

Preparing a fellowship application

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Central thesis of today's presentation

The key to preparing a successful fellowship application is understanding how an application is reviewed .

Review Criteria for Individual NIH/NRSA Fellowship applications.

F32 (postdoctoral)

F31 (pre-Ph.D.)

F30 (pre-M.D./Ph.D.)

Goal: Provide training for the next generation of biomedical research scientists.

The Review Panel's responsibility:

**“To identify the best
of the really good.”**

How the process works:

Before the meeting: Reviewers (primary, secondary and discussant) will be asked to define strengths and weaknesses (as bullet points) for each of five Scored Review Criteria, and give a separate score for each.

Each reviewer submits a preliminary score for the overall impact/priority of the application based primarily on these criteria, and writes a paragraph summarizing the factors that informed that score.

What are the criteria?

Scored Review Criteria

Fellowship Applicant

Sponsors, Collaborators and Consultants

Research Plan

Training Potential

Institutional Environment & Commitment
to Training

Assigning Scores

Impact Score Descriptor Additional Guidance on Strengths/Weaknesses

High	1	Exceptional	Exceptionally strong with essentially no weaknesses
	2	Outstanding	Extremely strong with negligible weaknesses
	3	Excellent	Very strong with only some minor weaknesses
Medium	4	Very Good	Strong but with numerous minor weaknesses
	5	Good	Strong but with at least one moderate weakness
	6	Satisfactory	Some strengths but also some moderate weaknesses
Low	7	Fair	Some strengths but with at least one major weakness
	8	Marginal	A few strengths and a few major weaknesses
	9	Poor	Very few strengths and numerous major weaknesses

Minor Weakness: An easily addressable weakness that does not substantially lessen impact

Moderate Weakness: A weakness that lessens impact

Major Weakness: A weakness that severely limits impact

At the meeting:

The top 60% of F32 applications are discussed at the meeting. Usually, all F30 and F31 applications are discussed.

Each reviewer states their preliminary score.

The primary reviewer presents the application to the panel, discussing each criterion.

The secondary reviewer and discussant have a turn to speak, only to add new comments.

The application is then opened for discussion by the whole panel.

Average length of discussion: 10-12 minutes.

Scored Review Criteria: How are they best fulfilled?

Fellowship Applicant:

Undergraduate and Graduate School grades in the sciences.

Publications; number and quality. Published or “in press”, not “submitted” or “in preparation”.

Letters of recommendation. Be certain your referees will write a strong letter. For postdocs, letters should not be from individuals at the sponsoring institution, if possible.

Sponsors, Collaborators and Consultants:

Publication record in area of research proposed.

Funding for bulk of proposed budget period.

Training experience. If Sponsor is junior, get a senior Co-sponsor.

Sponsors, Collaborators and Consultants (con't):

Personalizing the mentoring plan; evidence that the sponsor has given thought to gaps in the trainee's experience and describes how they will be filled. A simple listing of local seminars, meetings, other faculty, etc., is necessary but not sufficient.

Get a letter of support from all collaborators and consultants. Detail how collaboration contributes to training of applicant.

Research Plan:

Focused, not diffuse. Hypothesis-driven plan is good; “Discovery” should be well justified.

Feasible within requested funding period. “Over-ambitious” plan will sink the application.

Cogent with respect to Specific Aims; inter-related but not inter-dependent.

Research Plan:

Within the expertise of lab (and collaborators and consultants; provide letters detailing their contribution).

If time has been spent in Sponsor's lab already, Preliminary Data is important.

Should be written for an "informed" reviewer who is not necessarily an expert in the field.

Timeline.

Training Potential:

Critical component of application.

You must demonstrate that you will gain experience distinct from your training to date, and that the fellowship will provide a platform for growth as an independent investigator.

This also includes an assurance that the sponsor will relinquish some “scientific turf” to the trainee.

Institutional Environment & Commitment to Training:

Describe why URMC and your department and the Sponsor's lab is an outstanding place to do this work, and will provide superlative training for the applicant.
(GEBS overview, GSS, OGE & Postdoctoral Affairs)

A letter from the chair stating support for both the applicant and sponsor is very helpful.

Additional Review Criteria:

After the scored criteria are discussed, the following areas are discussed, but not scored. However, they can influence the scoring of the application.

Deficiencies in any area must be corrected before a grant will be funded.

Vertebrate Animal use:

Answer the five questions in detail.

Necessary even if you are having antibodies made commercially.

Obtain local UCAR approval after notification of funding.

Human Subjects:

Answer questions in detail if Research Plan involves human testing or materials where the subject or sample can be traced back to the individual person.

Obtain local IRB approval after notification of funding. Obtaining anonymous specimens like blood or tissue are exempt and do not require approval.

If there are any doubts on this, it is best to check with the Scientific Review Officer for your Study Section in advance of submission of the application.

Biohazards:

A thorough description of any biohazards associated with the proposed research, and plans to handle them needs to be described in the application.

Resubmission:

If the application is being resubmitted because it was not funded the first time, you must address all aspects of the critique and show in the revised application the changes that were made.

Remember that the review panel expects a courteous set of responses. If you pick a fight, you will ALWAYS lose.

Overall Impact/Merit:

A synopsis of the Major and Additional criteria is provided by each reviewer, and each of the three reviewers re-visits their Preliminary Score (1-9, best to worst).

Each panel member then submits a score based on the discussion. Voting outside the reviewer range is allowed but must be justified verbally.

The final score of the application is an average of scores of all panel members after this discussion X 10.

Final Priority Score and Funding

10 = Perfect

90 = Worst

Funding at NIAID (FY 2011-12):

F31 - 24

F32 - 22

(between 10-15%)

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High	1	Exceptional	Exceptionally strong with essentially no weaknesses
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Additional Review Considerations:

After the Review Criteria are discussed and scores are registered by each committee member, the following areas are discussed. They do not influence the scoring of the application.

Deficiencies in any area must be corrected before a grant will be funded.

Training in the Responsible Conduct of Research:

Even if you had this training previously, it is best to provide a highly detailed description of the training (i.e., IND 501) you will receive at URMC.

Areas to cover: Format, Subject Matter, Faculty Participation, Duration, Frequency.

Include any additional individual training to be provided by the mentor.

Resource Sharing Plans:

If any cell lines, transgenic animals, recombinant DNA reagents, or other resources are to be generated by the research, you need to describe how they will be distributed to the scientific community upon request.

Additional Review Considerations (con't):

Applications from Foreign Organizations

Select Agents

Budget and Period of Support

Howard Hughes Medical Institute's the International Student Research Fellowship Program.

These three-year fellowships will be awarded to students engaged in their doctoral dissertation research. Support for years 3-5.

Outstanding international predoctoral students in the biomedical or related sciences who are ineligible for fellowship or training grant support through federal agencies.

Institutional nomination. See Dr. Edith M. Lord, SAGE.

http://www.hhmi.org/grants/individuals_intl_fellows.html.