

# The National Research Service Award: Strategies for Developing a Successful Proposal

BARBARA PARKER, RN, PhD, FAAN,\* AND RICHARD STEEVES, RN, PhD, FAAN†

**An important experience for doctoral students is developing and submitting an application for a National Research Service Award (NRSA) from the National Institutes of Health (NIH). This article provides an overview of the process of developing and submitting an NRSA proposal from the perspective of a sponsor of successful proposals as well as a member of the Scientific Review Section. Topics included are suggestions for writing and rewriting the proposal, developing a training plan specific to the proposal, selection of sponsors consultants and references, the review process, and revising and resubmitting a proposal. Tables give examples of (a) applicants identifying strengths and areas for growth, (b) activities to address areas for growth (c), and responses to a previous review. The intended audience is beginning doctoral students and novice sponsors. (Index words: National Research Service Award (NRSA); Doctoral student; Proposal writing; Faculty sponsor) *J Prof Nurs* 21: 23–31, 2005. © 2005 Elsevier Inc. All rights reserved.**

**A**N IMPORTANT EXPERIENCE for doctoral students is developing and submitting an application for a National Research Service Award (NRSA) from the National Institutes of Health (NIH). NIH offers two kinds of NRSAs. A T32 is an institutional grant that is awarded to a school, which then awards the money to individual students. The second is an F31 or F32, which are awards granted to individual students at the predoctoral level in the former and the postdoctoral level in the latter. This discussion will be limited to the predoctoral F31 awards.

Although submitting a proposal is optional in most programs, there are several reasons for students to consider submitting an application. An NRSA award provides the student with tuition and fees as well as a stipend and health insurance for up to 5 years of predoctoral study (3 years of postdoctoral study). In fiscal year 2003, the NRSA covered 100% of the first \$3,000 of tuition, fees, and health insurance and 60% of combined costs above \$3,000 (NIH, 2004b). The predoctoral stipend was \$19,968 plus an annual institutional allowance of \$2,750 that can be used for a variety of professional purposes such as purchasing books and research supplies or travel for data collection and professional conferences. In addition to the financial advantages, submitting an NRSA proposal provides the student with an excellent experience in developing a proposal, submitting it for review, and receiving the written critique and feedback. These are critically important skills for future researchers, and experiencing this process while in the supportive environment of a doctoral program is an excellent first step in developing a program of research. Additionally, while in a doctoral program, the student has several mentors and advisors who can assist in developing the proposal and interpreting the summary statement. As with most new endeavors, students need to begin by understanding some of the unique terminology of NIH. Table 1 lists a NIH-provided glossary of terms.

## Eligibility Requirements

Eligibility requirements for submitting an NRSA proposal stipulate that by the time of the award, the student must be a citizen or noncitizen national of the United States or have been lawfully admitted to the United States for permanent residence. Individuals on student visas are not eligible. For the National Institute of Nursing Research (NINR), additional requirements are that the applicant must be a registered nurse enrolled or accepted into a graduate program (NINR, 2003).

\*Professor and Director of the Doctoral Program, University of Virginia, School of Nursing, Charlottesville, VA.

†Associate Professor, University of Virginia, School of Nursing, Charlottesville, VA.

Address correspondence and reprint requests to Dr. Parker: Professor and Director of the Doctoral Program, University of Virginia, School of Nursing, PO Box 800782, Charlottesville, Virginia 22908. E-mail: bparker@virginia.edu  
8755-7223/\$30.00

© 2005 Elsevier Inc. All rights reserved.  
doi:10.1016/j.profnurs.2004.11.009

TABLE 1. Glossary of Terms

---

**Integrated Review Group (IRG):** a cluster of study sections responsible for the review of grant applications in scientifically related areas. These study sections share common intellectual and human resources.

**Percentile:** Represents the relative position or rank of each priority score (along a 100.0 percentile band) among the scores assigned by a particular study section.

**Priority score:** A numerical rating that reflects the scientific merit of the proposed research relative to the “state of the science.”

**Scientific Review Administrator (SRA):** NIH health scientist administrators in charge of review and advisory groups.

**Study section:** Panel of experts established according to scientific disciplines or current research areas for the primary purpose of evaluating the scientific and technical merit of grant applications, also called scientific review groups (SRGs).

**Summary statement:** A combination of the reviewers’ written comments and the SRA’s summary of the members’ discussion during the study section meeting. It includes the recommendations of the study section, a recommended budget, and administrative notes of special considerations.

---

From <http://www.csr.nih.gov/REVIEW/terms.htm> (October 26, 2003).

A program announcement dated November 26, 2001, noted that “NINR is committed to increasing the number of doctorally prepared nurses in order to meet the demands for adequately trained, biobehavioral scientists. NINR is particularly interested in helping students who are in creative research training programs for recent nursing graduates and students in BSN to PhD programs” (NIH, 2004a).

### Writing and Rewriting the Proposal

In planning for submission, an applicant should plan enough time for multiple (at least three) drafts to be reviewed by the sponsor and other faculty volunteers and for the proposal to be reviewed and signed by several administrators in the school where they have matriculated including the dean. Early in the process of developing the proposal, the applicant must determine the policy of the school regarding the amount of time needed for signoff of proposals. Some schools require up to 10 working days before the proposal’s due date. Although this might seem a long time, a student should recognize that grant office personnel are handling many other proposals with the same due dates and need sufficient time to process the proposal. A meeting with the appropriate administrators to determine the specific requirements of the school to determine time frames of submission needs to be scheduled early. In many schools, the appropriate administrator is the associate dean for research, but in some places, it may be the director of a center

or a department chair. In almost all cases, a grant administrator is included. In planning the schedule, a student should plan for time for a final review of the proposal before it is submitted and double-check that the appropriate biosketches are included, page numbers are correct, and that final formatting of the proposal has not created problems. NIH accepts proposals three times a year: April 5, August 5, and December 5.

Although similar to a research proposal, a fellowship training grant such as an NRSA has some unique components. The NRSA proposal has three important parts: a description of the training plan, the statement by the sponsor, and the research proposal. Each is important and will be treated separately in this article. Additional considerations of an NRSA proposal are the applicant’s past research and clinical experiences, the environment of the college of nursing and the university, and the applicant’s identification of his or her personal strengths and limitations. A well-written proposal will clearly combine these components to demonstrate how all the pieces fit together to provide a coherent training plan and subsequent research study. For example, the student may describe how he/she identified a problem in clinical practice and while searching the literature for an answer found an author who was studying a similar topic. In the process of corresponding with the author, the applicant decided to pursue a doctorate to study with this particular sponsor.

### The Training Plan

In the training plan, applicants describe their entire program of study, not just the courses they will take while supported by the grant. In consultation with their academic advisor, students develop a curriculum plan (training plan) that supports the research focus of their project. Applicants must describe the plan thoroughly, including what they learned/plan to learn in each course taken. Although the wording of the NRSA instructions might imply that only the educational activities engaged in during the funding period are of interest, it is difficult for reviewers to judge the adequacy of these activities unless the entire curriculum is described in detail. Supplementing formal courses with workshops, seminars, and other learning experiences to document how a student will receive the training needed to conduct the dissertation and develop a lifelong program of research is necessary. The training plan begins with an overview of the doctoral program. This will include the

TABLE 2. Applicant’s Strengths and Areas for Growth

Strengths	Areas for Growth
<ul style="list-style-type: none"> <li>• More than 5 years of clinical experience with patients with cancer</li> <li>• Clinical expertise in women’s health</li> <li>• Commitment to the study of women’s health and, in particular, breast cancer survivors</li> <li>• Experience networking with nurse researchers in professional organizations</li> <li>• Work with mentor on similar project in first semester of doctoral study</li> </ul>	<ul style="list-style-type: none"> <li>• Experience with statistical analysis</li> <li>• Knowledge of qualitative and quantitative research methods</li> <li>• Knowledge of unique needs of minority women with breast cancer</li> <li>• No experience working with human investigation committees (HICs), particularly with vulnerable research participants</li> </ul>

required courses in the curriculum as well as cognates, electives, and internships specific to the research interests of the applicant. As much as possible, applicants should describe how current or past courses were relevant to their particular research question. For example, a student could describe a course and then add, “in this course, I developed the concept of consent to further understand issues surrounding sexual assault.” Cognates, electives, and internships should be carefully selected to complement the research topic as well as fill in identified gaps in the students learning. A rationale for the selection of cognates, internships, and electives should be provided. For example, a student studying children would want to include coursework on childhood growth and development and issues of conducting research with children. In searching for electives, it is important to be creative and not limit one’s search to the home university. Exploring web-based or summer courses in other universities, particularly if they are specific to the research interest, can be a creative way to augment a plan of study. An additional strategy would be to include developing an independent study with experts anywhere. Courses the student has taken should be clearly delineated from those currently enrolled in and those that are planned for the future. If the research proposal will

require specific laboratory skills or equipment, the applicant should plan an independent study with someone currently using this equipment or possessing these skills.

NIH requires that all students have training in the responsible conduct of scientific research. This course is different from those required by Institutional Review Boards (IRBs). Most doctoral programs have such a designated course (often an interdisciplinary course). In describing coursework, the applicant should clearly indicate which course meets this NIH requirement. Including a table describing a realistic appraisal of a student’s strengths (what is being brought to the study) as well as areas for growth is very helpful. The table should be followed with another describing how the areas for growth will be addressed. Tables 2 and 3 provide examples compiled from a number of different proposals.

The training plan should conclude with a timeline for completion of course work, preliminary/comprehensive examinations, defending the research proposal, collecting and analyzing the data, and writing and defending the dissertation. Working closely with an advisor is helpful to ensure a realistic schedule, keeping in mind that obstacles will arise and that obtaining human investigation approval sometimes takes several submissions.

TABLE 3. Training Plan to Address Areas for Growth

Areas for Growth	Corrective Activities
<ul style="list-style-type: none"> <li>• Experience in statistics</li> <li>• Knowledge of quantitative and qualitative research</li> <li>• Knowledge of unique needs of minority women with breast cancer</li> <li>• No experience working with HICs, particularly with vulnerable research participants</li> </ul>	<ul style="list-style-type: none"> <li>• Nine credits in statistics course work in doctoral program</li> <li>• Access to faculty who are actively conducting quantitative analysis of data</li> <li>• Course work in quantitative and qualitative research methods</li> <li>• Research practicum/independent study with sponsor and cosponsor</li> <li>• Attendance at University of North Carolina at Chapel Hill Summer Institute in qualitative methods</li> <li>• Independent study with faculty at Center for Minority Health</li> <li>• Attendance at annual conference on health disparities at Howard University School of Nursing</li> <li>• Attendance as observer at HIC meeting, study of research ethics with sponsor</li> </ul>

## Selecting a Sponsor and Cosponsor

The sponsor (also called mentor) must be actively engaged in a program of research similar to the student and agree to supervise directly the applicant's research. The sponsor also documents the availability of other research support and facilities for training. A match between the sponsor and the applicant is an important component of the application. Frequently, a proposal will include both a sponsor and a cosponsor. A strong application might include a sponsor with content expertise and a cosponsor with methodology expertise in the area of the student's research. Another example of a good match for a hypothetical student who would like to conduct an intervention to help children with cancer might be having a sponsor who is an expert in clinical trials in cancer with adults and supplementing with a cosponsor who has expertise with children. A cosponsor does not need to be at the same institution as the applicant, but must agree to provide substantive time and expertise for the applicant. It is best if this commitment is spelled out in detail, including how often the two will meet and for how long each time. Both the sponsor and cosponsor need to provide the applicant with a biosketch and a listing of current and past fellows on NIH forms. Having a number of past successful fellow is a plus; having too many current doctoral students is a liability. An applicant must provide a clear rationale for why he or she selected both the sponsor and the university. The rationale should be more than, "The school was located near my home." Discussion of the interaction with the sponsor with respect to the application and plans for ongoing work with the sponsor such as biweekly meetings is very helpful. An additional way to add expertise to a proposal is through the use of a consultant. A consultant is expected to assist the applicant but has less time commitment than a sponsor or cosponsor. If someone agrees to be a consultant, he or she needs to provide the applicant with a biosketch and letter agreeing to serve, which includes his or her particular contribution.

## The Research Proposal

The proposal should begin with a brief introduction that is not titled. In this section, the problem to be addressed in the study should be introduced and a brief overview of the importance of the problem and what might be accomplished by the study should be

presented. This section should end with the specific aims. The specific aims are the most important part of the proposal because they give direction to the hypothesis or research questions, the study procedure, and how variables will be measured and analyzed. Additionally, the specific aims must be focused and obtainable.

Although the review panel no longer describes proposals with levels designating the applicant's status in the doctoral program (i.e., new student vs. doctoral candidate), different levels of sophistication are expected, depending on whether the student is early in a program or has completed course work. A student who has completed course work is expected to follow specific aims with detailed research questions or hypotheses, depending on the nature of the study. An early student may not be able to provide more than a specific aim that focuses his or her general goals. In either case, it is useful to think of a specific aim as a contract; that is, each word in each aim must be considered carefully because the specific aim is a promise concerning what the research will do. As noted by Lusk (2004), the entire proposal should reflect the specific aims. The section of the proposal entitled "Background and Significance" will be used to justify and explain the wording in the specific aims. The methods including the sample, variables, and procedures all rise from an attempt to address the specific aims. All that is in the specific aims must be addressed in the rest of the proposal and anything that is not in the specific aims should not appear in the remainder of the proposal.

After the specific aims comes the section on background and significance. This is the section in which the student should present a critical review of the literature. The literature review needs to include all pertinent studies, a critical analysis and synthesis of key studies, and a careful description of the current state of the science on the topic of the study. The citations included in this section give the reviewers a sense of the student's knowledge of the field, so selection must be made with care. The student should describe the importance of the problem, including such considerations as cost or inefficiency in health-care, morbidity or mortality data, unnecessary pain and suffering, or evidence regarding the best practices. If there are controversies in the field, they should not be ignored. All sides of arguments need to be explored and a stand taken based on a well-stated rationale. A description of the current state of the science and how this study will move the science

forward is vital. The significance section concludes with a statement on what is known, what is not known, and how this study will fill current gaps in knowledge (Lusk, 2004).

Common mistakes in this part of the proposal include failing to cast a broad-enough net, that is, not reviewing all of the important studies. Both historical and the current studies should be considered and need to be addressed as such, that is, a student should present the historical studies as background and show how their premises have been substantiated or revised with more current research. The review must also reflect current studies. In addition, the writer should not make major generalizations with references that are 30 years old. For example, a statement such as “health-care professionals are not trained to assess for domestic violence” should not have references from 1970 and 1980. Health care is constantly changing, and the literature review needs to reflect that the student is aware of the influence of history on study findings. In addition, writers should clearly differentiate between primary original research articles and publications that summarize findings such as review articles or book chapters. If a student finds research findings in a secondary source, such as a book chapter, it is important to find and review the original data-based publication.

It is very rare that a student can accurately state, “there are no studies in the area to be investigated.” When tempted to write that sentence, a student should go back to the library and expand the literature review. Another common error is to do a broad survey of studies giving them all the same attention. Some studies are more important than others in terms of a student’s project and should be described in detail with attention to method. An additional potential error comes from trying to find the right balance between critique and acceptance. Because it is possible to find something wrong with any published study, a student is rarely helping herself by pointing out every error. On the other hand, applicants have the obligation to be critical of the studies relevant to their anticipated research. Finally, applicants may fall prey to merely listing and describing the studies. This section should not be a list but an argument that leads to the conclusion that the study the writer is proposing needs to be done. Reviewing and critiquing studies is not done for its own sake, it is done for the sake of an argument that must lead to the conclusion the applicant wants—the proposed study should be done.

Whether the background and significance section should begin with a theory that will guide the study, end with such a theory, or not even specify a theory is a question that is often of concern to students. This is a complex scientific question with no standard answer. In phenomenology, having a theory guide the study is inappropriate. A phenomenological worldview is sometimes thought of as a theory, but any more specific or midlevel theory would stand in the way of leaning about a phenomenon from the point of view of the participants. A physiological study may be based on the “laws” of hemodynamics, for instance, or some other basic scientific theory. In that case, the student need not use a great deal of space presenting these theories but can reference them and move on to discussions of important physiological studies. However, most behavioral studies in which standardized instruments are used should be based on a specific and detailed midrange theory. Theoretical concerns in the science of the student’s proposal are issues that must be carefully discussed with the sponsor.

The next section of the proposal is methods. Depending on the amount of course work the student has completed, this section may be brief or quite extensive. Early students may be able to do little more than designate the design of their study—for example, descriptive, correlational, experimental, qualitative, or longitudinal—and estimate what the sample might be. However, even at this level of generality, the applicant must convince the reader that he/she will be able to carry out the proposal and access a sample that will be able and willing to participate in the study. The applicant who has completed course work needs to be specific about the design and precise about the sample—including size—and detailed about variables and how they will be measured or, in the case of qualitative, specific about data collection techniques including probes when applicable. Analytic techniques must also be presented in detail.

### **Selecting People to Write a Reference**

Another component of the NRSA application are letters of reference from three people. NIH has specific forms on which the referee ranks the applicant on the specific criteria of research ability and potential, written and verbal communication, perseverance in pursuing goals, self-reliance and independence, originality, accuracy, scientific back-

ground, familiarity with research literature, and ability to organize scientific data. The reference concludes with an open-ended description of the nature of association with the applicant and overall strengths and weaknesses of the applicant. Selecting references who know the applicant and his or her work well is vital. Most often, the references will come from current and past teachers and advisors. Referees should be contacted well in advance of the due date. Most schools will have the forms available on shared computer drives but forms can also be downloaded from the NIH web page and sent to the referee. These references are not to be written by the sponsor or cosponsor. The sponsor and cosponsor instead speak of the applicant's research ability on a separate part of the application. The three reference letters are submitted in sealed envelopes. The applicant can collect the sealed envelopes to include in their proposal packet or the school's research center may serve as a repository for the letters for the student.

### **Research Experience**

Applicants are asked to describe their research experience. This section is important and provides an opportunity for students to describe, in detail, all of their experiences in conducting research including working with faculty or mentors on all phases of the research process. For each experience, the applicant should summarize the problem studied and the findings. Also, including service on hospital or specialty group research review committees, research workshops attended, and posters or other presentations is helpful. Course work should not be included in this section. Following the section on research experience is a section in which the applicant lists publications. The entire citation including all authors and journal information should be included with an indication if the writer's name has changed. Unlike the biosketch, this section may include manuscripts that are "in preparation" or "in press".

### **Resources and Environment**

Part of an application is a section titled "Resources and Environment." Most colleges have "boilerplate" information for this section describing the library, computing, and other resources available to students and researchers. In addition to this boilerplate, however, it is advisable to include resources specific

to the research topic. For example, if the proposed study is with children, seminars or programs specific to children should be described. If the proposed study requires particular equipment or resources such as a physiology lab, it is important that access to these resources is clearly identified. If the proposed study is with a particular patient group, a table listing the numbers of patients available to the applicant should be included with a description of how access to these patients will be assured.

### **Formatting the Final Proposal**

NIH has specific guidelines regarding spacing, margins, and font size. If these guidelines are not followed, the proposal will not be reviewed. The most current guidelines are available on the NIH web page (NIH, 2004a). Adherence to type size and line spacing requirements is necessary so that no applicant will have an unfair advantage by being able to include more text in the application than another. Page limitation guidelines are available at <http://www.format.nih.gov/FAQ/FAQ.htm>.

### **Gender and Minority Inclusion**

Demographics related to the population from which the sample will be recruited must be provided along with a justification for the type of subjects to be recruited. The inclusion of women, minorities, and children should be presented separately and in detail with strong justification for the exclusion of any group, a justification that goes beyond a statement that not many members of a specific group are available in the area where the study is to take place. These regulations at NIH are designed to insure that scientific knowledge is not based solely on a population of White adult men, a situation that has been true in the past. A study of prostate cancer with a wholly male population is acceptable. However, a study of heart disease in which the sample will be drawn from clients at a Veterans Administration Hospital because the investigator has access to this setting is not acceptable, unless the investigator has a way of compensating for the fact that the Veterans Administration serves many more men than women. In another example, if a particular disease is being studied, statistics on and minority distribution of the disease overall and within the setting should be provided. For example, if an applicant were studying behavioral problems of

nursing home residents, he or she would cite the demographics of the nursing home population to help justify that the sample would most likely be White women. However, this would not exempt the research from recruiting a minority sample. A minority sample at least equivalent to the proportion of minorities affected by the behavioral problem would need to be actively recruited. The applicant must cite a plan for recruitment of minorities other than “every effort will be made.” The researcher may need to oversample a particular group to make a more representative sample. Specific detailed recruitment efforts targeted to minorities should be given. [Harden and McFarland \(2000\)](#) suggest developing a contingency plan to recruit minorities at nontraditional sites such as barbershops, laundromats, or community centers. They also discuss strategies such as monetary incentives, matching race and ethnicity of participants and data collectors, gaining support from local community leaders, and providing transportation or child care. If an applicant is studying a problem that affects children, they need to be included or the applicant must have a very good justification for excluding them. The NIH defines children as those younger than 21 years. Thus, it would be difficult, for instance, not to include children in a study of pregnancy and motherhood.

### **Human Subjects and Animal Welfare**

This section of the application includes specific subsections that must be filled out in detail. It is not sufficient to state that local IRB approval will be sought and obtained. The risk and benefits and the protections must be addressed specifically and thoughtfully. Special attention must be given to the NIH mandate that clinical research that involves any kind of intervention (not just studies defined as clinical trials) require a data safety and monitoring plan. Directions for establishing such a plan are included in the NRSA directions and need to be followed carefully. This section of a proposal is the same as for a traditional research proposal and the issues have been thoroughly described elsewhere ([Hamric, 2003](#)).

### **The Review Process**

The review process for NRSA proposals is similar to other NIH research proposals. Upon submission, a

proposal is assigned to an IRG, for assessment of scientific merit. Once the appropriate IRG is identified, the application is assigned to a study section within the IRG. Most nursing studies would be assigned to an IRG at NINR, unless the applicant requests another institute in a cover letter. Once the study section is identified, a unique application number is assigned to each application. Proposals are then assigned to members of the IRG, usually a primary reviewer, secondary reviewer, and a discussant. The reviewers and discussants receive a paper copy of the proposals they are to review. All the members of the IRG receive a digital copy of all the proposals. The digital copies do not include the appendices. These IRGs are primarily composed of senior researchers.

The scientific review section meetings usually last two days. Members convene around a conference table to maximize interaction. Occasionally, a reviewer or discussant will not be able to attend and will either send in a written assessment and/or participate by conference call. The chairperson (a member of the study section) and the SRA are responsible for jointly conducting the meeting. After the assigned reviewers and discussants provide their evaluations, there is a general discussion and each member marks his or her priority score privately for each application.

Usually within a month of the review, applicants will receive a score for their proposal. Approximately 3-4 weeks later, a written summary sheet is received that describes a summary of the discussion at the review panel as well as a written critique from the three reviewers. Scores range between 100 (*the best*) to 500 (*the worst*). Many proposals do not receive a score within the fundable range at the first submission. The fundable score range varies slightly from year to year but a lower score is always preferable. Regardless of the score, funding decisions are not made until after a meeting of the advisory counsel. Dates of the scientific review and advisory counsel committee meetings as well as the names of people serving on the committees are posted on the NINR web site.

### **Reading the Summary Sheets**

Reading the summary sheets can be difficult, especially if the proposal did not receive a good score. It is important to keep in mind that this is part of being a scientist and a researcher. Although the summary sheets are confidential, doctoral students should plan to share their summary sheets

TABLE 4. Example of a Response to Previous Review

---

The applicant and her sponsor appreciate the thoughtful review of the original proposal. The critique gave us the opportunity and structure for further discussions to make some needed revisions and clarify our thinking. Although the entire proposal has been changed, substantive changes are indicated with italics. Specific issues are addressed below.

The review of the literature, while extensive, is too generic to focus or guide the intervention. *The literature review has been further focused and limited to children's (age 5-12 years) response to chronic illness (please see page 4-6).*

The training plan is underdeveloped with regard to understanding ethical issues regarding end of life care. *Two interdisciplinary courses from the Center for Biomedical ethics have been added as cognates. In addition, the applicant has developed an independent study with Dr. Rachel Moss who is studying patients with lung cancer.*

The applicant fails to argue effectively that a lack of foot care is a critical health-care concern. *The proposal has been revised to indicate the financial impact of this condition on pages 3 and 6. An additional projection of the number of amputations that could be avoided is also included on page 6.*

The proposed study is to develop an instrument to measure social problem solving with adolescents but there are no proposed courses on instrument development and the sponsor's training in instrument development is not described. *The applicant has added a summer workshop on instrument development at UUU (see appendix for course description) The sponsor had two courses on instrument development as a doctoral student and developed an instrument on learned helplessness with abused women. This information was inadvertently omitted in the first submission.*

A cosponsor with expertise in qualitative research methods would strengthen application. *Dr. Robert Jones has agreed to cosponsor the application. Dr. Jones is currently conducting two-NIH sponsored qualitative studies and also teaches the SON qualitative research course.*

---

with their sponsors and others with experience in interpreting this type of feedback. The first part of the summary sheet (following the abstract) is a summary of the discussion of the review panel. Many people consider this the most important part of the feedback, and it deserves careful review. Following the summary of the discussion, each reviewer's comments are presented sequentially. Although rare, sometimes the reviewer makes a comment indicating that something was missing from the application, when, in reality, it was there. Although this can be frustrating, it is important for the applicant to recognize that the needed information was not presented in a format that made it easy for the reviewer to find. The applicant should carefully review the comments of each reviewer, making sure to note those areas that are identified as strengths so that revisions can focus on the identified problems.

## Revising and Resubmitting, One-Page Response

When submitting a revised proposal, the applicant should remember to revise and update the entire proposal. This includes asking for new letters of reference from referees who can speak to current abilities. The rewrite should update courses that have been completed and specify any changes in the planned educational activities. The proposal itself begins with a one-page response to the critique. It is polite to begin this response by thanking the reviewers for their time and effort, recognizing that reviewers are paid very little and are doing this as a service to the discipline. The format of the rest of the page can take one of several forms. Regardless of the format selected, the issues identified by the reviewers should be presented using italics or bold and the response to the critique presented in a different font. The reader should be referred to the specific page in the proposal where this issue is addressed (see Table 4 for an example). If the three reviews raise very different issues, the response can be organized by reviewer. It is more common for several reviewers to raise the same issue. In this case, response to the issue should be made once. Most often, the applicant will respond to a critique by changing the proposal, particularly when the applicant is a student. There will be times however, when the applicant disagrees with the reviewer. In this case, the writer should clearly and politely explain why the change is not being made. Substantive critiques should never be ignored. When an amended proposal is reviewed, the reviewer also receives a copy of the previous summary statement. Ignoring a major problem that was identified on a prior review does not help the application. When submitting a revised proposal, indicate where changes have been made in the body of the proposal by using a different font or italics to indicate to the reviewer that a change has been made.

## Conclusion

Submitting an NRSA proposal is a major undertaking and will involve substantial time and effort from both the student and the sponsor. As a beginning researcher, however, the investment is a first step in learning the process of obtaining funding for a program of study and is worth the effort.

## References

Hamric, A. (2003). Resources in research ethics. *Nursing Outlook*, 51, 242–244.

Harden, J., & McFarland, G. (2000). Avoiding gender and minority barriers to NIH funding. *Journal of Nursing Scholarship*, 32, 83–86.

Lusk, S. (2004). Developing an outstanding grant application. *Western Journal of Nursing Research*, 26, 367–373.

NIH. (2004a). *Frequently asked questions about the*

*format of grant applications*. Retrieved April 7, 2004, from <http://www.format.nih.gov/FAQ/FAQ.htm>.

NIH (2004b). Ruth L. Kirschstein National Research Service Awards for individual postdoctoral fellows (F32). Retrieved December 9, 2004, from <http://grants2nih.gov/grants/guide/pa-files/PA-04-032.html>.

NINR. (2003). *Individual predoctoral fellowships*. Retrieved November 24, 2003, from <http://grants.nih.gov/grants/guide/pa-files/PAR-02-019.html>.