NIH F31s

From the perspective of a reviewer
NIH Program Announcement (PA-16-309) includes Application Review Information

A research project integrated with a training plan that will be evaluated for scientific and technical merit through NIH peer review system

“The review will emphasize the applicant’s potential for an independent, scientific research career, the applicant’s need for the proposed training, and the degree to which the research project and training plan, the sponsor(s), and the environment will satisfy those needs.”
LOGISTICS OF THE REVIEW PROCESS

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Review Process

before the Review Panel meets

- Each application is assigned to three reviewers
- All three reviewers provide a *preliminary* overall impact score and preliminary scores for individual criteria
- All three reviewers write an *overall impact summary*
- R1 and R2 write a full critique including details supporting their scores for each review criteria
Review Process

When the Review Panel meets

Applications sorted by preliminary impact score; Panel discusses at least 50% of applications (for each funding mechanism)

• Reviewers announce preliminary scores
• R1 provides introduction and concise review, emphasizing strengths and weaknesses; R2 and R3 discuss areas of concurrence or disagreement
• All panel members encouraged to participate in discussion
• Reviewers announce final impact scores
• Each member of the panel records a score based on panel discussion (typically within the range set by the reviewers)
• Non-scored review criteria discussed (RCR, sharing plans)
• Applications not discussed will receive written critiques
Overall Impact/Merit Score

...assessment of the likelihood that the fellowship will enhance the candidate’s potential for, and commitment to, a productive independent scientific research career in a health-related field, in consideration of the scored and additional review criteria.
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SCORED REVIEW CRITERIA

PA-16-309, Section V
**Scored Review Criteria**

- Fellowship Applicant
- Sponsors, Collaborators, and Consultants
- Research Training Plan
- Training Potential
- Institutional Environment and Commitment to Training

*Reviewers list strengths and weaknesses and assign individual scores for each category*

*All criteria can affect overall impact score*

*Need not be strong in all categories to be judged likely to have major impact*
Fellowship Applicant

- academic record
- research experience
- potential for independence and productivity
- demonstrate commitment to research career

Does the applicant have the potential to develop into an independent and productive researcher?
Sponsor(s), Collaborators, and Consultants

• research qualifications/recent publications
• track record of mentoring
• match between applicant and sponsor interests
• understanding of and commitment to address applicant’s training needs
• adequate research funds/number of trainees

Does the sponsor recognize the applicant’s training goals and demonstrate commitment to help the applicant achieve them?
Research Training Plan

• high scientific quality
• clear and reasoned with discussion of outcomes and possible problems
• appropriate project for PhD candidate
• preliminary data not required, but approach should be feasible based on existing data

Will the research plan train the applicant to be an excellent scientist?
Training Potential

Research Project and Training Plan should:

• support applicant’s strengths, address weaknesses
• provide individualized and mentored experiences to develop knowledge, research skills, professional development skills (seminars, journal clubs, presentations, opportunities to attend conferences, specialized courses (here or elsewhere))
• serve as a sound foundation to allow applicant to develop into a productive researcher

What experiences will the applicant have to help meet their training goals?
Institutional Environment & Commitment to Training

• adequate and appropriate facilities, equipment, graduate program resources and opportunities
• high quality environment for scientific development
• commitment to fostering mentored training toward research career goals

Is the institution committed to helping the applicant achieve their training goals?
**Additional Review Criteria**

- Protections for Human Subjects
- Inclusion of Women, Minorities, Children
- Vertebrate Animals
- Biohazards
- Resubmissions

*inform overall impact score, but separate scores not given*
Features of a strong application

• Well integrated and consistent: sponsor and applicant reinforce overall goals of training experience

• Communicates how the applicant will take advantage of available resources to become a great scientist

• All components of the application make it easy for the reviewer to summarize why award of this fellowship will have a major impact on the likelihood that the applicant will be prepared for a productive, independent, scientific career
Features of a strong sponsor plan

• Individualized: describes the training this student needs to become a great scientist

• Addresses multiple aspects of training: experimental design, experimental technique, communication (oral and written), mentoring, teaching, specialized coursework

• Describes how the lab environment, local scientific environment, and institutional resources will contribute to training
Components** of an F31 Application

*not all components are listed!*

- Applicant Biosketch *include Personal Statement and Scholastic Performance*
- Sponsor Biosketch *include Personal Statement (emphasize training experience) and Research Support*
- Applicant’s Background and Training Goals (research experience, training goals and objectives, activities planned under award, consider including a timeline)
- Specific Aims/Research Strategy (1+6 pages)
- Respective Contributions of sponsor and applicant in preparing the research strategy
- Selection of Sponsor and Institution
- Training in Responsible Conduct of Research
- Sponsor and Co-Sponsor Information
- Institutional Environment and Commitment to Training (includes graduate program information)
- Three Letters of Reference

**ALL of these sections can help convey to the review panel why your application will have impact on your training!!**