

# VII. PROPOSAL PREPARATION

## A. GENERAL APPLICATION GUIDELINES

Military nurse researchers are encouraged to submit scientifically rigorous proposals that convey both military and TSNRP research priority area relevance (see Part IV). 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).

**Pay attention to details. Ensure that all parts of the proposal are consistent, error free, clear, legible, and complete.** Applications must be complete and accurate at the time of submission. An application will be returned without review if it exceeds the funding award limit, is illegible, fails to meet the guidelines, is not on the appropriate forms, or presents insufficient material to permit an adequate review. Supplementary or corrective material may not be submitted after the deadline unless the TSNRP Executive Director agrees.

All applications are required to include a signed cover letter. Attach it to the original proposal copy only. This letter should include the application title, TSNRP Call for Proposal year (FYXX) with letter (A or B), the type of award sought, the Principal Investigator's complete contact information, and the name and contact information for the grantee organization.

### **Use the following guidelines to format the application:**

- Study title must be limited to a maximum of 81 characters, including spaces.
- Single-sided and single-spaced.
- Margins in all directions must be at least 1/2 inch, or according to the pre-formatted application form pages.
- Font requirements:
  - Type face: Arial, Helvetica, Palatino Linotype, or Georgia.
  - Font size: no smaller than 12 point.
  - Type density including characters and spaces: no more than 15 per inch.
  - Lines per inch: maximum 6 lines per inch.
  - Black ink only.
- Grantsmanship:
  - Use English.
  - Avoid jargon.
  - Spell out acronyms the first time used and include the appropriate abbreviation in parentheses. Use the abbreviation thereafter.
- Number pages consecutively throughout the application, including appendices.
- Copies:
  - The original document signed by an authorized organizational official.
  - Four (4) exact, legible, single-sided photocopies.
  - One electronic copy of the complete application, including TSNRP forms and the appropriate PHS forms, with appendices, on CD-RWs. **Do not send**

**floppy disks or read-only CDs. PDF files are permitted for letters of support and appendices ONLY.**

**B. PAGE LIMITATIONS AND CONTENT REQUIREMENTS**

- Per the most current PHS 398 Instructions for Novice; 1-, 2-, and 3-Year; and Graduate Research Awards:

<b>Section</b>	<b>Page Limit</b>	<b>Content</b>
<b>Introduction</b> – New applications – Revised/Resubmission applications	Not to be submitted  3 pages, plus RECOMMENDATIONS AND REVISIONS FOR FY _____ SUBMISSION form	See Instructions.
<b>Research Plan</b> – Sections 2–5 – Sections 6–12	25  None	Text, including all figures, charts, tables, and diagrams.
<b>Biographical Sketches</b>	4 pages per person	No more than 4 pages for each person listed as key personnel.
<b>Literature Cited</b>	None	Complete citations, including titles and all authors.
<b>Appendix</b>	None	No more than 3 publications are allowed. Photographs and other images must also be included in the Research Plan.

**C. APPLICATION RESUBMISSION**

The PI must identify whether the current grant application represents a revision of an application previously submitted for TSNRP funding. PIs are limited to submitting two revisions of an application. The resubmission must include substantial changes. It must address comments from previous scientific and programmatic reviews and state how these 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.

The revision must include an “Introduction” that *summarizes* the substantial additions, deletions, and changes made in the revised application. Use the RECOMMENDATIONS AND REVISIONS FOR FY \_\_\_\_\_ SUBMISSION form (see Appendix C). List each area of concern noted in the reviews (scientific and programmatic) of the previous application and identify the changes and their locations on the chart. Use brackets to identify paragraphs with significant changes to distinguish them from the previous application. **Do not underline, italicize, bold type, or shade** changes. Insert the summary and form after the TSNRP forms.

## D. APPLICATION FORMS

The following table outlines the forms needed for a complete application for each type of award. All forms are accessible at <http://www.usuhs.mil/tsnrp/GrantApplications/forms.php>.

### Application forms needed for each award category

PHS 398		Novice	1-, 2-, & 3-Year	Pilot & Feasibility	EBP	Graduate	Fast Track	Fellowship
	TSNRP forms	√	√	√	√	√	√	√
	Face Page Form Page 1	√	√	√	√	√	√	√
	Form Page 2 Description, Sites	√	√	√	√	√	√	√
	Form Page 2 continued Key Personnel, Other Contributors	√	√	√	√	√	√	√
	Form Page 3 Table of Contents	√	√	√	√	√	√	
	CDA Substitute Form Page 3 Table of Contents							√
	Form Page 4 Detailed Budget Initial	√	√	√	√	√	√	√
	Form Page 5 Budget for the Entire Period	√	√	√	√	√	√	√
	Biographical Sketch	√	√	√	√	√	√	√
	Continuation Format Page	√	√	√	√	√	√	√
	Other Support							√
	Resources Format Page	√	√	√	√	√	√	√
	Checklist	√	√	√	√	√	√	√
	Personal Data	√	√	√	√	√	√	√

## E. APPLICATION INSTRUCTIONS FOR ALL AWARD CATEGORIES

**Applicants for all award categories must complete the following TSNRP form (Revised December 2007).**

**TSNRP 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, facsimile number, e-mail address, and (if applicable) civilian title(s) and work position are required.

Indicate the Award Category (see Section V B) and categorize the proposal according to the TSNRP Research Priorities (see Section IV). Identify *three key words* relating to the proposal, using the CRISP Thesaurus for their selection. The thesaurus is on the Web at <http://crisp.cit.nih.gov/Thesaurus/index.htm>.

PIs who have previously received TSNRP funding must list all dissemination activities and publications by TSNRP grant number, title, and funding amount.

**Relevance to Military Nursing Form:** This is the last page of the TriService Nursing Research Program Cover Sheet (see Appendix C). Fully describe how the proposed research would expand the body of military nursing practice and military scientific knowledge. This abstract is military specific and differs from the scientific abstract required on PHS 398, Form Page 2. Present the abstract in the following order.

- Background.
- Purpose.
- Research Questions/Aims/Hypotheses.
- Conceptual or Theoretical Framework.
- Methods.
- Sample.
- Outcome Variables.
- Plan for Analysis.
- Relevance to Military Nursing.

### **PHS 398 Forms (Revised 11/2007)\***

PHS 398 forms and instructions for completing them are accessible online through the TSNRP Web site, <http://www.usuhs.mil/tsnrp/GrantApplications/forms.php>.

\*The PHS 398 has had several revisions. The TSNRP Web site will connect to the most current forms. **Do not use any form dated earlier than November 2007.**

Applicants are advised that additional TSNRP-specific instructions must be followed in completing some PHS 398 forms, such as budget forms, the Biographical Sketch Format Page, etc., and the application instructions contained in this Call for Proposals supersede instructions for the PHS 398 forms.

**Number ALL pages consecutively. All pages following the face page must have the Principal Investigator's name (Last, First, Middle) in the header.**

Additional instructions are provided below.

**F. APPLICATION INSTRUCTIONS: NOVICE; 1-, 2-, AND 3-YEAR; PILOT; FAST TRACK; AND FEASIBILITY AWARDS (PHS 398 FORMS ONLY)**

**Face Page Box 1, Title:** Select a title that is specifically appropriate to the research topic. Do not exceed 81 characters, including spaces and punctuation.

**Box 2, Response to specific request:** Yes, Number, NA, Title: TriService Nursing Research Program.

**Box 3, New Investigator:** Check YES in the New Investigator box only if PI has no previous funding from TSNRP.

**Box 3a, Name**

**Box 3b, Degrees:** Indicate up to three academic and professional degrees or other credentials such as licenses (e.g., R.N.).

**Box 3c, Position Title:** List your title in the organization.

**Box 3d, Mailing address:** Provide the complete information necessary for postal delivery, including room number, building, street address, and zip code.

**Box 3e, Department:** List your department in the organization.

**Box 3f, Major Subdivision:** Identify your subdivision or subdepartment.

**Box 3g, Telephone and fax numbers:** Provide a daytime telephone number and, if available, a fax number.

**Box 4, Human Subjects Research:** Research that involves obtaining private information or human biological specimens (such as blood and tissue samples) that can be linked by the investigator(s) to living individuals is considered human subjects research (45 CFR Part 46). Check YES if activities involving human subjects are planned at any time during the proposed project period. YES should be checked even if the research is exempt from regulations for the protection of human subjects. Check NO if activities involving human subjects are not planned at any time during the proposed project period.

**Box 4a, Exemptions from Department of Health and Human Services (HHS) Human Subjects Regulations:** Check YES if the activities proposed are exempt from the regulations. Insert the exemption number(s) corresponding to one or more of the six exemption categories listed in the PHS 398 Instruction Files, Part II, Human Subjects Research Supplement, available at <http://grants.nih.gov/grants/funding/phs398/phs398.html>.

**Box 4b:** If applicant organization has a current Federal Wide Assurance (FWA) on file with the Office of Human Research Protection (OHRP), enter the number in the space provided.

**Box 4c:** If the applicant organization has a current approved Animal Welfare Assurance on file with the Office of Laboratory Animal Welfare (OLAW), enter the assurance number of the applicant organization. Do not include the Animal Welfare Assurance Number for any other performance sites or collaborating institution(s).

**Box 5, Vertebrate animals:** Check YES if activities involving vertebrate animals are planned at any time during the proposed project period. Be sure to add the Institutional Animal Care and Use Committee (IACUC) approval date and the Animal Welfare Assurance Number in boxes 5a and 5b if you have them at the time of application.

**Box 6, Dates of Proposed Period of Support:** Enter beginning and end dates.

**Box 7a, Costs Requested for the Initial Budget Period:** Enter the “Subtotal Direct Costs for Initial Budget Period” from the non-modular budget form page 4.

**Box 7b, Total Costs Requested for Initial Budget Period:** Enter the sum of the “Total Direct Costs for Initial Budget Period” from the non-modular budget form page 4 and the Facilities and Administrative costs for the initial budget period as calculated on the Checklist Form Page.

**Box 8a, Direct Costs Requested for Proposed Period of Support:** Enter the sum of “Subtotal Direct Costs” for all years from the non-modular budget form page 5.

**Box 8b, Total Costs Requested for Proposed Period of Support:** Enter the sum of “Total Direct Costs” from the non-modular Form Page 5 and the total Facilities and Administrative costs calculated on the Checklist Form Page.

**Box 9, Applicant Organization:** Identify the organization that will be legally and financially responsible for the conduct of activities supported by the requested award, if made. TSNRP awards are restricted to nonprofit and university organizations. Do not engage a for-profit grantee organization. Applications naming a for-profit grantee organization will be returned without review.

**Box 11, Entity identification number, DUNS number, Congressional District:** Enter the appropriate numbers for the applicant organization.

**Box 12, Administrative Official to Be Notified If Award Is Made:** Name the applicant organization administrative official to be notified if an award is made. Provide a complete address for postal delivery and the telephone number, fax number, and e-mail address for this official.

**Box 13, Official signing for the applicant organization:** Only an institutional official with formal designated or delegated authority to sign on behalf of the organization may sign the form. The signature must be dated. An original signature in ink is required.

**Box 14, Applicant Organization Certification and Acceptance:** By signing the application Face Page, the Authorized Organizational Representative of the applicant organization certifies that the applicant organization will comply with all applicable policies, assurances, and/or certifications referenced in the application.

The applicant organization is responsible for verifying its eligibility and the accuracy, validity, and conformity with the most current institutional guidelines of all the administrative, fiscal, and scientific information in the application, including the Facilities and Administrative rate. Deliberate withholding, falsification, or misrepresentation of information could result in administrative actions such as withdrawal of an application, suspension and/or termination of an award, debarment of individuals, as well as possible criminal penalties.

The signer further certifies that the applicant organization will be accountable both for the appropriate use of any funds awarded and for the performance of the grant-supported project resulting from this application. The grantee institution may be liable for the reimbursement of funds associated with any inappropriate or fraudulent conduct of the project.

Find the policies, assurances, and certifications list in Appendix K.

**Form Page 1—continued:** Do not use.

**Form Page 2 Project Summary (abstract page), Relevance, Performance Sites, Key Personnel, Other Significant Contributors**

**Description:** This section is the research “abstract.” It will serve as a succinct and accurate description of the proposed work when separated from the application. State the broad long-term objectives and specific aims. Briefly describe the research design, rationale, and methods for achieving the stated objectives and aims. This abstract is not a copy of the military relevance abstract completed in the TSNRP application forms.

**Relevance:** Use no more than two or three sentences to describe the relevance of this research to the body of nursing science.

**Performance site:** A performance site is a location where the work described in the Research Plan will be performed. List all sites and provide justification on the Resource Format Page of the application. 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. **Do not include the DUNS numbers for the performance sites.**

**Key personnel:** Key personnel are individuals who contribute substantively to the scientific development or execution of the project, whether or not their salaries are requested by the applicant organization. Key personnel must devote measurable effort (in person months) to the project. Efforts of “zero person months” or “as needed” are not acceptable levels of involvement for key personnel.

The PI is the one individual designated by the applicant organization as responsible for the proper conduct of the study. Designate only one individual as the PI for a

study. TSNRP does not recognize the use of a co-Principal Investigator title. Individuals providing technical services are not considered key personnel (e.g., transcriptionist).

Begin the list of key personnel with the PI. List the other key personnel in alphabetical order by last name. Include their institutional affiliation. List their role(s) on the project and describe how they will contribute to the proposed study.

A mentoring component is a requirement for **new and junior investigators**. Both the mentor and the protégé **must** be listed as key personnel. 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 these researchers. See instructions, Mentoring Plan, page 26.

**Other significant contributors:** These individuals have committed to contribute to the scientific development or execution of the project but are not committing any specified measurable effort to the project.

**Provide biosketches for all key personnel and those listed as other significant contributors.**

**Form Page 3 Table of Contents:** Complete with correct page numbers. Check the Appendix box if included. List the appendices and their contents in the space below the box. For example,

APPENDIX I: Instruments XYZ  
APPENDIX II: Survey  
APPENDIX III: Publications

**Budget and Budget Justification:**

**Form Page 4: Detailed Budget for Initial Budget Period, Direct Costs Only**

The budget must be complete, accurate, reasonable, and within the funding limits for each grant award category. List only direct costs. Do not include Facilities and Administrative Costs. Applications exceeding the specific award category's funding limit will not be reviewed.

Federal employees may not use grant funds for salaries. Contributions by federal employee research team members should be annotated as "without charge" or "WOC" on the budget forms and in the budget justification sections.

Submit a detailed categorical budget for the initial and entire period of support (Form Pages 4 and 5). Form Page 4 reflects the total direct costs, which include the total of any contractual costs requested for the first 12 months of the study's budget. Form Page 5 reflects the total direct costs for the entire study period. Each item listed on Form Page 4 must be clearly justified on Form Page 5.

**Personnel:** Begin this list with the PI. List all persons involved in the study during the initial period, regardless of whether salaries are requested for them. 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.”**

Active Duty PIs: Active Duty PIs 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 3 months. Details on Active Duty key personnel must be included in the Budget Justification section.

**Role in project:** Identify the role of every individual listed on the project. Describe their specific functions under the justification on Form Page 5.

**Months devoted to project:** Enter the number of calendar months devoted to the project for each individual listed. The form contains three columns to allow for differing types of appointments to the study: academic, calendar, and/or summer. Study personnel may have consecutive appointments within a calendar year; for example, an academic period and a summer period. Identify each of these appointments individually using the corresponding column, leaving the calendar month column empty. If the person’s involvement does not change throughout the year, use only the calendar month column.

**Salary requested:** Indicate the salary requested for each person listed.

**Fringe benefits:** List benefits included. The grantee organization will provide this information for the researcher.

**Total salary:** Add the salary requested and fringe benefits for each person listed.

**Consultant costs:** Provide the names and organizational affiliations of all consultants not involved in consortium/contractual arrangements. Describe the consultant services in the budget justification.

**Equipment:** List each item of equipment and the cost separately.

**Supplies:** Itemize supplies in separate categories unless the *category* totals less than \$1,000. If animals are included, identify the species and give the number to be purchased.

Computer equipment and software requests must be based on the needs of the research proposal. Some grantee organizations consider these items equipment. Some grantee organizations consider these items supplies. Include computer equipment and software requests in the category appropriate to the selected grantee organization. **The maximum allowable cost for computer equipment and software is \$3,000.**

**Travel:** Itemize travel requests and justify them on Form Page 5. 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 \$2,000 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.

**Patient care costs:** Itemize patient participation costs in the research study. These are limited to expenses specifically associated with the proposed study.

**Other expenses:** Itemize other anticipated direct costs, such as animal maintenance (cost of care per animal and number of care days), study participation incentives, publication costs, equipment rental, communication costs, transcription costs, advertising costs (to recruit study staff or participants), assistance with manuscript preparation (including editing and proofing), etc. Provide hours and rates for all equipment rental and services. A maximum of \$500 is allowed for preparation of dissemination materials.

Military personnel may not receive compensation for participation in research, except for blood draws, typically up to \$50 per draw. TSNRP recommends consultation with the performance site's legal consultant while preparing the proposal to ensure compliance with Department of Defense regulations on remuneration of military personnel.

**CRADA and/or IRB-related processing fees are not allowed.**

**Consortium/Contractual Costs:** Each participating consortium and/or contractual organization must submit a separate detailed budget for both the initial budget period (Form Page 4) and the entire proposed project period (Form Page 5).

### **Form Page 5: Detailed Budget for Entire Proposed Project Period, Direct Costs Only and Justification**

Complete the budget categories for each year of the study. List the total direct costs for the entire proposed project period in the box provided. Justify all budget items in the space entitled "Justification." Add continuation pages if needed. Add the detailed mentoring plan, if applicable, following the budget justification.

#### **Mentoring Plan:**

A mentoring component is a requirement for **new and junior investigators**. Applications are evaluated on the expertise and credentials of the mentor and the plan's potential to develop a military nurse researcher, thereby increasing the cadre of these researchers. 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.

The mentoring plan must:

1. Identify the expected knowledge transfer from the mentor to the PI.
2. Clearly explain the means and frequency of contact between the mentor and PI.
3. Describe the mentor's plan to evaluate the PI's progress. (This evaluation is

now required as part of the annual progress report.)

**Biographical Sketch Format Page:**

Biographical sketches are required for all key personnel and other significant contributors. Biographical sketches should include the individual's education, professional experience, military assignments, content expertise, research experience, funding history (with the title and dates of each award), peer-reviewed publications, and other qualifications appropriate to their role on the research team.

Address the following items in the following order.

- A. Positions and Honors:** List employment positions in chronological order ending with your current position. List other experience, professional memberships, and any honors.
- B. Selected peer-reviewed publications:** Provide evidence of publications emanating from previously funded research. List publications in chronological order and reference the corresponding TSNRP-funded study, if appropriate. List a selection of peer-reviewed publications for the individual listed in the biosketch.
- C. Research Support:** Research Support defines scientific expertise and emphasizes individual professional accomplishments. Begin with the projects most relevant to the proposed research. Provide the percentage of effort with the biographical information. The reviewers will use this information to assess each individual's qualifications for a specific role on the project as well as the overall qualifications of the research team. (List all research support provided. TSNRP no longer requests the "Other Support" page.)

**Other Support Format Page: No longer required.**

**Resources Format Page:**

Follow the sample format and instructions on the Resources Format Page when completing information on resources available for the project. If multiple Project/Performance Sites are proposed, the resources available at each should be described. Discuss ways in which the proposed study will benefit from unique features of the scientific environment and/or available subject populations, and/or employ useful collaborative arrangements.

**Personal Data on Principal Investigator:**

This form is required. The PI must complete the document. Place the form at the end of the original application. **Do not submit more than one copy of the Personal Data form.**

**Research Plan: Do not exceed 25 pages for items 2–5 of the list below. All tables, graphs, figures, diagrams, and charts must be included in the 25-page limit. Contents of the Research Plan:**

1. Resubmission or Revision Applications only: Use TSNRP’s “Recommendations and Revisions for FY\_\_ Submission” to respond to reviewer comments for resubmissions and insert here (see Appendix C).
2. Specific Aims
3. Background and Significance
4. Preliminary Studies/Progress Report
5. Research Design and Methods
6. Bibliography and References Cited/Progress Report Publication List
7. Protection of Human Subjects
8. Inclusion of Children
9. Vertebrate Animals
10. Consortium/Contractual Arrangements
11. Letters of Support (e.g., consultants)

**Items 2–5 include:**

- 2. Specific Aims:** This section is the foundation on which the rest of the proposal is built. A direct relationship between the hypotheses (or research questions), data collected, and analysis should be fully presented.

The Specific Aims section should:

- a. Be easy to read and logically presented.
- b. Suggest the relevance of the proposed study to TSNRP’s mission.
- c. Refer to the current state of knowledge in the area of study, noting how the proposed study will fill gaps in that knowledge.
- d. Indicate the expected outcomes of the study and the expected impact of the study findings.

- 3. Background and Significance:** Briefly describe the background leading to the proposal. Cite research literature that supports the significance of the research problem and that identifies gaps the proposed investigation intends to fill. Describe the effect of these studies on the concepts, methods, technologies, treatments, services, and interventions that drive the application. State how this study will advance scientific knowledge or clinical practice if the study aims are achieved. Finally, include any economic impact that the research findings are expected to have.

Citation of, and specific credit for, other authors’ work is part of the researcher’s scientific and scholarly responsibility, and references cited are to be included in the bibliography. Opinion-based citations do not provide adequate support for the proposed research.

- 4. Preliminary Studies/Progress Report:** Highlight preliminary work done by the research team **in the proposed area of study** to demonstrate that this team has mastered the technical aspects of the proposed research, including accessing the proposed sample population, pilot testing the proposed instruments, etc.

Include relevant data from unpublished research in this section. Describe what the data show and why the findings to date are significant to the proposed work. If necessary, include related materials from any published work in the appendices. Keep in mind that the objective is to convince the reviewers that the research team is prepared to undertake the proposed study and has a competitive advantage over others working in the field. Report only research by members of the proposed team.

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

If children are involved as subjects, fully describe the process for meeting parental permission and child assent requirements. Include a description of the circumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method for documenting consent.

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 to be studied. Support letters demonstrating access to settings and populations are critical to the application. Specific details of how subjects will be identified and recruited must be included. The site population and the number available for sampling should be described.

**Items 6–11, not subject to the 25-page limit:**

- 6. Bibliography and References Cited:** All references cited in the text must appear in the reference list in APA format. Names of authors must appear in the same sequence in which they appear in the publication, the article and journal title, book title, volume number, page numbers, and the year of publication.

Provide the PubMed Central (PMC) reference number (e.g., PMCID234567) for each citation that falls under the NIH Public Access Policy. Citations not covered by the Public Access Policy, but publicly available in a free, online format, may include URLs or PMCID numbers along with the full reference. (The NIH Public Access Policy ensures that the public has access to the published results of NIH-funded research.)

- 7. Protection of Human Subjects:** Describe potential risks and actions to minimize any risks to human subjects. Include a realistic IRB processing time on the study timeline. Discuss issues related to human subjects protection (e.g., confidentiality, coercion, volunteerism, data safety, monitoring plan, Health Insurance Portability and Accountability Act compliance, etc.). Consult current DoD service- and site-specific human subjects protection requirements. 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 can also slow the IRB approval 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 that provide oversight for human subject protection may see your records.” Include a draft of an Informed Consent document in the appendices.

Research involving human subjects must be conducted in full compliance with all applicable federal regulations and DoD policies. Research taking place on DoD installations or using DoD beneficiaries must have the approval of all appropriate Institutional Review Boards (IRBs). 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 may not be made by the investigator. Although not required at the time of submission, the applicant will be responsible for providing documented IRB approval of the research protocol for each performance site if the proposal is funded. Because USU is the grantor, its IRB conducts secondary review of all TSNRP-funded studies involving human subjects. A list of references related to human subjects protection is in Appendix G. **Funding will not be disbursed without appropriate IRB approvals from each performance site and USU.**

- 8. Inclusion of Children:** Research involving vulnerable populations must follow provisions of the regulations in Subparts B, C, and D of 45 CFR Part 46. These subparts describe the additional protections required.

A child is a person who has not attained the legal age for consent to treatment or procedures involved in the research, under the applicable laws. Describe the rationale for selecting a specific age range of children. Describe planned procedures for protecting against or minimizing the potential risks to the children. The plan must include a description of the expertise of the investigative

team for dealing with children at the ages included, of the appropriateness of the available facilities to accommodate the children, and the inclusion of a sufficient number to contribute to a meaningful analysis.

- 9. Vertebrate Animals:** Conduct research involving the use of animals only at a facility accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC). Provide documentation of IACUC approval if funded. Research involving animals must be in full compliance with all applicable federal regulations and DoD policies.

For research involving vertebrate animals, the following must be included: Provide a detailed description of the proposed use. Identify the species, strains, ages, sex, and numbers of the animals. Justify their use, the choice of species, and the number. Describe information on the veterinary care of the animals and their per diem. Describe the procedures for ensuring that discomfort, distress, pain, and injury will be limited to that which is unavoidable in the conduct of the research. Describe the use of analgesic, anesthetic, and tranquilizing drugs and/or comfortable restraining devices, where appropriate, to minimize discomfort, distress, pain, and injury. Describe any method of euthanasia to be used and the rationale for its selection. State whether this method is consistent with the recommendations of the American Veterinary Medical Association Guidelines on Euthanasia. If the method is not according to these guidelines, justify the choice of euthanasia procedure.

Because USU is the grantor, its IRB conducts secondary review of all TSNRP-funded proposals involving human subjects and its IACUC reviews any involving vertebrate animals. A list of references related to human subjects and animal study protection is in Appendix G. **Funding will not be disbursed without appropriate IRB or IACUC approvals** from each performance site and USU.

- 10. Consortium/Contractual Arrangements:** Explain the programmatic, fiscal, and administrative arrangements to be made between the grantee organization and the consortium organization(s). Include letters of collaboration and budget plans for each contractual agreement (including PHS 398 budget pages for both the initial budget period and the entire proposed period).

- 11. Letters of Support (e.g., consultants):** 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 facilities needed to conduct the study. Letters of support from consultants and their biographical sketches should be included in this section. Letters of support from consultants should include scope of work (responsibilities), compensation, level of commitment (percentage effort), and duration of commitment. Active Duty and Reserve graduate students applying for Graduate Research Awards to support research for their dissertations or theses are required to provide written documentation that the applicant's dissertation or thesis committee has approved the proposal topic. This must be generated by the applicant's committee chair and accompany

the proposal application. Letters of support from site commanders, as appropriate, should be included.

### **Checklist Form Page:**

**Type of Application:** Check all types that apply to this application.

**Program Income:** Indicate program income amount. If none, state none.

**Assurances and Certifications:** Each application requires that the policies, assurances, and certifications listed on the Checklist be verified by the signature of the official signing for the grantee organization on the Face Page of the application.

**Facilities and Administrative Costs (F&A)/Indirect Costs:** Provide the date of the most recently established F&A rate. Calculate the F&A costs using the current negotiated F&A rate, less exclusions, for the initial and all future budget periods. It is not necessary to list the exclusions on the checklist or anywhere in the application. However, both the F&A rate and the direct cost base used to calculate the F&A costs must be included for each year.

The indirect cost rate itemized by the applicant organization on the Checklist Form Page should correspond to the information provided on the budget pages and the Face Page of the application.

### **Appendices: One set of appendices should accompany each copy of the proposal.**

Do not use an appendix to circumvent the page limitations of the Research Plan. Graphs, diagrams, tables, and charts should be included in the body of the Research Plan. Include material relevant to the application that is not suited for the body of the application such as:

1. Samples of all measurement and instrument items, including surveys, questionnaires, data collection instruments, and clinical protocols, and assessments of their reliability and validity. Include an instrument table with corresponding reliabilities within the methodology section to assist the scientists reviewing the application.
2. The use of any instruments not in the public domain requires the authors' permission. Include letters from the authors or their legal representatives to the PI granting permission to use such instruments.
3. Consent form(s).

### **G. APPLICATION INSTRUCTIONS: EVIDENCE-BASED PRACTICE (EBP) AWARDS (PHS 398 FORMS ONLY)**

Evidence-based practice is appraisal and application of research findings and other sources of valid, pertinent knowledge to the care of patients to improve patient outcomes, provide quality nursing care, and support nursing policy decisions (Kelley, 2002). Acceptable sources of evidence range from randomized controlled trials to expert opinion (Cook,

1998). Research evidence is used in conjunction with patient values and clinical expertise in delivery of health care services to improve patient outcomes (Sackett, Straus, Richardson, Rosenberg, & Haynes, 2000). However, the lag between discovery and its application in practice is substantial (Nieva et al., 2005). [Complete references are available in Appendix G.]

Promoting EBP aligns with TSNRP's priority, Translating Knowledge into Practice in a Military Context (Strategic Conference, February 2009). This priority was created to support implementation and evaluation of EBP projects at the point of care. EBP project proposals are restricted to master's- or doctoral-level Active Duty Nurse Corps officers stationed at military medical facilities who are actively mentored by a doctoral-level Active Duty Military evidence-based practice nursing expert.

- Use PHS 398 forms as indicated for Novice; 1-, 2-, and 3-Year; Pilot; Fast Track; and Feasibility Awards.
- Minimum three guidelines per application per facility over a period not to exceed 24 months.

Instructions listed are for elements specific to EBP proposals.

### **EBP Conceptual Guideline Development**

**Project Plan: Do not exceed 25 pages for the items listed below. All tables, graphs, figures, diagrams, and charts must be included in the 25-page limit.**

1. **Specific Aims:** In addition to listing the broad, long-term objectives (or purposes), the Specific Aims section must give a preliminary overview, including: a) a logically presented nursing issue; b) an explanation of the relevance of the proposed project to the mission of TSNRP, military nursing, patient outcomes, and/or your organization; c) the current state of knowledge in the area of study and an explanation of how the proposed project will fill gaps in that body of knowledge and/or practice; and d) expected outcomes of the project and the expected impact of those outcomes.
2. **Background and significance:** This section should identify the chosen topic(s) or clinical question(s) and include discussion of why they were chosen to pursue as an evidence-based practice project. It should include the background of the topic(s) that are the focus of the proposed EBP project, a description of the evidence related to the selected topic(s) (enough to convince the reviewers that sufficient evidence exists to develop an EBP guideline in this area), and the relevance to nursing practice.
  - **Literature Review:** The proposal should itemize the databases, Web sites, and other sources used to search for the preliminary evidence for the background section. The sources that will be used include research reports, synthesis reports, and evidence-based practice guidelines for the selected topic(s). A description of the keywords used to search the evidence should be given. Methods to decide which references to include in the critique and synthesis of the evidence should be presented. A preliminary review of the literature related to the topic area(s) or clinical question must convince the reviewer that the applicant has a command of the evidence from which the guideline will be developed.
  - **Literature Evaluation and Synthesis:** The plan for literature evaluation should include a schema of how the literature will be evaluated, who will perform the

evaluation, and a plan to mentor clinical nurses in the critical evaluation of evidence for clinical practice. The schema should include all elements of the evidence to be critiqued. The proposal should discuss how the evaluated literature will be synthesized into a succinct yet comprehensive summary to be used for guideline development.

- This section should conclude with the clinical issues to be examined, written in a question format that includes the patient population (e.g., adults with type II diabetes), users of the evidence-based practice (e.g., nurse practitioners in family practice clinic), and outcomes anticipated (e.g., improved self-care management practices). If more than one clinical topic is planned, a question relevant for each topic should be included. Applicants should describe how this evidence-based practice project is important to care delivery for clients in the military health care system.
3. **Preliminary Studies/Prior Work:** Any prior experience and/or work in EBP by applicants (applicant team members) should be described, with data demonstrating the impact of their work. This section should provide enough information to convince reviewers that the applicants can successfully carry out this EBP project.
  4. **Project Plan:** Identification of and support from all involved stakeholders is critical to the success of any project. This section should include all multidisciplinary stakeholders who will be involved with or who have input into the proposed project. These include planners, literature reviewers, and all end-users of the developed guideline. (Support letters must be provided from all stakeholder levels. Place these in the Appendices.)
    - **Theoretical Framework:** An appropriate model should be used to frame the development of the clinical guideline. The discussion should show a distinct relationship between the model and the project to be developed. Describe the conceptual framework or model that will guide the project.
    - **Data Collection and Analysis:** This section should discuss any already developed instruments that will be used to collect clinical performance improvement data before guideline development. If established instruments are to be used, their reliability and validity should be explicated. Already established tools should be included in the appendices of the proposal.
      - **KEY:** The applicant should discuss what parameters will be used to assess the current practices in the area of the project's topic(s) or clinical question. This should include a description of how the current practice will be assessed, i.e., tools, group interaction, how the data will be collected.
      - Discuss how data collection tools will be developed, based on the literature synthesis, and what outcomes will be measured before and after implementation to determine the success of the proposed project. A detailed description of the data collection plan should be included. In addition, the applicant should discuss the analysis of the preliminary data, what statistics will be used, and how this analysis will be used to plan strategies for the proposed implementation.
    - **Sample and Site Availability (Resources and Availability):** This section of the application should describe the setting where the EBP project will be carried out

and any existing resources available to assist with it (e.g., statistician, database manager, personnel with expertise in instrumentation). Letters of support from senior leadership at the site are required. (Place these in the Appendices.)

- **Development of Guideline for Practice:** This section should describe how the literature synthesis, data collected and analyzed, and the model for implementing new knowledge into practice will be used to develop the clinical guideline. It should also clearly discuss plans for multidisciplinary input into the guideline and show support from all levels of stakeholders. Those involved in the development of the guideline should be identified in this section.
- **Dissemination Plans:** A description of how the impact of the EBP project will be disseminated to internal constituents within the specified military setting as well as other stakeholders in the military health care system should be the focus of this section. A final report is due to TSNRP within 90 days of completion of the project.

**Items not subject to the 25-page limitation:**

1. **Timeline:** Provide a detailed timeline for all phases of the conceptual guideline development project.
2. **Bibliography and References Cited:** All references cited in the text must appear in the reference list. Other authors' work must be cited accurately in the text. Use APA reference format.
3. **Protection of Human Subjects:** Human subjects and IRB approvals must be obtained, as required, from the individual sites and from USU.
4. **Consortium/Contractual Arrangements:** Explain the programmatic, fiscal, and administrative arrangements to be made between the grantee organization and the consortium organization(s). Include letters of collaboration and budget plans for each contractual agreement (including PHS 398 budget pages for both the initial and the entire proposed budget periods).
5. **Letters of Support:** Letters of support from consultants and their biographical sketches should be included in this section. Letters of support from consultants should include scope of work (responsibilities), compensation, level of commitment (percentage effort), and duration of commitment. Letters of support from commanders of the EBP sites are required.

**Checklist Form Page:**

**Type of Application:** Check all types that apply to this application.

**Program Income:** Indicate program income amount. If none, state none.

**Assurances and Certifications:** Each application requires that the policies, assurances, and certifications listed on the Checklist be verified by the signature of the official signing for the grantee organization on the Face Page of the application.

**Facilities and Administrative Costs (F&A)/Indirect Costs:** Provide the date of the most recently established F&A rate. Calculate the F&A costs using the current negotiated F&A rate, less exclusions, for the initial and all future budget periods. Show the rate used in the calculation for F&A rates.

The indirect cost rate itemized by the applicant organization on the Checklist Form Page should correspond to the information provided on the budget pages and the Face Page of the application.

**Appendices: One set of appendices should accompany each copy of the proposal.**

Do not use the appendix to circumvent the page limitations of the Project Plan. Graphs, diagrams, tables, and charts should be included in the body of the Project Plan. Include material relevant to the application that is not suited for the body of the application such as:

1. Samples of all measurement and instrument items, including surveys, questionnaires, data collection instruments, and clinical protocols, and assessments of their reliability and validity. Include an instrument table with corresponding reliabilities within the methodology section to assist the scientists reviewing the application.
2. The use of any instruments not in the public domain requires the authors' permissions. Include letters from the authors or their legal representatives to the PI granting permission to use to the instruments.
3. Consent form(s), as applicable.
4. 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 facilities needed to conduct the study.

**EBP Implementation of Innovation**

**Project Plan: Do not exceed 25 pages for items listed below. All tables, graphs, figures, diagrams, and charts must be included in the 25-page limit.**

1. **Specific Aims:** In addition to listing the broad, long-term objectives (or purposes), the Specific Aims section should a) be easy to read and logically presented, b) discuss the relevance of the proposed project to the mission of TSNRP, c) refer to the current state of knowledge in the area of study, noting how the proposed project will fill gaps in that body of knowledge and/or practice, and d) indicate the expected outcomes of the project and the expected impact of those outcomes.
2. **Background and significance:** This section should identify the chosen topic(s) and discuss the rationale for its selection as an evidence-based practice project. Provide the background of the selected topic(s). In addition, include either a description of the evidence synthesis carried out in a prior conceptual guideline development project **OR** a discussion of how an already developed evidence-based clinical practice guideline was chosen for the implementation project. In either case, include findings from an external

appraisal of the selected guideline. An example of an instrument that will facilitate external appraisal is the AGREE Instrument (see Appendix E), created by the AGREE Research Trust. This is a generic instrument designed to help guideline developers and users evaluate the methodological quality of a clinical guideline. This instrument is available online, without cost, at <http://www.agreetrust.org/instrument.htm>. Include the guideline used for the implementation project in an appendix.

- The applicant should demonstrate a command of the literature inherent in either development of a guideline or use of an already established guideline. Describe the conceptual framework or model used to guide the project and how it is linked to the project. Applicants should describe how this evidence-based practice project is important to care delivery for clients in the military health care system.
  - Include a discussion of the results of the data analysis and the implications for implementation of the developed guideline if data were collected and analyzed from a previous conceptual guideline development project.
- 3. Preliminary Studies/Prior Work:** Any prior experience and/or work in EBP by applicants (applicant team members) should be described, with data demonstrating the impact of their work. This section should provide enough information to convince reviewers that applicants can successfully carry out this EBP project.
- 4. Project Plan:** Identification of and support from all involved stakeholders is critical to the success of any project. This section should include all multidisciplinary stakeholders who will be involved with or who have input into implementation of the proposed project. This includes planners, champions, and all end users of the implemented guideline. Support letters must be provided from stakeholders at all levels. (Place these in the appendices.)
- **Methods:** This is a substantive component of the implementation proposal. Address the following major areas: a) strategies for implementing the evidence in practice(s) with a description of the site(s)/context of care delivery, b) evaluation plans to determine the impact of the EBP project on processes and outcomes of care, and c) plans for sustaining the evidence-based practices following completion of the project. Each of these areas is further described below. The conceptual framework described in the Background and Significance section of the proposal should be integrated into each of these areas as appropriate.
  - **Implementation Strategies:** Provide a detailed description of where (setting) and how the practice recommendations from the synthesized evidence will be implemented. Applicants should describe both individual and organizational implementation strategies. Identify the potential number and type of patients who could benefit annually from the EBP project, and discuss the number and type of providers who will be affected by the EBP. Describe methods for garnering support of key stakeholders, as well as educational strategies, system changes, and other key implementation approaches. Include the rationale for the strategies to be used. If strategies such as posting project messages in clinical areas and/or audit and feedback of data are planned, fully describe their frequency. Provide a sufficiently detailed discussion of implementation strategies to enable others unfamiliar with the project to enact/replicate the implementation plan. This section should include

discussion of anticipated challenges that may be encountered during implementation.

- **Sample and Site Availability (Resources and Availability):** Describe the setting where the EBP project will be carried out and any existing resources available to assist with it (e.g., statistician, database manager, personnel with expertise in instrumentation). Letters of support from senior leadership at the site are required.
- **Evaluation:** Discuss how the success of the EBP project will be determined. A variety of methods may be used to evaluate its impact, and applicants should discuss the rationale for using the selected methods. Both outcome and process variables/indicators should be described. A data collection plan is necessary and should include the methods of acquiring the data, their sources, and the reliability and validity of the instruments to be used. Data collection frequency should be described in relation to the implementation plan. Methods and statistics for data analyses should be included, and methods to evaluate implementation success or failure as well as plans to overcome potential obstacles within the organization should be discussed. Data collection instruments should be included as appendices.
- **Sustainability:** Discuss what strategies will be used to sustain the use of evidence-based practices following the conclusion of the funded project. This section should present a plan for institutionalizing the EBPs within the context of care where each is implemented and discuss what other settings in the facility might benefit from adopting them.
- **Dissemination Plans:** A description of how the impact of the EBP project will be disseminated to internal constituents within the specified military setting as well as other stakeholders in the military health care system should be the focus of this section. A final report is due to TSNRP within 90 days of completion of the project.

**Items not subject to the 25-page limitation:**

- **Timeline:** Provide a detailed timeline for all phases of the project.
- **Bibliography and References Cited:** All references cited in the text must appear in the reference list. Other authors' work must be cited accurately in the text. Use APA reference format.
- **Human Subjects Approvals:** Human subjects and IRB approvals must be acquired, as required, from the individual sites and from USU.
- **Consortium/Contractual Arrangements:** Explain the programmatic, fiscal, and administrative arrangements to be made between the grantee organization and the consortium organization(s). Include letters of collaboration and budget plans for each contractual agreement (including PHS 398 budget pages for both the initial and entire proposed budget periods).
- **Consultants:** Letters of support from consultants and their biographical sketches should be included in this section. Letters of support from consultants should include scope of work (responsibilities), compensation, level of commitment (percentage effort), and duration of commitment.

## **Checklist Form Page:**

**Type of Application:** Check all types that apply to this application.

**Program Income:** Indicate program income amount. If none, state none.

**Assurances and Certifications:** Each application requires that the policies, assurances, and certifications listed on the Checklist be verified by the signature of the official signing for the grantee organization on the Face Page of the application.

**Facilities and Administrative Costs (F&A)/Indirect Costs:** Provide the date of the most recently established F&A rate. Calculate the F&A costs using the current negotiated F&A rate, less exclusions, for the initial and all future budget periods. It is not necessary to list the exclusions on the checklist or anywhere in the application. List the direct cost base used for the calculation for each year. Show the rate used in the calculation for F&A rates.

The indirect cost rate itemized by the applicant organization on the Checklist Form Page should correspond to the information provided on the budget pages and the Face Page of the application.

## **Appendices: One set of appendices should accompany each copy of the proposal.**

Do not use the appendix to circumvent the page limitations of the Project Plan. Graphs, diagrams, tables, and charts should be included in the body of the Project Plan. Include material relevant to the application that is not suited for the body of the application, such as:

1. Samples of all measurement and instrument items, including surveys, questionnaires, data collection instruments, and clinical protocols, and assessments of their reliability and validity. Include an instrument table with corresponding reliabilities within the methodology section to assist the scientists reviewing the application.
2. The use of any instruments not in the public domain requires the authors' permission. Include letters from the authors or their legal representatives to the PI granting permission to use to the instruments.
3. Consent form(s), if applicable.
4. 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 facilities needed to conduct the study.

## H. APPLICATION INSTRUCTIONS: FELLOWSHIP AWARDS

This award is designed to facilitate the mentored training in some research aspect of doctoral-level Active Duty Nurse Corps officers or to expand the research skills of *experienced* Active Duty Nurse Corps nurse researchers. This award has different regulations regarding funding, study effort, and letters of support.

- Funds **may not** be requested for the purchase of equipment or for the Research Fellow's salary. Funds may be requested only for personnel (to compensate non-federal employee mentors), consultant costs, supplies, travel, and other expenses.
- The Fellow must devote at least 15%–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 supervisor for the proposed effort.

Applicants for Research Fellow Awards use **PHS 398 forms** only. This is a change from prior year instructions.

### **Application Instructions:**

**Face Page:** Complete as directed for the Novice; 1-, 2-, and 3-Year; and Pilot Awards (see page 21).

### **Form Page 2 Project Summary (abstract page), Relevance, Performance Sites, Key Personnel, and Other Significant Contributors**

**Description:** This section is the “abstract” of the entire application. Include the candidate's immediate and long-term career goals, research project, career development plan, and the research environment.

**Relevance:** Use only two or three sentences to describe the relevance of the intended research to the military. Be succinct and use plain language.

**Performance sites:** List all performance sites for the application.

**Key personnel:** These are individuals who contribute substantively to the project. Their involvement is identified in person months of the project budget. List the candidate, the mentor(s), consultants, and any other substantively involved persons.

List individuals who are agreeing to contribute to the scientific development and conduct of the project but who are not committing any specified measurable effort as Other Significant Contributors. **Submit Other Support Pages for mentors in addition to listing them as Key Personnel.**

**CDA Table of Contents Substitute Form Page 3:** Complete with the correct page numbers. Check the Appendix box if any are included.

## **Budget and Budget Justification:**

### **Form Page 4: Detailed Budget for the Initial Budget Period, Direct Costs Only.**

**Form Page 5: Budget for the Entire Proposed Project Period, Direct Costs Only and Justification: Do not request funds** for equipment purchases or for the Research Fellow's salary. Request funds for the following categories: personnel (to compensate non-federal employee mentors), consultant costs, supplies, travel, and other expenses. Complete a detailed justification of costs. Identify all consultants by name and organizational affiliation and describe the services they are to perform.

**Biographical Sketch Format Page:** This form is required for the candidate, mentor, all key personnel, and other significant contributors identified on Form Page 2-continued. The biographical sketch for the candidate should appear first with the rest in the order they are listed on Form Page 2-continued. **PAGE LIMIT: 4 pages per individual.**

The candidate's biographical sketch should contain the following items in the given order.

- **Education:** Provide month and year for each degree. For non-degree education, indicate the period covered. List professional certifications received within the last 10 years.
- **Research and/or Professional Experience:** Use this instruction for completion of this section and not the instruction on the Biographical Sketch Format Page. Use these headings:
  - **Employment:** List employment consecutively, beginning with the first position held after receiving the baccalaureate degree. Indicate the department and organization, department head or supervisor, rank, tenured or non-tenured, status (full- or part-time), and inclusive dates. Include information about military service, internships, research history, etc.
  - **Honors:** List academic and professional honors chronologically. Include research grants and fellowships awarded to the candidate.
  - **Professional Societies and Public Advisory Committees:** List the candidate's memberships in professional societies and related organizations for the last 10 years. Provide dates. Include present membership on any federal government public advisory committee.
  - **Publications:** List all, chronologically divided into the following groups. Use APA format. If the list exceeds the space allocation, provide the most pertinent.
    - Original research.
    - Non-experimental articles such as book chapters, literature reviews, etc.
    - Books, pamphlets, etc.

**Other Support Format Page:** Provide a modified Other Support Page(s) for the candidate's mentor. Provide the following selected items for the mentor's current and pending research support relevant to the candidate's research plan.

- Project number.
- Funding source.
- Major goals: a brief statement of the overall objectives for the project, subproject or subcontract.
- Approved/proposed project dates.
- Annual direct costs.

**Resources: Resource Format Page:** Provide a detailed description of the career development program-related activities and institutional resources available at each performance site listed on Form Page 2. This information is critical in establishing the feasibility of the goals of the career development plan.

**Career Development Plan:** Continuation Format Pages:

The following items may not exceed 25 pages.

**Candidate's background:** Include any information not described in the Biographical Sketch Format Page.

**Career Goals and Objectives:** Scientific Biography—Describe the candidate's past scientific history. Indicate how this proposal fits with the experiences and research career development. Make clear any consistent themes or issues that have guided previous work. If the candidate's work has changed direction, provide the reasons for the change. Justify the award and elucidate how it will foster or expand a research career. Though not required, include a timeline with any plans to apply for subsequent grant support.

**Career Development/Training Activities During Award Period:** Identify and describe the new research skills and knowledge gained from the Fellowship. Describe the structured activities, such as course work or technique workshops, which are part of the developmental plan. If course work is included, provide course numbers and descriptive titles. Briefly discuss each activity in which the candidate will participate. Include a percentage of time involvement for each activity and explain how the activity is related to the proposed research and career development plan.

**Training in the Responsible Conduct of Research:** Describe the candidate's plan for responsible conduct of research training.

**Statement by the Mentor, Consultant(s), and Contributors:** Mentors, consultant(s), and contributors complete this section. Mentors must explain how they will contribute to the development of the candidate's research career. Include the following:

- Describe the candidate's plan for the training and research career development. It must include research and other developmental activities, such as seminars, scientific meetings, training in the responsible conduct of research, and presentations. Discuss publication expectations over the training period.
- Describe the nature and extent of supervision and mentoring and the commitment to the candidate's development over the award period.
- Describe a plan for the candidate's transition from the mentored stage to the independent investigator stage by the end of the award period.
- Describe previous experience as a mentor, including type of mentoring (e.g., graduate students, career development awardees, postdoctoral students), the number of persons mentored, and their career outcomes.

All fellowship applications should identify the consultants and collaborators involved with the project. Describe their areas of expertise. Explain how these skills will enhance the candidate's development. Describe any resources that will be committed to the fellowship.

Include letters from the mentor, consultant(s), and collaborator(s), documenting their roles and their willingness to participate in the project in this section of the application.

**Description of the Institutional Environment:** Describe the resources listed on the Resources Format Page. Indicate how the necessary facilities and other resources will be available for career enhancement and the research proposed in the application. Describe opportunities for intellectual interaction with other investigators; include courses offered, journal clubs, seminars, and presentations.

**Institutional Commitment to the Research Career Development Plan:** The institution must provide a document on institutional letterhead that describes its commitment to the candidate's career development plan. Include the institution's agreement to provide adequate time and support for the candidate during the entire period of the proposed award. Support includes appropriate office and laboratory space, equipment, and other resources and facilities (including access to clinical and/or other research populations) to carry out the proposed research and time for the mentorship.

The institutional commitment must be signed and dated by the person authorized to commit the institution to the agreement and assurances. The signature must appear over the signer's name and title at the end of the statement. Include this document in this section of the application.

**Command Support:** The candidate must provide written confirmation that the command agrees to release the candidate from other duties and activities to devote the necessary time for the career development plan. The command must provide this dated and signed statement on command letterhead.

**Research Plan:** Refer to Research Plan instructions for the 1-, 2-, and 3-Year and Novice Awards (beginning on page 28). Describe how the research, coupled with

other developmental activities, will provide the experience, knowledge, and skills necessary to achieve the objectives of the career development plan.

**Items not subject to the 25-page limit. Refer to instructions for the 1-, 2-, and 3-Year and Novice Awards (beginning on page 29).**

**Bibliography and References Cited**

**Protection of Human Subjects**

**Inclusion of Children**

**Vertebrate Animals**

**Consortium/Contractual Arrangements**

**Letters of Support (e.g., consultants)**

**Checklist Form Page:** Refer to instructions for the 1-, 2-, and 3-Year and Novice Awards (see page 35).

**Appendices:** One set of appendices should accompany each copy of the proposal. Refer to instructions for the 1-, 2-, and 3-Year and Novice Awards (page 36).

**Personal Data on Principal Investigator:** This form is required. The PI must complete the document. Place the form at the end of the original application. **Do not submit more than one copy of the Personal Data form.**

## **I. APPLICATION INSTRUCTIONS: GRADUATE RESEARCH AWARDS**

Applicants for Graduate Research Awards **no longer use a combination** of PHS forms. Refer to the chart on page 19.

Funding in this award category assists the graduate student PI to defray costs in all aspects of the research budget. Faculty advisor salaries and consultant expenses are not permitted for Graduate awards. These costs are considered to be included in the graduate student PI's tuition as part of the graduate education.

Graduate students must:

- Inform the committee chair of their desire to apply for TSNRP funding.
- Provide written documentation that the proposal topic has been approved by the applicants' dissertation or thesis committees. This documentation must be generated by an applicant's committee chair and accompany the proposal application.
- Submit a letter from the committee chair indicating support of the proposal.
- Obtain assistance from the committee in preparing the proposal.
- Identify the resources needed to complete the study.

Applications for this award follow the pagination requirements stated in the instructions for 1-, 2-, and 3-Year; Novice; Pilot; Fast Track; and Feasibility Awards (beginning on page 21). All pages following the face page must have the Principal Investigator's name (Last, First, Middle) in the header.

## **PHS 398 Biographical Sketch Format Page**

### **Applicant**

Positions and honors: List any honors that would reflect upon the applicant's potential for a research career. Include current memberships in professional societies.

Publications: List the applicant's entire bibliography, if present.

Scholastic performance: List all undergraduate and graduate courses with grades by academic institution and year.

### **Mentor**

The identified sponsor must be the faculty member with substantial oversight for the student's dissertational/thesis work (i.e., the chair of the dissertation/thesis committee).

### **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.

