**Template guidelines:** For your grant application, the SERCC strongly recommends using the words that are in bold below as section headers. Instructions from the NIH SF424 are in blue text with additional SERCC comments in gray text.

**Candidate’s Goals, preparedness, and potential**

|  |
| --- |
| **Overall Training Goals*:*** *Candidates should describe the goals for the proposed research training plan and the long-term goals for a career in biomedical research workforce. Relate the fellowship goals to the long-term career goals. Candidates should describe their motivation for pursuing a career in the biomedical research workforce.** **F30/31: Focus should be on learning to think like a scientist (i.e., how to develop, analyze, and present work); F30s should have a clinical focus.**
* **F32s: Focus should be on specific goals as well as how current training and sponsor will help with transition to an independent career.**

Sections to consider including:* Career and training goals
	+ Describe what your career goals are and the training goals needed to achieve these.
	+ Describe your motivation for pursuing a career in biomedical research.
	+ Be honest and as specific as possible.
* Gaps in training
	+ Describe what skills, theories, conceptual approaches, etc., are needed to achieve your goal. These might include expertise in: rigorous research design, experimental methods, quantitative approaches, and data analysis and interpretation.
* Sponsor
	+ Describe their field and how working in this area fits with your goals
	+ (F32) Discuss how your sponsor will help you transition to an independent career (including how they will train you in laboratory management and mentoring skills).
* Non-research activities
	+ Discuss professional development opportunities and/or clinical activities.
* Training environment
	+ Describe departmental program, including opportunities to participate in journal clubs, seminar series, meet with speakers, collaborations, networking, clinical research (if relevant).
* Outcomes
	+ Design metrics of success toward meeting your goals.
* Future Directions:
	+ Discuss how the proposed research will facilitate your transition to the next career stage.
	+ (F32s) Discuss arrangement with mentor regarding project (i.e., what components you can take with you).
 |

|  |
| --- |
| **Candidate’s Preparedness:** *This section provides information regarding the educational, scientific, and professional experiences that prepare the candidate for the proposed research training plan. Note: information listed in the candidate’s biosketch may be expanded upon, but not simply duplicated, in this section. The candidate should address the following:* 1. *How relevant activities and experiences contributed to the candidate’s scientific development and preparation for the current research training plan. Examples may include coursework, research experiences, conference attendance, internships, and employment.*
2. *Any additional activities and experiences that demonstrate an interest and commitment to a career in the biomedical research workforce. Examples may include seeking out opportunities for research skill development or engaging in leadership, service, teaching, or outreach activities.*

Sections to consider including:* High school internship
* Undergraduate honors project
* Undergraduate research experience
* Dissertation work

For each of the above, discuss:* The scientific focus of the laboratory OR historical context for the work/study
* The research performed and techniques/skills acquired (technical skills, data analysis)
	+ Outcomes: both scientific advances (if possible) and professional development (e.g., leadership skills, presentation skills, networking, introduction to a specific field)
 |

|  |
| --- |
| **Candidate’s Self-Assessment:** *The purpose of this self-assessment is to provide an opportunity for the candidate to define their current characteristics (such as relevant skills, abilities, traits or attitudes) and areas to develop that are likely to contribute most significantly to success in the proposed research training plan and career path. For example, the candidate may include but is not limited to describing technical (techniques or technical methods, quantitative/computational approaches), operational (practices that promote rigorous and reproducible science, research safety, animal, or human welfare) or professional (management, leadership, communication, teamwork) skills. The candidate should describe:* * *Two to four current characteristics that are likely to contribute to achieving the research training.*
	+ E.g., resilience, persistence, commitment, strong work ethic, patience, perceptiveness
* *Two to four specific areas of development during the fellowship to attain the stated research training and career goals.*
	+ E.g., specific coursework
	+ E.g., specialized technical training you need for your future career
	+ E.g., professional development skills needed for the future (presentation skills, manuscript preparation, mentoring, etc.)
 |

|  |
| --- |
| **Scientific Perspective:** *This section is intended to provide information about the candidate’s potential to think about and express ideas within a scientific field. NIH staff have mentioned that this is an opportunity for candidates to demonstrate critical thinking about a broad scientific problem in more detail than is feasible in the Research Strategy.* *In this section, candidates should explain the following:** *Why this field of science is important and the ways the chosen research training project will advance the field.*
* *A broader, unresolved scientific question in the chosen scientific field, the importance of the problem, and the ways biomedical research might advance the scientific field.*
 |

*In the* [*Scored Review Criteria for Fellowship Applications*](https://grants.nih.gov/policy-and-compliance/policy-topics/peer-review/revisions-nih-fellowship-application-review-process/changes-to-fellowship-review-criteria)*, reveiwers are asked to comment on the following:*

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.

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.

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.

*Potentially also helpful in considering how well your application complies with reviewer expectations:*

*In the Forms H instructions to the standard F30 (*[*PA-21-049*](https://grants.nih.gov/grants/guide/pa-files/PA-21-049.html)*), F31 (*[*PA-21-051*](https://grants.nih.gov/grants/guide/pa-files/PA-21-051.html)*), and F32 (*[*PA-21-048*](https://grants.nih.gov/grants/guide/pa-files/PA-21-048.html)*) reviewers are asked to evaluate the following questions in assessing the training potential of the applicant. Note, only questions relevant to the training plan are included here; additional questions relevant for other sections of the proposal may exist.*

Criteria under Fellowship Applicant

* Are the candidate's academic record and research experience of high quality?
* Does the candidate have the potential to develop into an independent and productive researcher?
* Does the candidate demonstrate commitment to a research career in the future?

Criteria under Research Training Plan

* Is the proposed research project of high scientific quality, and is it well integrated with the proposed research training plan?
* Is the proposed time frame feasible to accomplish the proposed training?
* Is the training plan well-reasoned, and likely to provide an effective, integrated research and clinical training experience and ease the transitions between phases of the dual-degree program?
* Does the training plan provide adequate opportunities to present and publish research findings and meet with scientists in the community at national meetings as the work progresses?
* Will the training plan provide the professional skills needed for the candidate to transition to the next stage of his/her research career?
* If proposed, will the clinical trial experience contribute to the proposed project and/or the candidate’s research training?

Criteria Under Training Potential criteria

* Are the proposed research project and training plan likely to provide the applicant with an integrated perspective and appropriate skills for a physician-scientist or other clinician-scientist?
* Does the training plan take advantage of the applicant's strengths and address gaps in needed skills?
* Does the training plan document a clear need for, and value of, the proposed training?
* Does the proposed [integrated research and clinical] training have the potential to serve as a sound foundation that will clearly enhance the applicant's ability to develop into a productive, independent physician-scientist or other clinician-scientist?
* If applicable to the dual-degree program, are appropriate opportunities for electives, early and longitudinal clinical experiences, or other enhanced clinical training available to the applicant? Are appropriate opportunities available to ease the transition to clinical clerkships and for research electives during clinical training?

Criteria under Institutional Environment & Commitment to Training:

* Are the research facilities, resources (e.g., equipment, laboratory space, computer time, subject populations, clinical training settings) and training opportunities (e.g., seminars, workshops, professional development opportunities) adequate and appropriate?
* Is this institutional environment for the candidate’s scientific development of high quality?
* Are the facilities and resources appropriate to provide exposure to a research-oriented, clinical environment?
* Does the environment include individuals with similar training who will serve as role models for the candidate?
* Given the integrated nature of the training program, will appropriate advising be available to the candidate as he/she transitions between the research and clinical components of the integrated training program and to the next career stage?
* Is there appropriate institutional commitment to fostering the candidate’s mentored training?
* Is there appropriate institutional commitment to fostering the candidate’s integrated training as a physician-scientist or other clinician-scientist [or mentored training (F31/F32)]? Does this commitment extend to support the candidate’s research and training, if needed, for the duration of the proposed award?
* Does the institutional and/or lab environment provide appropriate and sufficient opportunities for the candidate to gain the professional skills needed for a successful research career?