - # and outcome of current/previous trainees
  - "Training plan" tailored to applicant needs

"sponsor information section"

3. Research training plan

- Looking for
  - ~~Innovation~~
  - High scientific quality
    - Hypothesis-driven
    - Clear, achievable aims
    - Caveats considered
  - Consistent with applicant career stage
  - Develops new skills and expertise
  - Fills in gaps consistent with applicant research career goals
  - [Clear that your PI has read it!]

4. Training potential

- Will the proposal provide an individualized, supervised experience that develops applicant's research skills?

- Will the proposal serve as foundation for a productive research career?

5. Institutional environment

- Looking for
  - High quality
  - Conducive to training
  - Adequate research facilities
  - Appropriate training opportunities
- As evidenced by:
  - "Training Plan, Environment, Research Facilities"

Impact score takes into account the five criteria for F critiques

1. Fellowship applicant

2. Sponsors, collaborators, and consultants

3. Research training plan

4. Training potential

5. Institutional environment and commitment to training

Impact Score

"Likelihood the fellowship will enhance the candidate's potential for, and commitment to, a productive independent scientific research career"

Scoring System

Impact	Score	Descriptor	Additional Guidance on Strengths and Weaknesses
High	1	Exceptional	Exceptionally strong , essentially no weaknesses
	2	Outstanding	Extremely strong, negligible weaknesses
	3	Excellent	Very strong, only some minor weaknesses
Medium	4	Very Good	Strong, numerous minor weaknesses
	5	Good	Strong, at least one moderate weakness
	6	Satisfactory	Some strengths, some moderate weaknesses
Low	7	Fair	Some strengths, at least one major weakness
	8	Marginal	A few strengths, a few major weaknesses
	9	Poor	Very few strengths, numerous major weaknesses

(Impact Score = Priority Score)

How peer review works

- Your proposal is assigned to 3 people (out of ~20)

- At end of discussion, EVERYONE submits an "impact score"

- (Impact score = priority score)

Overall Impact Score is reported on summary statement

- = (Average impact scores submitted by all reviewers) x 10

- Final score is between 10-90

- Reflects the "likelihood the fellowship will enhance the candidate's potential for, and commitment to, a productive independent scientific research career"

Is it "fundable?"

- Study sections evaluate proposals

- <u>Institutes</u> make funding decisions

- Institute funding decisions are based on

  - Impact scores of proposals

  - Funding priorities of institute

  - Availability of funds

- *NIAID Funding Newsletter* explains paylines, influence of budget cycles, etc.