Applicants to the International Student Research Fellowship are nominated by a group of highly selective universities. Thus, all of the applicants are of high caliber, representing some of the best trainees in the nation. Thus, the challenge presented to the reviewers is to try to identify from among many strong applicants those who have high potential to develop into scientific innovators and leaders. The review depends on all of the information included in the application, including the research proposal, the reference letters, and the applicant’s statement.

**Because of the large number of applications to this program, we cannot provide applicants individual critiques.** This document provides to applicants and nominating institutions some general feedback based on common observations made over the several years of this program. We hope that these comments might prove helpful.

**EVALUATING THE SCIENTIFIC MERIT OF THE RESEARCH PROPOSAL**

For most reviewers, the most important section of the application is the research proposal. Thus, it is critical that both the applicant and the thesis advisor detail their contributions (and that of others) in both the development of the ideas and the writing of the applicant’s proposal. These contributions should be detailed by the applicant in the research plan section, and by the thesis advisor in his/her letter of recommendation.

Applicants should understand that the scientists reviewing the proposal will mainly be experienced scientists who are likely not specialists in the area of the project. Therefore, the applicant has the responsibility to communicate the ideas to a general audience of scientists. The applicant must effectively explain to a nonexpert why the problem is important, the rationale for using a specific approach, and describe the potentially transformative nature of the approach.

The application instructions included items to which the applicants were asked to specifically address. However, many do not follow these guidelines. Common omissions include not specifically highlighting the significance and innovation of the project, failing to identify potential pitfalls and discussing alternative strategies, not explaining the value of the model system chosen, and not including a testable hypothesis or engineering objective. It is helpful to other scientists, including those who are not specialists in the applicant’s area, to provide critical feedback on drafts of the proposal well before the application is submitted.

All of the applicants are highly accomplished and work in excellent labs. Thus, it is very important that the applicant clearly describe the significance and innovation of the research being proposed.

**EVALUATING THE APPLICANT’S SCIENTIFIC POTENTIAL**

**LETTERS OF REFERENCE**

The letters of reference are very important in evaluating the applicant’s potential to be a leader in the scientific community. Evaluators rely on the letters to provide evidence that the applicant possesses the traits necessary to be a scientific leader – innovation, talent, creativity, excellent communication skills, and perseverance.

While the reviewers find useful specific comparisons – e.g., “best graduate student I have ever had” or “in the top 2% of all students I have trained” -- superlatives without specificity are not very useful. The research project advisor should clearly and specifically describe the applicant’s contributions (both intellectually and practically) to the lab, to the project, and to any publications that came from that research experience. These letters should also include evidence of the applicant’s potential as a scientific innovator, a specific description of the applicant’s role in developing and implementing research projects, and his/her contribution to any publications which might have already come from the project.

**PUBLICATION RECORD**

Review panel members also look carefully at an applicant’s publication record. More important than the number of publications is the applicant’s contribution to the publications. When listing his/her publications, the applicant should include an annotation that describes his/her intellectual and experimental contributions.
PERSONAL STATEMENT/INNOVATIVE DISCOVERY ESSAY
The personal statement/discovery essay is the applicant’s opportunity to demonstrate his/her knowledge of a recent scientific discovery and explain why that particular discovery contributed to innovation in the field. The applicant should closely follow the guidelines to describe a discovery that is NOT his/her own or that of his/her adviser.

Additional information can be found at http://www.hhmi.org/programs/international-student-research-fellowships.
If you have questions or comments email predoc@hhmi.org.