### Department of Health and Human Services

#### Part 1. Overview Information

<table>
<thead>
<tr>
<th>Participating Organization(s)</th>
<th>National Institutes of Health (NIH)</th>
</tr>
</thead>
</table>
| Components of Participating Organizations | National Cancer Institute (NCI)  
National Eye Institute (NEI)  
National Heart, Lung, and Blood Institute (NHLBI)  
National Human Genome Research Institute (NHGRI)  
National Institute on Aging (NIA)  
National Institute on Alcohol Abuse and Alcoholism (NIAAA)  
National Institute of Allergy and Infectious Diseases (NIHID)  
National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)  
National Institute of Biomedical Imaging and Bioengineering (NIBIB)  
**Eunice Kennedy Shriver** National Institute of Child Health and Human Development (NICHD)  
National Institute on Deafness and Other Communication Disorders (NIDCD)  
National Institute of Dental and Craniofacial Research (NIDCR)  
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)  
National Institute on Drug Abuse (NIDA)  
National Institute of Environmental Health Sciences (NIEHS)  
National Institute of General Medical Sciences (NIGMS)  
National Institute of Mental Health (NIMH)  
National Institute of Neurological Disorders and Stroke (NINDS)  
National Institute on Minority Health and Health Disparities (NIMHD)  
National Library of Medicine (NLM)  
National Center for Complementary and Alternative Medicine (NCCAM)  
Division of Program Coordination, Planning and Strategic Initiatives, Office of Research Infrastructure Programs (ORIP) |

Special Note: Because of the differences in individual Institute and Center (IC) program requirements for this FOA, prospective applicants are strongly encouraged to consult the Table of IC-Specific Information, Requirements and Staff Contacts, to make sure that their application is responsive to the requirements of one of the participating NIH
<table>
<thead>
<tr>
<th>Funding Opportunity Title</th>
<th>Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral MD/PhD or Other Dual-Doctoral Degree Fellowship (Parent F30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity Code</td>
<td>F30 Individual Predoctoral NRSA for MD/PhD Fellowships</td>
</tr>
<tr>
<td>Announcement Type</td>
<td>Reissue of PA-11-110</td>
</tr>
</tbody>
</table>
| Related Notices           | • September 25, 2014 - See Notice NOT-OD-14-133. Notice to Emphasize the Requirement for Additional Educational Information under PA-14-150 "Ruth L. Kirschstein National Research Service Award (NSRA) Individual Predoctoral MD/PhD or Other Dual-Doctoral Degree Fellowship (F30)"  
  • August 29, 2014 - See Notice NOT-OD-14-129. eRA Commons Username Required for Sponsor in Individual Fellowship Grant Applications to NIH and AHRQ.  
  • June 4, 2014 - Notice NOT-14-074 supersedes instructions in Section III.3 regarding applications that are essentially the same.  
  • May 16, 2014 - See Notice NOT-OD-14-090. Notice of Clarification Regarding the Additional Educational Information Required.  
| Funding Opportunity       | PA-14-150                                                                                                           |
| Announcement (FOA) Number |                                                                                                                    |
| Companion Funding        | None                                                                                                               |
| Opportunity              |                                                                                                                    |
| Number of Applications    | See Section III. 3. Additional Information on Eligibility.                                                          |
| Catalog of Federal       | 93.351; 93.846; 93.233; 93.839; 93.838; 93.837; 93.866; 93.307; 93.853; 93.121; 93.859; 93.172; 93.273; 93.879; 93.867; 93.847; 93.856; 93.855; 93.398; 93.286; 93.173; 93.865; 93.213; 93.242; 93.113; 93.279 |
| Domestic Assistance      | The purpose of the Kirschstein-NRSA, dual-doctoral degree, predoctoral fellowship                                     |
| (CFDA) Number(s)         |                                                                                                                    |

**Funding Opportunity Purpose**

(F30) is to enhance the integrated research and clinical training of promising predoctoral students, who are matriculated in a combined MD/PhD or other dual-doctoral degree training program (e.g. DO/PhD, DDS/PhD, AuD/PhD, DVM/PhD), and who intend careers as physician-scientists or other clinician-scientists. Applicants must propose an integrated research and clinical training plan and a dissertation research project in scientific health-related fields relevant to the missions of the participating NIH Institutes and Centers. The fellowship experience is expected to clearly enhance the individuals’ potential to develop into productive, independent physician-scientists or other clinician-scientists.

**Key Dates**

| **Posted Date** | March 7, 2014 |
| **Open Date (Earliest Submission Date)** | March 8, 2014 |
| **Letter of Intent Due Date(s)** | Not Applicable |
| **Application Due Date(s)** | **Standard dates** apply, by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. |
| **AIDS Application Due Date(s)** | **Standard AIDS dates** apply, by 5:00 PM local time of applicant organization. Applicants are encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date. |
| **Scientific Merit Review** | **Standard dates** apply |
| **Advisory Council Review** | Not Applicable for Fellowships |
| **Earliest Start Date** | **Standard dates** apply |
| **Expiration Date** | January 8, 2017 |
Due Dates for E.O. 12372 | Not Applicable

Required Application Instructions

It is critical that applicants follow the instructions in the Individual Fellowship SF424 (R&R) Application Guide except where instructed to do otherwise (in this FOA or in a Notice from the NIH Guide for Grants and Contracts). Conformance to all requirements (both in the Application Guide and the FOA) is required and strictly enforced. Applicants must read and follow all application instructions in the Application Guide as well as any program-specific instructions noted in Section IV. When the program-specific instructions deviate from those in the Application Guide, follow the program-specific instructions. Applications that do not comply with these instructions may be delayed or not accepted for review.

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   Section VIII. Other Information

Part 2. Full Text of Announcement

Section I. Funding Opportunity Description

The overall goal of the NIH Ruth L. Kirschstein National Research Service Award (NRSA) program is to help ensure that a diverse pool of highly trained scientists is available in appropriate scientific disciplines to address the Nation’s biomedical, behavioral, and clinical research needs. In order to accomplish this goal, NRSA training programs are designed to train
individuals to conduct research and to prepare for research careers. More information about NRSA programs may be found at the Ruth L. Kirschstein National Research Service Award (NRSA) website.

There is a critical need for physician-scientists and other clinician-scientists to investigate human health and disease through rigorous research. The complexity of biomedical, behavioral, and clinical science today prevents the standard course of study at most medical and other health professional schools from providing the mentored experiences necessary to develop health professionals who are well-trained researchers. To fill this gap, a variety of programs have been developed to combine training for the MD or other health professional degree (e.g., DO, DDS, AuD, DVM) with extensive research experience leading to a second, advanced degree. It is expected that individuals who are both physicians/clinicians and highly trained scientists will play a vital role in advancing knowledge across the full spectrum of health-related research.

The purpose of the Kirschstein-NRSA Individual Predoctoral MD/PhD or Other Dual-Doctoral Degree Fellowship (F30) is to support highly promising predoctoral students, who are matriculated in a combined MD/PhD or other dual-doctoral degree training program (e.g. DO/PhD, DDS/PhD, AuD/PhD, DVM/PhD), during their mentored dissertation research training and clinical training under the guidance of outstanding faculty sponsors. This program thus contributes to efforts to increase the pool of highly trained physician-scientists and other clinician-scientists in the biomedical research workforce.

Applicants for the Kirschstein-NRSA F30 award are expected to propose an integrated research and clinical training plan and a dissertation research project in scientific health-related fields relevant to the missions of the participating NIH Institutes and Centers. The integrated program of research and training should enhance the individual's potential to develop into a productive, independent physician-scientist or other clinician-scientist. The training plan should document the need for, and the anticipated value of, the proposed mentored training in relationship to the individual’s goals for a career as an independent physician-scientist or other clinician-scientist. The training plan should also facilitate the fellow’s transition to a residency program appropriate for the applicant’s career goals, or to a postdoctoral program as appropriate for the particular clinical degree (e.g., DDS or DMD).

It is expected that the integrated, mentored training experience will provide:

- A strong foundation in research design, methods, and analytic techniques appropriate to the proposed dissertation research;
- The enhancement of the applicant's ability to conceptualize and think through research problems with increasing independence;
- Experience conducting research using appropriate, state-of-the-art methods, as well as presenting and publishing the research findings as first author;
- The opportunity to interact with members of the scientific community at appropriate scientific meetings and workshops;
- Opportunities to integrate clinical experiences during the research training component; and
- Clinical clerkship opportunities tailored to the applicant and his/her interests, as appropriate for the dual-degree program of study.
The Kirschstein-NRSA F30 award may provide up to six years of support for research and clinical training that leads to the MD/PhD degree or another dual-doctoral degree. Because the F30 program is intended to support individuals matriculated in an integrated, dual-degree program during both their graduate research training and clinical training, the F30 cannot be used to support only the clinical training years.

The NIH encourages applications from students early in the research training phase of their dual-degree training so that they can substantively benefit from the mentored research training opportunities of an individual fellowship award. Moreover, to encourage timely completion of dual-degree training, the F30 fellowship is generally not intended to support dual-degree students after year 8 of their dual-degree training program. In addition, this program has special eligibility criteria, and prospective applicants should refer to Section III, Eligible Individuals, for additional information.

Special Note: Because of the differences in individual Institute and Center (IC) program requirements for this FOA, prospective applicants are strongly encouraged to consult the Table of IC-Specific Information, Requirements and Staff Contacts, to make sure that their application is responsive to the requirements of one of the participating NIH ICs.

Section II. Award Information

<table>
<thead>
<tr>
<th>Funding Instrument</th>
<th>Grant: A support mechanism providing money, property, or both to an eligible entity to carry out an approved project or activity.</th>
</tr>
</thead>
</table>
| Application Types Allowed | New  
Resubmission  
Renewal: Individual fellowship awards are generally not renewable. In rare cases in which fellowship awardees require further fellowship support, they should consult with NIH staff to obtain advice regarding submission of a renewal application.  
The OER Glossary and the SF424 (R&R) Individual Fellowship Application Guide provide details on these application types. |
| Funds Available and Anticipated Number of Awards | The number of awards is contingent upon NIH appropriations and the submission of a sufficient number of meritorious applications. |
| Award Budget | Award budgets are composed of stipends, tuition and fees, and institutional allowance, as described below. |
| Award Project Period | Individuals may receive up to 6 years of aggregate Kirschstein-NRSA support at the predoctoral level for dual-degree training, including any combination of support from institutional training grants (e.g., T32) and an individual fellowship award. Over the total |
duration of F30 support, at least 50% of the award period must be devoted to graduate research training leading to the doctoral research degree.

## Other Award Budget Information

| **Stipends** | Kirschstein-NRSA awards provide stipends as a subsistence allowance to help defray living expenses during the research and clinical training experiences. The most recent stipend levels are described on the Kirschstein-NRSA webpage. NIH will adjust awards on the anniversary date of the award to ensure consistency with the stipend level in effect at that time. Visit NIH Grants Policy Statement: Ruth L. Kirschstein National Research Service Awards for more information. |
| **Tuition and Fees** | NIH will contribute to the combined cost of tuition and fees at the rate in place at the time of award. The most recent tuition and fees levels are described on the Ruth L. Kirschstein National Research Service Award (NRSA) webpage. Visit NIH Grants Policy Statement: Ruth L. Kirschstein National Research Service Awards for more information. |
| **Institutional Allowance** | The applicant should request a Kirschstein-NRSA institutional allowance to help defray the cost of fellowship expenses such as health insurance, research supplies, equipment, books, and travel to scientific meetings. The most recent institutional allowance levels are described via a link on the Ruth L. Kirschstein National Research Service Award (NRSA) site. Requests for additional costs (such as to accommodate the disabilities of a fellow) must be explained in detail and justified in the application. Visit NIH Grants Policy Statement: Ruth L. Kirschstein National Research Service Awards for more information. |
| **Indirect Costs** | NIH does not separately reimburse indirect costs (also known as Facilities & Administrative [F&A] Costs) for fellowships. Costs for administering fellowships are part of Institutional Allowance. |

NIH grants policies as described in the NIH Grants Policy Statement will apply to the applications submitted and awards made in response to this FOA.

## Section III. Eligibility Information
1. Eligible Applicants

Eligible Organizations

Higher Education Institutions

- Public-State Controlled Institutions of Higher Education
- Private Institutions of Higher Education

The following types of Higher Education Institutions are always encouraged to apply for NIH support as Public or Private Institutions of Higher Education:

- Hispanic-serving Institutions
- Historically Black Colleges and Universities (HBCUs)
- Tribally Controlled Colleges and Universities (TCCUs)
- Alaska Native and Native Hawaiian Serving Institutions
- Asian American Native American Pacific Islander Serving Institutions (AANAPISIs)

Nonprofits Other Than Institutions of Higher Education

- Nonprofits with 501(c)(3) IRS Status (Other than Institutions of Higher Education)
- Nonprofits without 501(c)(3) IRS Status (Other than Institutions of Higher Education)

For-Profit Organizations

- Small Businesses
- For-Profit Organizations (Other than Small Businesses)

Governments

- Eligible Agencies of the Federal Government

Before submitting a fellowship application, the applicant must identify a sponsoring institution. The sponsoring institution must have staff and facilities available on site to provide a suitable environment for performing high-quality research and clinical training. The training should occur in a strong research environment that has appropriate human and technical resources and is demonstrably committed to both research and clinical training in the particular program proposed by the applicant. The
sponsoring institution may be private (profit or nonprofit) or public, including the NIH Intramural Programs and other Federal laboratories. All institutions with the appropriate resources and commitment are encouraged to apply, regardless of the nature and scope of their prior involvement in dual-degree training.

An individual may request support for research training abroad (see Foreign Institutions below) but may not request support for clinical training abroad. In such cases, the applicant is required to provide detailed justification for the foreign training, including the reasons why the facilities, the sponsor, or other aspects of the proposed experience are more appropriate than training in a domestic setting. The justification is evaluated in terms of the scientific advantages of the foreign training as compared to the training available domestically. Foreign training will be considered for funding only when the scientific advantages are clear.

**Foreign Institutions**

Non-domestic (non-U.S.) Entities (Foreign Institutions) are not eligible to apply. Non-domestic (non-U.S.) components of U.S. Organizations are not eligible to apply. Foreign components, as defined in the NIH Grants Policy Statement, are allowed.

**Required Registrations**

**Applicant Organizations**

Applicant organizations must complete and maintain the following registrations as described in the SF 424 (R&R) Application Guide to be eligible to apply for or receive an award. All registrations must be completed prior to the application being submitted. Registration can take 6 weeks or more, so applicants should begin the registration process as soon as possible. The NIH Policy on Late Submission of Grant Applications states that failure to complete registrations in advance of a due date is not a valid reason for a late submission.

- **Dun and Bradstreet Universal Numbering System (DUNS)** - All registrations require that applicants be issued a DUNS number. After obtaining a DUNS number, applicants can begin both SAM and eRA Commons registrations. The same DUNS number must be used for all registrations, as well as on the grant application.
- **System for Award Management (SAM)** (formerly CCR) – Applicants must complete and maintain an active registration, which requires renewal at least annually. The renewal process may require as much time as the initial registration. SAM registration includes the assignment of a Commercial and Government Entity (CAGE) Code for domestic organizations which have not already been assigned a CAGE Code.
- **NATO Commercial and Government Entity (NCAGE) Code** – Foreign organizations must obtain an NCAGE code (in lieu of a CAGE code) in order to register in SAM.
- **eRA Commons** - Applicants must have an active DUNS number and SAM registration in order to complete the eRA Commons registration. Organizations can register with the eRA Commons as they are working through their SAM or Grants.gov registration. eRA Commons requires organizations to identify at least one Signing Official (SO) and at least one Program Director/Principal Investigator (PD/PI) [for fellowships, this is the applicant] account in order to submit an
application.

- **Grants.gov** – Applicants must have an active DUNS number and SAM registration in order to complete the Grants.gov registration.

### Program Directors/Principal Investigators (PD(s)/PI(s))

All PD(s)/PI(s) [for fellowships, this is the applicant] must have an eRA Commons account and should work with their organizational officials to either create a new account or to affiliate an existing account with the applicant organization’s eRA Commons account. Obtaining an eRA Commons account can take up to 2 weeks.

### Eligible Individuals (Program Director/Principal Investigator)

Any applicant with the skills, knowledge, and resources necessary to carry out the proposed research as the Program Director/Principal Investigator (PD/PI) [for fellowships, this is the applicant] is invited to work with his/her sponsor and organization to develop an application for support for training in any research area within the mission of the NIH. Individuals from underrepresented racial and ethnic groups as well as individuals with disabilities are always encouraged to apply for NIH support. Multiple PDs/PIs are not allowed.

By the time of award, the individual must be a citizen or a non-citizen national of the United States or have been lawfully admitted for permanent residence (i.e., possess a currently valid Permanent Resident Card USCIS Form I-551, or other legal verification of such status).

Although a Kirschstein-NRSA award is not usually made for study leading to the MD, DO, DDS, AuD or similar professional degrees, or for study that is part of residency training leading to a medical specialty, the F30 program is specifically designed to support combined, dual-degree training leading to award of both a health professional doctoral degree (e.g., MD, DO, DDS, AuD, DVM, PharmD) and a research doctoral degree (e.g., PhD, DrPH) from an accredited program.

The applicant must have a baccalaureate degree, show evidence of high academic performance in the sciences, and commitment to a career as an independent physician-scientist or other clinician-scientist.

**For all applicants other than DDS/PhD, DMD/PhD, and AuD/PhD degree candidates:** To be eligible, an applicant 1) must have matriculated into a dual-degree program no more than 48 months prior to the due date of the initial (-01) application; and 2) must have identified a dissertation research project and sponsor(s). Exceptions to the first eligibility criterion will be considered when the applicant has taken an official leave of absence from the dual-degree program. In addition, over the total duration of F30 support, at least 50% of the award period must be devoted to full-time graduate research training leading to the doctoral research degree.

Because dentist-scientist and audiologist-scientist dual-degree programs are highly variable in their phasing and integration, the eligibility parameters for all DDS/PhD and DMD/PhD degree candidates are different.
For all DDS/PhD, DMD/PhD, and AuD/PhD degree candidates: To be eligible, an applicant 1) must have matriculated into a dual-degree program; and 2) must have identified a dissertation research project and sponsor(s). In addition, over the total duration of F30 support, at least 50% of the award period must be devoted to full-time graduate research training leading to the doctoral research degree.

2. Cost Sharing

This FOA does not require cost sharing as defined in the NIH Grants Policy Statement.

3. Additional Information on Eligibility

Number of Applications

NIH will not accept any application that is essentially the same as one already reviewed within the past thirty-seven months (as described in the NIH Grants Policy Statement), except for submission:

- To an RFA of an application that was submitted previously as an investigator-initiated application but not paid;
- Of an investigator-initiated application that was originally submitted to an RFA but not paid; or
- Of an application with a changed grant activity code.

Duration of Support

Individuals may not exceed the aggregate limit of NRSA support shown above in the Award Project Period (see Section II. Award Information). Applicants must consider any prior NRSA research training in determining the duration of support requested. Information regarding previous Kirschstein-NRSA support must be included in the application and will be considered at the time of award. The F30 fellowship is generally not intended to support dual-degree students after year 8 of dual-degree training. Over the total duration of F30 support, at least 50% of the award period must be devoted to graduate research training leading to the doctoral research degree. After an award is made, award duration may be adjusted to ensure that at least 50% of the total award duration is devoted to research training leading to the research doctorate.

Level of Effort

At the time of award, individuals are required to pursue their training on a full-time basis, normally defined as 40 hours per week or as specified by the sponsoring institution in accordance with its own policies.

Sponsor
Before submitting the application, the applicant must identify a sponsor(s) who will supervise the proposed, integrated, mentored research and clinical training experience. The primary sponsor should be an active investigator in the area of the proposed research training and be committed both to the applicant’s research training and to direct supervision of his/her research. The sponsor must document the availability of sufficient research funds and facilities for high-quality research training. The sponsor, or a member of the sponsor team, should have a successful track record of mentoring dual-degree students. Applicants are encouraged to identify more than one sponsor, i.e., a sponsor team, if this is deemed advantageous for providing expert advice in all aspects of the integrated research and clinical training program. A clinical training sponsor, in an area of clinical interest to the applicant, may also be appropriate. This individual would meet regularly to help collaboratively mentor the applicant during the tenure of the award. When there is a sponsor team, one individual must be identified as the primary sponsor who will coordinate the applicant’s integrated training program. The applicant must work with the sponsor(s) in preparing the application.

Section IV. Application and Submission Information

1. Requesting an Application Package

Applicants must download the SF424 (R&R) application package associated with this funding opportunity using the “Apply for Grant Electronically” button in this FOA or following the directions provided at Grants.gov.

2. Content and Form of Application Submission

It is critical that applicants follow the instructions in the SF424 (R&R) Individual Fellowship Application Guide, except where instructed in this funding opportunity announcement to do otherwise. Conformance to the requirements in the Application Guide is required and strictly enforced. Applications that are out of compliance with these instructions may be delayed or not accepted for review.

Page Limitations

All page limitations described in the SF424 (R&R) Individual Fellowship Application Guide and the Table of Page Limits must be followed.

Required and Optional Forms

The forms package associated with this FOA includes all applicable forms, required and optional. Please note that some forms marked optional in the application package are required for submission of applications for this FOA. Follow the instructions in the SF424 (R&R) Individual Fellowship Application Guide to ensure you complete all appropriate “optional” forms.
Instructions for Application Submission

The following section supplements the instructions found in the SF424 (R&R) Individual Fellowship Application Guide and should be used for preparing an application to this FOA.

SF424(R&R) Cover Form

All instructions in the SF424 (R&R) Individual Fellowship Application Guide must be followed.

SF424(R&R) Project/Performance Site Locations Form

All instructions in the SF424 (R&R) Individual Fellowship Application Guide must be followed.

Other Project Information Form

All instructions in the SF424 (R&R) Individual Fellowship Application Guide must be followed, with the following additional instructions:

Other Attachments

The following additional educational information is required and should be attached under Other Attachments:

- Describe the institution’s dual-degree program in which the applicant is enrolled. Provide some background on the dual-degree program including general program outcomes, such as the completion rate and the percentage of program graduates who are in academic research positions post-training. Describe the structure of the dual-degree program, and required milestones and their usual timing (e.g., number of courses, any teaching and clinical requirements, and qualifying exams). The sequencing of the applicant’s graduate research and medical (or other health professional) school years should also be described. Describe the progress and status of the F30 applicant in relation to the program’s timeline, indicating when the applicant matriculated into the program and when the applicant is likely to transition to clinical years of the dual-degree program. Describe any clinical tutorials during the graduate research years and any activities to ease transition from the graduate to the clinical years of the dual-degree program. Describe any research-associated activities during the clinical years of the dual-degree program. Describe the frequency and method by which the program formally monitors and evaluates a student’s progress. This information is typically provided by the director of the dual-degree program or the department chair. The name of the individual providing the information should be included at the end of the attachment.

- Provide justification for the duration of support requested in terms of the research and clinical training proposed. Include the number of anticipated months of research training and of clinical training.

- Note that scores for standardized exams (e.g., MCAT, GRE) as well as a listing of the applicant’s courses and grades must be included in the Fellowship Applicant Biographical Sketch, and NOT in this attachment.
• Please name this attachment “Additional Educational Information.”

_The filename provided for each “Other Attachment” will be the name used for the bookmark in the electronic application in eRA Commons._

**SF424(R&R) Senior/Key Person Profile (Expanded) Form**

All instructions in the SF424 (R&R) Individual Fellowship Application Guide must be followed.

**PHS Fellowship Supplemental Form**

All instructions in the SF424 (R&R) Individual Fellowship Application Guide must be followed, with the following additional instructions:

**Research Training Plan**

**Research Strategy**

Applicants must describe a well-defined research project (typically hypothesis-driven) that is well-suited to his/her stage of career development. The applicant should describe the background leading to the proposed research, the significance of the research, the research approach (design and methods) for achieving the Specific Aims, the rationale for the proposed approach, potential pitfalls, and expected/alternative outcomes of the proposed studies. It may be beneficial to include pertinent preliminary data to demonstrate feasibility.

**Resource Sharing Plan**

Individuals are required to comply with the instructions for the Resource Sharing Plans as provided in the SF424 (R&R) Application Guide.

**Responsible Conduct of Research**

All applications must include a plan to fulfill NIH requirements for Instruction in the Responsible Conduct of Research. The plan must address the five, required instructional components outlined in the NIH policy: 1) _Format_ - the required format of instruction, i.e., face-to-face lectures, coursework, and/or real-time discussion groups (a plan with only on-line instruction is not acceptable); 2) _Subject Matter_ - the breadth of subject matter, e.g., conflict of interest, authorship, data management, human subjects and animal use, laboratory safety, research misconduct, research ethics; 3) _Faculty Participation_ - the role of the mentor(s) and other faculty involvement in the instruction; 4) _Duration of Instruction_ - the total number of contact hours of instruction; and 5) _Frequency of Instruction_ – instruction must occur during each career stage and at least once every four years. Document any prior instruction during the applicant’s current career stage, including the inclusive dates instruction.
was last completed. See also NOT-OD-10-019. Applications lacking a Plan for Instruction in the Responsible Conduct of Research will not be reviewed.

**Additional Information**

**Goals for Fellowship Training and Career**

Discuss how the proposed research project and activities enhance the applicant’s development and relate to the applicant’s career goals as a productive, independent physician-scientist or other clinician-scientist. Discuss how the proposed, integrated research and clinical training plan will enhance his/her knowledge and technical, clinical and professional skills, and facilitate his/her transition to the next career stage.

**Activities Planned Under This Award**

The applicant’s research and clinical training plan, i.e. the activities planned under this award, should be individually tailored and well integrated with his/her research project. Describe the skills and techniques that the applicant intends to learn as well as any planned, non-research activities (e.g. those relating to professional development and clinical activities) during the award period. The applicant should provide a timeline for the entire duration of the dual-degree program in which he/she is matriculated. On the timeline, indicate the estimated percentage of time that will be devoted to clinical- and research-related activities each year and indicate where, on this timeline, the applicant is at the time of application. This timeline will complement the applicant’s description of how he/she expects to divide his/her time between research and clinical training during each year of the award period.

**Doctoral Dissertation and Other Research Experience**

All instructions in the SF424 (R&R) Individual Fellowship Application Guide must be followed.

**Sponsor and Co-Sponsor Information**

The F30 fellowship supports an integrated program of mentored research training and clinical training from outstanding faculty sponsors. The sponsor(s) should describe their current research support and how this support relates to the applicant’s proposed research project. A contingency plan should be provided that describes how the applicant’s research training will be supported should there be a gap in the sponsor’s funding during the proposed award period. The role of the sponsor in the integrated research and training plan should be described. If a sponsor team is proposed, this plan should describe the role of each sponsor and how they will communicate and coordinate their efforts to mentor the applicant effectively.

The training plan should be individualized for the applicant, keeping in mind the candidate’s strengths and any gaps in needed skills, and should be designed to enhance both research and clinical training. The research training component
should be coordinated with the applicant’s Research Strategy. The training plan should outline and justify new training opportunities, any relevant coursework, and professional development activities. Training in career skills, e.g. grant-writing and presentation skills, is strongly encouraged. The training plan should also provide opportunities to integrate clinical experiences during the research training component; a smooth transition to the clinical training component; and should have the potential to facilitate the applicant’s transition to a residency or other program appropriate for his/her career goals, as applicable for the proposed clinical specialty.

The research environment and the availability and quality of needed research facilities and research resources (e.g., equipment, laboratory space, computing resources, subject populations) should be described.

The sponsor and any co-sponsors are expected to provide an assessment of the applicant’s qualifications and potential for a career as a productive, independent physician-scientist or other clinician-scientist.

**Appendix**

Do not use the Appendix to circumvent page limits. Follow all instructions for the Appendix as described in the SF424 (R&R) Application Guide.

**Planned Enrollment Report**

When conducting clinical research, follow all instructions for completing Planned Enrollment Reports as described in the SF424 (R&R) Application Guide.

**Cumulative Inclusion Enrollment Report**

When conducting clinical research, follow all instructions for completing Cumulative Inclusion Enrollment Report as described in the SF424 (R&R) Application Guide.

**Letters of Reference**

Applicants must carefully follow the SF424 (R&R) Individual Fellowship Application Guide, including the time period for when letters of reference will be accepted (letters are due by the application due date as described in the Notice). It is important to note that neither the sponsor nor any co-sponsor of this application can be counted as a confidential reference. The sponsor/co-sponsor's recommendation is included as part of the application. Applications lacking the appropriate required reference letters will not be reviewed. This is a separate process from submitting an application electronically. Reference letters are submitted directly through the [ERA Commons Submit Reference Letter link](http://eracommons.org) and not through Grants.gov.

**Foreign Institutions**
Follow all instructions as described in the SF424 (R&R) Application Guide. Foreign Institutions are not allowed. Non-U.S. components of U.S. Organizations are not allowed. Foreign components, as defined in the NIH Grants Policy Statement, are allowed.

3. Submission Dates and Times

Part I. Overview Information contains information about Key Dates. Applicants are encouraged to submit applications before the due date to ensure they have time to make any application corrections that might be necessary for successful submission.

Organizations must submit applications to Grants.gov (the online portal to find and apply for grants across all Federal agencies). Applicants must then complete the submission process by tracking the status of the application in the eRA Commons, NIH’s electronic system for grants administration.

Applicants are responsible for viewing their application before the due date in the eRA Commons to ensure accurate and successful submission.

Information on the submission process and a definition of on-time submission are provided in the SF424 (R&R) Application Guide.

4. Intergovernmental Review (E.O. 12372)

This initiative is not subject to intergovernmental review.

5. Funding Restrictions

All NIH awards are subject to the terms and conditions, cost principles, and other considerations described in the NIH Grants Policy Statement. The National Research Service Award (NRSA) policies apply to this program. A Kirschstein-NRSA fellowship may not be held concurrently with another federally sponsored fellowship or similar Federal award that provides a stipend or otherwise duplicates provisions of this award.

Pre-award costs are generally not allowable for Fellowships.

Over the total duration of F30 support, at least 50% of the award period must be devoted to graduate research training leading to the doctoral research degree. After an award is made, award duration may be adjusted to ensure that at least 50% of the total award duration is devoted to research training leading to the research doctorate.

6. Other Submission Requirements and Information

Applications must be submitted electronically following the instructions described in the SF424 (R&R) Application Guide. Paper
Applications will not be accepted.

Applicants must complete all required registrations before the application due date. Section III. Eligibility Information contains information about registration.

For assistance with your electronic application or for more information on the electronic submission process, visit Applying Electronically.

Important reminders:
All PD(s)/PI(s) must include their eRA Commons ID in the Credential field of the Senior/Key Person Profile (Expanded) Form of the SF424(R&R) Application Package. Failure to register in the Commons and to include a valid PD/PI Commons ID in the credential field will prevent the successful submission of an electronic application to NIH.

The applicant organization must ensure that the DUNS number it provides on the application is the same number used in the organization’s profile in the eRA Commons and for the System for Award Management (SAM). Additional information may be found in the SF424 (R&R) Application Guide.

See more tips for avoiding common errors.

Upon receipt, applications will be evaluated for completeness by the Center for Scientific Review, NIH. Applications that are incomplete will not be reviewed.

Post Submission Materials
Applicants are required to follow the instructions for post-submission materials, as described in NOT-OD-13-030. Because the Sponsor(s)’ funding is an important factor in the review of a Fellowship application, post-submission material that updates the Sponsor(s)’ funding information in the originally submitted application is allowed. Information on the Sponsor(s)’ funding information must not exceed 1 page, and is limited to the project title, funding source (e.g. NIH grant number), and a brief description of the Specific Aims and relevance to the fellowship application under review. The additional material is due no later than 30 days prior to the meeting of the review committee. See also: NOT-OD-12-022.

Section V. Application Review Information

1. Criteria

Only the review criteria described below will be considered in the review process. As part of the NIH mission, all applications submitted to the NIH in support of biomedical and behavioral research are evaluated for scientific and technical merit through
the NIH peer review system.

For this particular announcement, note the following:

- A fellowship application has a research project that is integrated with the training plan. The review will emphasize the applicant’s potential for a productive career, the applicant’s need for the proposed training, and the degree to which the research project and training plan, the sponsor(s), and the environment will satisfy those needs.

**Overall Impact/Merit**

Reviewers will provide an overall impact score to reflect their assessment of the likelihood that the fellowship will enhance the candidate’s potential for, and commitment to, an independent scientific research career in a health-related field, in consideration of the scored and additional review criteria.

**Scored Review Criteria**

Reviewers will consider each of the review criteria below in the determination of scientific merit, and give a separate score for each. An application does not need to be strong in all categories to be judged likely to have major scientific impact.

**Fellowship Applicant**

- Are the applicant’s academic record and research experience of high quality?
- Are the applicant’s interests consistent with a career as a physician-scientist or other clinician-scientist?
- Does the applicant have the potential to develop into an independent and productive contributor to biomedical, behavioral or clinical science as a physician-scientist or other clinician-scientist?
- Does the applicant demonstrate commitment to a career as a physician-scientist or other clinician-scientist?

**Sponsors, Collaborators, and Consultants**

- Are the sponsor(s’) research qualifications (including recent publications) and track record of mentoring individuals at a similar stage appropriate for the needs of the applicant?
- Is there evidence of a match between the research and clinical interests of the applicant and the sponsor(s)? Do the sponsor(s) demonstrate an understanding of the applicant’s training needs as well as the ability and commitment to assist in meeting these needs?
- Is there evidence of adequate research funds to support the applicant’s proposed research project and training for the duration of the research component of the fellowship?
- If a team of sponsors is proposed, is the team structure well justified for the mentored training plan, and are the roles of the individual members appropriate and clearly defined?
Are the qualifications of any collaborator(s) and/or consultant(s), including their complementary expertise and previous experience in fostering the training of fellows, appropriate for the proposed project?

Research Training Plan

- Is the proposed research project of high scientific quality, and is it well integrated with the proposed research training plan?
- Based on the sponsor’s description of his/her active research program, is the applicant’s proposed research project sufficiently distinct from the sponsor’s funded research for the applicant’s career stage?
- Is the research project consistent with the applicant’s stage of research development?
- Is the training plan well-reasoned, and likely to provide an effective, integrated research and clinical training experience and ease the transitions between the phases of the dual-degree program?
- Is the proposed time frame feasible to accomplish the proposed research and clinical training?

Training Potential

- Are the proposed research project and research and clinical training plan likely to provide the applicant with an integrated perspective and appropriate skills for a physician-scientist or other clinician-scientist?
- Does the training plan take advantage of the applicant’s strengths and address gaps in needed skills? Does the training plan document a clear need for, and value of, the proposed training?
- If applicable to the dual-degree program, are appropriate opportunities for electives, early and longitudinal clinical experiences, or other enhanced clinical training available to the applicant? Are appropriate opportunities available to ease the transition to clinical clerkships and for research electives during clinical training?
- Does the proposed integrated research and clinical training have the potential to serve as a sound foundation that will clearly enhance the applicant’s ability to develop into a productive, independent physician-scientist or other clinician-scientist?

Institutional Environment & Commitment to Training

- Are the research facilities, resources (e.g., equipment, laboratory space, computer time, subject populations, clinical training settings) and training opportunities (e.g. seminars, workshops, professional development opportunities) adequate and appropriate?
- Is the institutional environment for the applicant’s scientific and clinical development of high quality? Are the facilities and resources appropriate to provide exposure to a research-oriented, clinical environment?
- Does the environment include individuals with similar training who will serve as role models for the applicant?
- Given the integrated nature of the training program, will appropriate advising be available to the applicant as he/she transitions between the research and clinical components of the integrated training program and to the next career stage?
- Is there appropriate institutional commitment to fostering the applicant’s integrated training as a physician-scientist or
other clinician-scientist? Does this commitment extend to support the applicant’s research and training, if needed, for the duration of the proposed award?

**Additional Review Criteria**

As applicable for the project proposed, reviewers will evaluate the following additional items while determining scientific and technical merit, and in providing an overall impact score, but will not give separate scores for these items.

**Protections for Human Subjects**

For research that involves human subjects but does not involve one of the six categories of research that are exempt under 45 CFR Part 46, the committee will evaluate the justification for involvement of human subjects and the proposed protections from research risk relating to their participation according to the following five review criteria: 1) risk to subjects, 2) adequacy of protection against risks, 3) potential benefits to the subjects and others, 4) importance of the knowledge to be gained, and 5) data and safety monitoring for clinical trials.

For research that involves human subjects and meets the criteria for one or more of the six categories of research that are exempt under 45 CFR Part 46, the committee will evaluate: 1) the justification for the exemption, 2) human subjects involvement and characteristics, and 3) sources of materials. For additional information on review of the Human Subjects section, please refer to the Guidelines for the Review of Human Subjects.

**Inclusion of Women, Minorities, and Children**

When the proposed project involves human subjects and/or NIH-defined clinical research, the committee will evaluate the proposed plans for the inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion (or exclusion) of children to determine if it is justified in terms of the scientific goals and research strategy proposed. For additional information on review of the Inclusion section, please refer to the Guidelines for the Review of Inclusion in Clinical Research.

**Vertebrate Animals**

The committee will evaluate the involvement of live vertebrate animals as part of the scientific assessment according to the following five points: 1) proposed use of the animals, and species, strains, ages, sex, and numbers to be used; 2) justifications for the use of animals and for the appropriateness of the species and numbers proposed; 3) adequacy of veterinary care; 4) procedures for limiting discomfort, distress, pain and injury to that which is unavoidable in the conduct of scientifically sound research including the use of analgesic, anesthetic, and tranquilizing drugs and/or comfortable restraining devices; and 5) methods of euthanasia and reason for selection if not consistent with the AVMA Guidelines on Euthanasia. For additional information on review of the Vertebrate Animals section, please refer to the Worksheet for...
**Biohazards**

Reviewers will assess whether materials or procedures proposed are potentially hazardous to research personnel and/or the environment, and if needed, determine whether adequate protection is proposed.

**Resubmissions**

For Resubmissions, the committee will evaluate the application as now presented, taking into consideration the responses to comments from the previous scientific review group and changes made to the project.

**Renewals**

For Renewals, the committee will consider the progress made in the last funding period.

**Revisions**

Not Applicable.

**Additional Review Considerations**

As applicable for the project proposed, reviewers will consider each of the following items, but will not give scores for these items, and should not consider them in providing an overall impact score.

**Training in the Responsible Conduct of Research**

All applications for support under this FOA must include a plan to fulfill NIH requirements for Instruction in the Responsible Conduct of Research (RCR). Taking into account the level of experience of the applicant, including any prior instruction or participation in RCR as appropriate for the applicant’s career stage, the reviewers will evaluate the adequacy of the proposed RCR training in relation to the following five required components: 1) *Format* - the required format of instruction, i.e., face-to-face lectures, coursework, and/or real-time discussion groups (a plan with only on-line instruction is not acceptable); 2) *Subject Matter* - the breadth of subject matter, e.g., conflict of interest, authorship, data management, human subjects and animal use, laboratory safety, research misconduct, research ethics; 3) *Faculty Participation* - the role of the sponsor(s) and other faculty involvement in the fellow’s instruction; 4) *Duration of Instruction* - the number of contact hours of instruction (at least eight contact hours are required); and 5) *Frequency of Instruction* – instruction must occur during each career stage and at least once every four years. Plans and past record will be rated as **ACCEPTABLE** or **UNACCEPTABLE**, and the summary statement will provide the consensus of the review committee. See also: [NOT-OD-10-]
Select Agent Research

Reviewers will assess the information provided in this section of the application, including 1) the Select Agent(s) to be used in the proposed research, 2) the registration status of all entities where Select Agent(s) will be used, 3) the procedures that will be used to monitor possession use and transfer of Select Agent(s), and 4) plans for appropriate biosafety, biocontainment, and security of the Select Agent(s).

Resource Sharing Plans

Reviewers will comment on whether the following Resource Sharing Plans, or the rationale for not sharing the following types of resources, are reasonable: 1) Data Sharing Plan; 2) Sharing Model Organisms; and 3) Genome Wide Association Studies (GWAS).

Budget and Period of Support

Reviewers will consider whether the budget and the requested period of support are fully justified and reasonable in relation to the proposed training.

2. Review and Selection Process

Applications will be evaluated for scientific and technical merit by (an) appropriate Scientific Review Group(s), in accordance with NIH peer review policy and procedures, using the stated review criteria. Assignment to a Scientific Review Group will be shown in the eRA Commons.

As part of the scientific peer review, all applications:

- May undergo a committee process in which only those applications deemed to have the highest scientific and technical merit (generally the top half of applications under review) will be discussed and assigned an overall impact score.
- Will receive a written critique.

Applications will be assigned on the basis of established PHS referral guidelines to the appropriate NIH Institute or Center. Applications will compete for available funds with all other recommended applications submitted in response to this FOA. Following initial peer review, recommended applications will receive a second level of review by the appropriate NIH Institute or Center. The following will be considered in making funding decisions:

- Scientific and technical merit of the proposed project as determined by scientific peer review.
- Availability of funds.
3. Anticipated Announcement and Award Dates

After the peer review of the application is completed, the PD/PI will be able to access his or her Summary Statement (written critique) via the eRA Commons.

Information regarding the disposition of applications is available in the NIH Grants Policy Statement.

Section VI. Award Administration Information

1. Award Notices

If the application is under consideration for funding, NIH will request "just-in-time" information from the applicant as described in the NIH Grants Policy Statement.

A formal notification in the form of a Notice of Award (NoA) will be provided to the applicant organization for successful applications. The NoA signed by the grants management officer is the authorizing document and will be sent via email to the grantee’s business official.

Awardees must comply with any funding restrictions described in Section IV.5. Funding Restrictions. Selection of an application for award is not an authorization to begin performance. Any costs incurred before receipt of the NoA are at the recipient's risk. These costs may be reimbursed only to the extent considered allowable pre-award costs.

Any application awarded in response to this FOA will be subject to the DUNS, SAM Registration, and Transparency Act requirements as noted on the Award Conditions and Information for NIH Grants website.

2. Administrative and National Policy Requirements

All NIH grant and cooperative agreement awards include the NIH Grants Policy Statement as part of the NoA. For these terms of award, see the NIH Grants Policy Statement Part II: Terms and Conditions of NIH Grant Awards, Subpart A: General and Part II: Terms and Conditions of NIH Grant Awards, Subpart B: Terms and Conditions for Specific Types of Grants, Grantees, and Activities. More information is provided at Award Conditions and Information for NIH Grants.

As specified in the NIH Revitalization Act of 1993, Kirschstein-NRSA recipients incur a service payback obligation for the first 12 months of postdoctoral support. Policies regarding the Kirschstein-NRSA payback obligation are explained in the NIH Grants.
Inventions and Copyrights

Fellowships funded primarily for educational purposes are exempted from the PHS invention requirements and thus invention reporting is not required. More details, including exceptions for fellows training at NIH, are provided in the NIH Grants Policy Statement.

Leave Policies

In general, NRSA fellows may receive stipends during the normal periods of vacation and holidays observed by individuals in comparable training positions at the sponsoring institution. For the purpose of these awards, however, the period between the spring and fall semesters is considered to be an active time of research and research training and is not considered to be a vacation or holiday. NRSA fellows may receive stipends for up to 15 calendar days of sick leave per year. Under exceptional circumstances, this period may be extended by the NIH awarding IC in response to a written request from an AOR. Other leave may be used for the medical conditions related to pregnancy and childbirth. NRSA fellows may receive stipends for up to 60 calendar days (equivalent to 8 work weeks) of parental leave per year for the adoption or the birth of a child when individuals in comparable training positions at the grantee organization have access to this level of paid leave for this purpose. Either parent is eligible for parental leave. The use of parental leave must be approved by the fellowship sponsor (see also: NOT-OD-08-064). A period of terminal leave is not permitted, and payment may not be made from fellowship funds for leave not taken. NRSA fellows requiring periods of time away from their research training experience longer than specified here, i.e., more than 15 calendar days of sick leave or more than 60 calendar days of parental leave, must seek approval from the NIH awarding component for an unpaid leave of absence. Approval for a leave of absence must be requested in advance by an AOR on behalf of the fellow.

3. Reporting

When multiple years are involved, awardees will be required to submit a Research Performance Progress Report (RPPR) annually. The report is due two months before the beginning date of the next budget period and must include information describing the current year's progress as well as the research project and training plan for the coming year.

The Federal Funding Accountability and Transparency Act of 2006 (Transparency Act), includes a requirement for awardees of Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards issued in FY2011 or later. All awardees of applicable NIH grants and cooperative agreements are required to report to the Federal Subaward Reporting System (FSRS) available at www.fsrs.gov on all subawards over $25,000. See the NIH Grants Policy Statement for additional information on this reporting requirement.
Other Fellowship Reporting Requirements:

- Individuals admitted to the United States as Permanent Residents must submit notarized evidence of legal admission prior to the award.
- The fellowship award recipient has up to six months from the issue date on the Notice of Award to activate the award using the Kirschstein-NRSA Individual Fellowship Activation Notice (PHS 416-5). Under unusual circumstances, NIH may grant an extension of the activation period upon receipt of a specific request from the fellow. Such a request must be countersigned by the sponsor and an authorized institutional official.
- For the individual's initial 12 months of Kirschstein-NRSA postdoctoral support, a signed, original Payback Agreement Form (PHS 6031) must accompany the Activation Notice.
- At the conclusion of a fellowship, the fellow must submit a Termination Notice (PHS 416-7) via xTrain to the NIH within 30 days of termination. Fellows with service payback requirements must notify the NIH of any change in address and submit Annual Payback Activities Certification Forms (PHS 6031-1) until the payback service obligation is satisfied.

4. Evaluation

In carrying out its stewardship of human resource-related programs, the NIH may request information essential to an assessment of the effectiveness of this program from databases and from participants themselves. Participants may be contacted after the completion of this award for periodic updates on various aspects of their employment history, publications, support from research grants or contracts, honors and awards, professional activities, and other information helpful in evaluating the impact of the program.

Section VII. Agency Contacts

We encourage inquiries concerning this funding opportunity and welcome the opportunity to answer questions from potential applicants.

Because of the difference in individual Institute and Center (IC) program requirements for this FOA, prospective applications are strongly encouraged to consult the Table of IC-Specific Information, Requirements, and Staff Contacts, to make sure that their application is responsive to the requirements of one of the participating NIH ICs.

Application Submission Contacts

eRA Commons Help Desk (Questions regarding eRA Commons registration, submitting and tracking an application, documenting system problems that threaten submission by the due date, post submission issues)
Telephone: 301-402-7469 or 866-504-9552 (Toll Free)

Web ticketing system: https://public.era.nih.gov/commonshelp
TTY: 301-451-5939  
Email: commons@od.nih.gov

Grants.gov Customer Support (Questions regarding Grants.gov registration and submission, downloading forms and application packages)  
Contact Center Telephone: 800-518-4726

Web ticketing system: https://grants-portal.psc.gov/ContactUs.aspx
Email: support@grants.gov

GrantsInfo (Questions regarding application instructions and process, finding NIH grant resources)  
Telephone: 301-435-0714  
TTY: 301-451-5936  
Email: GrantsInfo@nih.gov

Scientific/Research Contact(s)

Table of IC-Specific Information, Requirements, and Staff Contacts

Peer Review Contact(s)

Examine your eRA Commons account for review assignment and contact information (information appears two weeks after the submission due date).

Financial/Grants Management Contact(s)

Table of IC-Specific Information, Requirements, and Staff Contacts

Section VIII. Other Information

Recently issued trans-NIH policy notices may affect your application submission. A full list of policy notices published by NIH is provided in the NIH Guide for Grants and Contracts. All awards are subject to the terms and conditions, cost principles, and other considerations described in the NIH Grants Policy Statement.

Authority and Regulations
Awards are made under the authorization of Section 487 of the Public Health Service Act as amended (42 USC 288) and under Federal Regulations 42 CFR 66.

Weekly TOC for this Announcement
NIH Funding Opportunities and Notices

Note: For help accessing PDF, RTF, MS Word, Excel, PowerPoint, Audio or Video files, see Help Downloading Files.