

<b>Sequential Guide for Preparing an Institutional Kirschstein-NRSA Application</b> (Requires use of both the General and Kirschstein-NRSA Instructions.)	
<b>FORM PAGE 1</b>	<b>Page References</b>
Item 1. <a href="#">Specific PHS 398 Instructions</a>	PHS 398-17
Item 2. <a href="#">Kirschstein-NRSA Instructions</a> and <a href="#">Specific PHS 398 Instructions</a>	NRSA-56 PHS-17
Item 3. <a href="#">Specific PHS 398 Instructions</a>	PHS 398-17
Item 4. <a href="#">Kirschstein-NRSA Instructions</a>	NRSA-56
Item 5. <a href="#">Kirschstein-NRSA Instructions</a>	NRSA-56
Item 6. <a href="#">Kirschstein-NRSA Instructions</a> and <a href="#">Specific PHS 398 Instructions</a>	NRSA-57 PHS 398-20
Item 7. <a href="#">Specific PHS 398 Instructions</a>	PHS 398-20
<b>Form Pages 2-3:</b> Kirschstein-NRSA Instructions ( <a href="#">Form Page 2</a> ) and ( <a href="#">Form Page 3</a> )	NRSA-57
<b>Form Page 4:</b> <a href="#">Kirschstein-NRSA Instructions</a> and <a href="#">Stipends</a>	NRSA-58
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## ***Specific Instructions***

### **1. Face Page**

#### **Item 2. Response to Specific Request for Applications (RFA) or Program Announcement (PA)**

Indicate "Institutional Ruth L. Kirschstein NRSA" and the specific PHS awarding component and/or specialized program area, if applicable.

#### **Item 4. Human Subjects Research**

Check "Yes" if training plans include involvement of trainees in projects that include human subjects. If the applicant organization has an approved Federal Wide Assurance (FWA) or other Assurance on file with the Office for Human Research Protections (OHRP), insert the FWA or other number in Item 4b. If an award is made, human subjects may **not** be involved and trainees may not participate in human subjects related research until a certification of the date of IRB approval or a designation of exemption has been submitted to and accepted by the PHS agency, and NIH requirements for human subjects research have been addressed (see instructions in [Section I, Human Subjects Research](#), and the [GPS](#)).

In many instances, trainees supported by institutional training grants will be participating in research supported by research project grants for which the IRB review of human subjects is already complete or an exemption is already designated. This review or exemption designation is sufficient, provided the IRB determines that the research would not be substantially modified by the participation of a trainee. The appropriate grants must be identified along with their IRB **approval** dates or exemption designation in Section E of the Research Training Plan.

These policies apply to all Performance Sites.

#### **Item 5. Vertebrate Animals**

Check "Yes" if training plans include trainee participation in projects involving vertebrate animals. If the applicant organization has an approved Animal Welfare Assurance on file with the Office of Laboratory Animal Welfare (OLAW), insert the assurance number in Item 5b. If at the time of application, plans for the involvement of vertebrate animals are so indefinite that Institutional Animal Care and Use Committee (IACUC) review and approval are not feasible, insert "Indefinite" at Item 5a.

In many instances, trainees supported by institutional training grants will be participating in research supported by research project grants for which the IACUC review is already complete. This review is sufficient, provided that the research would not be substantially modified by the participation of a trainee. The appropriate grants must be identified along with their IACUC approval dates in Section F of the Research Training Plan.

The institution must ensure that trainees are enrolled in the institution's animal welfare training and occupational health and safety programs for personnel who have contact with animals, as appropriate. It is also the institution's responsibility to ensure that trainees are properly supervised when working with live vertebrate animals.

If an award is made, vertebrate animals may not be used and trainees may not participate in vertebrate animal related research until a verification of the date of IACUC approval has been submitted to the PHS awarding component.

These policies apply to all Performance Sites.

#### **Item 6. Dates of Entire Proposed Period of Support**

The usual starting date for an institutional Kirschstein-NRSA is July 1, but there are other possible starting dates. Consult the review and award schedule in Section I of the general instructions ([Table 2. Submission, Review, and Award Cycles](#)). Many PHS awarding components restrict submission and review dates to once a year. **Applicants are strongly encouraged to contact appropriate awarding component staff before submitting an application.**

## **2. Description, Performance Sites, Key Personnel, Other Significant Contributors, and Human Embryonic Stem Cells**

### **FORM PAGE 2**

#### **DESCRIPTION: PROJECT SUMMARY AND RELEVANCE**

The first and major component of the Description is a **Project Summary**. Summarize the objectives, rationale and design of the research training program. Provide information regarding the research areas and scientific disciplines encompassed by the program. Include a brief description of the level(s) and duration of the proposed training, the projected number of participating trainees and their anticipated levels of experience.

The second component of the Description is **Relevance**. Using no more than two or three sentences, describe the relevance of this research to **public** health. In this section, be succinct and use plain language that can be understood by a general, lay audience.

**Performance Sites.** List all of the locations where training, program management, and the research experiences described in the Program Plan will be performed. If a performance site is participating in research using human subjects, it is the responsibility of the applicant organization to assure that the performance site complies with the human subject protection regulations in [45 CFR Part 46](#) and other NIH human subject related policies described in the PHS 398 and [GPS](#). For research involving vertebrate animals, the applicant organization must ensure that all performance sites hold OLAW-approved assurances.

**Key Personnel and Other Significant Contributors.** The Program Director, training faculty and any other individuals whose contributions are critical to the development, management and execution of the Training Program in a substantive, measurable way (whether or not salaries are reimbursed) should be identified as Key Personnel. Since these efforts are not project related research endeavors, they should not be identified in Other Support information. The Other Significant Contributors section is not relevant for NRSA applications.

**Human Embryonic Stem Cells.** For each trainee utilizing human embryonic stem cells in a research project, list project title, mentor, and specific cell line(s) from the [registry](#).

### 3. Table of Contents

#### [KIRSCHSTEIN-NRSA SUBSTITUTE FORM PAGE 3](#)

[Use the substitute](#) Table of Contents for Kirschstein-NRSA.

### 4. Detailed Budget for Initial Budget Period

#### [INSTITUTIONAL KIRSCHSTEIN-NRSA SUBSTITUTE FORM PAGE 4](#)

[If you are requesting a budget of \\$500,000 directs costs or more for any year, contact the awarding component to determine whether you must obtain prior approval before submitting the application. Some Institutes/Centers do not require prior approval. \(See Policy on the Acceptance for Review of Unsolicited Applications That Request \\$500,000 or More in Direct Costs.\)](#)

[Use the](#) Institutional [Kirschstein-NRSA Substitute Form Page 4](#) and Institutional Kirschstein-NRSA Substitute Form Page 5 and follow the instructions below. **Refer to the relevant PA or consult the PHS awarding component for current allowable costs and stipend levels.** Provide information where possible on the substitute Institutional Kirschstein-NRSA Substitute Form Page 4, with additional details starting in the budget justification block on the substitute Kirschstein-NRSA Substitute Form Page 5.

#### **Stipends**

Enter the number of trainees and total stipend amount for each trainee category as appropriate. Use the current Institutional [Kirschstein-NRSA stipend schedule](#), (<http://grants.nih.gov/training/nrsa.htm>). If a category contains different stipend levels, e.g., for varying levels of postdoctoral experience and/or varying appointment periods, itemize. Enter the total stipends for all categories.

#### **Tuition, Fees, and Health Insurance**

Explain in detail the composition of this item. Itemize tuition, individual fees, and medical insurance. If tuition varies, (e.g., in-state, out-of-state, student status) identify these separately. Tuition at the postdoctoral level is limited to that required for specified courses. Tuition and fees (including self-only or family health insurance) may be requested only to the extent that the same resident or nonresident tuition and health insurance fees are charged to regular non-Federally supported students and postdoctorate fellows. Grantees should request full needs. A formula will be applied by the NIH awarding component at the time an award is calculated.

#### **Trainee Travel**

State the purpose of any travel, giving the number of trips involved, the destinations, and the number of individuals for whom funds are requested, bearing in mind that PHS policy requires coach class air travel be used. Justify foreign travel in detail, describing its importance to the training experience.

#### **Training Related Expenses**

Funds to defray other costs of training, such as staff salaries, consultant costs, equipment, research supplies, staff travel, etc., are requested as a lump sum based on the amounts specified in the Program Announcement for each predoctoral and

postdoctoral trainee. Give the number of trainees at the predetermined rate and enter the total dollar figure. No further itemization or explanation is required.

**5. Budget for Entire Proposed Period of Support**

**[USE THE INSTITUTIONAL KIRSCHSTEIN - NRSA SUBSTITUTE FORM PAGE 5](#)**

## Research Training Program Plan

### Introduction (Revised/Supplemental Applications Only)

If you are preparing a **revised** or **supplemental** application, complete the Introduction section first (see instructions provided earlier in Section I, [Revised Applications](#) or [Competing Supplements](#)).

Follow the outline below for all applications to describe the Research Training Program Plan. **Do not exceed 25 pages of narrative for sections A-D.** The information provided in tables (see below) will not be counted toward the page limitation; however, these tables should be numbered consecutively and each given a title. Number the table pages at the bottom of the page according to their placement within the narrative or contiguously at the end of the narrative to maintain the continuity of the application.

Before completing the training plan, contact the appropriate PHS awarding component, which may have further advice or suggestions for organizing the relevant data into particular formats.

#### A. Background

Give the rationale for the proposed research training program, relevant background history, and the need for the research training proposed. Indicate how the proposed program relates to current training activities at the applicant institution.

Summarize the research training activities of the major participating unit(s) and department(s) represented in the proposed program. **In a table (Table 1)**, provide the current number of faculty members in each unit and department, as well as the total numbers of current predoctoral students and postdoctoral trainees.

**In a table (Table 2)**, list all current and pending training support available to the participating faculty and department(s). For each grant, include status (active or pending), funding source, complete identifying number, dates of the entire project period, annual direct costs, name of the program director, title of the training program, and number of training positions (predoctoral and postdoctoral). List participating faculty members who are also named in this application, and indicate their percent effort in those programs.

#### B. Program Plan

1. **Program Administration.** Describe the program director's qualifications for providing leadership of the program, including relevant scientific background, current research areas, and experience in research training. Indicate the program director's percent effort in the proposed program.

Describe the administrative structure of the program and the distribution of responsibilities within it, including the means by which the program director will obtain continuing advice with respect to the operation of the program.

2. **Program Faculty.** List each training faculty member, his/her primary departmental affiliation, and role in the proposed program. Describe each faculty member's research that is relevant to this program and indicate how trainees will participate in this research. Describe the extent to which participating faculty members cooperated, interacted, and collaborated in the past, including joint publications and joint sponsorship of student research.

**In a table (Table 3)**, for each participating faculty member, list active and pending research grant and contract support from all sources (including Federal, non-Federal, and institutional research grant and contract support) that will provide the context for research training experiences. If none, state "None." Include the source of support, grant number and title, dates of the entire project period, and annual direct costs. If part of a larger project, identify the principal investigator and provide the above data for both the parent grant and the subproject.

**In a table (Table 4)**, for each participating faculty member, list all past and current students for whom the faculty member was/is the thesis advisor or sponsor (past 10 years only). For each student indicate: 1) whether predoctoral or postdoctoral; 2) the training period; 3) previous institution, degree, and year awarded prior to entry into training; 4) title of the research project; and 5) for past students, their current positions, and for current students, their source of support.

For **new applications**, list representative recent publications of some of the above students or postdoctorates.

**In competing continuation applications**, denote trainees who were or are supported by this training grant with an asterisk. Individuals who were trained at sites other than the applicant organization may be included but should be specifically identified. Publications of trainees should be listed in the Progress Report of this application (see instructions for Progress Report below).

- Proposed Training.** Describe the proposed training program. State the training level and number of trainees. For postdoctoral trainees, indicate the proposed distribution by degree (e.g., M.D., Ph.D.). Describe course work and research opportunities, the extent to which trainees will participate directly in research, and the duration of training, i.e., usual period of time required to complete the training offered.

Indicate how the individual disciplinary and/or departmental components of the program are integrated and coordinated and how they will relate to an individual trainee's experience.

For training programs that emphasize research training for clinicians, describe the interactions with basic science departments and scientists. Include plans for ensuring that the training of these individuals will provide a substantive foundation for a competitive research career. Generally, a minimum of 2 years of research training is required for all postdoctoral trainees with health professional degrees. Describe fully any trainee's access to and responsibility for patients, including time commitment.

Provide representative examples of programs for individual trainees. Include curricula, degree requirements, didactic courses, laboratory experiences, qualifying examinations, and other training activities, such as seminars, journal clubs, etc. Describe how the preceptor and research problems are chosen, how each trainee's program will be guided, and how the trainee's performance will be monitored and evaluated.

- Training Program Evaluation.** Program directors are encouraged to develop methods for ongoing evaluation of the quality of the training program. Describe any plans for such an evaluation, e.g., plans to obtain feedback from current and former trainees to help identify weaknesses in the training program and to provide suggestions for program improvements.

5. **Trainee Candidates.** Describe recruitment plans, including the sources and availability of trainees; the qualifications of prospective trainees; and the criteria and procedures by which trainees will be selected.

Create a **table(s) (Table 5a, b, etc.)** for each participating department/unit for each of the past 5 years. Include the following information: 1) number of individuals who have formally applied for training; 2) number offered admission; 3) number who entered training; 4) number who completed or are currently in training; and 5) number who left the program.

Indicate whether these individuals were applying for predoctoral or postdoctoral training; for postdoctoral fellows, identify their degrees (e.g., M.D., Ph.D.).

**Prospective predoctoral trainees.** In a table (**Table 6**), anonymously indicate the credentials and application outcomes of the predoctoral applicant pool for the most recent year for each participating department and unit. For each applicant (identified with a number in sequence, rather than by name, to safeguard privacy) indicate the previous institution attended, Graduate Record Examination scores, and grade point average. Indicate whether applicants were or were not offered admission, which applicants matriculated, and whether applicants were U.S. citizens or had permanent resident status.

**Prospective postdoctoral trainees.** In a table (**Table 7**), present the qualifications of prospective postdoctoral trainees in the most recent applicant pool. Provide the degree(s) and year awarded, previous institution, thesis research topic, preceptor, citizenship or permanent resident status, and residency training (when appropriate) for each prospective applicant to the program. Indicate whether applicants were or were not offered admission and which applicants entered the program.

### C. Minority Recruitment and Retention Plan

The NIH promotes broad and systematic efforts to recruit individuals from minority groups currently underrepresented in biomedical and behavioral research. The accomplishments of Kirschstein-NRSA programs, with respect to recruiting and retaining individuals from underrepresented groups, will ensure that minority scientists are progressively better represented in the national research effort.

Applications without a description of minority recruitment efforts will be considered incomplete and will be returned to the applicant without peer review.

Describe the program's previous efforts and plans to recruit and train graduate students and/or postdoctoral trainees from ethnic or racial groups underrepresented in biomedical and behavioral research. Organize the information as follows:

**History.** Describe efforts to recruit minority students into the existing training program. In **competing continuation applications**, also describe past efforts to recruit and retain underrepresented minority students into Kirschstein-NRSA training positions.

**Achievements.** In a table (**Table 8**), summarize recruitment data for the program and/or each of the participating departments or units in each of the past 3 years. Provide the number of minority individuals who applied; number offered admission; and number who entered the program. For those who entered the program, indicate current status (i.e., in training, graduated or completed training) and all sources of support. For those who have left the program or completed training, include information about their

subsequent career development or employment. In competing continuation applications, indicate which individuals were supported by the Kirschstein-NRSA grant.

**Proposed plans.** Describe steps to be taken during the proposed award period regarding the identification, recruitment, and retention of graduate students and postdoctorates from underrepresented groups. Consider the success and/or failures of recruitment strategies used in the past. In particular, describe the specific efforts to be undertaken by the training program and how these might relate to the recruitment efforts of the medical school, graduate school, and/or the university at large. In most cases, institutional efforts alone will not satisfy the requirement to recruit individuals from underrepresented groups.

#### **D. Plan for Instruction in the Responsible Conduct of Research**

Applications lacking a plan for instruction in the responsible conduct of research will be considered incomplete and will be returned to the applicant without review.

Every Kirschstein-NRSA trainee **must** receive instruction in the responsible conduct of research. Describe a plan to provide trainees with formal and informal instruction on scientific integrity and ethical principles in research. The plan must address the rationale for the instruction, the format and subject matter, the degree of faculty participation, trainee attendance, plans to assess the quality and the frequency of instruction. For **competing continuation applications**, describe the type of instruction provided in the current project period, the degree of student participation, the results of any assessments and other relevant information.

There are no specific curriculum or format requirements for this instruction; however, conflict of interest, responsible authorship, policies for handling misconduct, policies regarding the use of human and animal subjects, data management, and data-sharing are areas that are strongly suggested for consideration. Applicants may wish to consult the NIH web site (<http://www.nih.gov/sigs/bioethics/researchethics.html>) for additional guidance.

#### **E. Progress Report (Competing Continuation Applications Only)**

State the period covered. Briefly describe the accomplishments of the training program. **In a table (Table 9)**, for each year of the grant since the last competing application, provide the following: 1) total number of positions awarded in each training category; 2) number of predoctoral trainees appointed and months of support committed; and 3) number of postdoctoral trainees appointed, with what degrees, at what levels, and for how many months. If any trainee positions were not filled, explain the reason.

**In a table (Table 10)**, list all trainees who were, or are, supported by this training grant (past 10 years only, if applicable). For each student provide: 1) name; 2) year of entry into the training program; 3) prior institution and degree at entry; 4) source of support during each year of training, e.g., this training grant, another training grant (specify), research grant, university fellowship, individual fellowship (specify), etc.; 5) name of research mentor; 6) research topic; and 7) for trainees who have completed the program, their current positions and institutional affiliations.

In the narrative section of the Progress Report, list each trainee supported during the period covered and indicate in parentheses the preceptor/mentor. Briefly summarize the research conducted by each trainee and list all publications (full citation) that resulted

from the work done during training. If any postdoctoral trainee with a health professional degree who was appointed to the grant during the most recent award period received less than 2 years of research training, explain why. Where possible for past trainees, describe the extent of their current involvement in research, including research grant support and representative recent publications. This information will be used to track the pattern of support of trainees and the subsequent research career development of former trainees.

Describe any specific effects of this training program on curriculum and/or research directions. Describe how the funds provided under Training Related Expenses were used to benefit the program.

#### **F. Human Subjects**

As indicated earlier in these instructions (Item 4 on the Face Page), where appropriate, include a list of already reviewed research project grants (grant number, principal investigator, project title) and their IRB approval dates or exemption designations.

#### **G. Vertebrate Animals**

As indicated earlier in these instructions (Item 5 on the Face Page), where appropriate, include a list of already reviewed research project grants (grant number, principal investigator, project title) and their IACUC approval dates.

#### **H. Consortium/Contractual Arrangements**

Describe any programmatic, fiscal, or administrative arrangements between the applicant organization and other participating organizations. See [Section 1.C.7.h](#) for additional guidance.

#### **I. Resource Sharing**

Not applicable to Institutional Training Grants. Omit this section.

## **Appendix**

Appendix material is generally not needed with training grant applications. Oversized documents, brochures, and catalogues may be exceptions. Five collated sets should be submitted.

## **Checklist**

[CHECKLIST FORM PAGE \(MS WORD OR PDF\)](#)

### **Inventions and Patents**

Not applicable.

### **Facilities and Administrative Costs**

Facilities and Administrative (F&A) costs under Institutional Kirschstein-NRSAs, other than those issued to state or local government agencies, will be awarded at 8 percent of total allowable direct costs (exclusive of tuition and related fees). Equipment and consortium costs are also excluded from the F&A costs on those training grants, where Training Related Expenses are not calculated and awarded on a lump-sum basis, such as the Minority Access to Research Careers Program (MARC) or Career Opportunities in Research (COR) Undergraduate Research Training Program. State and local government agencies will receive the full F&A cost rate.

### **Key Personnel Report**

[NOT APPLICABLE.](#)