Revisions to the NIH Fellowship Application and Review Process

Guidance for Sponsors (Mentors)

NIH Fellowship (F30, F31, F32) proposals submitted after January 25, 2025, must use a revised application and will be reviewed under revised criteria (see: https://grants.nih.gov/policy-and-compliance/policy-topics/peer-review/revisions-nih-fellowship-application-review-process).

These changes affect the materials that Sponsors of candidates (applicants) are required to submit in support of a candidate. Note that "Sponsors" is the NIH term for the mentors of an candidate.

Background

The review criteria for fellowships are changed from the previous five criteria (Fellowship Applicant, Sponsors, Collaborators, and Consultants, Research Training Plan, Training Potential, Institutional Environment and Commitment to Training) to three scored review criteria defined as follows:

1. Candidate's Preparedness and Potential

- Discuss the candidate's preparedness for the proposed research training plan. Consider the context, for example, the candidate's stage of training and the opportunities available.
- Assess whether the candidate and sponsor statements as well as the referee letters provide
 convincing evidence that the candidate possesses qualities (such as scientific understanding,
 creativity, curiosity, resourcefulness, and drive) that will improve the likelihood of a successful
 research training outcome.
- Consider the candidate's potential to benefit from the fellowship research training plan and to transition to the next career stage in the biomedical research workforce.

2. Research Training Plan

- Assess the rigor and feasibility of the research training project and how completion of the project will contribute to the development of the candidate as a research scientist.
- Evaluate the goals of the overall research training plan and the extent to which the plan will facilitate the attainment of the goals.
- Discuss whether the research training plan identifies areas of needed development and contains appropriate, realistic activities and milestones to address those needs.
- Consider whether the sponsor(s), scientific environment, facilities, and resources are adequate and appropriate for the proposed research training plan.

3. Commitment to Candidate

- Assess whether the sponsor(s) presents a strong mentoring plan appropriate to the needs and goals of the candidate.
- Evaluate the extent to which the sponsor(s) and organizational commitment is appropriate, sufficient, and in alignment with the candidate's research training plan.
- Consider whether the level of commitment provided will contribute to the successful completion of the proposed plan and allow the candidate to advance to a productive career in the biomedical research workforce.

The Sponsor statements address the last criterion most specifically but are also essential in helping reviewers evaluate the other criteria.

The requirements for the fellowship application have also been revised to align with the changed criteria. In particular, candidates must now complete a 3-page section, "Goals, Preparedness, and Potential", which includes the following required content:

Comments and recommendations in red are by Drs. Joan Lakoski and Robert Milner (instructors for GSK course, NIH Grant Writing for Graduate Students).

- 1. Overall Training Goals
- 2. Candidate's Preparedness
- 3. Candidate's Self-Assessment
 - Two to four current characteristics that are likely to contribute to achieving the research training.
 - Two to four specific areas of development during the fellowship to attain the stated research training and career goals
- 4. Scientific Perspective

Sponsors should provide feedback to candidates on the Candidate Section and review when writing the Sponsor statements to ensure that these are consistent.

The other major sections of the revised application are:

- Training Activities and Timeline (3 pages)
- Research Training Plan Specific Aims (1 page)
- Research Training Plan Research Strategy (6 pages)

These sections must be written by the candidate, but the Sponsors may provide feedback. The Training Activities and Timeline must address the areas of development identified in the candidate's self-assessment. Sponsors should also address these areas in their statements. Note that the Training Activities and Timeline includes a description of the roles of each Sponsor.

Note that the revised application requires more detailed and defined information than previously; these additions are highlighted in the guide below.

Guidance for Sponsors

This guide provides the instructions for the Sponsor section of a fellowship application with recommendations for completing the section. The instructions (shown in black font) are from NIH Forms I Instructions for Fellowships (https://grants.nih.gov/grants-process/write-application/how-to-apply-application-guide). Some information (e.g., suggested word limits) is from the Final Report of the CSR Advisory Council Working Group on Peer Review of NRSA Fellowship Applications (https://public.csr.nih.gov/sites/default/files/2022-11/CSRAC Fellowship review WG report September 2022 final.pdf)

Commitment To Candidate, Mentoring And Training Environment: Sponsor(s) Commitment The "Sponsor(s) Commitment Statement" attachment is required. The sponsor and each co-sponsor must provide statements as described below, uploaded as a single PDF file.

Content:

Complete these items as comprehensively as possible so that a meaningful evaluation of the commitment to the research training can be made by the reviewers. Each sponsor and co-sponsor statement must address the following sections (A-E).

This section has a 6 page limit. Therefore, if an applicant has multiple sponsors, they must decide how to divide the pages between them. For example, the primary sponsor might provide a longer statement (3–4 pages) with co-sponsors submitting shorter statements (~1 page) focused on their specific roles. The sponsors and candidate should discuss during preparation of the application.

A. Mentoring Approach and Candidate Mentoring Plan

Effective mentorship is critical to the development and retention of scientists and the advancement of research. Sponsors and co-sponsors must describe their mentoring approach and the specific mentoring plan for the candidate to ensure career advancement in the biomedical research workforce. The mentoring plan should be tailored to the overall training goals outlined by the candidate and go beyond simply providing access to research environments. Effective mentoring plans may include areas such as enhancing the candidate's understanding of scientific research, promoting the candidate's professional development, maintaining effective communication, aligning expectations and fostering independence.

This section is **new** and focuses on the *mentoring* provided by the Sponsors. Sponsors should review the candidate's Self-Assessment and Training Activities and Timeline to tailor their mentoring plan to meet the needs of the candidate. The primary mentor should devote at least ½ page to this section. Cosponsors should describe how they will mentor the candidate in their areas of expertise.

B. Prior Commitment to Training and Mentoring

This section may be used to demonstrate the sponsor(s) past commitment to effective training, mentoring, and career development. Previous experience is not a pre-requisite to serve as a sponsor. Sponsor(s) may provide examples from no more than 2-5 recent trainees at the level of the candidate and describe the individualized training and mentoring offered. Simply listing former trainees and their career outcomes does not provide evidence of effective mentoring. The sponsor(s) should describe the impacts of the individualized training and mentoring on each former trainee's scientific, educational, or career development. For early-stage sponsor(s), examples may include informal training and mentoring activities conducted as a student or postdoctoral fellow.

Note that this section requires more detailed information about the sponsor's mentoring experience than previously required for fellowship applications. To emphasize the instructions: it is **not sufficient** to list just names and current positions of former mentees. Devote ~200 words to each mentee.

C. Commitment to the Candidate's Research Training Plan

This section should contain confirmation of the sponsor(s) commitment to the candidate's research training plan and that sponsor(s) have sufficient time to devote to the training and mentoring given their other professional and supervisory obligations. The sponsor(s) should provide:

- A description of the frequency, duration, and nature of meetings with the candidate throughout the training plan timeline.
- A listing of how many other scientists in the research team will be supervised during the proposed fellowship award period and how the candidate will receive consistent, individualized attention.

Make sure that the description of meetings is consistent with that provided by the candidate in the Training Activities and Timeline section. Devote ~200 words to this section.

D. Research Training Environment

The information contained in the "Training Plan Environment" section of the Sponsor's and Cosponsors' Statements should be coordinated with information provided in the Research Training Plan section or the Other Project Information Form: Facilities and Other Resources so that material is not duplicated.

The sponsor should describe the research training environment and how it will meet the needs of the candidate to achieve the outlined goals. The co-sponsor may include information if different from the sponsor's description. Include any additional relevant items to promote the development of the candidate not listed elsewhere in the application. For example, describe:

- The sponsor(s) research training environment and how the environment will support the candidate's development and attainment of the defined career goals. Sponsor(s) are encouraged to describe efforts to create safe, supportive, and accessible research environments. Describe the day-to-day research environment with special attention to training and how the candidate will benefit from the environment.
- Organizational research training environments such as available centralized research facilities or equipment needed to complete the research training project not listed elsewhere in the application.
- Relevant and accessible organizational research training program(s) related to the candidate's area of interest.
- Opportunities for professional development and intellectual interactions, for example, scientific meetings, journal clubs, seminars, and opportunities for presentations. Include items such as classes, opportunities for interaction with other scientists and any professional skills development opportunities. Describe how the sponsor will work with the candidate to develop and publish rigorous scientific products such as publications and presentations.

Again, make sure that your statements about research training are consistent with those provided by the candidate in the Training Activities and Timeline and Research Strategy sections. The primary sponsor should devote at least 2 pages to this section; co-sponsors ½ page each.

E. Candidate's Potential

The section is intended to provide information about the candidate's main areas for development during the training as well as their potential to benefit from the research training plan and to have a productive career in the biomedical research workforce. Sponsor(s) should provide the following for the candidate:

- Examples of personal characteristics (for example, skills, abilities, traits, attitudes) that are likely to significantly contribute to further advancement in the candidate's defined career path. Take into consideration relevant indicators for success, such as scientific curiosity, resourcefulness, and persistence.
- Areas for development to improve the candidate's prospects of transitioning into a productive career in the biomedical research workforce. Areas may include, but not limited to the following skills: technical (e.g., new techniques or technical methods, quantitative or computational approaches), operational (e.g., practices that promote rigorous, reproducible, and responsible research) or professional (e.g., management, leadership, communication, teamwork). Indicate whether the proposed training plan will address these areas and contribute to the candidate's development and attainment of the stated career goals.
- An overall assessment of the candidate's preparedness and likelihood for success in the proposed research training plan. Provide examples, such as scientific or intellectual contributions, that highlight the likelihood of achieving the training goals and advancing to a career in the biomedical research workforce.

This section is the Sponsor's "letter of reference" for the Candidate. Primary Sponsors should devote at least a page to this section. Co-sponsors, with more limited space, might highlight a particular attribute of a candidate. Note that the instructions are more guided than previously, with examples and areas to address.

Evaluation of the candidate must be honest but support by a sponsor that may be less than enthusiastic should be discussed with the candidate prior to committing to the application. Ideally, the Sponsor and Candidate should be aligned, resulting in strong support consistent with the Candidate's needs.

Clinical Trial Training (if proposed)

Note: If the candidate is proposing to gain experience in a clinical trial as part of the research training plan, then the sponsor or co-sponsor should include information in the statement to document leadership of the clinical trial. Include the following:

A statement/attestation that the sponsor or co-sponsor will be responsible for the clinical trial.

- Source of funding;
- ClinicalTrials.gov Identifier (e.g., NCT87654321), if applicable;
- A description of how the expertise available to guide the candidate in the proposed clinical trials research experience;
- The sponsor(s) must have primary responsibility for leading and overseeing the trial and must describe the level of oversight.
- Include details on the specific roles/responsibilities of the fellow and sponsor, keeping in mind that the terms of a fellowship award do not permit the fellow to lead a clinical trial.