VII. PROPOSAL PREPARATION

A. General Application Guidelines

Investigators are encouraged to submit rigorous scientific proposals that convey military relevance and relevance to the TSNRP's research focus areas (see Part III). The proposal should demonstrate logical consistency and clarity throughout (i.e., purpose, statement of specific aims, review of literature, theoretical framework, research questions/hypotheses, design, data collection, and data analysis).

When preparing the application, **applicants should pay utmost attention to detail and ensure that all parts of the proposal are consistent, error-free, and complete. The following guidelines should be used to format an application**:

- Study title must be limited to a maximum of 56 characters.
- Single-sided and single spaced.
- Margins in all directions must be at least ½ inch, or according to the application form pages (which are pre-formatted).
- Font size must be **no smaller than 12 point**.
- No more than 6 lines of type within a vertical inch.
- Page limitations and content requirements as per the most current PHS 398 instructions.

Applications must be complete and accurate at the time of submission. An application will be returned without review <u>if it exceeds the funding award limit</u>, is illegible, fails to meet the guidelines, or presents insufficient material to permit an adequate review. **Supplementary or corrective material may not be submitted after the deadline, unless the TSNRP Director agrees to accept this information.**

B. Application Resubmission

PIs are limited to submitting two revisions of an application. The PI should identify whether the current grant application represents a revision of an application previously submitted for TSNRP funding. Resubmission is an opportunity for the PI to address comments from previous scientific and programmatic reviews and to state how the recommendations were considered when preparing the revised application. All information from a previously submitted application, including reviewer critiques, is made available to reviewers for consideration during the scientific and programmatic review process of the resubmission.

All revised applications must include an introduction not to exceed three pages. In the introduction, list each area of concern noted in the reviews (scientific and programmatic) for the previous application, and clearly summarize the changes that have been made in the revised application. Do not include an extensive description of each change in the introduction. Use the RECOMMENDATIONS AND REVISIONS FOR FY ____ SUBMISSION form to provide a detailed description of each change (see Appendix C). Use brackets to identify paragraphs with significant changes to distinguish them from the previous application. **Do not** <u>underline</u>**, bold type, or** shade changes. Resubmit a whole new proposal for revisions if the revisions are extensive and difficult to follow. This exception should be explained in the introduction to the revised application. Refer to the PHS 398 instructions for guidelines on preparing a revised application.

C. APPLICATION FORMS

The table below outlines the forms needed for a complete application for each type of award. All forms are accessible through the TSNRP web site http://www.usuhs.mil/tsnrp/forms/index.html.

Application forms needed for each award category

AWARD		PHS 398 FORMS											PHS 416-1 Forms (NRSA)						
	TSNRP Forms	Face Page	Abstract Page	Table of Contents	Detailed Budget	Entire Budget	Biographical Sketch	Other Support	Resources	Research Plan	Checklist	Personal Data	Form Page 2	Table of Contents Form Page 3	Scholastic Performance Form Page 4	Background Form Page 5	Research Form Page 6	Bio Sketch of Sponsor Form Page 7	Facilities & Commitment Form Page 8
Novice Investigator	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
1- and 2-Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
3 Year	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
Pilot Project	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
Graduate Research	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓		✓	✓
Research Fellow	✓	✓			✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓
Fast Track	✓	✓	✓	✓*	✓	✓	✓	✓	✓	✓	✓	✓							

*Modified PHS 398 Table of Contents form specific to the Fast Track Award.

1. All Applicants

Applicants of all award categories must complete the following two TSNRP Forms:

a. Grant Application Cover Sheet

All proposals must have a completed TSNRP Grant Application Cover Sheet (see Appendix C) as the first document of the application. The PI's name, military rank, military unit, full mailing address to include facsimile and e-mail, and (if applicable) civilian title(s) and work position are required. The PI must indicate the Award Category being requested (see Part IV.B) and categorize the proposal according to the TSNRP Research Priorities (see Part III). PIs who have previously received TSNRP funding must attach on a separate page dissemination of research findings from their TSRNP-funded research.

b. Relevance to Military Nursing Form

The Relevance to Military Nursing form follows the Cover Sheet (see Appendix C). In the space provided, the PI should fully describe how the proposed research would expand the body of military nursing practice and military scientific knowledge.

2. Novice Investigator, 1-, 2-, and 3-Year, and Pilot Project Awards

Applicants for these awards must complete PHS 398 forms, revised 5/01 and updated 29 September 2003. PHS 398 forms and instructions for completing the forms are accessible online through the TSNRP web site http://www.usuhs.mil/tsnrp/forms/index.html. Applicants are advised that there are additional TSNRP-specific instructions for some PHS 398 forms, such as Budget Forms, Biographical Sketch Format Page, Other Support Format Page, etc., and the application instructions contained in this Call for Proposals supercede instructions for the PHS 398 forms.

The PI's name and rank should be listed at the top right corner of each PHS 398 page, except for the face page. Additional general instructions are provided below.

a. Face Page

Since the applicant organization is ultimately responsible for the implementation and administration of the research, the signing official at the organization and the PI must both sign the Face Page (see Appendix D). The signing official's signature is considered certification of the information contained within the application, the budget information in particular, and provides assurance that appropriate mechanisms are in place to manage and monitor the grant. **Applications submitted with only the PI's signature on the Face Page will be returned without review**.

b. Description, Performance Sites, and Key Personnel (Abstract Page)

1) Description

This section is also known as the research "abstract." Follow the instructions listed on the PHS 398 form. In the space allowed, cite key areas of the research, for example, the problem to be examined, theoretical framework, population or sample, design, procedures, intervention, data analysis plan, measurements, etc.

2) Performance Site

A performance site is a location where data are collected. The performance site may or may not be the same as the PI's assigned duty station or academic site. A study may have multiple performance sites (see example below).

PERFORMANCE SITE(S) (organization, city, state)	
Naval Medical Center	San Diego, CA
Madigan Army Medical Center	Tacoma, WA
Brooke Army Medical Center	San Antonio, TX
Wilford Hall Medical Center	San Antonio, TX

3) Key Personnel

Starting with the PI, list the names of all individuals functioning as key personnel. Key personnel are defined as individuals who contribute in a substantive way to the scientific development or execution of the project, whether or not salaries are requested by the applicant organization. The PI is the one individual designated by the applicant organization as responsible for the proper conduct of the study. **Only**

one individual can be designated as the PI for a study. The TSNRP does not recognize the use of a *co-Principal Investigator* title. Individuals providing technical services (e.g., transcriptionists) are not considered key personnel.

PIs previously funded by TSNRP are evaluated on their past compliance with federal, Uniformed Services University of the Health Sciences, and TSNRP requirements, such as timely submission of Institutional Review Board approval documents, progress reports, and publication history.

a) Mentoring

A mentoring component is a requirement for ***new and junior investigators*** applying for the Novice Investigator, 1-, 2-, and 3-Year, and Pilot Project Awards, and ***all retired investigators***. Both the mentor and individual being mentored should be listed as key personnel.

New or junior investigators' applications are evaluated on the expertise and credentials of the experienced mentor. The mentor must be a member of the research team and be available to provide support to the investigator, as outlined in the mentoring plan.

Investigators who are retired from the military are evaluated on the presence or absence of a new or junior military investigator as a member of the research team. The mentoring plan for the new or junior investigator is evaluated for its potential to develop a military nurse researcher, thereby increasing the cadre of military nursing researchers. Details of the mentoring plan must therefore be provided in the personnel section of the Budget Justification (see below).

b) Active Duty PIs

In addition to describing the PI's ability to carry out the proposed research (i.e., education, research experience, content expertise, previous work in the proposed area of research, previous experience in other research areas, relevant publications, prior funding, etc.), Active Duty PIs "Time on Station" is considered by reviewers. Therefore, the research team of an Active Duty PI should include a second military nurse at the primary performance site to serve as the site's contact should the PI be away from the site for more than three months (e.g., deployment, permanent change of station, end of time in service, TDY, etc.). Details on Active Duty key personnel must be included in the Budget Justification section (see below).

The stability of the Active Duty PIs research team at the primary performance site is evaluated with consideration to change of duty station, temporary duty, end of time in service, etc.

c. Budget and Budget Justification

The budget should include project costs that will be charged to grant funds. Federal employees may not use grant funds for salaries, and contributions by Federal employee research team members should be annotated as "without charge," or "WOC," on the Budget Forms and Budget Justification sectionS. The budget must be complete, accurate, and reasonable, and within the budget limits for each grant award category (see Part IV.B). When preparing the detailed budget, list only the **direct costs** requested in the application (see Appendix C). Direct costs are those items required to conduct the

research, such as personnel, equipment, and supplies. **Applications exceeding the specific award's funding limit will be returned without review**.

A narrative justification that is clear and detailed must be provided for all requested major budget items. The budget justification begins on the "Budget for Entire Proposed Project Period – Direct Costs Only" form.

For multiple-year studies, applicants should complete a detailed budget page for each year of the study and a page for the entire proposed project period. Types of direct costs, by category, are shown below.

1) *Personnel Costs*
For each individual listed as key personnel, list the percent effort on the project and the individual's base salary on the Detailed Budget pages. The salary requested is calculated by multiplying the individual's base salary by the percent effort on the study.

List the name, role on project, and percent effort for all key project personnel in the Budget Justification, including "Without Charge" personnel. Provide a narrative justification for each person based on his/her role on the project, specific responsibilities for the research, research experience, content expertise, amount of time proposed to accomplish the research tasks, and proposed level of effort. Avoid any duplication of roles and/or responsibilities. **For military personnel, include the additional information of their "Time on Station," "Permanent Rotation Date," or "End of Time in Service."**

Investigators who have changed their area of research may lack some of the key evaluation aspects listed previously therefore adequate justification should be provided in the proposal to support the PI's new direction/research area.

For applications requiring mentoring plans, include in the budget justification a clear explanation of the mentor's role, and how the mentoring process will be evaluated. Retired service members must describe how they intend to develop the new investigator's involvement in the conduct of research. A detailed mentoring plan must include the responsibilities of **both** the mentor and the protégé.

2) *Consultant Costs*
A consultant is an individual hired to give professional advice or services for a fee and is normally not an employee of the applicant organization. Identify all consultants by name and organizational affiliation, expertise in the specified area, their significant contribution to the success of the study, and when and how the consultant's services will be performed. There is no allowance for consultant fees for master's and doctoral research grants.

3) *Major Equipment**
The purchase of equipment for the conduct of research is allowable. Justification for all equipment must be provided in the application.

4) *Supplies,* Materials, Consumables*
A general description and estimate of the total cost of expendable equipment and supplies is required. Itemize supplies in separate categories if the total is greater than $1,000. If animals are to be purchased, state the species and number to be used.

* Requested computer equipment and software must reflect the needs of the research being conducted. The placement of computer equipment under "Major Equipment" or Supplies, Materials, Consumables," is dependent upon the individual grantee organization's definition of equipment however, the maximum allowable cost for computer equipment, including software, is $3,000.

5) *Travel Costs*
Travel costs may be incurred in the implementation of the research study. List the purpose and destinations for all proposed travel and for each individual. A table may be included for multiple trips. Estimate round-trip airfare (or mileage), hotel, and per diem costs for each trip.

Dissemination of findings is an important component of the research. A maximum of $1,800 per award may be budgeted for travel to attend a scientific meeting to disseminate research findings. Travel for dissemination typically occurs in the last year of a project.

6) *Research-Related Patient Costs*
Itemize costs of patient participation in the research study. These costs are limited to expenses specifically associated with the proposed study. Military personnel cannot receive remuneration for participation in research, except for blood draws, which ARE typically up to $50 per draw. Consultation with the performance site's legal consultant is recommended during the writing of the proposal to ensure compliance with Department of Defense regulations on remuneration of military personnel.

7) *Other Expenses*
Itemize other anticipated direct costs, SUCH AS, equipment rental, communication costs, transcription costs, advertising costs for study personnel, assistance in manuscript preparation (including editing and proofing), etc. Provide hours and rates for all equipment rental and services. A maximum of $350 for preparation of dissemination materials is allowed. **IRB related processing fees are not allowed.**

8) Indirect Costs—See "Checklist" page.

Examples of corresponding budget documents (Face Page, Detailed Budget for Initial Budget Period, Budget for Entire Proposed Project Period, and Checklist Form Page) have been provided as a reference in Appendix C.

d. Biographical Sketch
Biographical sketches should include the person's education, job experience, military assignments, content expertise, research experience, *funding history with the amount of each award,* and other qualifications appropriate to their role on the research team. Evidence of publications emanating from previously funded research should be provided as part of the biographical sketch. PIs who have previously received TSNRP funding are evaluated on their efforts to disseminate the findings of their TSNRP-funded research. The TSNRP strongly advises investigators not to use biographical sketches that have

been prepared for other purposes. The biographical sketches will be most effective if tailored to the specific proposal.

e. Other Support

Other Support is defined as all financial resources (Federal, non-Federal, commercial, or institutional) available in direct support of an individual's research endeavors. Information on Other Support assists THE TSNRP in identifying investigators' potential overlap in support. Overlap, whether scientific, budgetary, or commitment of an individual's effort greater than 100 percent, is not permitted. **Complete an "Other Support" page for all key personnel.**

f. Resources

Applicants are advised to focus on those institutional resources that are particularly relevant to the proposed research study. Proposal reviewers want to be assured that investigators have access to all of the material/facilities/services that will be needed to conduct the research study. It is also helpful to include information on conduciveness of the environment to successfully complete the research, access to resources needed to conduct the research study (e.g., material, computers, copiers, medical equipment, library, laboratories, testing centers, space, services, scholarly environment, etc.), and any related research being conducted by other investigators at the research site. Having on-site colleagues who are interested and involved in studies related to your research area can be a valuable resource.

g. Research Plan

PIs are encouraged to use all allowable space to explain their research plan. The text should be formatted according to the guidelines on page 12. Areas for discussion in the Research Plan are shown below.

1) Specific Aims

This section, the foundation on which the rest of the proposal will be built, is one of the most important parts of the proposal. If sufficient time and thought are invested in this first stage of the proposal, the rest should flow smoothly. In addition to listing the broad, long-term objectives (or purposes) and hypotheses for the study's research questions, the Specific Aims section should: 1) be easy to read and logically presented, 2) suggest the relevance of the proposed study to the mission of the TSNRP, 3) refer to the current state of knowledge in the area of study, noting how the proposed study will fill gaps in that body of knowledge, and 4) indicate the expected outcomes of the study and the expected impact of the study findings. A direct relationship between the hypotheses (or research questions), data collected, and analysis should be fully presented.

2) Background and Significance

In the Background and Significance section, the proposal's aims should be well substantiated from previous research. Emphasis in this section is on: citation of specific research literature supporting the significance of the research problem; identification of gaps the proposed research is intended to address and support of the selected methodology, to include a conceptual framework if applicable, instruments/ measurement techniques, or procedures. Citation of, and specific credit for, another author's work is part of the researcher's scientific and scholarly responsibility. Opinion-based citations do not provide adequate support for the proposed research.

Applicants are encouraged to present any supporting statistics or other pertinent information that further demonstrates the importance of the proposed study to the current body of knowledge in the research area and the mission of the TSNRP. If there is an expectation that the proposed research will have practical therapeutic applications for clinical nursing, be sure to include such information by indicating the nursing intervention, expected outcome, and reliability and validity of outcome measures. Finally, include any economic impact that the research findings are expected to produce.

3) Preliminary Studies/Progress Report

In this section, highlight preliminary work the research team has done in the proposed area of study to demonstrate that the research team has mastered the technical aspects of the proposed research, including accessing the proposed sample population, pilot testing proposed instruments, etc.

Relevant data from unpublished research should be included in this section. Describe what the data show and why the findings to date are significant to the proposed work. If necessary, selectively include in the appendices related materials from any published work. In writing this section, keep in mind that the objective is to convince the reviewers that the research team is prepared to undertake the proposed study and that the research team has a competitive advantage over others working in the field. Only research conducted by members of the proposed research team should be reported in this section.

4) Research Design and Methods

This section should follow directly from the Specific Aims statement. Organize this section carefully to ensure that the Research Design addresses each stated Specific Aim. Present the theoretical/conceptual basis of the Research Design before getting into details of Methods. Discuss sample, instrumentation, data collection procedure, analysis, and human rights protection in enough detail (e.g., methodology, statistics, discussion of controls) to make clear what will be done, how it will be done, and how the data will be interpreted. **Provide a detailed timeline delineating the proposed progression of the study, to include major tasks/milestones and the period within which they will be accomplished** (see Appendix D). Discuss anticipated problems and plans for alternative strategies should these problems arise.

5) Instruments

Samples of all instruments and assessments of their reliability and validity must be submitted with the application. Inclusion of an instrument table with corresponding reliabilities within the methodology section may assist the scientists reviewing the proposal. Use of untested instruments (except in instrumentation proposals and some qualitative research) or failure to include reliability and validity data diminishes the credibility of the measures.

6) Sample and Site Availability

Sample selection for the proposed study must be realistic, especially for those studies using military populations. Include the parameters employed and the results of a power analysis to justify the sample size for the research questions addressed in the proposal. Support letters demonstrating access to settings and populations are critical to the application. Specific details as to how subjects will be identified and recruited

must be included. The site population should be described as well as the number available for sampling.

7) Data Collection Procedure
Every step in the data collection procedure should be fully described so as to be evident to the reviewers what will be done, how it will be done, and by whom.

8) Human and Animal Use Approvals
Research involving either human subjects or animals must be conducted in full compliance with all applicable Federal regulations and Department of Defense (DoD) policies. If the proposed research involves human subjects, the PI should discuss issues related to human subjects protection (e.g., confidentiality, coercion, volunteerism, data safety, monitoring plan, Health Insurance Portability and Accountability Act compliance, etc.). Applicants may want to consult current DoD, Service, and site-specific human subject protection requirements.

Research involving the use of animals must be conducted at a facility accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC). Documented Institutional Animal Care and Use Committee (IACUC) approval must be provided if the proposal is funded.

Research taking place on DoD installations or using DoD beneficiaries must have the approval of all appropriate Institutional Review Boards (IRB). Academic institutions' human use approval will not be considered a substitute for the appropriate DoD IRB approval at the performance site. Determination of exempt status for research is the responsibility of the local IRB and cannot be made by the investigator. Although not required at the time of application, the applicant will be responsible for providing documented IRB approval of the research protocol for each performance site if the proposal is funded. As the grantor, the Uniformed Services University of the Health Sciences' IRB also reviews all TSNRP-funded proposals involving human subjects. **Funding for approved applicants will not be dispersed without appropriate IRB approvals from each performance site and the Uniformed Services University of the Health Sciences**.

The use of vulnerable populations is subject to strict scrutiny by Human Subjects Committees, potentially causing a lengthy and difficult IRB approval process. The use of multiple performance sites may also slow the IRB approval process. In these cases, IRB approval should be sought early in the application process.

Human use consent forms must state the following under the section labeled "Confidentiality": "The Institutional Review Board of [the specified study site], the Uniformed Services University of the Health Sciences, Bethesda, MD, and other Federal agencies who provide oversight for human subject protection may see your records." **If applicable, a draft of an Informed Consent document must be included in the application**.

A list of references related to human and animal study subjects protection is provided in Appendix F.

9) Reference List
All references cited in the text must appear in the reference list. Another author's work must be cited accurately in the text. Use a reference format that includes the titles of the research articles; the use of a publication manual is recommended.

10) Consortium/Contractual Arrangements
This section should include letters of collaboration and budget plans for each contractual agreement (including PHS 398 budget pages for initial budget period and entire proposed period).

11) Consultants
Letters of support from consultants and their biographical sketches are included in this section. Letters of support from consultants should include scope of work (responsibilities), compensation, level of commitment (percent effort), and duration of commitment.

h. Checklist
Facilities and Administrative (F&A)/Indirect costs (overhead) information is calculated and completed by the applicant organization. F&A/Indirect costs are those costs incurred for common or joint objectives within the applicant organization in support of various projects. F&A/Indirect costs, therefore, cannot be readily identified with a specific research project or activity of an organization. A number of activities become a part of what makes up the indirect costs of the organization. These may include local telephone service, accounting and legal services, and operation and maintenance of the facilities. Do not list in the detailed budget any item treated by the applicant organization as an F&A/Indirect cost.

F&A/Indirect cost rates differ among the various institutions according to a Federal rate negotiation agreement. Each organization should have an F&A/Indirect cost rate. F&A/Indirect costs are computed by applying the negotiated indirect cost rate to the direct cost project base. The indirect cost rate is itemized by the applicant organization on the Checklist Form Page and should correspond to the information provided on the budget pages and the Face Page of the application.

i. Personal Data on Principal Investigator
This form is required and is to be completed by the PI. Place the form at the end of the original application. Do not copy.

j. Appendix
Appendices can include material relevant to the application that is not suited for the body of the application, including (but not limited to) measurement/instrument, consent form(s), list of publications, manuscripts accepted for publication, and letters of support. The number of publications and manuscripts accepted for publication should not exceed 5. No page numbering is necessary for an appendix. **One set of appendices should accompany each copy of the proposal**.

1) Letters of Support
Original letters of support from all heads of departments, that might be affected by any aspect of the research should be included with the application. Relevant letters should demonstrate that investigators have access to the population and the use of facilities needed to conduct the study.

Individuals named as key personnel and consultants should submit letters of support acknowledging participation, including scope of work (responsibilities), compensation, level of commitment (percent effort), and duration of commitment.

2) Instrument Permissions
The use of any instruments not in the public domain requires the author's permission; a letter acknowledging that permission should be included with the application.

3. Research Fellow Awards

This award is to facilitate training in some aspect of research for master's-prepared Active Duty and Reserve Nurse Corps Officers, or to expand the research skills of *experienced* Active Duty and Reserve Nurse Corps nurse researchers.

Requirements

- Funds **may not** be requested for the purchase of equipment or salary for the research fellow. Funds may only be requested for the following categories: Personnel - to compensate non-Federal employee mentors, Consultant Costs, Supplies, Travel, and Other Expenses.
- The Fellow must devote at least 20% effort to work on the grant.
- The application must include a letter of support from the mentor and a letter of support from the Fellow's Commander (if applicable) for the proposed effort.

Applicants for Research Fellow Awards must use a **combination of PHS 398 and PHS 416-1 forms**. Applications for this award should consist of the following forms, ordered in the following fashion:

- Face Page (PHS 398 form);
- Form Page 2 (PHS 416-1 form);
- Table of Contents (PHS 416-1 Form Page 3);
- Scholastic Performance (PHS 416-1 Form Page 4);
- Background (PHS 416-1 Form Page 5);
- Research (PHS 416-1 Form Page 6);
- Biographical Sketch of Research Fellow (PHS 398 Biographical Sketch form);
- Biographical Sketch of Sponsor (PHS 416-1 Form Page 7);
- Facilities and Commitment (PHS 416-1 Form Page 8);
- Detailed Budget for Initial Budget Period (PHS 398 form);
- Budget for Entire Proposed Period of Support (PHS 398 form);
- Checklist Form Page (PHS 398 form); and
- Personal Data Form Page (PHS 398 form).

Applicants should use the PHS 416-1 Continuation Page if space beyond what is provided is needed to complete sections of the application.

The identified "Sponsor" should be the individual who will provide the mentoring experience to the fellow.

a. PHS 416-1 Form Page 2
1) *Applicant's Education*

List all degree programs beginning with baccalaureate or other initial professional education and licensure, to include degrees received or expected. Graduate students are evaluated on course work that supports the proposal and support from the committee chair.

2) Applicant's Training/Employment
List in chronological order all non-degree training, including postdoctoral research training, all employment after college, and military service.

3) Goals for Fellowship Training and Career
Explain training goals under the proposed grant and their relevance to the applicant's career goals. Identify the skills, theories, conceptual approaches, etc., to be learned or enhanced during the award. Describe how the proposed activities, including any research, will contribute to the achievement of these career goals. You may use a continuation page if necessary.

4) Research Proposal
Using only the space provided, present a succinct and accurate description of the proposed work. State the broad, long-term objectives and specific aims of the research proposal, referring to the health relatedness of the project. Describe concisely the research design and methods for achieving these goals. Do not summarize past accomplishments, and avoid the use of the first person.

b. PHS 416-1 Form Page 3 (Table of Contents)
The PHS 416-1 Table of Contents form has been modified to reflect TSNRP requirements for the Research Fellow Award. Only applicants for Research Fellow Awards should use this Table of Contents form.

a. PHS 416-1 Form Page 4 (Scholastic Performance)
List by institution and year all undergraduate and graduate courses with grades.

b. PHS 416-1 Form Page 5 (Background)
Applicants for Graduate Research Awards should complete only items 25a–26 on this page. Applicants for Research Fellow Awards must complete this entire form.

1) Prior and/or Current TSNRP Support
List all prior and current TSNRP support. List attendance at TSNRP educational events (i.e., grant writing workshops). List involvement with completed and current TSNRP-funded research projects.

2) Academic and Professional Honors
List any honors that would reflect upon the applicant's potential for a research career. Include current memberships in professional societies.

3) Application for Concurrent Support
Check the appropriate box. If the applicant has applied or will be applying for other support that would run concurrently with the period covered by this application, include the type, dates, source, and amount.

e. PHS 416-1 Form Page 6 (Research)
1) Research Experience

Summarize the applicant's research experience in chronological order, including the problems studied and conclusions. Specify which problems were part of a thesis or dissertation. If the applicant has no research experience, list other scientific experience. Do not list academic courses here. Do not exceed one page.

Summarize master's thesis or doctoral dissertation. Do not exceed one page.

In chronological order, starting with the most recent, list the applicant's entire bibliography, separating abstracts, book chapters, reviews, and research papers. If the list of publications cannot be accommodated within two pages, select only the most pertinent publications. For each publication, give the authors in published sequence, full title, journal, volume number, page numbers, and year of publication. Indicate if another name was previously used. Manuscripts pending publication or in preparation should be included and identified.

2) Training Plan

The Training Plan is the body of the proposal, specifying the allotment of time to activities and outlining the mentoring plan. This section should be well-formulated and presented in sufficient detail that it can be evaluated for both its research training potential and scientific merit. It is important that it be developed in collaboration with the sponsor, but it is to be written by the applicant.

Specify the activities (research, course work, etc.) the applicant will be involved in under the proposed award and the percentage of time to be devoted to each activity. The percentages (including the applicant's outside obligations) must not exceed 100 percent.

The following topics should be addressed in the Training Proposal:

- Background and Career Goals of the Fellow.
- Significance to Military Nursing Research.
- Specific Aims of the Training.
- Mentoring Plan:
  - Identify mentor and demonstrate mentor's extensive expertise in the selected area of study.
  - Formal mentoring plan, developed collaboratively with the mentor. This plan could include coursework, didactic training, and individualized counseling.
- Final Product: description of the final product to be delivered at the conclusion of the award. For example, publication, research proposal ready for submission, funded research award.

Describe the collaborative process between the sponsor and the applicant in the development, review, and editing of the Training Proposal described. Do not include the respective roles in accomplishing the proposed research.

Explain why the sponsor and institution were selected to accomplish the research training goals.

d. PHS 416-1 Form Page 7 (Biographical Sketch of Sponsor)
This form is to be completed by the applicant's sponsor. The Biographical Sketch page from the PHS 398 application may be substituted for this form. If the PHS 398 page is substituted, indicate on the Biographical Sketch the total number of publications.

e. PHS 416-1 Form Page 8 (Facilities and Commitment)
This form is to be completed by the applicant's sponsor.

4. Graduate Research Awards

Applicants for this award must include all required PHS 398 forms and four PHS 416-1 pages: Scholastic Performance (Form Page 4), Background (Form Page 5), Biographical Sketch of Sponsor (Form Page 7), and Facilities and Commitment (Form Page 8). **Refer to the table on page 13.** These pages are also provided in Appendix C. The supplemental pages should be added to the PHS 398 application as follows:

- Scholastic Performance page should follow the graduate student's PHS 398 Biographical Sketch page.
- Background page should follow the PHS 398 Scholastic Performance page.
- Facilities and Commitment page should follow the PHS 398 Resource page.

The documents are accessible online through the TSNRP web site http://www.usuhs.mil/tsnrp/forms/index.html. Some general instructions are provided below. The PI's name and rank should be listed at the top right corner of the PHS 416-1 forms.

The identified "sponsor" should be the faculty member with substantial oversight for the student's dissertational/thesis work (i.e., the chair of the dissertation/thesis committee). The TSNRP advises graduate students to:

- Inform the committee chair of the desire to apply for TSNRP funding.
- Secure the committee chair's written support of the proposal.
- Obtain assistance from the committee in preparing the proposal.
- Identify the resources needed to complete the study.

Funding in this award category is to assist the graduate student PI in defraying costs in all aspects of the budget *except personnel hired* to assist with data collection, statistical work, etc. Work done on the dissertation is part of the PI's graduate education, therefore it is expected that the PI will perform the work of the study. Transcription costs are permissible and should be listed under "Other Expenses."

c. PHS 416-1 Form Page 4 (Scholastic Performance)
List by institution and year all undergraduate and graduate courses with grades.

d. PHS 416-1 Form Page 5 (Background)
Applicants for Graduate Research Awards should complete only items 25a–26 on this page. Applicants for Research Fellow Awards must complete this entire form.

1) Prior and/or Current TSNRP Support
List all prior and current TSNRP support. List attendance at TSNRP educational events (i.e., grant writing workshops). List involvement with completed and current TSNRP-funded research projects.

2) Academic and Professional Honors
List any honors that would reflect upon the applicant's potential for a research career. Include current memberships in professional societies.

3) Application for Concurrent Support
Check the appropriate box. If the applicant has applied or will be applying for other support that would run concurrently with the period covered by this application, include the type, dates, source, and amount.

c. PHS 416-1 Form Page 7 (Biographical Sketch of Sponsor)
This form is to be completed by the applicant's sponsor. The Biographical Sketch page from the PHS 398 application may be substituted for this form. If the PHS 398 page is substituted, indicate on the Biographical Sketch the total number of publications.

d. PHS 416-1 Form Page 8 (Facilities and Commitment)
This form is to be completed by the applicant's sponsor.

f. Letter of Support
A letter from the student's thesis or dissertation committee chair must be included in the application, and it must include statements that the proposal has been approved and/or defended and that the student has met the school's requirements for thesis or dissertation proposal defense.

5. Fast Track Awards

This award is to assist **experienced** Active Duty nurse researchers in facilitating rapid implementation of short-term research of emerging **service-specific** questions or concerns. Applicants for Fast Track Awards must complete all required PHS 398 forms. Applicants should follow the instructions for completion of the PHS 398 forms, with the exception of guidelines for preparing the Abstract and Research Plan. There are specific requirements for these components of the application.

a. Abstract
The abstract is the "Description" section of the PHS 398 Form Page 2, "Description, Performance Sites, and Key Personnel." The abstract should be a brief, stand-alone description of the project, of fewer than 250 words, including a statement of the aims/objectives of the study, hypotheses or research questions, theoretical framework (if applicable), research design, sample, data collection methods, and plan for statistical analysis.

b. Research Plan
The research plan should not exceed 10 pages. Listed below are the topics that should be addressed in the Research Plan. Guidelines are provided for each topic. The PI should address only topics applicable to the proposed research.

1) Purpose/Objectives/Specific Aims
List and discuss the purpose/objectives/specific aims of the study.

2) Hypotheses/Research Questions
State the specific hypotheses or research questions to be tested.

3) Significance
State concisely the importance and health relevance of the research by relating the specific aims to the broad, long-term objectives. State the practical application(s).

4) Military Relevance
With regard to military needs and mission requirements (e.g., Readiness, TriCare, Building Healthy Communities), this section should provide a brief and succinct military justification for the research.

5) Background/Review of Literature
Briefly describe the background leading to the present study. Critically evaluate existing knowledge and identify the gaps that the project is intended to fill.

6) Preliminary Studies/Progress Report
Highlight preliminary work the research team has done in the proposed area of study. Relevant data from unpublished research should be included in this section. Describe what the data show and why the findings to date are significant to the proposed work. If necessary, selectively include in the appendices related materials from any published work.

7) Research Design, Methods, and Randomization Process
Describe how the research is designed to answer the hypotheses/research questions and how the research is to be conducted. Be very specific as to who will perform what procedure, how each procedure will be performed, and the sequence of the procedure in the overall study. Be sure to indicate whether or not the specific procedures are "Standard of Care" (i.e., would be done even if the subject were not included in the study). Describe the study arms, the randomization points (i.e., at study entry or later), and the criteria for patient stratification.

8) Data Collection and Measurement
Describe data to be collected, data collection procedures, any required data collection forms, how the data obtained will be stored, and procedures for safeguarding confidential subject information. Define what measurements (operational definitions, independent and dependent variables) the study will evaluate to answer the research question. Describe the accuracy and precision of equipment that will be used to measure the outcome variables. Include information on the reliability and validity of surveys or questionnaires; include a copy of the survey/questionnaire.

9) Target Sample, Sample Size, and Inclusion/Exclusion Criteria
Describe the characteristics of the target population, including their anticipated age range and health status. Include a sample size estimation/power analysis. State the anticipated effect size and alpha level. Indicate the number of subjects to be enrolled and the distribution of subjects among data collection sites. List inclusion/exclusion criteria and rationale.

10) Human Subject Protection, Recruitment, Benefits, Risks, and Risk/Benefit Assessment

All subjects should be treated in compliance with human subjects protection regulations and applicable DoD, Food and Drug Administration, and Health and Human Services guidelines. Describe how subjects will be recruited and the consent procedure; include the circumstances under which consent will be sought and obtained. Describe the potential risks or discomforts (physical, psychological, social, legal, or other) and assess their likelihood and seriousness. Describe the potential benefits to subjects or to others that may reasonably be expected from the research. Discuss why the risks to the subjects are reasonable in relationship to the anticipated benefits to the subjects and in relation to the importance of the knowledge that may reasonably be expected to result.

11) Vertebrate Animals

Research involving the use of animals must be conducted at a facility accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC).

12) Data Analysis

Describe the data analysis strategy, including the statistical tests or procedures to be used with each variable or group of variables and/or each hypothesis/research question. Identify and discuss any assumptions made (variability of instrumentation, analytical detectable limits, etc.). Identify who will be responsible for final data analysis.

13) Timeline

Provide a detailed timeline delineating the proposed progression of the study, to include major tasks/milestones and the period within which they will be accomplished. Identify any distinct phase points (subject accrual, treatment phase, follow-up, data analysis, etc.). A sample timeline is provided in Appendix D.

14) Reference List

Cite referenced literature.

There is a customized PHS 398 Table of Contents form for the Fast Track Award (see Appendix D), including the Research Plan's required topics. This document is accessible online through the TSNRP web site http://www.usuhs.mil/tsnrp/forms/index.html.