

VIII. Behavioral Center of Excellence Awards

VIII-A. Behavioral Center of Excellence Awards

The Department of Defense (DOD) recognizes the critical importance of social, behavioral, and lifestyle factors on breast cancer and challenges the scientific community to focus creative effort on founding cutting-edge behavioral research centers. The intent of Behavioral Center of Excellence Awards (Behavioral Center Awards) is to invigorate the behavioral research community by engaging experts from multiple disciplines to establish centers of excellence that will advance investigations in behavioral breast cancer research. An overall goal of these awards is to establish multidisciplinary centers that will foster an environment conducive to groundbreaking research at the frontier of behavioral science and will ensure the continuance of excellent behavioral research long after the completion of the funding period. An additional objective of the Behavioral Center Award is to provide outstanding training opportunities for future leaders in the fields of behavioral and breast cancer research.

Behavioral Centers should be novel, interactive, multidisciplinary, synergistic, and integrated around a common theme relevant to behavioral research. These awards are designed to stimulate research that addresses new paradigms in the study of behavioral research, challenges existing paradigms, or looks at an existing problem from a new perspective. Applicants are encouraged, but not limited to, addressing interactions among social, psychological, genetic, neuroendocrine, physical, behavioral, immune, and other biological and disease-related factors and outcomes. Research strategies can involve, but are not limited to, quantitative, qualitative, experimental, interview, and observational research.

Behavioral Center Awards should foster multidisciplinary collaborations among established and promising investigators as well as provide training opportunities for new investigators who want to acquire the necessary experience and skills to develop independent careers in behavioral research. Behavioral Center Award proposals must include at least two but no more than five nested predoctoral and/or postdoctoral **trainees**. Additionally, these awards must contain at least two **Research Projects** integrated around a common theme relevant to behavioral research and at least one **Core Facility** to support the proposed work. Collaborations established through Behavioral Centers should result in a **synergistic** program rather than an additive set of subprojects (i.e., the combined efforts in the whole center provide greater benefit than the sum of individual research initiatives). The Center Director of the Behavioral Center, i.e., the principal investigator (PI) of the Overall Program proposal, should have a proven track record of leadership and scientific ability.

Behavioral Center Award proposals consist of the following components:

- An Overall Program proposal that emphasizes the novel, interactive, thematic, and multidisciplinary nature of the Center, describes the qualifications of the Center Director, and outlines the training opportunities to be provided;

- At least two individual Research Project proposals; and
- One or more Core Facility proposals that describe the services and support to be provided by the Core(s) to Center investigators.

These proposal types are discussed in greater detail in Sections VIII-E, VIII-F, and VIII-G.

A strong institutional commitment of resources and space are required for successful competition for Behavioral Center Awards. No mechanism exists that will provide support for Centers after the performance period. Therefore, the proposal must address how institutional commitment will be established and funding for the Center will be sustained beyond the grant's performance period if the proposal is selected for funding.

Approximately \$18M is available for Behavioral Center Awards. Funding for these awards can be requested for an average of \$1M per year for direct costs for a maximum of \$4M over a 4-year performance period, plus indirect costs as appropriate.

In general, the DOD Breast Cancer Research Program (BCRP) does not accept duplicate submissions addressing the same research question. However, a Research Project proposal submitted as part of a Behavioral Center Award proposal may address the same research question as an Idea Award (Section III). If both the Research Project proposal and Idea Award proposal are favorably reviewed, then the Research Project proposal will be funded as part of the Behavioral Center Award. Please refer to the Foreword, item 8 (Duplicate Submissions) on page v for additional details on duplicate submissions.

VIII-B. Scientific Peer Review Evaluation Criteria for Behavioral Center of Excellence Proposals

Scientific peer review of Behavioral Center Award proposals will involve two phases. First, each Research Project and Core Facility within a Behavioral Center will be evaluated separately according to the criteria listed in the following sections (see Sections VIII-B.2 and VIII-B.3). Then, the Overall Program will be evaluated according to the criteria in Section VIII-B.1. To be eligible for funding, each Behavioral Center Award application must include (1) a minimum of two scientifically meritorious projects, (2) at least one Core Facility, and (3) a minimum of two but no more than five nested predoctoral and/or postdoctoral trainees.

VIII-B.1 Scientific Peer Review – Evaluation Criteria for Overall Program Proposals

The Overall Program will be evaluated according to the following criteria:

- **Scientific Relevance and Impact:** Is the proposed research likely to generate a new understanding of behavioral breast cancer research? Does the proposed Behavioral Center have the potential to impact the field of behavioral breast cancer research? Will the proposed research impact the lives of those affected by breast cancer?
- **Proposed Research and Research Management Plan:** Are the proposed projects synergistic? Are scientifically excellent Research Projects proposed? Is the proposed research multidisciplinary? Does the Overall Program proposal for the Behavioral Center present a solid plan to integrate individual Research Projects and the Core(s) into a cohesive overall effort? Are the individual Research Projects and Core goals effectively linked to the overall research strategy?
- **Qualifications of the Behavioral Center Director:** Is there evidence that the Center Director has the leadership, experience, and scientific ability to successfully coordinate and lead the proposed Behavioral Center? Does the Project Director have the training and expertise to oversee the multidisciplinary research of the Behavioral Center and ensure a breast cancer emphasis? Has a management plan been outlined to coordinate and optimize the collaborations and Core services available within the Behavioral Center and other available resources? Does the Center Director have a record of commitment to training future behavioral scientists?
- **Research Environment/Institutional Commitment:** Is there evidence of a strong institutional commitment to sustain the long-term goals of the effort? Have adequate resources been allocated to support the overall research goals of the Behavioral Center? Is the institutional research environment supportive of the effort?
- **Training Environment and Nested Trainees:** Do the investigators on this project have the background, resources, qualifications, and time to supervise and ensure adequate mentoring and training for the number of trainees requested? Is there a senior staff member who is identified and responsible for each trainee? Is the research training properly structured and balanced to give the trainees a strong foundation in behavioral breast cancer research that will prepare and encourage them to follow a career path in this area? What are the methods used to recruit trainees?
- **Budget:** Is the budget reasonable for the proposed research? Is each Research Project and Core Facility adequately funded to perform the research presented? Are adequate funds requested to ensure the success of the entire Behavioral Center?

VIII-B.2 Scientific Peer Review – Evaluation Criteria for Individual Research Projects

Each Research Project within the Behavioral Center will be evaluated according to the following criteria:

- **Research Strategy:** Are the conceptual framework, hypotheses, design, methods, and analyses adequately developed and well-integrated to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternative methods/tactics? Has a sound scientific rationale been presented through a critical review and analysis of the literature, logical reasoning, and/or the use of preliminary data? If statistical analyses are used, is there a clear statistical plan, including power analysis, outlined in the proposal?
- **Scientific Relevance and Impact:** Does this study address a critical problem in breast cancer behavioral research? What will be the effect of these studies on the concepts or methods that drive this field? To what extent will the project, if successful, make an original and important contribution to the goal of eradicating breast cancer and/or advancing behavioral research? Does the proposal make a convincing case for the relevance of the research to breast cancer?
- **Innovation:** Does the research employ novel concepts, approaches, or methods? Are the aims original and innovative? Does the project challenge existing paradigms, develop new methodologies or technologies, or address underexplored or unexplored areas?
- **Principal Investigator and Research Team:** Does the PI show potential for contributing to the breast cancer field? Is the proposed work appropriate to the experience level of the PI and other researchers (if any)? Is there appropriate representation from all the expertise areas needed to conduct the study successfully? If statistical analyses are used, is the appropriate statistical expertise represented?
- **Environment:** Is the scientific environment appropriate for the proposed research? Are the research requirements adequately supported by the scientific environment, necessary resources, and any collaborative arrangements proposed? Is there evidence of institutional support?
- **Budget:** Is the budget reasonable for the research proposed?

VIII-B.3 Scientific Peer Review – Evaluation Criteria for Core Facilities

Each proposed Core Facility will be evaluated according to the following criteria:

- **Integration and Function:** Is the proposed Core Facility well-integrated with each Research Project and the overall goals of the Behavioral Center? Does the Core Facility provide high quality services required by the Research Projects? Are the facilities adequate to provide these services? If statistical analyses are used, is there a clear statistical plan, including power analysis, outlined in the proposal?

- **Personnel:** Are the Core Director and key staff well-qualified to perform the Core services and functions? How will the personnel ensure integration and delivery of Core services and functions to each project? If statistical analyses are used, are personnel with appropriate statistical expertise included?
- **Budget:** Is the budget reasonable for the proposed Core services and functions?

VIII-C. Programmatic Review – Evaluation Criteria

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance. Remembering that the vision of the BCRP is to eradicate breast cancer, how will this proposal advance the field of behavioral and breast cancer research? Does the proposal meet the intent of the Behavioral Center Award mechanism? Additional details on programmatic review procedures and evaluation criteria are included in Section I-C.

VIII-D. Letter of Intent

The BCRP would like to provide Behavioral Center Award applicants as much time as possible to prepare these complex proposals. However, because of the need to plan in advance for peer review, all applicants considering submission of a proposal in response to this Program Announcement are **required to submit a “Letter of Intent” by July 19, 2000 at 4:00 p.m. Eastern Time**, 2 weeks prior to the proposal receipt deadline. This form can be found in Appendix A and submitted as directed, or completed and submitted via the CDMRP web site at <http://cdmrp.army.mil/?/announce/forms>. Please note that proposals submitted without prior submission of the required Letter of Intent may be considered noncompliant.

VIII-E. Overall Program Proposal

The Overall Program for Behavioral Center Award proposals should emphasize the novel, interactive, and multidisciplinary nature of the Center. The Overall Program must represent an innovative, multidisciplinary approach to behavioral breast cancer research that is integrated around a common theme. The Overall Program should be synergistic rather than additive. Plans for continuing the Behavioral Center after the completion of the award should be described in the body of the Overall Program proposal. Please note that the body of the Overall Program proposal is limited to **10 pages**.

The Center Director of the Behavioral Center, i.e. the PI of the Overall Program proposal, should have a proven track record of leadership and scientific ability. In addition, the Center Director should have demonstrated his/her ability to direct and oversee the overall research effort, be able to bring synergy to the project, ensure emphasis in breast cancer research, and have experience in managing multifaceted projects.

Behavioral Center Award proposals must provide training opportunities for new investigators who want to acquire the necessary experience and skills to develop independent careers in behavioral breast cancer research. Support for these nested training positions can be used to prepare individuals for careers in behavioral breast cancer research under the mentorship of an experienced PI. A trainee is defined as a predoctoral student or a recent doctoral degree graduate with limited postdoctoral experience (i.e., 5 years or less at the time of proposal submission). A minimum of two, but no more than five, trainees must be included in the Overall Program proposal. Biographical sketches of no more than 3 pages for each trainee must be submitted and included in the Biographical Sketch section (see Appendix B, part 14 and Appendix E). To Be Named (TBN) trainees are acceptable for the proposal. When TBN trainees are ultimately selected, the CDMRP must be notified and the name and biographical sketch of each candidate must be provided.

For complete Overall Program proposal requirements, please refer to Section VIII-E.1. Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in Sections VIII-B and VIII-C.

VIII-E.1. Overall Program Proposal Preparation

Instructions for proposal preparation are found in Appendix B of this Program Announcement. The following proposal preparation information is specific for the Overall Program proposal for a Behavioral Center Award. Please note that the proposal **receipt deadline is August 2, 2000 at 4:00 p.m. Eastern Time.**

1. Who May Apply – See Appendix B, part 1.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
A Proposal Cover Booklet must be completed for the Overall Program.
4. Peer Review Referral Page – See Appendix B, part 4.
A Peer Review Referral page must be completed for the Overall Program.
5. Proposal Title Page – See Appendix B, part 5.
A Proposal Title page must be completed for the Overall Program.
6. Table of Contents – See Appendix B, part 6.
Use the table of contents on page VIII-11 in your proposal submission. Number all pages consecutively at the bottom center, beginning with the Proposal Title Page. The DOD BCRP recommends that PIs use this table of contents as a guide for assembling all required components of the proposal.

7. Checklist for Proposal Submission – See Appendix B, part 7.
A Checklist for Proposal Submission must be completed for the Overall Program.
8. Proposal Abstracts – See Appendix B, part 8.
Provide technical and public (nontechnical) abstracts that describe the overall aspects of the project. It is important to emphasize the novel, thematic, interactive, multidisciplinary, and synergistic aspects of the Overall Program. Please note that each Research Project and each Core Facility will also complete its own technical and public abstracts.
9. Statement of Work – **Not required** for the Overall Program.
10. Proposal Relevance and Impact Statement – See Appendix B, part 10.
A Proposal Relevance Statement must be completed for the Overall Program. The Overall Program proposal should state explicitly how the proposed work is innovative and relevant to behavioral breast cancer research. Describe how the combination of innovation and relevance in the proposal will make a contribution to the goal of eradicating breast cancer and/or advancing the field in behavioral research.
11. Proposal Body – See Appendix B, part 11.
The Overall Program proposal body is limited to **10 pages**. Presentation of preliminary or pilot data is not required but can be included if available. Figures, tables, and graphs, if used, must be included within this section. If color figures are submitted, it is recommended that they be provided in all copies to ensure their availability to all peer reviewers.

For the **Overall Program**, describe the proposed Behavioral Center using the **general** outline provided below:

- a. **Background:** Provide a brief statement of the ideas and reasoning behind the proposed work. Describe previous experience most pertinent to this proposal. Cite relevant literature references.
- b. **Purpose:** State the purpose of the Behavioral Center and the expected results or outcomes. Indicate how the Overall Program is synergistic rather than additive. An essential component of a successful Behavioral Center will be that the Overall Program as a whole provides greater benefit than the sum of its parts.
- c. **Themes/Objectives:** State concisely the goals of the Overall Program. Describe the theme relevant to behavioral breast cancer research. Address the multidisciplinary and synergistic aspects of the program and describe how the program will impact breast cancer research. A strong institutional commitment of resources and space are required for successful competition for Behavioral Center Awards. No mechanism exists that will provide support for Centers after the performance period. Therefore, the proposal must address how institutional commitment will be established and funding for the Center will be sustained beyond the grant's performance period if the proposal is selected for funding.

- d. Nested Trainees: Describe how the program would provide a good environment to train predoctoral and postdoctoral fellows. Describe the methods used to recruit and retain trainees. For named trainees, identify the staff member who will be responsible for the trainee. Describe the research training in which the trainees will participate such as research, coursework, laboratory techniques, conferences, and journal clubs. Briefly describe how the training will promote the trainees' career development.

12. Abbreviations – See Appendix B, part 12.

13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.

On the first page of the Biographical Sketch section for the Overall Program, present a list of all the participants, starting with the Center Director (the PI) followed by the participants for each Research Project, Core Facility, and named trainee as shown in the following example. Following this list, present the biographical sketches of the Center Director (the PI) and named trainees in the same order as in the list. Biographical sketches of other participants should not be included in the Overall Program proposal, but should be included within the individual Research Project and/or Core Facility proposals as appropriate.

EXAMPLE

List of Biographical Sketches for the Overall Program
(List all essential personnel and their roles)

Center Director: Joe Green, M.D., Ph.D.

Performance Sites: Outstanding University, Nirvana, IN; Respectable Institute, Respectable, IN

Project A: Psychological Factors and Breast Cancer

Project PI: Joe Green, M.D., Ph.D.

Co-investigator: Barbara Black, R.N., Ph.D.

Consultant: Mary Orange, D.Sc. (Respectable Institute)

Project B: Determinants of Decision Making in Breast Cancer Patients

Project PI: Susan Blue, M.D., Ph.D.

Co-investigator: Steven Teal, M.P.H.

Project C: Behavioral and Social Factors Influencing Stress and Symptom Management

Project PI: Carol Indigo, M.S.W., Ph.D.

Co-investigator: Thomas Red, M.D.

Co-investigator: Chris Violet, R.N.

Consultant: Joe Grey, M.S.W.

Core: Biostatistics

Core PI: Joe Green, M.D., Ph.D.

Co-investigator: Barbara Black, R.N., Ph.D.

Co-investigator: Charles Yellow-Green, Ph.D.

Nested Trainees:

Postdoctoral Trainees: Matthew Mauve, Ph.D. and 1 TBN

Predocctoral Trainees: Joan Fuschia and 2 TBN

15. Existing/Pending Support – See Appendix B, part 15.

Existing/Pending Support for the Center Director and Nested Trainees should be included in this section.

16. Facilities/Equipment Description – See Appendix B, part 16.

In the Overall Program description, include any Facilities/Equipment Description not included within individual Research Projects or Core Facilities. Do not duplicate Facilities/ Equipment Description information described with individual Research Projects or Core Facilities.

Indicate institutional support (e.g., institutional Core services) on a separate page. Indicate how existing shared or Core services are accessed and utilized.

17. Administrative Documentation – See Appendix B, part 17.

In the Overall Program proposal submission, provide a letter from a Dean, President, or appropriate official confirming institutional support for the establishment of a Behavioral Center, matching funds for any proposed construction, and plans to continue the program beyond the funding provided by this application as described in the Themes/Objectives section of the proposal body.

18. Detailed Cost Estimate – See Appendix B, part 18 and Appendix F.

For the Overall Program description, please use the Detailed Cost Estimate form. Bring forward the amounts from each Research Project and each Core Facility onto the Overall Program Detailed Cost Estimate form. Examples are shown on pages VIII-12–13. It is essential that the Center Director ensure that the total costs from the individual Research Projects and Core Facilities are correctly summated in the Overall Program Detailed Cost Estimate.

The maximum amount of funds allowed is \$4M in direct costs over a performance period up to 4 years. In the Budget Justification section, provide itemized documentation of any consortium or collaborative costs that are not otherwise described in the individual Research Project sections or the Core section. The amount allotted for travel is \$1,800 per year per PI (Center Director and each Project and Core Facility PI) and \$1,500 per year per trainee to attend scientific/technical meetings.¹ In addition, funding should be requested for PIs and can be requested for each trainee for a one-time, 3½-day meeting to be held in the Baltimore,

¹ Due to reduced registration costs at most meetings, fewer funds are allocated for trainee travel.

Maryland/Washington, DC area to disseminate the results of DOD-sponsored research. Applicants are asked to budget for this meeting in year 2 of the Detailed Cost Estimate form.

Funds for predoctoral trainees can be requested for an average of \$22,000 per year per trainee inclusive of direct and indirect costs over 4 years. Funds for postdoctoral trainees can be requested for an average of \$50,000 per year per trainee inclusive of direct and indirect costs over 4 years. Direct costs can cover tuition, stipend, salary, expenses including research supplies, and travel to scientific meetings as described above. Expenses relevant to the traineeship should be listed under the “Other” category on the Detailed Cost Estimate form. It is requested that indirect charges related to the traineeship be at the lowest rates possible.

19. Instruments – See Appendix B, part 19.

20. Publications and Patent Abstracts – See Appendix B, part 20.

21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadline – See Appendix B, part 22.

Please note that the **receipt deadline for the Behavioral Center Award Letter of Intent is July 19, 2000 at 4:00 p.m. Eastern Time.** Please note that the **receipt deadline for the complete Behavioral Center Award proposal is August 2, 2000 at 4:00 p.m. Eastern Time.**

23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

Principal Investigator: _____

Proposal Title: _____

**Behavioral Center of Excellence Award Proposal: Overall Program
Table of Contents**

	Page Number
Proposal Cover Booklet (12 pages)	
Peer Review Referral Page (no page limit)	i
Proposal Title Page (1-page limit)	1
Table of Contents (1-page limit)	2
Checklist for Proposal Submission (1 page)	3
Technical Abstract (1-page limit)	4
Public Abstract (1-page limit)	5
Proposal Relevance and Impact Statement (1-page limit)	6
Proposal Body (10-page limit)	7
Abbreviations (1-page limit)	___
References (no page limit)	___
List of Biographical Sketches for the Overall Program	___
Biographical Sketches (3-page limit each)	
Center Director (PI)	___
Named Trainees	___
Existing/Pending Support (no page limit)	___
Facilities/Equipment Description (no page limit)	___
Administrative Documentation (no page limit)	
Letter confirming institutional support for the establishment of the Behavioral Center	___
Letters of Collaboration (if applicable)	___
Detailed Cost Estimate (no page limit)	___
Instruments (no page limit)	___
Publications and Patent Abstracts (5-document limit)	___

Behavioral Center of Excellence Awards

EXAMPLE
Detailed Cost Estimate for the Overall Program
(List all essential personnel for each project)

Principal Investigator (last, first, middle)

DETAILED BUDGET FOR INITIAL BUDGET PERIOD					FROM	THROUGH	
PERSONNEL		TYPE APPT. (MONTHS)	ANNUAL BASE SALARY	% EFFORT ON PROJECT	DOLLAR AMOUNT REQUESTED (OMIT CENTS)		
NAME	ROLE ON PROJECT				SALARY REQUESTED	FRINGE BENEFITS	TOTALS
Joe Green, M.D., Ph.D.	Center Director (PI)				Note: Salary may be concurrent with project or core		
<u>Project A</u> Joe Green, M.D., Ph.D. Barbara Black, R.N., Ph.D. Mary Orange, D.Sc.	Project PI Co-Invest. Consultant				Total Project A salaries	Total Project A fringes	Total Project A salaries + fringes
<u>Project B</u> Susan Blue, M.D., Ph.D. Steven Teal, M.P.H.	Project PI Co-Invest.				Total Project B salaries	Total Project B fringes	Total Project B salaries + fringes
<u>Project C</u> Carol Indigo, M.S.W., Ph.D. Thomas Red, M.D. Chris Violet, R.N. Joe Grey, M.S.W.	Project PI Co-Invest. Co-Invest. Consultant				Total Project C salaries	Total Project C fringes	Total Project C salaries + fringes
<u>Core</u> Joe Green, M.D., Ph.D. Barbara Black, R.N. Charles Yellow-Green, Ph.D.	Core PI Co-Invest. Co-Invest.				Total Core salaries	Total Core fringes	Total Core salaries + fringes
Nested Trainees Matthew Mauve, Ph.D. and 1 TBN Joan Fuschia and 2 TBN	Postdocs Predocs				Total Core salaries	Total Core fringes	Total Core salaries + fringes
SUBTOTALS →→→→→for all projects					Total salaries	Total fringes	\$ Total salaries + fringes
CONSULTANT COSTS PROJECT A \$X; PROJECT B \$X; PROJECT C \$X; CORE \$X							Total
MAJOR EQUIPMENT (ITEMIZE) PROJECT A \$X; PROJECT B \$X; PROJECT C \$X; CORE \$X							Total
MATERIALS, SUPPLIES, AND CONSUMABLES (ITEMIZE BY CATEGORY) PROJECT A \$X; PROJECT B \$X; PROJECT C \$X; CORE \$X; COSTS ASSOCIATED WITH NESTED TRAINEES \$X							Total
TRAVEL COSTS PROJECT A \$X; PROJECT B \$X; PROJECT C \$X; CORE \$X; NESTED TRAINEES \$X							Total
RESEARCH-RELATED PATIENT COSTS PROJECT A \$X; PROJECT B \$X; PROJECT C \$X; CORE \$X							Total
OTHER EXPENSES (ITEMIZE BY CATEGORY) PROJECT A \$X; PROJECT B \$X; PROJECT C \$X; CORE \$X; COSTS ASSOCIATED WITH NESTED TRAINEES \$X							Total
SUBTOTAL OTHER DIRECT COSTS FOR INITIAL BUDGET PERIOD →→→→→							\$ Total
					DIRECT COST PROJECT A \$X; PROJECT B \$X; PROJECT C \$X; CORE \$X		Total
CONSORTIUM COSTS					INDIRECT COST PROJECT A \$X; PROJECT B \$X; PROJECT C \$X; CORE \$X		Total
TOTAL PERSONNEL AND OTHER DIRECT COSTS FOR INITIAL BUDGET PERIOD							\$ Total
TOTAL INDIRECT COSTS FOR INITIAL BUDGET PERIOD							\$ Total
TOTAL COSTS FOR INITIAL BUDGET PERIOD							\$ Total

Behavioral Center of Excellence Awards

EXAMPLE
Detailed Cost Estimate for the Overall Program

Principal Investigator (last, first, middle)

BUDGET FOR ENTIRE PROPOSED PERIOD OF SUPPORT						
BUDGET CATEGORY TOTALS*	INITIAL BUDGET PERIOD (FROM FORM PAGE 1)	ADDITIONAL YEARS OF SUPPORT REQUESTED				TOTAL
		2 nd	3 rd	4 th	5 th	
PERSONNEL	Total	Total	Total	Total		Total
FRINGE BENEFITS	Total	Total	Total	Total		Total
CONSULTANT COSTS	Total	Total	Total	Total		Total
MAJOR EQUIPMENT	Total	Total	Total	Total		Total
MATERIALS, SUPPLIES, AND CONSUMABLES	Total	Total	Total	Total		Total
TRAVEL COSTS	Total	Total	Total	Total		Total
RESEARCH-RELATED PATIENT COSTS	Total	Total	Total	Total		Total
OTHER EXPENSES	Total	Total	Total	Total		Total
SUBTOTAL DIRECT COSTS	Total	Total	Total	Total		Total
CONSORTIUM COSTS	DIRECT	Total	Total	Total		Total
	INDIRECT	Total	Total	Total		Total
TOTAL DIRECT COSTS	Total	Total	Total	Total		Total
TOTAL INDIRECT COSTS	Total	Total	Total	Total		Total
TOTAL DIRECT COSTS FOR ENTIRE PROPOSED PERIOD OF SUPPORT				(No more than \$4M over 4 years) \$ Total		
TOTAL INDIRECT COSTS FOR ENTIRE PROPOSED PERIOD OF SUPPORT				\$ Total		
TOTAL COSTS FOR THE ENTIRE PROPOSED PERIOD OF SUPPORT THIS AMOUNT SHOULD AGREE WITH THAT ENTERED ON THE PROPOSAL COVER BOOKLET, ITEM #4				\$ Total		

* Itemize all budget categories for additional years on the *Justification* page that follows.

VIII-F. Research Project Proposals

Behavioral Center Award proposals must support at least two multidisciplinary Research Projects. Quantitative, qualitative, experimental, observational, and interview research are encouraged to study interactions among social, psychological, genetic, neuroendocrine, physical, behavioral, immune, and other biological and disease-related factors and outcomes. Research Projects should be novel, interactive, multidisciplinary, and integrated around a common theme relevant to behavioral research. It is the responsibility of the investigator to clearly articulate how the proposed research is relevant to breast cancer research.

Proposals may be of the type suitable for Idea Awards (Section III) or more traditional developmental research projects. The research should address new or understudied avenues in behavioral research. The research may represent a new paradigm, challenge existing paradigms, or look at an existing problem from a new perspective. The proposed studies may be untested, but should have a high probability of revealing new avenues of investigation. Although this research is inherently risky in nature, the research plan must demonstrate solid scientific judgment and rationale through a critical review and analysis of the literature and/or logical reasoning. Therefore, preliminary or pilot data are not required but may be included if available.

For complete Research Project proposal requirements, please refer to Section VIII-F.1. Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in Sections VIII-B and VIII-C.

VIII-F.1. Research Project Proposal Preparation

Instructions for proposal preparation are found in Appendix B of this Program Announcement. The following proposal preparation information is specific for Research Projects within the Behavioral Center Award Overall Program proposal. The body of each Research Project proposal is limited to **10 pages**. Please note that the **receipt deadline for the complete Behavioral Center Award proposal is August 2, 2000 at 4:00 p.m. Eastern Time.**

1. Who May Apply – See Appendix B, part 1.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
A Proposal Cover Booklet must be completed for each Research Project.
4. Peer Review Referral Page – See Appendix B, part 4.
A Peer Review Referral page must be completed for each Research Project.
5. Proposal Title Page – See Appendix B, part 5.
A Proposal Title page must be completed for each Research Project.

6. Table of Contents – See Appendix B, part 6.
Use the table of contents on page VIII-17 in your proposal submission. Number all pages consecutively at the bottom center, beginning with the Proposal Title Page. The DOD BCRP recommends that PIs use this table of contents as a guide for assembling all required components of the proposal.
7. Checklist for Proposal Submission – See Appendix B, part 7.
A Checklist for Proposal Submission must be completed for each Research Project.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
10. Proposal Relevance and Impact Statement – See Appendix B, part 10.
In addition to the instructions found in Appendix B, part 10, applicants should state explicitly (within the 1-page limit) how the proposed work is innovative and relevant to breast cancer biology, prevention, detection, diagnosis, and/or therapy. Articulate how the combination of innovation and relevance in the proposal will impact and further programmatic goals.
11. Proposal Body – See Appendix B, part 11.
Each Research Project proposal body is limited to **10 pages**. Presentation of preliminary or pilot data is not required but can be included if available. Figures, tables, and graphs, if used, must be included within this section. If color figures are submitted, it is recommended that they be provided in all copies to ensure their availability to all peer reviewers.

For each **Research Project**, describe the proposed project using the **general** outline provided below:
 - a. Background: Provide a brief statement of the ideas and reasoning behind the proposed work. Describe previous experience most pertinent to this proposal. Cite relevant literature references.
 - b. Hypothesis/Purpose: State the hypothesis to be tested and the expected results.
 - c. Objectives: State concisely the specific aims of the study.
 - d. Methods: Give details about the experimental design and methodology. If the methodology is new or unusual, describe it in sufficient detail for evaluation. If statistical analyses are used, provide a clear statistical plan, including power analysis.
12. Abbreviations – See Appendix B, part 12.
13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.
Biographical sketches for Research Project investigators, collaborators, and other key personnel should be included within this section. Biographical sketches of participants in multiple individual projects and/or the core facility should be duplicated in each relevant proposal.
15. Existing/Pending Support – See Appendix B, part 15.
Existing/Pending Support for investigators associated with this Research Project should be included within this section.
16. Facilities/Equipment Description – See Appendix B, part 16.
Facilities/Equipment Description for Research Projects should be included within this section. Do not duplicate information provided in the Core Facility proposal(s).
17. Administrative Documentation – See Appendix B, part 17.
18. Detailed Cost Estimate – See Appendix B, part 18 and Appendix F.
Use the Detailed Cost Estimate form to provide budgetary information to be brought forward for the Overall Program. The maximum total amount of funds allowed for the entire Behavioral Center Award is \$4M in direct costs over a performance period up to 4 years. The amount allotted for travel is \$1,800 per year per PI (Center Director and each Project and Core Facility PI) to attend scientific/technical meetings. In addition, funding should be requested for PIs for a one-time, 3½-day meeting to be held in the Baltimore, Maryland/ Washington, DC area to disseminate the results of DOD-sponsored research. Applicants are asked to budget for this meeting in year 2 of the Detailed Cost Estimate form. In the Budget Justification section, provide itemized documentation of any consortium or collaborative costs.
19. Instruments – See Appendix B, part 19.
20. Publications and Patent Abstracts – See Appendix B, part 20.
21. Proposal Submission – See Appendix B, part 21.
22. Receipt Deadline – See Appendix B, part 22.
Please note that the **receipt deadline for the complete Behavioral Center Award proposal is August 2, 2000 at 4:00 p.m. Eastern Time.**
23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

Center Director (PI): _____

Overall Program Title: _____

Research Project PI: _____

Project Title: _____

**Behavioral Center of Excellence Award Proposal: Research Project
Table of Contents**

	Page Number
Proposal Cover Booklet (12 pages)	
Peer Review Referral Page (no page limit)	i
Proposal Title Page (1-page limit)	1
Table of Contents (1-page limit)	2
Checklist for Proposal Submission (1 page)	3
Technical Abstract (1-page limit)	4
Public Abstract (1-page limit)	5
Statement of Work (2-page limit)	6
Proposal Relevance and Impact Statement (1-page limit)	___
Proposal Body (10-page limit)	___
Abbreviations (1-page limit)	___
References (no page limit)	___
Biographical Sketches (3-page limit each)	
Research Project PI	___
Key personnel (including collaborating investigators and support staff)	___
Existing/Pending Support (no page limit)	___
Facilities/Equipment Description (no page limit)	___
Administrative Documentation (no page limit)	
Letters of support from collaborating individuals and/or institutions	___
Detailed Cost Estimate (no page limit)	___
Instruments (no page limit)	___
Publications and Patent Abstracts (5-document limit)	___

VIII-G. Core Facility Proposal(s)

Behavioral Center Award proposals must contain at least one Core Facility to support the proposed work. A Core Facility provides shared resources or services that are used by the Research Projects in the Center. A Core Facility can include administrative support, information management systems, statistical/survey services, registries, laboratory services, etc.

For complete Core Facility proposal requirements, please refer to Section VIII-G.1. Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in Sections VIII-B and VIII-C.

VIII-G.1. Core Facility Proposal Preparation

Instructions for proposal preparation are found in Appendix B of this Program Announcement. The following proposal preparation information is specific for a Core Facility within the Behavioral Center proposal. The body of each Core Facility proposal is limited to **10 pages**. Please note that the **receipt deadline for the complete Behavioral Center Award proposal is August 2, 2000 at 4:00 p.m. Eastern Time.**

1. Who May Apply – See Appendix B, part 1.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
A Proposal Cover Booklet must be completed for each Core Facility.
4. Peer Review Referral Page – See Appendix B, part 4.
A Peer Review Referral page must be completed for each Core Facility.
5. Proposal Title Page – See Appendix B, part 5.
A Proposal Title page must be completed for each Core Facility.
6. Table of Contents – See Appendix B, part 6.
Use the table of contents on page VIII-21 in your proposal submission. Number all pages consecutively at the bottom center, beginning with the Proposal Title Page. The DOD BCRP recommends that PIs use this table of contents as a guide for assembling all required components of the proposal.
7. Checklist for Proposal Submission – See Appendix B, part 7.
A Checklist for Proposal Submission must be completed for each Core Facility.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.

10. Proposal Relevance and Impact Statement – See Appendix B, part 10.

In addition to the instructions found in Appendix B, part 10, Core Facility applicants should state explicitly how the proposed work is relevant to the Overall Program. Articulate how the Core Facility will impact and further programmatic goals. Describe how the Core Facility will make a contribution to the goal of eradicating breast cancer and advancing the field of behavioral research.

11. Proposal Body – See Appendix B, part 11.

The Core Facility proposal body is limited to **10 pages**. Figures, tables, and graphs, if used, must be included within this section. If color figures are submitted, it is recommended that they be provided in all copies to ensure their availability to all peer reviewers.

For each **Core Facility**, describe the proposed project using the **general** outline provided below:

- a. **Function:** Describe the resources or services that this Core Facility will provide to the Overall Program, the facilities to support the services, and the anticipated usage of the facilities. *If construction is proposed as part of the effort, institutional matching funds are required to sustain the long-term goals of the Center.* Describe previous experience most pertinent to this proposal. Cite relevant literature references.
- b. **Integration:** State concisely how this Core Facility will integrate each Research Project and the overall goals of the Center. Address how personnel will ensure integration and delivery of services and functions to each project.
- c. **Methods:** Give details about the experimental design and methodology. If the methodology is new or unusual, describe it in sufficient detail for evaluation.

12. Abbreviations – See Appendix B, part 12.

13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.

Biographical sketches for Core Facility investigators, collaborators, and other key personnel should be included within this section. Biographical sketches of each participant in multiple Research Projects and/or a Core Facility(ies) should be duplicated in all relevant proposals.

15. Existing/Pending Support – See Appendix B, part 15.

Existing/Pending Support for investigators associated with this Core Facility should be included within this section.

16. Facilities/Equipment Description – See Appendix B, part 16.

The Facilities/Equipment Description for each Core Facility should be included within this section. Include a description of how the proposed Core Facility is to be accessed and utilized. This may duplicate some information provided in the Overall Program proposal.

17. Administrative Documentation – See Appendix B, part 17.

18. Detailed Cost Estimate – See Appendix B, part 18 and Appendix F.

Use the Detailed Cost Estimates to provide budgetary information to be brought forward for the Overall Program. Please note, existing core facilities for which no funds are being requested should be described in Facilities/Equipment Description. The maximum total amount of funds allowed is \$4M in direct costs over a performance period up to 4 years. The amount allotted for travel is \$1,800 per year per PI (Center Director and each Research Project and Core Facility PI) to attend scientific/technical meetings. In addition, funding should be requested for PIs for a one-time, 3½-day meeting to be held in the Baltimore, Maryland/Washington, DC area to disseminate the results of DOD-sponsored research. Applicants are asked to budget for this meeting in year 2 of the Detailed Cost Estimate form. In the Budget Justification section, provide itemized documentation of any consortium or collaborative costs.

19. Instruments – See Appendix B, part 19.

20. Publications and Patent Abstracts – See Appendix B, part 20.

21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadline – See Appendix B, part 22.

Please note that the **receipt deadline for the complete Behavioral Center Award proposal is August 2, 2000 at 4:00 p.m. Eastern Time.**

23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

Center Director (PI): _____

Overall Program Title: _____

Core Facility PI: _____

Core Title: _____

**Behavioral Center of Excellence Award Proposal: Core Facility
Table of Contents**

	Page Number
Proposal Cover Booklet (12 pages)	
Peer Review Referral Page (no page limit)	i
Proposal Title Page (1-page limit)	1
Table of Contents (1-page limit)	2
Checklist for Proposal Submission (1 page)	3
Technical Abstract (1-page limit)	4
Public Abstract (1-page limit)	5
Statement of Work (2-page limit)	6
Proposal Relevance and Impact Statement (1-page limit)	___
Proposal Body (10-page limit)	___
Abbreviations (1-page limit)	___
References (no page limit)	___
Biographical Sketches (3-page limit each)	
Core Facility PI	___
Key Personnel (including collaborating investigators and support staff)	___
Existing/Pending Support (no page limit)	___
Facilities/Equipment Description (no page limit)	___
Administrative Documentation (no page limit)	
Letters of support from collaborating individuals and/or institutions	___
Detailed Cost Estimate (no page limit)	___
Instruments (no page limit)	___
Publications and Patent Abstracts (5-document limit)	___

IX. Undergraduate Summer Training Program Awards

IX-A. Undergraduate Summer Training Program Awards

The intent of the Undergraduate Summer Training Program Awards (Undergraduate Awards) is to establish summer breast cancer training programs that will provide meaningful research experiences for undergraduate students. A goal of the Undergraduate Award is to attract talented students to careers that focus on breast cancer research. It is anticipated that these awards will provide educational and training opportunities for undergraduate students at an important career decision-making point.

Undergraduate Award proposals must have a minimum of two and a maximum of eight undergraduate students per year. Students should spend 8-12 weeks of the summer participating in the program. The undergraduate students in this program can be named or designated “to be named” (TBN) at the time of proposal submission.

One or more investigators may be involved in the training program. When a proposal includes multiple staff, a single individual should be clearly designated as the Program Director, i.e., the principal investigator (PI) for the proposal.

Applications are solicited from all eligible institutions. Eligible institutions include for-profit and nonprofit organizations, public and private, such as universities, colleges, hospitals, laboratories, companies, and agencies of local, state, and federal governments. The Congressionally Directed Medical Research Programs (CDMRP) encourages proposals from Historically Black Colleges and Universities/Minority Institutions for Undergraduate Awards (see Appendix B, part 1).

Undergraduate Award proposals should address the following key aspects for the proposed breast cancer undergraduate training program: (1) the program vision and goals, particularly as they relate to breast cancer; (2) the program faculty/staff; (3) the training program; and (4) the trainee recruitment plans. In the development of recruitment plans, methods to encourage the participation of women and minority students should be considered. For complete proposal requirements, please refer to Section IX-E. Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in Sections IX-B and IX-C.

Approximately \$2.5M will be available for Undergraduate Awards. Funding for these awards can be requested for a \$4,000 stipend per student per summer and \$10,000/year administrative costs over a 3-year performance period for a maximum total of \$126,000 in direct costs. Direct costs can cover tuition, student stipends, faculty salary, and expenses including research supplies.

IX-B. Scientific Peer Review – Evaluation Criteria for Undergraduate Summer Training Award Proposals

Undergraduate Award proposals will be evaluated according to the criteria listed below.

- **Training Program:** Does the training program offer a structured, focused experience in breast cancer research? Does the program ensure direct, structured interaction between mentor and student? Have plans been developed to provide students with a stimulating, problem-solving research experience? Does the program provide mechanisms for students to summarize and present their work? Does the training program provide opportunities for students to interact with other program investigators outside the laboratory in which they are working? Has a plan been developed to track the students' future careers and the effectiveness of the program for initiating careers in breast cancer research?
- **Program Director and Training Staff:** Does the Program Director have the background, research qualifications, and ability to lead and successfully manage an undergraduate breast cancer training program? What are the research interests and records of past experience in training and mentoring undergraduates of the participating investigators? Is there a sufficient number of investigators participating in the program to ensure adequate mentoring and supervision for the number of student trainees?
- **Trainees:** What methods are used to recruit trainees? Are the selection criteria for admitting students into the program appropriate? Are the recruitment methods likely to attract students with a high likelihood of pursuing a career in breast cancer research? What is the overall quality of present and former students, if applicable? Have former undergraduate trainees (if any) gone on to pursue careers in breast cancer research? Is the size, i.e., number of trainees, appropriate for the available faculty/resources?
- **Relevance:** Does the institution make a convincing case for its commitment to develop an undergraduate summer training program focused on breast cancer research?
- **Institutional Environment:** Is there a strong institutional commitment to research training in breast cancer? Does the institution have other undergraduate research opportunities? Does the institution provide an intellectually stimulating environment and facilitate interaction among mentors and trainees? Does the institution provide adequate laboratory facilities, equipment, and other relevant resources to support these training activities?
- **Budget:** Is the budget reasonable for the proposal?

IX-C. Programmatic Review – Evaluation Criteria for Undergraduate Summer Training Program Awards

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance. For example, how will the proposal contribute to the program's goal of eradicating breast cancer? Does the proposal meet the intent of the Undergraduate Award mechanism? Additional details on programmatic review procedures and evaluation criteria are included in Section I-C.

IX-D. Letter of Intent

All applicants considering submission of a proposal in response to this Program Announcement are requested to submit a "Letter of Intent" no later than 2 weeks prior to the proposal receipt deadline. This form can be found in Appendix A and submitted as directed, or completed and submitted via the CDMRP web site at <http://cdmrp.army.mil/?/announce/forms>.

IX-E. Proposal Preparation

Instructions for proposal preparation are found in Appendix B of this Program Announcement. The following proposal preparation information is specific for Undergraduate Awards. Please note that the body of the proposal is limited to **6 pages** and that the **receipt deadline is June 7, 2000 at 4:00 p.m. Eastern Time**.

1. Who May Apply – See Appendix B, part 1.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
4. Peer Review Referral Page – See Appendix B, part 4.
5. Proposal Title Page – See Appendix B, part 5.
6. Table of Contents – See Appendix B, part 6.
Use the table of contents at the end of this section in your proposal submission. Number all pages consecutively at the bottom center, beginning with the Proposal Title Page. The Department of Defense (DOD) BCRP recommends that PIs use this table of contents as a guide for assembling all required components of the proposal.
7. Checklist for Proposal Submission – See Appendix B, part 7.

8. Proposal Abstracts – See Appendix B, part 8.

9. Statement of Work – See Appendix B, part 9 and Appendix D.
The first summer program should be planned for summer 2001.

10. Proposal Relevance Statement – See Appendix B, part 10.

In addition to the instructions found in Appendix B, part 10, Undergraduate Award proposals should describe (within the 1-page limit) how the training program will be designed to offer a structured, well-rounded, focused experience in breast cancer research. Include how the training program will foster the likelihood of its trainees pursuing a career in breast cancer research.

11. Proposal Body – See Appendix B, part 11.

The body of Undergraduate Award proposals is limited to **6 pages**. Figures, tables, and graphs, if used, must be included within this section. If color figures are submitted, it is recommended that they be provided in all copies to ensure their availability to all peer reviewers.

Undergraduate Award proposals should address the following key aspects of the proposed training program: (1) the program vision and goals, particularly as they relate to breast cancer; (2) the program faculty/staff; (3) the training program; and (4) the trainee recruitment plans. As part of the discussion of each of these key aspects, the body of the proposal should address the breast cancer emphasis of the program; the qualifications of the Program Director and any additional participating investigators; an expanded description of the training environment and facilities; the proposed research opportunities available for trainees; the recruitment of students into the program; the selection criteria for students; the method of assigning students to a mentor; and the plan for tracking students after participation in the program to determine how many go on to pursue careers involving breast cancer research. In the development of recruitment plans, methods to encourage the participation of female and minority students should be considered. An outline of any course or seminar series that might be available as part of the training program could be included. Additional information on the participating investigators/trainees and institutional support is to be described under items 14 and 17 in this section.

12. Abbreviations – See Appendix B, part 12.

13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.

a. Mentor Biographical Sketches

Biographical sketches should include a section describing the Program Director's (the PI's) and training staff members' experience in the field of breast cancer research and

previous experience training and mentoring students, particularly undergraduates. A list of significant publications in breast cancer research should be incorporated into the biographical sketches.

b. Trainee Biographical Sketches

A biographical sketch of no more than 3 pages must be included in this section for **named** trainees. The biographical sketch form in Appendix E should be used, but emphasis should be placed on the trainee's interests and career goals, relevant coursework and extracurricular activities, and any past experience in scientific research. When TBN trainees are ultimately selected, the CDMRP must be notified, and the name and biographical sketch of each trainee must be provided.

15. Existing/Pending Support – See Appendix B, part 15.

16. Facilities/Equipment Description – See Appendix B, part 16.

17. Administrative Documentation – See Appendix B, part 17.

Provide the following administrative documentation in the proposal submission:

- A letter of support from the institution indicating a strong commitment to the summer training program.
- Letters of support from all participating investigators (except the Program Director, the PI and author of the proposal) demonstrating their commitment to support the breast cancer Undergraduate Summer Training Program.

18. Detailed Cost Estimate – See Appendix B, part 18 and Appendix F.

Funding for these awards can be requested for a \$4,000 stipend per student per summer and \$10,000/year administrative costs over a 3-year performance period for a maximum total of \$126,000 in direct costs. Training awards frequently have a different institutional overhead charge. All training investigators are encouraged to check with their institution concerning overhead costs. Direct costs can cover tuition, student stipends, faculty salary, and expenses including research supplies. Funding should be requested for the Program Director to attend a one-time, 3½-day meeting to be held in the Baltimore, Maryland/Washington, DC area to disseminate the results of DOD-sponsored research. Applicants are asked to budget for this meeting in year 2 of the “Detailed Cost Estimate.”

19. Instruments – See Appendix B, part 19.

20. Publications and Patent Abstracts – See Appendix B, part 20.

21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadline – See Appendix B, part 22.

Please note that the **receipt deadline for Undergraduate Award proposals is June 7, 2000 at 4:00 p.m. Eastern Time.**

23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

Principal Investigator: _____

Proposal Title: _____

**Undergraduate Summer Training Program Award Proposal
Table of Contents**

	Page Number
Proposal Cover Booklet (12 pages)	
Peer Review Referral Page (no page limit)	i
Proposal Title Page (1-page limit)	1
Table of Contents (1-page limit)	2
Checklist for Proposal Submission (1 page)	3
Technical Abstract (1-page limit)	4
Public Abstract (1-page limit)	5
Statement of Work (2-page limit)	6
Proposal Relevance Statement (1-page limit)	_____
Proposal Body (6-page limit)	_____
Abbreviations (1-page limit)	_____
References (no page limit)	_____
Biographical Sketches (3-page limit each)	
Program Director (PI)	_____
Participating Staff	_____
Named Trainees	_____
Existing/Pending Support (no page limit)	_____
Facilities/Equipment Description (no page limit)	_____
Administrative Documentation (no page limit)	
Letter of institutional support	_____
Letters of support from all participating investigators	_____
Detailed Cost Estimate (no page limit)	_____
Instruments (no page limit)	_____
Publications and Patent Abstracts (5-document limit)	_____

X. Predoctoral Fellowship Awards

X-A. Predoctoral Fellowship Awards

The intent of Predoctoral Fellowship Awards is to support promising graduate students studying breast cancer under the guidance of a designated mentor. The overall goal of Predoctoral Fellowship Awards is to prepare individuals for careers in breast cancer research. Individuals enrolled in an M.D./Ph.D. program are encouraged to apply. Important aspects of these applications include (1) the mentor and the training environment, (2) the candidate's qualifications, and (3) the candidate's plans after the completion of the proposed project.

Predoctoral Fellowship proposals, with appropriate direction from the mentor, should be written and signed by the trainee as the principal investigator (PI) and author of the proposal. Proposals will not be evaluated nor will awards be made for "to be named" trainees. Predoctoral Fellowship applicants must describe both the proposed research project and their career goals in the body of the proposal. The mentor is also responsible for preparing certain components of the proposal. For complete proposal requirements, please refer to Section X-E. Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in Sections X-B and X-C.

Approximately \$4.5M will be available for Predoctoral Fellowship Awards. Predoctoral Fellowship Awards can be requested for an average of \$22,000 per year, inclusive of direct and indirect costs for a maximum of \$66,000 over 3 years. Direct costs can cover tuition, stipend, expenses (including research supplies), and travel to scientific meetings. These awards are intended to support dissertation research rather than rotations or basic course work.

X-B. Scientific Peer Review – Evaluation Criteria for Predoctoral Fellowship Proposals

Predoctoral Fellowship proposals will be evaluated according to the criteria listed below:

- **Candidate:** Do the candidate's achievements to date (as measured by background, academic performance, awards, and honors) make him/her qualified for predoctoral training? What are the candidate's stated career goals? What are the candidate's research plans after the completion of this project? Do the letters of recommendation support the candidate's abilities and potential for a productive research career?
- **Mentor:** Does the mentor have the background, qualifications, and time to supervise the candidate's training program? What has been the mentor's previous research training experience with candidates for advanced degrees?

- **Research Training and Environment:** Are the research and training programs properly structured and balanced to ensure that the trainee will acquire the necessary skills and knowledge about the scientific area being studied? Is the research proposed likely to provide the candidate with a strong foundation in breast cancer research that will prepare and encourage him/her to follow a career path in this area? Does the training take place in an environment that is appropriate to accomplishing the candidate's goals? Are the research and training requirements adequately supported by the scientific environment, necessary resources, and any collaborative arrangements proposed?
- **Relevance:** Does the predoctoral training relate to an important problem in breast cancer research? If the aims of the training are achieved, will there be potential benefits to patients with, or populations at risk for, breast cancer? Does the application make a convincing case for the relevance of the research and training to breast cancer?
- **Budget:** Is the budget reasonable for the work proposed? Are there sufficient overall financial resources to support the proposed research?

X-C. Programmatic Review – Evaluation Criteria for Predoctoral Fellowship Proposals

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance. For example, how will the proposal contribute to the program's goal of eradicating breast cancer? Will the project lead to new insights into the biology, etiology, prevention, diagnosis, detection, and/or treatment of breast cancer? Does the proposal meet the intent of the Predoctoral Fellowship Award mechanism? Additional details on programmatic review procedures and evaluation criteria are included in Section I-C.

X-D. Letter of Intent

All applicants considering submission of a proposal in response to this Program Announcement are requested to submit a "Letter of Intent" no later than 2 weeks prior to the proposal receipt deadline. This form can be found in Appendix A and submitted as directed, or completed and submitted via the Congressionally Directed Medical Research Programs web site at <http://cdmrp.army.mil/?/announce/forms>.

X-E. Proposal Preparation

Instructions for proposal preparation are found in Appendix B of this Program Announcement. The following proposal preparation information is specific for Predoctoral Fellowships. Please note that the body of the proposal is limited to **6 pages** and that the **receipt deadline is June 7, 2000 at 4:00 p.m. Eastern Time**.

1. Who May Apply – See Appendix B, part 1.
Predoctoral Fellowship awards are made to promising graduate students under the guidance of a designated mentor. Individuals enrolled in an M.D./Ph.D. program are encouraged to apply.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
4. Peer Review Referral Page – See Appendix B, part 4.
5. Proposal Title Page – See Appendix B, part 5.
6. Table of Contents – See Appendix, part 6.
Use the table of contents at the end of this section in your proposal submission. Number all pages consecutively at the bottom center, beginning with the Proposal Title Page. The DOD BCRP recommends that PIs use this table of contents as a guide for assembling all required components of the proposal.
7. Checklist for Proposal Submission – See Appendix B, part 7.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
10. Proposal Relevance and Impact Statement – See Appendix B, part 10.
In addition to the instructions found in Appendix B, part 10, predoctoral candidates should describe explicitly (within the 1-page limit) the training value of the proposed research concept relative to the applicant’s career goals and how the proposed research is pertinent to one or more critical issues in breast cancer biology, etiology, prevention, detection, diagnosis, and/or therapy. Articulate how the combination of training and relevance to breast cancer will prepare the candidate for a career in the battle against breast cancer.
11. Proposal Body – See Appendix B, part 11.
The body of Predoctoral Fellowship proposals is limited to **6 pages** and should include descriptions of the research project, and training and career plans as described below. Figures, tables, and graphs should be included within this section. If color figures are submitted, it is recommended that they be provided in all copies to ensure their availability to all peer reviewers.

Address the following in the body of the proposal:
 - a. Description of Research Project: Describe the proposed project using the **general** outline provided below:

- i. **Background:** Briefly describe the ideas behind the proposed work and cite relevant literature references.
 - ii. **Hypothesis/Rationale/Purpose:** State the hypothesis to be tested and the expected results.
 - iii. **Objectives:** State concisely the specific aims and research strategy of the project.
 - iv. **Methods:** Give details about the experimental design and methodology.
- b. **Career/Research Plans:** Briefly describe the candidate's career development plan and how the proposed training will promote the candidate's career development in the area of breast cancer research. Discuss the applicant's research plans after the completion of this award.
12. **Abbreviations** – See Appendix B, part 12.
13. **References** – See Appendix B, part 13.
14. **Biographical Sketches** – See Appendix B, part 14 and Appendix E.
For Predocctoral Fellowship proposals, biographical sketches should be prepared for the candidate (the PI), the mentor, and collaborating investigators. Each sketch is limited to 3 pages. The candidate's biographical sketch should include a list of publications, a summary of the candidate's research experience, and the candidate's potential for contribution to the field of breast cancer research. The mentor's biographical sketch should include his/her qualifications, especially in breast cancer research, and previous experience in training students and predocctoral trainees.
15. **Existing/Pending Support** – See Appendix B, part 15.
It is especially important to list the mentor's existing/pending support as evidence that there is adequate support in the training environment for the predocctoral trainee.
16. **Facilities/Equipment Description** – See Appendix B, part 16.
17. **Administrative Documentation** – See Appendix B, part 17.
Provide the following administrative documentation in the proposal submission:
- Official transcripts from undergraduate institutions and graduate-level courses completed to date.
 - A description of the training environment prepared by the mentor (1-page limit). Describe the research training in which the applicant will participate such as coursework, laboratory techniques, conferences, and journal clubs. The mentor should provide a brief overview of research being performed under his/her direction. Information should be

provided on how the mentor can assist in training the applicant for a career in breast cancer research. The mentor's history in training other predoctoral students should also be outlined. A brief summary of the laboratory's resources should be outlined to demonstrate the adequacy of available support for the trainee's project. (Specific details on existing support should be covered in item 15, see page X-4.)

- A list of the names, positions, and grant function (e.g., mentor, recommender) of authors of the following letters of support should be included in the Administrative Documentation section of the application to document the sources of these letters. However, please attach the letters in **sealed** envelopes with a binder clip to the original proposal underneath the Proposal Cover Booklet.
 - a. *A letter of support from the **mentor** describing his/her commitment to the training/ career development/mentorship of the applicant and the nature of the proposed collaboration/training.* Emphasis should be placed on the applicant's potential as a future breast cancer researcher and the mentor's degree of interaction in training the candidate. This letter is to be sent from the mentor to the applicant in a **sealed** envelope for forwarding, unopened, with the application. To ensure that the mentor's letter of support is not misplaced, the sealed envelope should be attached by binder clip to the original proposal underneath the Proposal Cover Booklet. Letters of support **will not** be accepted separately from the application.
 - b. *Two additional letters of recommendation.* These letters are to be sent from references to the applicant in **sealed** envelopes for forwarding, unopened, with the application. To ensure that the letters of recommendation are not misplaced, the sealed envelopes should be attached by binder clip to the original proposal underneath the Proposal Cover Booklet. Letters of recommendation **will not** be accepted separately from the application.

Include letters of support from any other collaborating investigators. Such letters need not be placed in envelopes and should be included in the Administrative Documentation section of the application.

Proposals lacking the above-mentioned administrative documentation may be considered noncompliant and thus may not be forwarded for review (see Appendix B).

18. Detailed Cost Estimate – See Appendix B, part 18 and Appendix F.

Predocctoral Fellowship Awards can be requested for an average of \$22,000 per year inclusive of direct and indirect costs for a maximum of \$66,000 over 3 years. Training awards frequently have a different institutional overhead charge. All training investigators are encouraged to check with their institution concerning overhead costs. Direct costs can cover tuition, stipend, expenses including research supplies, and travel to scientific meetings. These awards are intended to support dissertation research rather than rotations or basic course work. The amount allotted for travel is \$1,500 per year to attend scientific/technical

meetings. In addition, funding should be requested for a one-time, 3½-day meeting to be held in the Baltimore, Maryland/Washington, DC area to disseminate the results of Department of Defense-sponsored research. Applicants are asked to budget for this meeting in year 2 of the Detailed Cost Estimate form.

19. Instruments – See Appendix B, part 19.

20. Publications and Patent Abstracts – See Appendix B, part 20.

21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadlines – See Appendix B, part 22.

Please note that the **receipt deadline for Predoctoral Fellowship Award proposals is June 7, 2000 at 4:00 p.m. Eastern Time.**

23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

Principal Investigator: _____

Proposal Title: _____

**Predocorial Fellowship Award Proposal
Table of Contents**

	Page Number
Proposal Cover Booklet (12 pages)	
Letters of Recommendation (in sealed envelopes, binder-clipped to the original proposal)	
Letter of support from mentor	
Letters of recommendation (2)	
Peer Review Referral Page (no page limit).....	i
Proposal Title Page (1-page limit)	1
Table of Contents (1-page limit)	2
Checklist for Proposal Submission (1 page).....	3
Technical Abstract (1-page limit).....	4
Public Abstract (1-page limit).....	5
Statement of Work (2-page limit)	6
Proposal Relevance and Impact Statement (1-page limit).....	___
Proposal Body (6-page limit).....	___
Abbreviations (1-page limit)	___
References (no page limit)	___
Biographical Sketches (3-page limit each)	
PI (Predocorial Applicant).....	___
Mentor.....	___
Collaborating Investigators.....	___
Existing/Pending Support (no page limit).....	___
Facilities/Equipment Description (no page limit)	___
Administrative Documentation (no page limit)	
Transcripts	___
Description by mentor of training environment	___
List of individuals providing sealed letters of support.....	___
Letters of support from collaborating individuals and/or institutions	___
Detailed Cost Estimate (no page limit).....	___
Instruments (no page limit).....	___
Publications and Patent Abstracts (5-document limit)	___

XI. Postdoctoral Fellowship Awards

XI-A. Postdoctoral Fellowship Awards

The intent of Postdoctoral Fellowship Awards is to enable recent doctoral or medical degree graduates to obtain the necessary experience to pursue a career in breast cancer research. Eligible applicants should have been in the laboratory in which this research is to be performed no more than 2 years at the time of submission and should have less than 5 years total postdoctoral research experience (exclusive of clinical residency or fellowship training). **Proposals are being solicited for both Postdoctoral Fellowship Awards and for Clinical Translational Research (CTR) Postdoctoral Fellowship Awards.**

Postdoctoral Fellowships:

Postdoctoral Fellowship proposals should either extend the candidate's ongoing research related to breast cancer or broaden the scope of his/her research to include work relevant to breast cancer, under the guidance of a designated mentor. The research focus of the proposal should address an issue relevant to breast cancer biology, etiology, prevention, detection, diagnosis, and/or therapy. Individuals with a Ph.D., M.D., D.O., D.V.M., D.D.S./D.M.D., D.N.Sc., Sc.D., or other equivalent degree are encouraged to apply.

CTR Postdoctoral Fellowships:

CTR Postdoctoral Fellowship (CTR Fellowship) Awards are intended to train clinically oriented physicians to serve as a dynamic bridge between the laboratory and the clinic. A primary objective of CTR Fellowship Awards is to encourage interested physicians to undertake clinical translational research in breast cancer. The focus of CTR Fellowship proposals should be directly relevant to the prevention, detection, diagnosis, or treatment of breast cancer. Individuals applying for this award should be able to demonstrate their interest in, and commitment to, pursuing a career in clinical translational breast cancer research. Individuals with an M.D. or D.O. are encouraged to apply.

The overall goal of both Postdoctoral and CTR Fellowship Awards is to prepare individuals for careers in breast cancer research. Important aspects of these applications include (1) the mentor and the training environment, (2) the candidate's qualifications, and (3) the candidate's plans after the completion of the proposed project.

Postdoctoral Fellowship proposals, with appropriate direction from the mentor, should be written and signed by the trainee as the principal investigator (PI) and author of the proposal. Proposals will not be evaluated, nor will awards be made for "to be named" trainees. Postdoctoral

Fellowship applicants must describe their research project, training program, and goals in the body of the proposal. The mentor is also responsible for preparing certain components of the proposal. For complete proposal requirements, please refer to Section XI-E. Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in Sections XI-B and XI-C.

Approximately \$8M will be available for Postdoctoral Fellowship Awards and approximately \$0.5M for CTR Fellowship Awards. Fellowships can be requested for an average of \$50,000 per year, inclusive of direct and indirect costs, for a maximum of \$150,000 over 3 years. Direct costs can cover salary, expenses including research supplies, and travel to scientific meetings.

XI-B. Scientific Peer Review – Evaluation Criteria for Postdoctoral Fellowship and CTR Postdoctoral Fellowship Proposals

Both Postdoctoral Fellowship and CTR Fellowship proposals will be evaluated according to the following criteria:

- **Candidate:** Do the candidate's achievements to date (as assessed by background, academic performance, awards, and honors) make him/her well-qualified for postdoctoral training? Does the candidate have a record of previous research experience, publications, and/or related professional training that indicates suitability for a career in breast cancer research? What are the candidate's research plans after the completion of this project? Has the candidate demonstrated a personal commitment to pursuing a career in breast cancer research? Do the letters of recommendation support the candidate's abilities and potential for a productive research career?
- **Mentor:** Does the mentor have the background, qualifications, and time to supervise the candidate's training program? What is the mentor's previous research training experience with doctoral students, fellows, residents, etc.?
- **Research Strategy:** Are the conceptual framework, hypotheses, design, methods, and analyses adequately developed and well-integrated to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternative methods/tactics? Has a sound scientific rationale been presented through a critical review and analysis of the literature, logical reasoning, and/or the use of preliminary data? If the research plan requires statistical analysis, is there a clear statistical plan with power analysis included in the proposal?
- **Training and Environment:** Will the training result in a valuable experience for the trainee in preparing him/her for an independent career in breast cancer research? Does the postdoctoral training take place in an environment that is appropriate to accomplishing the candidate's goals? Are the research requirements adequately supported by the scientific

environment, necessary resources, and any collaborative arrangements proposed? Is there a strong institutional commitment to research training in breast cancer? For CTR Fellowship proposals, is there a clearly proposed formal training program in breast cancer clinical and/or translational research? Would the described training further the trainee's goal to become an independent clinical translational researcher?

- **Relevance:** Does the training relate to an important problem in breast cancer research? Is the proposed research likely to train and encourage the fellow to pursue a career in breast cancer research? If the aims of the training are achieved, will the results of the training and research be of benefit to breast cancer research? Does the application make a convincing case for the relevance of the research to breast cancer?
- **Budget:** Is the budget reasonable for the work proposed? Are there sufficient overall financial resources to support the proposed research?

Additional criterion for CTR Fellowship Award proposals:

- **Potential for a Career in Translational Research:** Has the candidate demonstrated how his/her qualifications, mentor, training environment, quality of research training, and project's scientific relevance will lead to a career in clinical translational research?

XI-C. Programmatic Review – Evaluation Criteria for Postdoctoral Fellowship and CTR Postdoctoral Fellowship Proposals

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance. For example, How will the proposal contribute to the program's goal of eradicating breast cancer? Will the project lead to new insights into the prevention, diagnosis, detection, and/or treatment of breast cancer? Does the proposal meet the intent of the Postdoctoral Fellowship Award or the CTR Fellowship Award mechanism? Additional details on programmatic review procedures and evaluation criteria are included in Section I-C.

XI-D. Letter of Intent

All applicants considering submission of a proposal in response to this Program Announcement are requested to submit a "Letter of Intent" no later than 2 weeks prior to the proposal receipt deadline. This form can be found in Appendix A and submitted as directed, or completed and submitted via the Congressionally Directed Medical Research Programs web site at <http://cdmrp.army.mil/?/announce/forms>.

XI-E. Proposal Preparation

Instructions for proposal preparation are found in Appendix B of this Program Announcement. The following proposal preparation information is specific for Postdoctoral Fellowships and CTR Fellowships. Please note that the body of the proposal is limited to **6 pages** and that the **receipt deadline is June 7, 2000 at 4:00 p.m. Eastern Time**.

1. Who May Apply – See Appendix B, part 1 and item 17 on page XI-6.

Postdoctoral Fellowships: Eligible applicants should have been in the laboratory in which the research is to be performed no more than 2 years at the time of submission and should have less than 5 years total postdoctoral research experience (exclusive of clinical residency or fellowship training). Individuals with a Ph.D., M.D., D.O., D.V.M., D.D.S./D.M.D., D.N.Sc., Sc.D., or other equivalent degree are encouraged to apply.

CTR Postdoctoral Fellowships: Eligible applicants should have been in the laboratory in which the research is to be performed no more than 2 years at the time of submission and should have less than 5 years total postdoctoral research experience (exclusive of clinical residency or fellowship training). Individuals with an M.D. or D.O. are encouraged to apply.

2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
4. Peer Review Referral Page – See Appendix B, part 4.
5. Proposal Title Page – See Appendix B, part 5.
6. Table of Contents – See Appendix B, part 6.
Use the table of contents at the end of this section in your proposal submission. Number all pages consecutively at the bottom center, beginning with the Proposal Title Page. The Department of Defense (DOD) Breast Cancer Research Program recommends that PIs use this table of contents as a guide for assembling all required components of the proposal.
7. Checklist for Proposal Submission – See Appendix B, part 7.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
10. Proposal Relevance and Impact Statement – See Appendix B, part 10.

Postdoctoral Fellowships: In addition to the instructions found in Appendix B, part 10, Postdoctoral Fellowship Award applicants should describe explicitly (within the 1-page limit) the training value of the proposed research concept relative to the applicant's career goals and

how the proposed research is pertinent to one or more critical issues in breast cancer biology, etiology, prevention, detection, diagnosis, and/or therapy. Articulate how the combination of training and relevance to breast cancer will prepare the candidate for a career in the battle against breast cancer.

CTR Postdoctoral Fellowships: In addition to the instructions found in Appendix B, part 10, CTR Fellowship Award applicants should describe explicitly (within the 1-page limit) the training/potential of the proposed research and/or program. Articulate how the combination of training value and relevance to breast cancer biology, etiology, prevention, detection, diagnosis, and/or therapy will prepare the candidate for a career in translational breast cancer research.

11. Proposal Body – See Appendix B, part 11.

The body of Postdoctoral Fellowship proposals is limited to **6 pages** and should include descriptions of the research project, and training and career plans as described below. Figures, tables, and graphs should be included within this section. If color figures are submitted, it is recommended that they be provided in all copies to ensure their availability to all peer reviewers.

- a. **Description of the Research Training:** Describe the research training in which the candidate will participate such as coursework, laboratory techniques, conferences, and journal clubs. CTR Fellowship applicants should describe explicitly the training value/potential of the proposed research and/or program and should articulate how the combination of training value and relevance to breast cancer will prepare the candidate for a career in clinical breast cancer research.
- b. **Description of Research Project:** Describe the proposed project using the **general** outline provided below:
 - i. **Background:** Briefly describe the ideas behind the proposed work and cite relevant literature references.
 - ii. **Hypothesis/Rationale/Purpose:** State the hypothesis to be tested and the expected results.
 - iii. **Objectives:** State concisely the specific aims and the research strategy of the project.
 - iv. **Methods:** Give details about the experimental design and methodology.
- c. **Career/Research Plans:** Briefly describe the applicant's career development plan and how the proposed training will promote the trainee's career development in the area of breast cancer research. Discuss the applicant's research plans after the completion of this award.

12. Abbreviations – See Appendix B, part 12.

13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.

For Postdoctoral Fellowship proposals, biographical sketches should be prepared for the applicant, the mentor, and collaborating investigators. Each sketch is limited to 3 pages. The candidate's biographical sketch should include a list of significant publications, a succinct summary of his/her professional experience in breast cancer research, and his/her potential for contribution to the field of breast cancer research. The mentor's biographical sketch should include his/her qualifications, especially in breast cancer research, and previous experience in training students and postdoctoral fellows.

15. Existing/Pending Support – See Appendix B, part 15.

It is especially important to list the mentor's existing/pending support as evidence that there is adequate support in the training environment for the postdoctoral trainee.

16. Facilities/Equipment Description – See Appendix B, part 16.

17. Administrative Documentation – See Appendix B, part 17.

Provide the following administrative documentation in the proposal submission:

- Official transcripts from undergraduate and graduate institutions.
- A form signed by the Department Chair, Dean, or equivalent official verifying that the applicant (1) has or will have successfully completed a doctoral or medical degree at the time of award negotiation, (2) has been in the laboratory in which this research is to be performed no more than 2 years at the time of submission, and (3) has less than 5 years total postdoctoral research experience (exclusive of clinical residency or fellowship training) and therefore is an eligible applicant for this award type. Use the Statement of Eligibility Form at the end of this section.
- A description of the training environment prepared by the mentor (1-page limit). The mentor should provide a brief overview of other research being performed under his/her direction. Information should be provided on how the mentor can assist in training the applicant for a career in breast cancer research. The mentor's history in training other postdoctoral fellows and in clinical translational research training, if applicable, should be outlined. A brief description of the laboratory's funds should be outlined to demonstrate the adequacy of available resources to support the trainee's project. (Specific details on existing support should be covered in item 15 above.)

- A list of the names, positions, and grant function (e.g., mentor, recommender) of authors of the following letters of support should be included in the Administrative Documentation section of the application to document the sources of these letters. However, please attach the letters in **sealed** envelopes with a binder clip to the original proposal underneath the Proposal Cover Booklet.
 - a. *A letter of support from the **mentor** describing his/her commitment to the training/career development/mentorship of the applicant and the nature of the proposed collaboration/training.* Emphasis should be placed on the applicant's potential as a future breast cancer researcher and the degree of interaction in training the candidate. This letter is to be sent from the mentor to the applicant in a **sealed** envelope for forwarding, unopened, with the application. To ensure that the mentor's letter of support is not misplaced, the sealed envelope should be attached by binder clip to the original proposal underneath the Proposal Cover Booklet. Letters of support **will not** be accepted separately from the application.
 - b. *Two additional letters of recommendation.* These letters are to be sent from references to the applicant in **sealed** envelopes for forwarding, unopened, with the application. To ensure that the letters of recommendation are not misplaced, the sealed envelopes should be attached by binder clip to the original proposal underneath the Proposal Cover Booklet. Letters of recommendation **will not** be accepted separately from the application.

Include letters of support from any other collaborating investigators. Such letters need not be placed in envelopes and should be included in the Administrative Documentation section of the application.

Proposals lacking the above-mentioned administrative documentation may be considered noncompliant and thus may not be forwarded for review (see Appendix B).

18. Detailed Cost Estimate – See Appendix B, part 18 and Appendix F.

Postdoctoral Fellowships can be requested for an average of \$50,000 per year, inclusive of direct and indirect costs, for a maximum of \$150,000 over 3 years. Training awards frequently have a different institutional overhead charge. All training investigators are encouraged to check with their institution concerning overhead costs. Direct costs can cover salary, expenses including research supplies, and travel to scientific meetings. The amount allotted for travel is \$1,500 per year to attend scientific/technical meetings. In addition, funding should be requested for a one-time, 3½-day meeting to be held in the Baltimore, Maryland/Washington, DC area to disseminate the results of DOD-sponsored research. Applicants are asked to budget for this meeting in year 2 of the Detailed Cost Estimate form.

19. Instruments – See Appendix B, part 19.

20. Publications and Patent Abstracts – See Appendix B, part 20.

Postdoctoral Fellowship Awards

21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadlines – See Appendix B, part 22.

Please note that the **receipt deadline for Postdoctoral Fellowship Award proposals is June 7, 2000 at 4:00 p.m. Eastern Time.**

23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

Principal Investigator: _____

Proposal Title: _____

**Postdoctoral Fellowship Award
Table of Contents**

	Page Number
Proposal Cover Booklet (12 pages)	
Peer Review Referral Page (no page limit).....	i
Proposal Title Page (1-page limit)	1
Table of Contents (1-page limit)	2
Checklist for Proposal Submission (1 page).....	3
Technical Abstract (1-page limit).....	4
Public Abstract (1-page limit)	5
Statement of Work (2-page limit)	6
Proposal Relevance and Impact Statement (1-page limit).....	___
Proposal Body (6-page limit).....	___
Abbreviations (1-page limit)	___
References (no page limit)	___
Biographical Sketches (3-page limit each)	
PI (Postdoctoral Applicant)	___
Mentor.....	___
Collaborating Investigators.....	___
Existing/Pending Support (no page limit).....	___
Facilities/Equipment Description (no page limit)	___
Administrative Documentation (no page limit)	
Transcripts	___
Statement of Eligibility Form.....	___
Description by mentor of training environment	___
List of individuals providing sealed letters of support.....	___
Letters of support from collaborating individuals and/or institutions	___
Detailed Cost Estimate (no page limit).....	___
Instruments (no page limit).....	___
Publications and Patent Abstracts (5-document limit)	___

STATEMENT OF ELIGIBILITY

Applicant's Name: _____

Title of Proposal: _____

Applicant's Organization Name: _____

Applicant's Organization Location: _____

Signature of Applicant: _____

STATEMENT OF ELIGIBILITY

For the purposes of the Department of Defense Congressionally Directed Medical Research Program's Breast Cancer Research Program Postdoctoral Fellowship Award mechanism as outlined in the Program Announcement, the applicant fulfills all of the following criteria:

- Has or will have successfully completed a doctoral thesis or medical degree for Postdoctoral Fellows, or a medical degree for Clinical Translational Research Postdoctoral Fellows, at the time of award negotiation;
- Has 2 years or less of postdoctoral experience in the laboratory in which the proposed research will be performed; and
- Has less than 5 total years of postdoctoral research experience (exclusive of clinical residency or fellowship training) at the time of proposal submission.

I, _____ of
(printed name of Department Chair, Dean, or equivalent official)

(printed name of institution)

attest that the above-named investigator fulfills the requirements to be considered for a Postdoctoral Fellowship Award.

Signature of Official: _____ Date: _____

XII. Career Development Awards

XII-A. Career Development Awards

Career Development Awards (CDAs) are designed to encourage (1) scientists or physicians who have postdoctoral and/or fellowship training, but are not yet established investigators, to pursue a breast cancer-related research career, as well as (2) established scientists or research physicians who are currently working in areas other than breast cancer to shift their focus to breast cancer research. Such awards will provide investigators who are new to breast cancer research the opportunity to acquire the training, data, and experience to compete for traditional awards later in their careers. **Proposals are being solicited for both CDAs and for Clinical Translational Research (CTR) CDAs.**

CDAs:

For the purpose of this program, a CDA is intended for an individual who has his/her own independent program of research; is within 6 years of postdoctoral, residency, fellowship, or equivalent training; and holds a position as an Assistant Professor or equivalent.

CTR CDAs:

For the purpose of this program, a CDA is intended for an individual who has his/her own independent program of research; is within 6 years of residency, fellowship, or equivalent training; and holds a position as an Assistant Professor or equivalent. Applicants for the CTR CDA mechanism should also have some experience in conducting clinical trials. Individuals applying for this award should be able to demonstrate their commitment to pursuing a career in clinical breast cancer research.

The intent of CTR CDAs is to train clinically oriented physicians and clinical investigators to serve as a dynamic bridge between the laboratory and the clinic. An overall goal of CTR CDAs is to encourage interested physicians to undertake clinical translational research in breast cancer. The research focus of CTR CDAs is on clinical translational research that is directly relevant to the prevention, detection, diagnosis, or treatment of breast cancer.

Both CDA and CTR CDA proposals should include a discussion of the level of institutional commitment to fostering the applicant's research career as reflected by (1) the extent to which the applicant will be relieved of his/her academic responsibilities to have additional time for research, (2) the provision of adequate laboratory facilities and equipment, and (3) the opportunities for critical professional interaction with senior colleagues. **A letter of support from the institution must be included as part of the proposal.**

Approximately \$4M will be available for CDAs and approximately \$0.5M for CTR CDAs. CDAs can be requested for an average of \$59,000 per year in direct costs, for a maximum of \$236,000 over 4 years, plus indirect costs as appropriate. Direct costs can cover only salary support and

travel to scientific meetings. Funds for research must be provided from another resource.

Evidence of either current or pending research support or concomitant submission of a Department of Defense (DOD) Breast Cancer Research Program (BCRP) Idea Award or Clinical Bridge Award proposal is a requirement of a CDA proposal and should be noted in the Existing/Pending Support section.

In general, the DOD BCRP does not accept duplicate submissions addressing the same research question (please refer to item 8 of the Foreword for additional details on duplicate submissions). However, a CDA proposal may address the same research question proposed in an Idea Award (Section III) *or* a Clinical Bridge Award (Section IV) proposal. Both proposals must be prepared by and specify the same principal investigator (PI). If a submitted Idea/Clinical Bridge Award proposal is listed as the source of research support in a CDA proposal, the CDA can only be recommended for funding if the Idea/Clinical Bridge Award is recommended for funding. However, the Idea/Clinical Bridge Award may be recommended for funding even if the corresponding CDA proposal is not.

XII-B. Scientific Peer Review – Evaluation Criteria for Career Development Award and Clinical Translational Research Career Development Award Proposals

CDA and CTR CDA proposals will be evaluated according to the following criteria:

- **Candidate:** Do the candidate's previous training, prior research experience, and publication record indicate promising achievements to date? Is there a need for the proposed research experience and training in order for the candidate to develop into an independent breast cancer investigator? Has the candidate demonstrated a personal commitment to pursuing a career in breast cancer research? *Additional criteria for CTR CDA proposals:* Does the candidate have the appropriate background to pursue a career in clinical translational breast cancer research? Does the applicant have experience in conducting clinical trials?
- **Research Program:** Are the conceptual framework, hypotheses, design, methods, and analyses of the research adequately developed and well-integrated for the candidate's research program? Is the candidate appropriately trained and well-suited to carry out the proposed research? Is the candidate aware of potential problem areas and are potential solutions proposed? If the research plan requires statistical analysis, is there a clear statistical plan with power analysis included in the proposal? Will the research offer a valuable opportunity to further develop research experience to advance and develop the candidate's independent research career? *Additional criterion for CTR CDA proposals:* Is there a clearly proposed plan for training in breast cancer clinical and/or translational research?
- **Scientific Relevance and Impact:** Does the candidate's research program address a critical problem in breast cancer research? What will be the effect of these studies on the concepts or methods that drive this field? Does the application make a convincing case for the relevance of the research to breast cancer? To what extent will the project, if successful, make an

original and important contribution to the goal of preventing or eradicating breast cancer and/or advancing research in the field?

- **Institutional Commitment:** Is there a strong institutional commitment to relieve the candidate from other academic responsibilities in order to permit substantially increased time for research activities? Is the institution prepared to provide adequate laboratory facilities, equipment, and opportunities for critical professional interaction with senior colleagues? Is there a strong institutional commitment to the candidate's development?
- **Budget:** Is the budget reasonable?

Additional criterion for CTR CDA proposals:

- **Potential for a Career in Translational Research:** Has the candidate demonstrated how his/her qualifications, the training environment, the quality of research training, and the project's scientific relevance will lead to a career in clinical translational research?

XII-C. Programmatic Review – Evaluation Criteria for Career Development Award Proposals

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance. For example, how will the proposal contribute to the program's goal of eradicating breast cancer? Will the project lead to new insights into the biology, etiology, prevention, diagnosis, detection, and/or treatment of breast cancer? Does the proposal meet the intent of the CDA mechanism? Additional details on programmatic review procedures and evaluation criteria are included in Section I-C.

XII-D. Letter of Intent

All applicants considering submission of a proposal in response to this Program Announcement are requested to submit a "Letter of Intent" no later than 2 weeks prior to the proposal receipt deadline. This form can be found in Appendix A and submitted as directed, or completed and submitted via the Congressionally Directed Medical Research Programs web site at <http://cdmrp.army.mil/?/announce/forms>.

XII-E. Proposal Preparation

Instructions for proposal preparation are found in Appendix B of this Program Announcement. The following proposal preparation information is specific for CDAs and CTR CDAs. Please note that the body of the proposal is limited to **6 pages**, inclusive of figures, tables, and graphs and that the **receipt deadline is June 7, 2000 at 4:00 p.m. Eastern Time**.

1. Who May Apply – See Appendix B, part 1.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
4. Peer Review Referral Page – See Appendix B, part 4.
5. Proposal Title Page – See Appendix B, part 5.
6. Table of Contents – See Appendix B, part 6.
Use the table of contents at the end of this section in your proposal submission. Number all pages consecutively at the bottom center, beginning with the Proposal Title Page. The DOD BCRP recommends that PIs use this table of contents as a guide for assembling all required components of the proposal.
7. Checklist for Proposal Submission – See Appendix B, part 7.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
10. Proposal Relevance and Impact Statement – See Appendix B, part 10.
In addition to the instructions found in Appendix B, part 10, CDA applicants should describe (within the 1-page limit) the training value of the proposed research and/or program relative to the applicant’s career goals in breast cancer or clinical translational breast cancer research. Articulate how the combination of training value and relevance to breast cancer biology, etiology, prevention, detection, diagnosis, and/or therapy will catalyze the applicant’s development as an independent breast cancer investigator.
11. Proposal Body – See Appendix B, part 11.
The body of CDA proposals is limited to **6 pages**. CTR CDA applicants should emphasize the translational components of the training in this section. Figures, tables, and graphs, if used, must be included within this section. If color figures are submitted, it is recommended that they be provided in all copies to ensure their availability to all peer reviewers.

The body of the proposal should include a discussion of the level of institutional commitment to fostering the applicant’s research career as reflected by (1) the extent to which the applicant will be relieved of his/her academic responsibilities to have additional time for research, (2) the provision of adequate laboratory facilities and equipment, and (3) the opportunities for critical professional interaction with senior colleagues.

Additionally, applicants should provide an overview of how their time will be spent once relieved from other academic responsibilities. The following **general** outline should be used to describe the research project.

- a. Background: Briefly describe the ideas behind the proposed work and cite relevant literature references.
- b. Hypothesis/Rationale/Purpose: State the hypothesis that will be tested (in an appropriately designed clinical trial, if applicable) and the expected results.
- c. Objectives: State concisely the specific aims of the project.
- d. Methods: Give details about the experimental design and methodology.

12. Abbreviations – See Appendix B, part 12.

13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.

15. Existing/Pending Support – See Appendix B, part 15.

Independent funds for a research budget or concomitant submission of a BCRP Idea or Bridge Award proposal are a requirement of the CDA proposal. The PI should clearly indicate (1) the titles, time commitments, supporting agencies, duration, and levels of funding for all existing and pending research grants involving the PI and key personnel, (2) the level of support, source, and duration of any additional funds that would be applied to the CDA project (departmental funds, etc.), and/or (3) the title and mechanism (Idea or Bridge Award) of any BCRP proposal submitted by the PI at the same time as the CDA proposal.

16. Facilities/Equipment Description – See Appendix B, part 16.

17. Administrative Documentation – See Appendix B, part 17.

- A form signed by the Department Chair, Program Director, or Dean indicating that the PI holds a faculty position and possesses a doctoral level degree and therefore is an eligible applicant for this award type. Use the Statement of Eligibility Form at the end of this section.
- A letter of institutional support describing the level of institutional commitment to fostering the applicant's research career, as reflected by (1) the extent to which the applicant will be relieved of other academic responsibilities to have additional time for research, and (2) the provision of adequate laboratory facilities, equipment, and opportunities for critical professional interaction with senior colleagues.

- Letters of support from any other collaborating investigators. Support documentation **will not** be accepted separately from the proposal submission.

18. Detailed Cost Estimate – See Appendix B, part 18 and Appendix F.

CDAs can be requested for an average of \$59,000 per year in direct costs, for a maximum of \$236,000 over 4 years, plus indirect costs as appropriate. Direct costs can cover only salary support and travel to scientific meetings. Funds for research must be provided from another resource. **Evidence of either current or pending research support or concomitant submission of a BCRP Idea Award or Clinical Bridge Award proposal is a requirement of a CDA proposal** and should be noted in the Existing/Pending Support section. The amount allotted for travel is \$1,800 per year to attend scientific/technical meetings. In addition, funding should be requested for a one-time, 3½-day meeting to be held in the Baltimore, Maryland/Washington, DC area to disseminate the results of DOD-sponsored research. Applicants are asked to budget for this meeting in year 2 of the Detailed Cost Estimate form.

19. Instruments – See Appendix B, part 19.

20. Publications and Patent Abstracts – See Appendix B, part 20.

21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadline – See Appendix B, part 22.

Please note that the **receipt deadline for CDA proposals is June 7, 2000 at 4:00 p.m. Eastern Time.**

23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

Principal Investigator: _____

Proposal Title: _____

**Career Development Award Proposal
Table of Contents**

	Page Number
Proposal Cover Booklet (12 pages)	
Peer Review Referral Page (no page limit).....	i
Proposal Title Page (1-page limit)	1
Table of Contents (1-page limit).....	2
Checklist for Proposal Submission (1 page).....	3
Technical Abstract (1-page limit).....	4
Public Abstract (1-page limit).....	5
Statement of Work (2-page limit)	6
Proposal Relevance and Impact Statement (1-page limit).....	___
Proposal Body (6-page limit).....	___
Abbreviations (1-page limit)	___
References (no page limit)	___
Biographical Sketches (3-page limit each)	
PI.....	___
Key Personnel (including collaborating investigators, individuals in training, and support staff).....	___
Existing/Pending Support (no page limit).....	___
Facilities/Equipment Description (no page limit)	___
Administrative Documentation (no page limit)	
Statement of Eligibility Form.....	___
Letter of Institutional Support	___
Letters of support from collaborating individuals and/or institutions	___
Detailed Cost Estimate (no page limit).....	___
Instruments (no page limit).....	___
Publications and Patent Abstracts (5-document limit)	___

STATEMENT OF ELIGIBILITY

Applicant's Name: _____

Title of Proposal: _____

Applicant's Organization Name: _____

Applicant's Organization Location: _____

Signature of Applicant: _____

STATEMENT OF ELIGIBILITY

For the purposes of the Department of Defense Congressionally Directed Medical Research Program's Breast Cancer Research Program Career Development Award mechanism as outlined in the Program Announcement, the applicant fulfills all of the following criteria:

- Has his/her own independent research program,
- Is within 6 years of residency, fellowship, or equivalent training, and
- Holds a position as an Assistant Professor or equivalent.

I, _____ of
(printed name of Department Chair, Dean, or equivalent official)

(printed name of institution)

affirm that the above-named investigator fulfills the requirements for the Career Development Award.

Signature of Official: _____ Date: _____

XIII. Historically Black Colleges and Universities/ Minority Institutions Focused Training Awards

XIII-A. Historically Black Colleges and Universities/Minority Institutions Focused Training Awards

Historically Black Colleges and Universities/Minority Institutions (HBCU/MI) Focused Training Awards are intended to enable investigators at HBCU/MI to collaborate, train, and acquire the knowledge and experience needed to prepare and submit a high quality proposal(s) for breast cancer research. Major goals of this award are to attract new investigators to this research area and to establish collaborations between applicant investigators and established investigators in breast cancer research.

The applicant/proposal submission must be from an HBCU/MI, and **applications are required to include a collaboration between the applicant investigator and an established investigator**. The principal investigator (PI) and established collaborating investigators need not be of an ethnic minority. The collaborating investigators must have a strong track record in acquiring funding in breast cancer research. Although the investigators may be from different institutions, both must contribute to the planned project.

Applicants must have their own research space, have minimal or no other research support, hold a faculty position, and possess a doctoral level degree. Initially, the designated location for the effort can be a senior investigator or mentor's laboratory, clinical facilities, and/or assigned office space.

Research supported through an HBCU/MI Focused Training Award may involve the development of an initial concept, laying the groundwork for further study. These concept development proposals are encouraged in the following areas of research, but may target any aspect of breast cancer biology, prevention, detection, diagnosis, and/or treatment:

- Disparity in Morbidity and Mortality in Underserved/Minority Populations
- Cell Biology or Molecular Biology, including Biomarkers
- Epidemiology, including Molecular, Nutrition, and Diet
- Access to Care
- Treatment and Outcomes
- Social/Behavioral Sciences

HBCU/MI Focused Training Awards will be funded out of the HBCU/MI set-aside (see Appendix B, part 1), which is approximately \$8M in fiscal year 2000. HBCU/MI Focused Training Awards can be requested for up to \$100,000 per year for up to 18 months (i.e., up to \$150,000/ award), inclusive of direct and indirect costs. No more than 25% of the awarded funds should be directed toward the collaborator. Direct costs can cover salary support, tuition for special training and/or education, consultation with an established investigator, consultation

with scientific and/or technical experts (e.g., statisticians, editors), administrative and technical assistance, purchase of essential equipment or equipment rental, and expenses including research supplies, office supplies, and travel.

Only one HBCU/MI Focused Training Award proposal may be submitted from any one investigator. For complete proposal requirements, please refer to Section XIII-E. Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in Sections XIII-B and XIII-C.

XIII-B. Scientific Peer Review – Evaluation Criteria for HBCU/MI Focused Training Award Proposals

HBCU/MI Focused Training Award proposals will be evaluated according to the following criteria:

- **Applicant:** Do the applicant’s previous training, prior research experience, and publication record indicate promising achievements to date? Will the training/collaboration offer a valuable opportunity to further develop the experience necessary to advance the applicant’s research career in breast cancer?
- **Collaborating Investigator:** Does the collaborating investigator have the background, qualifications, and time to develop a productive collaboration with the applicant? Is the collaborating investigator committed to the applicant’s career development? Does the collaborating investigator have a strong track record of funding in breast cancer research? Does the collaborating investigator have experience training individuals from diverse backgrounds?
- **Training Plan:** Will the proposed training increase the applicant’s likelihood of submitting a high quality breast cancer research proposal? Will the collaboration support the applicant’s planned program of research? Do both the applicant and the collaborating investigator contribute to the planned project? How do the collaborating investigator and applicant propose to sustain an interactive, ongoing partnership?
- **Scientific Relevance:** Is the proposed concept and research likely to be developed into a clear, focused project on breast cancer biology, etiology, prevention, detection, diagnosis, and/or treatment? Does the application make a convincing case for the potential to develop a concept that is relevant to breast cancer?
- **Resources/Environment:** Is the applicant adequately supported by the scientific environment, necessary resources, and collaborative arrangements (of both the collaborator and the applicant)? Is there a sufficient demonstration of a strong institutional commitment to relieve the applicant of other academic or clinical responsibilities in order to permit time for collaboration and concept development? Is there a strong institutional commitment to the applicant’s career development?

- **Budget:** Is the budget reasonable for the work proposed? Does the HBCU/MI applicant secure 75% of the total requested funds?

XIII-C. Programmatic Review – Evaluation Criteria for HBCU/MI Focused Training Award Proposals

Funding recommendations at this second tier of review are based on a comparative process. Thus, the demonstrated need of HBCU/MI applicants may be taken into consideration in making recommendations. Applicants are reminded of the importance of programmatic relevance. For example, will the award enable an HBCU/MI investigator to pursue a productive career in breast cancer research? Does the proposal meet the intent of the HBCU/MI Focused Training Award mechanism? Additional details on programmatic review procedures and evaluation criteria are included in Section I-C.

XIII-D. Letter of Intent

All applicants considering submission of a proposal in response to this Program Announcement are requested to submit a “Letter of Intent” no later than 2 weeks prior to the proposal receipt deadline. This form can be found in Appendix A and submitted as directed, or completed and submitted via the Congressionally Directed Medical Research Programs (CDMRP) web site at <http://cdmrp.army.mil/?/announce/forms>.

XIII-E. Proposal Preparation

Instructions for proposal preparation are found in Appendix B of this Program Announcement. The following proposal preparation information is specific for the HBCU/MI Focused Training Awards. Please note that the body of the proposal is limited to **6 pages**, inclusive of figures, tables, and graphs and that the **receipt deadline is August 2, 2000 at 4:00 p.m. Eastern Time**.

1. Who May Apply – See Appendix B, part 1.
The list of HBCU/MI as recognized by the Department of Education is available at the CDMRP web site at <http://cdmrp.army.mil/?/announce/minority>.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
4. Peer Review Referral Page – See Appendix B, part 4.
5. Proposal Title Page – See Appendix B, part 5.
6. Table of Contents – See Appendix B, part 6.
Use the table of contents at the end of this section in your proposal submission. Number all pages consecutively at the bottom center, beginning with the Proposal Title Page. The

Department of Defense (DOD) Breast Cancer Research Program (BCRP) recommends that PIs use this table of contents as a guide for assembling all required components of the proposal.

7. Checklist for Proposal Submission – See Appendix B, part 7.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
A sample HBCU/MI Focused Training Award Statement of Work is provided at the end of this section.
10. Proposal Relevance and Impact Statement – See Appendix B, part 10.
In addition to the instructions found in Appendix B, part 10, HBCU/MI Focused Training Award applicants should describe (within the 1-page limit) the training value of the proposed research concept relative to the applicant’s career goals. Articulate how the proposal’s combination of training and relevance to breast cancer biology, etiology, prevention, detection, diagnosis, and/or therapy will prepare the applicant for a career in the battle against breast cancer.
11. Proposal Body – See Appendix B, part 11.
The body of HBCU/MI Focused Training Awards proposals is limited to **6 pages**. Figures, tables, and graphs, if used, must be included within this section. If color figures are submitted, it is recommended that they be provided in all copies to ensure their availability to all peer reviewers.

Describe the proposed research concept using the **general** outline provided below:
 - a. Collaborative Arrangement: Detail the proposed collaborative arrangement and emphasize the specific goals. A concise description of the proposed interaction between the established investigator and the applicant should be articulated. Qualifications and facilities of the established investigator should be addressed. Document the experience of the collaborating investigator in training breast cancer researchers and include information on training/collaborations with minority investigators.
 - b. Career Development: Explain how the proposed training will increase the applicant’s ability to prepare a high quality grant application for breast cancer research within the lifetime of the award. Describe explicitly the value of the proposed training as it relates to the applicant’s career goals. Articulate how the combination of training and relevance to breast cancer in the proposal will catalyze the applicant’s development as an independent breast cancer investigator.
 - c. Project Background: Provide a brief statement of the ideas and reasoning behind the proposed work. Describe previous experience most pertinent to this proposal. Proposals must present a clearly articulated plan for research concept development that focuses on

the biology, etiology, prevention, detection, diagnosis, and/or treatment of breast cancer. State the specific aims of the study. Briefly describe the methods to be used. Cite relevant literature references.

12. Abbreviations – See Appendix B, part 12.

13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.

15. Existing/Pending Support – See Appendix B, part 15.

16. Facilities/Equipment Description – See Appendix B, part 16.

17. Administrative Documentation – See Appendix B, part 17.

The following support documentation must be included within the HBCU/MI Focused Training Award proposal submission:

- A letter signed by the Department Chair, Dean, or equivalent official from the applicant institution describing the commitment of the institution to the applicant's research career, as reflected by the extent to which the applicant will be relieved of his/her academic and/or clinical responsibilities to have additional time for collaboration and training, access to appropriate facilities, and opportunities for professional interactions with senior colleagues.
- A form signed by the Department Chair, Program Director, or Dean indicating that the PI holds a faculty position and possesses a doctoral level degree and, therefore, is an eligible applicant for this award type. Use the Statement of Eligibility Form at the end of this section.
- A letter from the collaborating established investigator describing his/her commitment to the training/career development/mentorship of the applicant, and the nature of the proposed collaboration/training.
- Letters of support from any additional consultants/collaborators who will be supplying essential assistance to the proposed project describing their role in the concept development.

Support documentation **will not** be accepted separately from the proposal submission.

18. Detailed Cost Estimate – See Appendix B, part 18 and Appendix F.

HBCU/MI Focused Training Awards can be requested for up to \$100,000 per year for up to 18 months (i.e., up to \$150,000/award), inclusive of direct and indirect costs. Training awards frequently have a different institutional overhead charge. All training investigators

are encouraged to check with their institution concerning overhead costs. No more than 25% of the awarded funds should be directed toward the collaborator. Direct costs can cover salary support, tuition for special training and/or education, consultation with an established investigator, consultation with scientific and/or technical experts (e.g., statisticians, editors), administrative and technical assistance, purchase of essential equipment or equipment rental, and expenses including research supplies, office supplies, and travel. It is the policy of the DOD that all commercial and nonprofit recipients provide the equipment needed to support proposed research (see Appendix F). However, the greater need for equipment support at an HBCU/MI institution is recognized by the DOD BCRP and will be taken into consideration during the review process. The amount allotted for travel is \$1,800 per year for the applicant investigator to attend scientific/technical meetings. In addition, funding should be requested for a one-time, 3½-day meeting to be held in the Baltimore, Maryland/Washington, DC area to disseminate the results of DOD-sponsored research. Applicants are asked to budget for this meeting in year 2 of the Detailed Cost Estimate form.

19. Instruments – See Appendix B, part 19.

20. Publications and Patent Abstracts – See Appendix B, part 20.

21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadline – See Appendix B, part 22.

Please note that the **receipt deadline for HBCU/MI Focused Training Award proposals is August 2, 2000 at 4:00 p.m. Eastern Time.**

23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

Principal Investigator: _____

Proposal Title: _____

**HBCU/MI Focused Training Award Proposal
Table of Contents**

	Page Number
Proposal Cover Booklet (12 pages)	
Peer Review Referral Page (no page limit)	i
Proposal Title Page (1-page limit)	1
Table of Contents (1-page limit)	2
Checklist for Proposal Submission (1 page)	3
Technical Abstract (1-page limit)	4
Public Abstract (1-page limit)	5
Statement of Work (2-page limit)	6
Proposal Relevance and Impact Statement (1-page limit)	___
Proposal Body (6-page limit)	___
Abbreviations (1-page limit)	___
References (no page limit)	___
Biographical Sketches (3-page limit each)	
PI	___
Collaborating Established Investigator	___
Key Personnel (including collaborating investigators, individuals in training, and support staff)	___
Existing/Pending Support (no page limit)	___
Facilities/Equipment Description (no page limit)	___
Administrative Documentation (no page limit)	
Letter of Institutional Support	___
Statement of Eligibility Form	___
Letter of Support from Collaborating Established Investigator	___
Letters of support from other collaborating individuals and/or institutions	___
Detailed Cost Estimate (no page limit)	___
Instruments (no page limit)	___
Publications and Patent Abstracts (5-document limit)	___

**Sample Statement of Work
HBCU/MI Focused Training Award**

Smith, Mary E.

Statement of Work

Correlating Dietary Intake with Breast Cancer Incidence in African American Women

Phase 1: Project Startup and Parameter Development (Months 1-6)

- Meet with collaborating, established investigator; set up schedule for regular meetings
- Hire a biostatistician for statistical analyses of data
- Purchase computer to assist in information processing
- Review current databases for parameters relating to dietary intake and breast specific antigen measurements

Phase 2: Information Consolidation and Project Development (Months 7-12)

- Conduct a preliminary analysis of information obtained from databases
- Consult an epidemiologist to determine appropriate research design for a clinical trial
- Determine methods to recruit subjects
- Continue to consult with collaborating, established investigator

Phase 3: Formulation of Research Questions for Idea Award proposal in response to the DOD BCRP Announcement (Months 13-18)

- Consolidate information obtained during Phase 2 for another funding opportunity
- Prepare grant application
- Have grant application reviewed and critiqued by the collaborating, established investigator
- Prepare and submit reports summarizing the accomplishments of the collaborative and research efforts

STATEMENT OF ELIGIBILITY

Applicant's Name: _____

Title of Proposal: _____

Applicant's Organization Name: _____

Applicant's Organization Location: _____

Signature of Applicant: _____

STATEMENT OF ELIGIBILITY

For the purposes of the Department of Defense Congressionally Directed Medical Research Program's Breast Cancer Research Program Historically Black Colleges and Universities/ Minority Institutions (HBCU/MI) Focused Training Award mechanism as outlined in the Program Announcement, the applicant fulfills all of the following criteria:

- Holds a faculty position at an HBCU/MI,
- Has his/her own research space, and
- Holds a doctoral degree (M.D., Ph.D., D.V.M., or equivalent).

I, _____ of
(printed name of Department Chair, Dean, or equivalent official)

(printed name of institution)

affirm that the above-named investigator fulfills the requirements for the HBCU/MI Focused Training Award.

Signature of Official: _____ Date: _____

XIV. Historically Black Colleges and Universities/Minority Institutions Partnership Training Awards

XIV-A. Historically Black Colleges and Universities/Minority Institutions Partnership Training Awards

Historically Black Colleges and Universities/Minority Institutions (HBCU/MI) Partnership Training Awards are intended to provide assistance at an institutional level. A major goal of this award is to support collaborations between an applicant HBCU/MI and a collaborating institution with established investigators in breast cancer research **for the purpose of developing a training program to increase the number of HBCU/MI investigators focused on breast cancer research.** A long-term goal is to assist HBCU/MI investigators in submitting competitive breast cancer research proposals. The applicant/proposal submission must be from an HBCU/MI. Established investigators from collaborating institutions need not be of an ethnic minority, but they must have a strong track record in acquiring funding in breast cancer research.

This award provides support for concept development for faculty researchers with doctoral degrees with little or no resources. HBCU/MI Partnership Training Awards will provide investigators the opportunity to collaborate, train, and acquire the knowledge and experience needed to develop a competitive and successful training program in breast cancer research. The focus of these awards should be on enhancing the HBCU/MI faculty's skills so they may become competitive breast cancer researchers and make significant contributions to the training program in breast cancer research to be developed by the institution. Research supported through an HBCU/MI Partnership Training Award may involve the development of initial concepts, laying the groundwork for further study. These concept development proposals are encouraged for training programs in the following areas of research, but may target any aspect of breast cancer biology, etiology, prevention, detection, diagnosis, and/or treatment:

- Disparity of Morbidity and Mortality in Underserved/Minority Populations
- Cell Biology or Molecular Biology, including Biomarkers
- Epidemiology, including Molecular, Nutrition, and Diet
- Access to Care
- Treatment and Outcomes
- Social/Behavioral Sciences

HBCU/MI Partnership Training Awards will be funded out of the HBCU/MI set-aside (see Appendix B, part 1), which is approximately \$8M in fiscal year 2000. These awards can be requested for an average of \$250,000 per year, for a maximum of \$1M over 4 years inclusive of direct and indirect costs. Collaborating institutions may receive up to 40% of total costs during the first year of an award. However, no more than 25% of total costs for the full award can be granted to collaborating institutions during the lifetime of an award. Direct costs for HBCU/MI Partnership Training Awards can cover salary support, tuition for special training and/or education, consultation with established investigators, consultation with scientific and/or technical experts (e.g., statisticians, editors), administrative and technical assistance, purchase of essential equipment or equipment rental, and expenses including research supplies, office

supplies, and travel. Funds also may be used to establish formal technical assistance programs, in which experienced and well-funded investigators provide consultation and mentoring in grant writing and grantsmanship.

Only one HBCU/MI Partnership Training proposal may be submitted from any one HBCU/MI.

XIV-B. Scientific Peer Review – Evaluation Criteria for HBCU/MI Partnership Training Award Proposals

HBCU/MI Partnership Training Award proposals will be evaluated according to the following criteria:

- **Applicant Institution:** Does the HBCU/MI's previous training history, prior research experience, and publication record indicate promising achievements to date? Will the training/collaboration offer a valuable opportunity to further develop necessary experience to advance the institution's capability to develop training programs in breast cancer?
- **Collaborating Partner:** Does the collaborating institution have the background, qualifications, experience, and track record to develop a productive collaboration with the applicant institution? Is the collaborating institution committed to the applicant institution's development? What are the qualifications of the collaborating investigators? Does the collaborating institution have a strong track record of developing institutional training programs and acquiring funding in breast cancer research? How do the collaborating and applicant institutions propose to sustain an interactive, ongoing partnership?
- **Training Plan:** Does the proposed idea develop a credible training environment in the applicant institution to increase the numbers of HBCU/MI investigators focused on breast cancer research? Do both the applicant and the collaborating institutions contribute to the planned project? How do the collaborating and applicant institutions propose to sustain the interactive environment necessary for the development of an effective training program? What are the plans to develop an independent program in breast cancer research at the HBCU/MI by the end of the award period?
- **Scientific Relevance:** Do the proposed collaboration and training concept clearly focus on breast cancer biology, etiology, prevention, detection, diagnosis, and/or treatment? Does the applicant institution make a convincing case for its commitment to develop a training program focused on breast cancer research?
- **Resources/Environment:** Will the collaboration support the applicant institution's planned training program of breast cancer research? Is the applicant adequately supported by the scientific environment, necessary resources, and collaborative arrangements? Is there a strong institutional commitment at the HBCU/MI to support the development of the breast cancer research training program?
- **Potential Impact:** What impact would this training/collaboration have on producing well-trained breast cancer researchers?

- **Budget:** Is the budget reasonable for the work proposed? Does the HBCU/MI receive at least 75% of the intended funds over the lifetime of the award for use on projects directly related to building a breast cancer research training program? Does the collaborating institution receive 40% or less of the intended funds during the first year of the award?

XIV-C. Programmatic Review – Evaluation Criteria for HBCU/MI Partnership Training Award Proposals

Funding recommendations at this second tier of review are based on a comparative process. Thus, the demonstrated need of HBCU/MI applicants may be taken into consideration in making recommendations. Applicants are reminded of the importance of programmatic relevance. For example, is the award likely to train investigators at an HBCU/MI to perform high quality research and become successful, independent breast cancer researchers? Does the proposal meet the intent of the HBCU/MI Partnership Training Award mechanism? Additional details on programmatic review evaluation criteria are included in Section I-C.

XIV-D. Letter of Intent

All applicants considering submission of a proposal in response to this Program Announcement are requested to submit a “Letter of Intent” no later than 2 weeks prior to the proposal receipt deadline. This form can be found in Appendix A and submitted as directed, or completed and submitted via the Congressionally Directed Medical Research Programs (CDMRP) web site at <http://cdmrp.army.mil/?/announce/forms>.

XIV-E. Proposal Preparation

Instructions for proposal preparation are found in Appendix B of this Program Announcement. The following proposal preparation information is specific for HBCU/MI Partnership Training Awards. Please note that the body of the proposal is limited to **10 pages**, inclusive of figures, tables, and graphs, and that the **receipt deadline is August 2, 2000 at 4:00 p.m. Eastern Time**.

1. Who May Apply – See Appendix B, part 1.
The list of HBCU/MI as recognized by the Department of Education is available at the CDMRP web site at <http://cdmrp.army.mil/?/announce/minority>.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
4. Peer Review Referral Page – See Appendix B, part 4.
5. Proposal Title Page – See Appendix B, part 5.

6. Table of Contents – See Appendix B, part 6.
Use the table of contents at the end of this section in your proposal submission. Number all pages consecutively at the bottom center, beginning with the Proposal Title Page. The Department of Defense (DOD) Breast Cancer Research Program (BCRP) recommends that principal investigators use this table of contents as a guide for assembling all required components of the proposal.
7. Checklist for Proposal Submission – See Appendix B, part 7.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
A sample HBCU/MI Partnership Training Award Statement of Work is provided at the end of this section.
10. Proposal Relevance and Impact Statement – See Appendix B, part 10.
In addition to the instructions found in Appendix B, part 10, HBCU/MI Partnership Training Award applicants should describe explicitly (within the 1-page limit) the plan for developing a breast cancer research training program at the HBCU/MI. Articulate how the proposal’s combination of training and relevance to breast cancer biology, etiology, prevention, detection, diagnosis, and/or therapy in the proposal will prepare the HBCU/MI participants for successful experiences as breast cancer researchers.
11. Proposal Body – See Appendix B, part 11.
The body of HBCU/MI Partnership Training Awards proposals is limited to **10 pages**. Figures, tables, and graphs, if used, must be included within this section. If color figures are submitted, it is recommended that they be provided in all copies to ensure their availability to all peer reviewers.

Describe the proposed partnership using the **general** outline provided below:

- a. Background: Provide a brief statement of the ideas and reasoning behind the proposed collaboration(s). Proposals must present a clearly articulated plan for training program development that focuses on the biology, etiology, prevention, detection, diagnosis, and/or treatment of breast cancer. State the specific aims of the study (or studies). Briefly describe the methods to be used. Cite relevant literature references.
- b. Collaborative Arrangement: Detail the proposed collaborative arrangement and emphasize the specific goals. A concise description of the proposed interaction between the collaborating institution and the HBCU/MI should be articulated. Qualifications and facilities of the collaborating institution should be addressed. Document the experience of the collaborating institution in training breast cancer researchers and include information on training/collaborations with minority investigators.

- c. **Training Program:** Describe explicitly the value of the proposed training as it relates to the applicant institution's plans for developing a breast cancer research training program. Articulate how the combination of collaboration and relevance to breast cancer in the proposal will catalyze the applicant institution's development of successful breast cancer research training programs.
- d. **Communication:** Outline a plan for preparing reports on the status of how the collaboration is proceeding. These reports should be issued between the applicant and the collaborating institutions and should document progress, show how each institution is responding to problems, etc. Please note that these "status reports" cannot be used in lieu of actual meetings and the communications between the institutions' faculties.

12. Abbreviations – See Appendix B, part 12.

13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.

For HBCU/MI Partnership Training Award proposals, biographical sketches should be prepared for the participants at the applicant institution, participants at the established collaborating institution, and each of the key personnel, including collaborating investigators listed on the budget page for the initial budget period.

15. Existing/Pending Support – See Appendix B, part 15.

16. Facilities/Equipment Description – See Appendix B, part 16.

17. Administrative Documentation – See Appendix B, part 17.

The following support documentation must be included within the HBCU/MI Partnership Training Award proposal submission:

- A letter signed by the Department Chair, Dean, or equivalent official from the applicant institution assuring the commitment of the institution to the proposed training program. This letter should reflect the extent to which the institution will support the collaboration by relieving participants of their academic and/or clinical responsibilities to have additional time for collaboration and training, providing access to appropriate facilities, and providing opportunities for professional interactions with senior colleagues.
- A form signed by the Department Chair, Program Director, or Dean indicating that the investigators on this project hold faculty positions and possesses a doctoral level degree and, therefore, are eligible applicants for this award type. Use the Statement of Eligibility Form at the end of this section.
- A letter from the collaborating institution describing a commitment to the training/development/mentorship of the applicant institution and the nature of the proposed collaboration/training.

- Letters of support from any additional consultants/collaborators who will be supplying essential assistance to the proposed project describing their role in the research/training.

Support documentation **will not** be accepted separately from the proposal submission.

18. Detailed Cost Estimate – See Appendix B, part 18 and Appendix F.

HBCU/MI Partnership Training Awards can be requested for an average of \$250,000 per year, for a maximum of \$1M over 4 years inclusive of direct and indirect costs. Training awards frequently have a different institutional overhead charge. All training investigators are encouraged to check with their institution concerning overhead costs. Collaborating institutions may receive up to 40% of total costs during the first year of an award. However, no more than 25% of total costs for the full award can be granted to collaborating institutions during the lifetime of an award. Direct costs for HBCU/MI Partnership Training Awards can cover salary support, tuition for special training and/or education, consultation with established investigators, consultation with scientific and/or technical experts (e.g., statisticians, editors), administrative and technical assistance, purchase of essential equipment or equipment rental, and expenses including research supplies, office supplies, and travel. Funds also may be used to establish formal technical assistance programs, in which experienced and well-funded investigators provide consultation and mentoring in grant writing and grantsmanship. It is the policy of the DOD that all commercial and nonprofit recipients provide the equipment needed to support proposed research (see Appendix F). However, the greater need for equipment support at an HBCU/MI institution is recognized by the DOD BCRP and will be taken into consideration during the review process. The amount allotted for travel is \$1,800 per year per investigator for up to five investigators from the HBCU/MI to attend scientific/technical meetings. In addition, funding should be requested for up to five investigators from the HBCU/MI for a one-time, 3½-day meeting to be held in the Baltimore, Maryland/Washington, DC area to disseminate the results DOD-sponsored research. Applicants are asked to budget for this meeting in year 2 of the Detailed Cost Estimate form.

19. Instruments – See Appendix B, part 19.

20. Publications and Patent Abstracts – See Appendix B, part 20.

21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadline – See Appendix B, part 22.

Please note that the **receipt deadline for HBCU/MI Partnership Training Award proposals is August 2, 2000 at 4:00 p.m. Eastern Time.**

23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

Principal Investigator: _____

Proposal Title: _____

**HBCU/MI Partnership Training Award Proposal
Table of Contents**

	Page Number
Proposal Cover Booklet (12 pages)	
Peer Review Referral Page (no page limit).....	i
Proposal Title Page (1-page limit).....	1
Table of Contents (1-page limit).....	2
Checklist for Proposal Submission (1 page).....	3
Technical Abstract (1-page limit).....	4
Public Abstract (1-page limit).....	5
Statement of Work (2-page limit).....	6
Proposal Relevance and Impact Statement (1-page limit).....	___
Proposal Body (10-page limit).....	___
Abbreviations (1-page limit).....	___
References (no page limit).....	___
Biographical Sketches (3-page limit each)	
Participating Investigators at HBCU/MI.....	___
Participating Investigators at Collaborating Institution.....	___
Key Personnel.....	___
Existing/Pending Support (no page limit).....	___
Facilities/Equipment Description (no page limit).....	___
Administrative Documentation (no page limit)	
Letter of Commitment from HBCU/MI.....	___
Statement of Eligibility Forms.....	___
Letter of Commitment from Collaborating Institution.....	___
Letters of support from other collaborating individuals and/or institutions.....	___
Detailed Cost Estimate (no page limit).....	___
Instruments (no page limit).....	___
Publications and Patent Abstracts (5-document limit).....	___

**Sample Statement of Work
HBCU/MI Partnership Training Award**

Smith, Mary E.

Statement of Work

**Training Program in the Epidemiological Basis of Breast Cancer Research at the
University of Somewhere**

Phase 1: Project Startup and Parameter Development (Year 1)

- Meet with investigators at collaborating institution
- Begin training of faculty at HBCU/MI in epidemiological methodology
- Hire a biostatistician for statistical analyses of data
- Purchase equipment to assist in information processing

Phase 2: Project Development (Years 2-3)

- Train faculty at HBCU/MI on specific epidemiological aspects relevant to breast cancer
- Collect preliminary data
- Continue meetings and reports with collaborating institution
- Send faculty to workshops and appropriate courses
- Prepare grant applications
- Have grant application reviewed by collaborating, established investigator
- Submit grant applications

Phase 3: Analysis and interpretation of data gathered during Phase 2 (Year 4)

- Consolidate information obtained during Phase 2
- Prepare and submit additional proposals
- Prepare and submit reports summarizing the accomplishments of the collaborative and research efforts

STATEMENT OF ELIGIBILITY

Applicant's Name: _____

Title of Proposal: _____

Applicant's Organization Name: _____

Applicant's Organization Location: _____

Signature of Applicant: _____

STATEMENT OF ELIGIBILITY

For the purposes of the Department of Defense Congressionally Directed Medical Research Program's Breast Cancer Research Program Historically Black Colleges and Universities/ Minority Institutions (HBCU/MI) Partnership Training Award mechanism as outlined in the Program Announcement, the applicant fulfills all of the following criteria:

- Holds a faculty position at an HBCU/MI, and
- Holds a doctoral degree (M.D., Ph.D., D.V.M., or equivalent).

I, _____ of
(printed name of Department Chair, Dean, or equivalent official)

_____,
(printed name of institution)

affirm that the above-named investigator fulfills the requirements for the HBCU/MI Partnership Training Award.

Signature of Official: _____ Date: _____