

# 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.**”

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# **LOGISTICS OF THE REVIEW PROCESS**

# 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**

# 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!!**