

# National Institutes of Health (NIH)

## NRSA Individual Fellowship Applications (F Series)

### Template and Instructions for Selected Sections

*Template begins on page 10*

This document contains information from the NIH document “Details of Application Changes for Fellowships (for due dates on or after January 25, 2011)” dated June 2, 2010 ([http://enhancing-peer-review.nih.gov/docs/Details\\_of\\_Application\\_Changes\\_for\\_Fellowships.pdf](http://enhancing-peer-review.nih.gov/docs/Details_of_Application_Changes_for_Fellowships.pdf)) along with suggested formatting guidelines for the Specific Aims page. Candidates should refer to the SF 424, PHS 398 and funding notices (e.g., requests for applications, requests for proposals, funding opportunity announcements) and other official NIH documents when preparing their applications.

#### **Important Information to Know When Using this Document**

For current and specific information for NRSA Individual Fellowship Applications and other unsolicited or Investigator-Initiated applications, see

[http://grants.nih.gov/grants/guide/parent\\_announcements.htm](http://grants.nih.gov/grants/guide/parent_announcements.htm)

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## NRSA Individual Application Checklist

	SECTION OF APPLICATION	LIMITS (INSTRUCTION PAGE #)
	<b>Letters of Reference</b> <ul style="list-style-type: none"> <li>• Submitted by referees directly to eRA Commons</li> <li>• Sponsor/mentor not included under this section/limit count</li> </ul>	At least 3, no more than 5 (I-101)
	<b>Project Summary/Abstract</b>	30 lines page (I-62)
	<b>Project Narrative</b>	2-3 sentences (I-62)
	<b>Bibliography &amp; References Cited</b>	No page limit (I-63)
	<b>Facilities &amp; Other Resources</b>	No page limit (I-63)
	<b>Equipment</b> (if applicable)	No page limit (I-64)
	<b>Foreign Sponsorship</b> (if applicable) <ul style="list-style-type: none"> <li>• Attach under "12 - Other Attachments"</li> </ul>	No page limit (I-65)
	<b>Collaborators and Dissertation Advisor(s)</b> (if applicable) <ul style="list-style-type: none"> <li>• Attach under "12 - Other Attachments"</li> </ul>	No page limit (I-65)
	<b>Certification Letter for Pre-Doctoral Fellowships (F31) to Promote Diversity</b> (if applicable) <ul style="list-style-type: none"> <li>• Attach under "12 - Other Attachments"</li> </ul>	No page limit (I-65)
	<b>Biosketch</b> (version B) <ul style="list-style-type: none"> <li>• Predoctoral/Postdoctoral – use Fellowship Biosketch Form (<a href="http://grants.nih.gov/grants/funding/424/applicant-fellowbiosketch.doc">http://grants.nih.gov/grants/funding/424/applicant-fellowbiosketch.doc</a>)</li> <li>• Senior Fellowship – use traditional biosketch form</li> <li>• Sponsors &amp; others – use traditional biosketch form</li> </ul>	4 pages per person (I-70)
	<b>Research Training Plan / Introduction</b> (Resubmissions only)	1 page (I-85)
	<b>Research Training Plan / Specific Aims</b>	1 page (I-85)
	<b>Research Training Plan / Research Strategy</b> <ul style="list-style-type: none"> <li>• Significance</li> <li>• Innovation</li> <li>• Approach</li> </ul>	6 pages (I-86)
	<b>Protection of Human Subjects</b> (if applicable)	No page limit (I-89 & II-3)
	<b>Inclusion of Women &amp; Minorities</b> (if applicable)	No page limit (I-89 & II-12)
	<b>Targeted/Planned Enrollment</b> (if applicable) <a href="http://grants.nih.gov/grants/funding/424/SF424R-R_enrollment.doc">http://grants.nih.gov/grants/funding/424/SF424R-R_enrollment.doc</a>	No page limit (I-90 & II-14)
	<b>Inclusion of Children</b> (if applicable)	No page limit (I-90 & II-15)
	<b>Vertebrate Animal Section</b> (if applicable)	No page limit (I-90)
	<b>Select Agent Research</b> (if applicable)	No page limit (I-91)
	<b>Resource Sharing Plan</b> (if applicable)	No page limit (I-92)
	<b>Respective Contributions</b>	1 page (I-93)

	SECTION OF APPLICATION	LIMITS (INSTRUCTION PAGE #)
	<b>Selection of Sponsor and Institution</b>	1 page (I-93)
	<b>Responsible Conduct of Research</b>	1 page (I-93)
	<b>Applications for Concurrent Support</b> (if applicable)	1 page (I-96)
	<b>Goals for Fellowship Training and Career</b>	1 page (I-96)
	<b>Activities Planned Under This Award</b>	1 page (I-96)
	<b>Doctoral Dissertation and Other Research Experience</b>	2 pages (I-97)
	<b>Sponsor/Co-Sponsor Information</b> <ul style="list-style-type: none"> <li>• Research Support Available</li> <li>• Previous Fellows/Trainees</li> <li>• Training Plan, Environment, Research Facilities</li> <li>• Number of Fellows/Trainees to Be Supervised During Fellowship</li> <li>• Applicant's Qualifications &amp; Potential for a Research Career</li> </ul>	6 page (I-98)
	<b>Appendix</b> (if applicable)	10 max (I-99)
	<b>Cover letter</b> <ul style="list-style-type: none"> <li>• Include components per instructions</li> <li>• Must include referee list</li> </ul>	No page limit (I-77)

## Helpful Resources

### Criteria and Considerations for F Critiques:

<http://grants.nih.gov/grants/peer/critiques/f.htm>

### F Kiosk – Information about Ruth L. Kirschstein NRSA Individual Fellowship Funding Opportunities:

[http://grants.nih.gov/training/F\\_files\\_nrsa.htm](http://grants.nih.gov/training/F_files_nrsa.htm)

### NIH Standard Due Dates for Competing Applications:

<http://grants.nih.gov/grants/funding/submissionschedule.htm>

### NIH Scoring Key

<http://enhancing-peer-review.nih.gov/scoring&reviewchanges.html>

### NIH Glossary & Acronym List

<http://grants.nih.gov/Grants/glossary.htm>

# Writing the Application

## General Formatting Guidelines

For specific information, see SF424 R&R:

[http://grants.nih.gov/grants/funding/424/SF424\\_RR\\_Guide\\_Fellowship\\_VerB.doc](http://grants.nih.gov/grants/funding/424/SF424_RR_Guide_Fellowship_VerB.doc)

### Font

Use an Arial, Helvetica, Palatino Linotype, or Georgia typeface, a black font color, and a font size of 11 points or larger. (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.)

Type density, including characters and spaces, must be no more than 15 characters per inch. Type may be no more than six lines per inch.

### Paper Size and Page Margins

Use standard paper size (8 ½" x 11). Use at least one-half inch margins (top, bottom, left, and right) for all pages. No information should appear in the margins, including the PI's name and page numbers.

### Page Formatting

Since a number of reviewers will be reviewing applications as an electronic document and not a paper version, applicants are strongly encouraged to use only a standard, single-column format for the text. Avoid using a two-column format since it can cause difficulties when reviewing the document electronically.

Do not include any information in a header or footer of the attachments. A header will be system-generated that references the name of the PD/PI. Page numbers for the footer will be system-generated in the complete application, with all pages sequentially numbered.

### URLs

Unless otherwise specified in the FOA, Internet website addresses (URLs) may not be used to provide information necessary to the review because reviewers are under no obligation to view the Internet sites.

### Figures, Graphs, Diagrams, Charts, Tables, Figure Legends, and Footnotes

You may use a smaller type size but it must be in a black font color, readily legible, and follow the font typeface requirement. Color can be used in figures; however, all text must be in a black font color, clear and legible.

### Grantsmanship

Use English and avoid jargon.

If terms are not universally known, spell out the term the first time it is used and note the appropriate abbreviation in parentheses. The abbreviation may be used thereafter.

## Fellowship Biographical Sketch Instructions

A biographical sketch attachment (limited to 4 pages) is required for the fellowship applicant. Predoctoral and postdoctoral fellowship applicants should use the fellowship biosketch discussed below. Senior fellowship applicants should use the traditional NIH biosketch ([http://grants.nih.gov/grants/funding/424/SF424R-R\\_biosketch\\_VerB.doc](http://grants.nih.gov/grants/funding/424/SF424R-R_biosketch_VerB.doc)).

A copy of the fellowship biographical sketch format page is here:  
<http://grants.nih.gov/grants/funding/424/applicant-fellowbiosketch.doc>

A sample of a completed one is here:  
<http://grants.nih.gov/grants/funding/424/applicant-fellowbiosketchsample.doc>

A biosketch for a predoctoral or postdoctoral fellowship applicant should follow the instructions below:

**Education:** List all degree programs beginning with baccalaureate or other initial professional education and licensure, such as nursing (RN). Include all dates (month (mm) and year (yyyy)) of degrees received or expected, in addition to other information requested.

**Personal Statement:** Briefly describe why your experience and qualifications make you particularly well-suited for your role as a Fellowship applicant.

**Positions and Honors:** List in chronological order all non-degree training, including postdoctoral research training, all employment after college, and any military service. Clinicians should include information on internship, residency and specialty board certification (actual and anticipated with dates) in addition to other information requested. This information is used in reviewing the application and in determining the stipend level for Postdoctoral Fellowships. State the Activity/Occupation and include beginning/end dates, field, name of institution/company, and the name of your supervisor/employer.

List any academic and professional honors that would reflect upon your potential for a research career and qualifications for an Individual Fellowship. Include all scholarships, traineeships, fellowships, and development awards other than Kirschstein-NRSA. Indicate sources of awards, dates, and grant or award numbers. List current memberships in professional societies, if applicable.

**Publications:** List your entire bibliography, separating research papers, abstracts, book chapters, and reviews. Within each subsection the list should be chronological. *If the list of publications cannot be accommodated within the four-page biosketch limit, select only the most pertinent publications or limit the list to no more than 15 publications.* For each publication, list the authors in published sequence, full title of article, journal, volume number, page numbers, and year of publication. Indicate if you previously used another name that is reflected in any of the citations. URLs or NIH PubMed Central (PMC) submission identification numbers may be included along with the full reference. While there is no limit to the number of URLs or PMC submission identification numbers that can be cited, applicants should be both judicious and concise. Manuscripts listed as “pending publication” or “in preparation” should be included and identified.

### **Scholastic Performance:**

Predocctoral applicants: Using the chart provided, list by institution and year all undergraduate and graduate courses with grades.

In addition, in the space following the chart, explain any marking system if other than 1-100, A, B, C, D, F, or 0-4.0 if applicable. Show levels required for a passing grade. At the bottom of the page, Predoctoral applicants must also type in their scores for the Graduate Record Examination (GRE), if available; and M.D./Ph.D. applicants should type in their MCAT scores, if available.

Postdoctoral applicants: Using the chart provided, list by institution and year all undergraduate courses and graduate scientific and/or professional courses germane to the training sought under this award with grades. In the space following the chart, explain any marking system if other than 1-100, A, B, C, D, F, or 0-4.0 if applicable. Show levels required for a passing grade.

Predoctoral and postdoctoral applicants may be asked to send transcripts prior to award. Unless specified in a particular announcement (RFA/PA), do not include transcripts with the application.



## NRSA Individual Fellowship Template

**How to Use this Template:** Fill in the blank areas beneath each of the sections and delete the template as you write, leaving the bold-faced headings. This template is to serve as a guideline only and should be modified as needed based on the specific research project and NIH funding notice (e.g., funding opportunity announcement, request for application or request for proposal). Though this template reflects the general formatting guidelines on page 6, please ensure that you have correctly formatted your own application before submitting it.

*This template is formatted in 11-point Arial font*

## Specific Aims (1 Page Limit)

NIH Instructions: State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved. List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field, or develop new technology.

**\*\*\*Begin Specific Aims Template Below\*\*\***

### Specific Aims

- What is your project about? State your goal/objective/outcome.
- Why is it important? State the significance and overall impact.
  - Medical significance
  - Long-terms goal/objective of the project
- What is known? Provide background related to your research question.
  - This could include data from your lab as part of this background
- What is unknown? What do you hope to accomplish?
- Why is the gap in this knowledge a problem and how do you propose to address it?
  - Rationale of this study – why are you doing THIS project?
  - What have you accomplished to date that suggests this approach? (Preliminary Data)
- What is your hypothesis (hypotheses)?
  - Objective of this application
- Explain how you will address your hypothesis (hypotheses) using your **Specific Aims**. You may also list a hypothesis for each aim here.
  - Address “why” questions rather than “what”: no “demonstrate” or “describe” words should lead the aims, which should be very succinct and include expected outcomes
  - If you can briefly include an indication of the expected outcome/significance here, do so
  - KEEP THE AIMS SHORT – a full paragraph/aim is too much
- Summary paragraph: what you propose to do
  - Why it is relevant/SIGNIFICANT to medical science and the field
  - Why your research team is the best team for the project
  - INNOVATION
  - Other salient features (e.g., multidisciplinary investigative team, outstanding clinical and/or laboratory environments)

**\*\*\*End Specific Aims Template\*\*\***

## Research Strategy (6 page limit)

Organize the Research Strategy in the specified order using the instructions provided below. Start each section with the appropriate section headings: (a) Significance, (b) Innovation, (c) Approach. Cite published experimental details in the Research Strategy section and provide the full reference in the Bibliography and References cited section of the application.

**\*\*\*Begin Research Strategy Template Below\*\*\***

### (a) Significance

Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.

Explain how the proposed project will improve scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.

Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.

### (b) Innovation

Explain how the application challenges and seeks to shift current research or clinical practice paradigms.

Describe any novel theoretical concepts, approaches or methodologies, instrumentation or intervention(s) to be developed or used, and any advantage over existing methodologies, instrumentation or intervention(s).

Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation or interventions.

### (c) Approach (Include Preliminary Studies here)

Describe the overall strategy, methodology, and analyses to be used to accomplish the specific aims of the project. *Tip:* make it clear what tasks are related to each specific aim. Unless addressed separately in Item 21 (Resource Sharing Plan), include how the data will be collected, analyzed, and interpreted as well as any resource sharing plans as appropriate.

Discuss potential problems, alternative strategies, and benchmarks for success anticipated to achieve the aims.

If the project is in the early stages of development, describe any strategy to establish feasibility, and address the management of any high-risk aspects of the proposed work.

Point out any procedures, situations, or materials that may be hazardous to personnel and precautions to be exercised. A full discussion on the use of Select Agents should appear in Sections 19 and 21.

**\*\*\*End Research Strategy Template\*\*\***

**\*\*\*Begin Candidate Template Below\*\*\***

### **Candidate's Background**

Use this section to provide any additional information not described in the Biographical Sketch Format Page such as research and/or clinical training experience.

### **Career Goals and Objectives**

Describe your past scientific history, indicating how the award fits into past and future research career development. If there are consistent themes or issues that have guided previous work, these should be made clear; if your work has changed direction, the reasons for the change should be indicated. It is important to justify the award and how it will enable you to develop or expand your research career. You may include a timeline, including plans to apply for subsequent grant support.

### **Career Development/Training Activities During Award Period**

Stress the new enhanced research skills and knowledge you will acquire as a result of the proposed award. If you have considerable research experience in the same areas as the proposed research, reviewers may determine that the application lacks potential to enhance your research career. For mentored awards, describe structured activities, such as course work or technique workshops, which are part of the developmental plan. If course work is included, provide course numbers and descriptive titles. Briefly discuss each of the activities, except research, in which you expect to participate. Include a percentage of time involvement for each activity by year, and explain how the activity is related to the proposed research and the career development plan. Note that recipients of mentored K awards may receive concurrent support from an NIH research grant award or cooperative agreement only under certain conditions (see NIH Notice NOT-OD-08-065).

### **Training in the Responsible Conduct of Research**

For mentored career development awards, describe a plan to acquire instruction in the responsible conduct of research. For independent career awards, describe a plan to provide instruction in the responsible conduct of research. See Part III Section 1.16 for information on the NIH Policy on Training in the Responsible Conduct of Research (RCR).

Attach a description of plans for obtaining instruction in the responsible conduct of research. This section should document prior instruction or participation in RCR training during the applicant's current career stage (including the date instruction was last completed) and propose plans to either receive instruction or participate as a course lecturer, etc., in order to meet the once every four-year requirement. The plan should address how applicants plan to incorporate the five instructional components outlined in the NIH Policy on Instruction in the Responsible Conduct of Research: format, subject matter, faculty participation, duration, and frequency. The plan may include career stage-appropriate individualized instruction or independent scholarly activities that will enhance the applicant's understanding of ethical issues related to their specific research activities and the societal impact of that research. The role of the mentor in RCR instruction must be described. Where applicable, Renewal applications must describe the RCR instruction activities undertaken during the project period as well as future plans.

**\*\*\*End Candidate Template\*\*\***