

2011 International Student Research Fellowship Application Feedback

Since applicants to the International Student Research Fellowship must be nominated by his/her graduate institution, competition was exceedingly intense (12% award rate) and all of the applications were of very high caliber. To try to discern the applicants with the highest scientific potential, the review panel members focused most heavily on information gleaned from the reference letters, and the research proposal, though the entire package was evaluated extremely rigorously.

Unfortunately, due to the high number of applications to this program, individual feedback is not feasible. This document serves to provide feedback to applicants and to institutions about the review criteria in an effort to help make applications most competitive.

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 look for superlatives of course, but also look to see that the applicant possesses the traits necessary to be a scientific leader – talent, creativity, excellent communication skills, perseverance, etc.

Review panel members value letters with specific comparisons – “best graduate student I have ever had” or “in the top 2% of all students I have trained.” The recommender should then back these claims up with specifics. Any research project advisor should address the applicant's contributions (both intellectually and physically) to the lab, to the project, and to any publications that came from that research experience. This is especially important for the letter from the applicant's Ph.D. thesis advisor. This letter should also include a specific description of the applicant's role in developing and implementing the project, and his/her contribution to any publications which might have already come from the project.

Prior Research Experience and Publication Record

Review panel members also look carefully at an applicant's prior research experience and publication record. It is not the quantity of experiences or publications that count but the applicant's contribution to the publications and to the research done during their various research experiences. When describing research experiences, the applicant should make very clear his/her intellectual and physical contributions to each project and any publications resulting from that research experience. As mentioned above, it is helpful if the advisor for that project addresses this as well in the letter of recommendation.

Personal Statement

The personal statement is the applicant's opportunity to demonstrate his/her potential to be a leader in the scientific community. One way to do this is for the applicant to discuss significant life accomplishments, be they scientific or in another arena.

Other Information:

Honors/awards, Professional Activities, graduate transcripts, etc. are all considered as part of the entire application package when evaluating potential for scientific leadership.

Evaluating the Scientific Merit of the Research Proposal

Most importantly, applicants need to understand that not all of the scientists reviewing the proposal will be experts in that field. The burden is on the applicant to make the research plan accessible to knowledgeable scientists, but not necessarily scientists who do research in that area. The applicant also must 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 online system has bullets that the applicants were specifically told to address. Many did not follow these guidelines, and were evaluated accordingly. Common but critical omissions include not identifying potential pitfalls and discussing alternative strategies, not explaining the value of the model system chosen, and not including a testable hypothesis or engineering objective. Applicants should follow these instructions carefully, and request feedback from multiple scientists on the proposal, especially from scientists NOT in that specific research area.

It is also important that the applicant describe his/her specific contributions to the development and implementation of the proposal. These contributions should be echoed in the letter from the PI.

The applicants are highly competitive, as are the labs in which they are doing their thesis work. We assume that these stellar students in fantastic labs are doing innovative research. Thus, a factor contributing to the scientific merit of the proposal is the significance and innovation of the research being proposed, and the applicant's ability to describe that effectively in the research plan.

2012 Competition

Though there will be changes to the 2012 application, the feedback given above will still be relevant, since the changes are designed to address the issues mentioned above. Some potential changes include combining the significance and innovation section with the research plan, and requiring a listing of publications (and the applicant's contributions to the publications) as part of each description of a prior research experience.

We do not have deadlines as yet, though the dates will be very similar to those for the 2011 competition.

Additional information about this program can be found at www.hhmi.org/intl_fellows.

If you have questions or comments please email predoc@hhmi.org.