1. **Having a clearly written, well designed, well motivated research plan is less than half the battle.** NRSA programs are designed to fund a training experience for promising students, not a research project per se. Being able to prepare a great research plan is certainly one indicator of potential success and provides a fleshed out characterization of what will be happening during the training period, but it is only one component of the complete training plan. A superb research plan is not sufficient to get an NRSA funded. The other components (student qualifications, training plan, sponsor information and institutional support) are very important as well, and must form an integrated research and training plan that is tailored to your specific needs and goals.

2. **Impact, impact, impact.** Your application will be assessed primarily in terms of its overall impact. This is defined as follows:

   “Reviewers will provide an overall impact score to reflect their 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 following scored and additional review criteria. An application does not need to be strong in all categories to be judged likely to have a major impact.”

3. **The research and training plans must identify marked, unique training experiences or opportunities for growth beyond what you would typically get within the course of the degree, working in your advisor’s lab.** New techniques or analysis tools, new populations, new topics or literatures are all appropriate examples. The expansion can be incremental and can include doing something that your advisor is already doing that you haven’t had a chance to do yourself within the lab environment. There needs to be some very clear and explicitly stated “value added” component that links directly to your career aspirations and justifies the merit of this training.

4. **Develop a sponsorship model that appropriately reflects your goals and addresses your needs.** Make an argument for how and why your primary mentor’s (or mentors’) expertise is exactly what you need to accomplish your primary training goals. Emphasize the fit or match between your training goals and proposed study and your mentor’s areas of expertise. Then there are two scenarios in which a co-sponsor is justified and considered desirable. First, if you are introducing a new component in your research plan in which your advisor isn’t an expert, include a co-sponsor or consultant who is and make clear how you will acquire the training you need from the cosponsor — be concrete. Second, judicious use of co-sponsors can also compensate for any potential or perceived weaknesses of your primary sponsor. Sponsors who have limited experience mentoring doctoral students (i.e., who haven’t graduated many PhDs), who are junior, or who have limited external funding during the proposed training period are all considered higher-risk sponsors. So are sponsors with TOO many graduate students (or with administrative responsibilities such as deans) whom the committee might feel would have too little time to properly supervise the applicant. A sponsor whose grant funding runs out (grant period ends) during the training period can also raise concerns. Inclusion of a more experienced, more
senior, less inundated or better funded co-sponsor can mitigate many of these concerns, and is highly recommended in these cases.

5. **Be sure to highlight any tangible evidence of research productivity in your biosketch.** Include posters as well as publications and manuscripts under review and be concrete about what products you anticipate (and when) from your ongoing and previous research experience. Be aware that the committee also looks at transcripts, taking into account grades and coursework, especially courses you would be expected to have taken given your training ‘pathway’ – such as basic science courses, method courses, or statistics courses.

6. **Be sure to make the feasibility of your research apparent.** This includes making a convincing case that you have the sufficient time, skills, and funding to complete the proposed research during the proposed training period. Don’t propose an fMRI study if your advisor has no funding to pay for magnet time during your proposed training period. Don’t propose a two year longitudinal study if you are requesting 18 months of funding. Be specific about what equipment and resources are available to support the completion of the project.

7. **Include a detailed timeline that describes the components of your research plan but also includes which courses and other training experiences you will complete at each point in the training period.** This timeline will be closely examined to determine whether it is realistic, appropriate, and complete.

8. **Be sure to characterize the collaborative nature of the development of the research/training plan (i.e., mention consultation with your advisor and FAC).** This speaks to the supportiveness of the training environment. Also be specific and detailed about broader aspects of the training environment (e.g., weekly program seminars, department colloquia, specific scholars within the department or in other departments on campus that do related work) that will enhance your growth and intellectual community.

9. **Training in responsible conduct of research must be ongoing throughout the training period and must extend beyond CITI certification.** This can be either formal (grad school or departmental professional development programs) or informal (e.g., putting it on the agenda for a lab meeting once a semester).

10. **Reference letters by faculty are an important aspect of your evaluation as an applicant.** Be proactive in identifying appropriate faculty who can comment on your scholarly accomplishments, current ability, and potential for a future scientific career.
Revision Strategies:
If you are not successful in your first attempt, you have one chance to revise and resubmit. It is very important that you carefully consider the comments of the previous reviewers, and that you make a good faith effort to revise your application in a significant way.

In your revision, do not assume that all you need to do is address the critiques. Take the revision as an opportunity to enhance the impact of your application even further. Often, an applicant may reply well to all previous critiques, but still end up with a revised application that is not funded on the second try. This is partly because there are many very good applications submitted. If you have exciting new preliminary data, or a new technique you will learn, or some other aspect you think will increase reviewer enthusiasm for the impact of your proposal, consider integrating that into your revision. Be sure to note any new professional presentations or publications that you have accrued between submission periods.

Some frequently encountered criticisms of applications, related to the above guidelines:

- Applicant does not clearly specify what the impact of the application will be for his/her training.
- The applicant already has significant training in the techniques and approaches, and the impact of the proposed training is low because the applicant is requesting to essentially continue existing training with minor improvements.
- The sponsor is good, but has no current source of funding to support the proposed research training, and no co-sponsor is identified.
- Applicant’s productivity (papers, abstracts, etc.) is low relative to other applicants at this career stage.
- The training plan is generic and is not tailored to the specific needs of the applicant.
- The plan is over-ambitious and it is not feasible that the applicant will be able to complete the activities specified within the proposed time frame.
- Revision is not responsive to prior critiques.