

Attachment A.1.1: RFA-RM-12-022**Department of Health and Human Services****Part 1. Overview Information**

Participating Organization(s)	National Institutes of Health (NIH) Office of Strategic Coordination (Common Fund)
Components of Participating Organizations	This Funding Opportunity Announcement (FOA) is developed as a Common Fund initiative (http://commonfund.nih.gov/) through the NIH Office of the NIH Director, Office of Strategic Coordination (http://dpcpsi.nih.gov/osc/). The FOA will be administered by the National Institute of Dental and Craniofacial Research (http://www.nidcr.nih.gov/) on behalf of the NIH.
Funding Opportunity Title	NIH Director's Biomedical Research Workforce Innovation Award: Broadening Experiences in Scientific Training (BEST) (DP7)
Activity Code	DP7 Director's Biomedical Research Workforce Innovation Award Program
Announcement Type	New
Related Notices	NOT -RM-13-005
Funding Opportunity Announcement (FOA) Number	RFA-RM-12-022
Companion Funding Opportunity	None
Number of Applications	See Section III. 3. Additional Information on Eligibility .
Catalog of Federal Domestic Assistance (CFDA) Number(s)	93.310
Funding Opportunity Purpose	The purpose of this FOA is to seek, identify and support bold and innovative approaches to broaden graduate and postdoctoral training, such that training programs reflect the range of career options that trainees (regardless of funding source) ultimately may pursue and that are required for a robust biomedical, behavioral, social and clinical research enterprise. Collaborations with non -academic partners are encouraged to ensure that experts from a broad spectrum of research and research-related careers contribute to coursework, rotations, internships or other forms of exposure. This program will establish a new paradigm for graduate and postdoctoral training; awardee institutions will work together to define needs and share best practices.

Key Dates

Posted Date	March 4, 2013
Open Date (Earliest Submission Date)	April 10, 2013
Letter of Intent Due Date(s)	April 10, 2013
Application Due	May 10, 2013, by 5:00 PM local time of applicant organization.

Date(s)	
AIDS Application Due Date(s)	Not Applicable
Scientific Merit Review	June /July 2013
Advisory Council Review	August 2013
Earliest Start Date	September 16, 2013
Expiration Date	May 11, 2013
Due Dates for E.O. 12372	Not Applicable

Required Application Instructions

It is critical that applicants follow the instructions in the [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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Part 2. Full Text of Announcement

Section I. Funding Opportunity Description

This initiative is funded through the NIH Common Fund, which supports crosscutting programs that are expected to have exceptionally high impact. All Common Fund initiatives invite applicants to develop bold, innovative, and often-risky approaches to address problems that may seem intractable or to seize new opportunities that offer the potential for rapid progress.

Background

This initiative is developed in response to recommendations provided by the Advisory Committee to the Director (ACD), NIH. The committee studied the current state of the biomedical research workforce, and NIH's support of training for this workforce (http://acd.od.nih.gov/Biomedical_research_wgreport.pdf). The ACD report confirms that although the vast majority of people holding biomedical PhDs are productively employed, the proportion of PhDs that move into tenure -track or tenured faculty positions represents a minority of the trainee outcomes. An increasing proportion of trainees conduct research in non -academic venues such as government or private sector, or are in research-related areas (such as research management).

Despite the broad range of career options available to U.S.-trained PhD biomedical scientists, graduate programs and postdoctoral training focus almost exclusively on preparing individuals for careers as academic researchers. The ACD committee recommended that NIH-supported graduate programs and post-doctoral training be broadened to reflect the actual career

outcomes of today's PhD graduates and postdoctoral scientists. For the purposes of this FOA, a "research career" is defined as an occupation in which research is performed in any venue, including industry, academia, government or entrepreneurial pursuits. "Research-related" careers are defined as occupations that directly support the biomedical research enterprise.

Program Objectives

In consideration of these recommendations, this program invites applications that propose the establishment, implementation, and assessment of innovative approaches and activities to broaden and complement traditional research training in biomedical, behavioral, social and clinical (referred to as 'biomedical') sciences. These awards, also called the **Broadening Experiences in Scientific Training (BEST)** awards, will provide support for institutions to develop novel ideas in training and workforce development. The goal of this program is to better prepare pre-doctoral students and postdoctoral scientists for the breadth of careers in the biomedical research workforce, and to establish a network to develop, share, evaluate, and disseminate best practices within the training community.

The announcement seeks applications from institutions with established pre-doctoral programs. If the applicant institution also trains a significant number of postdoctoral scientists, their novel program designed in response to this FOA must also include a plan to address the needs of the postdoctoral trainees. We invite bold and innovative applications that leverage existing institutional resources to broaden and enrich training experiences so that trainees are exposed to multiple research and research-related career paths early in their training. Programs should identify various career paths and develop meaningful opportunities targeting those pathways. Trainees are expected to have the opportunity to select from among these preparatory experiences. The program is not meant to train them fully for new career options, but should prepare them for the next steps in their career development.

Training programs responsive to this FOA should provide opportunities to acquire a working knowledge of the skills necessary for a wide range of successful careers in the biomedical research workforce. The goal of this FOA is to broaden both pre- and postdoctoral traditional training experiences such that trainees are better prepared for careers in a variety of other venues, including industry, government, academia, or entrepreneurial enterprises. While it is expected that trainees intending to enter academic research careers will benefit from the broader training experience, programs designed exclusively to target academic research careers will be considered non-responsive. For individuals seeking careers in research-related areas, such as science policy, technology transfer, management or other areas requiring the research doctorate in biomedical science, NIH seeks applications to provide trainees meaningful training experiences so that they are better prepared to enter those occupations as well as for research careers in the private sector. Applicants are also encouraged to include the design of positive and attractive exit pathways for those individuals intending careers that do not require a research doctorate. More broadly, NIH seeks innovative new business and academic models of how graduate programs in biomedical research sciences define themselves and their purpose, how they recruit, admit, support, steer and mentor students to prepare them appropriately for chosen biomedical research or research-related careers. It is not expected that applicants must provide experiences in all research or research-related outcomes, but novel programs should target aspects of training that will enhance their existing programs and add to a more holistic approach across the enterprise.

Applicants are encouraged to form partnerships with organizations that employ scientists engaged in the careers for which the training experiences are directed (private sector, publishing, government, etc.). Partner organizations may provide opportunities for internships, their staff may participate in the development and implementation of novel curricula, or they may contribute in other ways to the success of the program.

Institutions that are currently exploring novel approaches are encouraged to apply but must carefully explain how support from this award would substantially complement and/or add new dimensions to their existing programs. Applications that request additional support only to maintain an existing program will be deemed non-responsive. Examples of innovative approaches include but are not limited to: exchange arrangements with other schools and programs within the applicant institution (Schools of Business, Economics, Law, Public Policy, Social Sciences, Public Health, Communications, etc.) with the potential for mutual benefit such as learning business skills, specific courses including hands-on training in technology transfer, program or policy development, management and administration at government agencies (Federal, state, and local governments, etc.), and internships with partner companies or other institutions.

It is expected that the **BEST** awards will transcend department, program, and possibly school boundaries, and be available to biomedical science students and postdocs across disciplines. They should aim to transform the culture of research training in the biomedical sciences for both trainees and mentors and disseminate findings widely across the training community. Applications that leverage funds from this program with existing institutional offices and programs, local resources outside the institution, or partners are highly encouraged.

The training period for biomedical careers is already lengthy, and these activities should be integrated with traditional training so as to not increase the time to degree for predoctoral students, or the length of the postdoctoral period.

The **BEST** awards are meant to be experiments and therefore rigorous evaluation of each individual award will be required by both the individual awardees and independently by NIH. To accomplish this, applicants must provide information that clearly states what the program intends to do, what it hopes to accomplish, and the expected impact of the program. An example would be to include a clear logic model and describe evaluative data that will be collected and other measures that will be used to demonstrate impact. For NIH's evaluation plan, awardees will be required to provide data including, but not limited to, information specified in the evaluation plan below. NIH expects that approaches that are tested and proven to be successful will be widely disseminated throughout the biomedical training community. A further expectation is that the newly developed training activities from these awards that are deemed successful will be institutionalized.

In order to prevent undue redundancies and to share information and best practices, the **BEST** awardees will interact on a regular basis. Each year, awardees will meet to discuss developments, progress and insights gained. Applicants should budget for participation at these meetings. The Program Director/Principal Investigator (PD/PI) and relevant personnel should be prepared to attend the "kick-off" meeting in Bethesda, MD, October 29-30, 2013. Periodic teleconference calls will augment interactions among the awardees, and site visits from NIH staff will evaluate progress of the program as it develops.

Section II. Award Information

Funding Instrument	Grant: A support mechanism providing money, property, or both to an eligible entity to carry out an approved project or activity.
Application Types Allowed	New The OER Glossary and the SF424 (R&R) Application Guide provide details on these application types.
Funds Available and Anticipated Number of Awards	NIH Common Fund intends to commit approximately \$6,750,000 in FY 2013. Approximately 10-15 awards are anticipated, contingent upon availability of funds and receipt of a sufficient number of meritorious applications.
Award Budget	Awards will be for up to \$250,000 in direct costs per year, plus applicable Facilities and Administrative (F&A) costs.
Award Project Period	The requested project period may not exceed five years. The purpose of this award is to support the development of programs but not to maintain them after 5 years.

Other Award Budget Information

Personnel Costs	Individuals designing, directing, and implementing the BEST program may request salary and fringe benefits appropriate for the person months devoted to the program. Salaries requested may not exceed the levels commensurate with the institution's policy for similar positions and may not exceed the congressionally mandated cap. (If mentoring interactions and other activities with students/participants are considered a regular part of an individual's academic duties, then any costs associated with the mentoring and other interactions with students/participants are not allowable costs from grant funds).
Participant Costs	Participants are the beneficiaries of this program, namely graduate students and postdoctoral individuals. No funds from this award may be used to cover or supplement wages or stipends of these individuals. Tuition costs of these individuals are also covered by other sources, and therefore not allowable under this award. However, travel of trainees to program sites is allowable.
Other Program-Related Expenses	Consultant costs, equipment, supplies, travel for key persons, and other program-related expenses may be included in the proposed budget. These expenses must be justified as specifically required by the proposed program and must not duplicate items generally available at the applicant institution.

	<p>Guest speakers, outside experts, consultant costs, administrative personnel, and other program-related expenses may be included in the proposed budget. These expenses must be justified as specifically required by the proposed program and must not duplicate items generally available at the applicant institution.</p> <p>Awardees must budget for attendance of relevant personnel at an annual awardee meeting starting with the October 2013 kick-off meeting, to be held in Bethesda, MD. Expenses are not to exceed \$1500 per person per trip.</p>
Indirect Costs	Awards will be for up to \$250,000 in direct cost per year, plus applicable Facilities and Administrative (F&A) costs.

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)

All Program Directors/Principal Investigators (PD(s)/PI(s)) must also work with their institutional officials to register with the eRA Commons or ensure their existing eRA Commons account is affiliated with the eRA Commons account of the applicant organization.

All registrations must be completed by the application due date.

The sponsoring institution must assure support for the proposed program. Appropriate institutional commitment to the program includes the provision of adequate staff, facilities, and educational resources that can contribute to the planned program.

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 not** allowed.

Required Registrations

Applicant organizations must complete the following registrations as described in the SF424 (R&R) Application Guide to be eligible to apply for or receive an award. Applicants must have a valid Dun and Bradstreet Universal Numbering System (DUNS) number in order to begin each of the following registrations.

- [System for Award Management \(SAM\)](#)– must maintain an active entity registration (formerly CCR registration), to be renewed at least annually. Use the Sam.gov “Manage Entity” function to manage your entity registrations. See the

Grants Registration User Guide at SAM.gov for additional information.

- Grants.gov
- [eRA Commons](http://eRA.Commons)

All Program Directors/Principal Investigators (PD(s)/PI(s)) must also work with their institutional officials to register with the eRA Commons or ensure their existing eRA Commons account is affiliated with the eRA Commons account of the applicant organization.

All registrations must be completed by the application due date. Applicant organizations are strongly encouraged to start the registration process at least 6 weeks prior to the application due date.

Eligible Individuals (Program Director/Principal Investigator)

Any individual(s) with the skills, knowledge, and resources necessary to carry out the proposed research as the Program Director(s)/Principal Investigator(s) (PD(s)/PI(s)) is invited to work with his/her organization to develop an application for support. Individuals from diverse backgrounds, including underrepresented racial and ethnic groups, individuals with disabilities, and women are always encouraged to apply for NIH support.

For institutions/organizations proposing multiple PDs/PIs, visit the Multiple Program Director/Principal Investigator Policy and submission details in the Senior/Key Person Profile (Expanded) Component of the SF424 (R&R) Application Guide.

The PD/PI should be an established investigator in the scientific area in which the application is targeted and capable of providing both administrative and scientific leadership to the development and implementation of the proposed program. The PD/PI will be expected to monitor and assess the program and submit all documents and reports as required.

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

Applicant organizations, as defined by specific DUNS numbers, may submit only one application.

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.

Preceptors/Mentors

Awardees are encouraged to recruit individuals with appropriate expertise from diverse backgrounds, including racial and ethnic minorities, persons with disabilities, and women as directors/mentors/teachers/lecturers/preceptors. Mentors should have research expertise and/or expert experience relevant to the proposed program and a demonstrated history of excellence in this area. Awardees are encouraged to recruit and support mentors from partner organizations representing diverse careers.

Participants

Applications must describe the intended participants, their training stage, the eligibility criteria that are essential for participation in the proposed program, and the selection process for participation in this program.

Unless strongly justified on the basis of exceptional relevance to NIH, these programs should be used primarily for the training of U.S. citizens and permanent residents. Foreign trainees may participate in the program, but the rare instance of expenses being directly attributable to them must be justified.

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 \(R&R\) 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.

For information on Application Submission and Receipt, visit [Frequently Asked Questions – Application Guide, Electronic Submission of Grant Applications](#).

Letter of Intent

Although a letter of intent is not required, is not binding, and does not enter into the review of a subsequent application, the information that it contains allows CSR staff to estimate the potential review workload and plan the review.

By the date listed in [Part 1. Overview Information](#), prospective applicants are asked to submit a letter of intent that includes the following information:

- Descriptive title of proposed research
- Name, address, and telephone number of the PD(s)/PI(s)
- Names of other key personnel
- Participating institutions
- Number and title of this funding opportunity

The letter of intent should be sent to:

Dr. Patricia Labosky
Program Leader
Office of Strategic Coordination
Division of Program Coordination, Planning and Strategic Initiatives
Office of the Director, NIH
1 Center Drive, Room 214A
Bethesda, MD 20892-0189
Telephone: 301 -594 -4863
Email: laboskypa@od.nih.gov

Page Limitations

All page limitations described in the SF424 (R&R) Application Guide and the [Table of Page Limits](#) must be followed, with the following additional instructions:

- BEST Program Plan (uploaded via Research Strategy): 25 pages

Required and Optional Components

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

SF424(R&R) Cover

Follow all instructions provided in the SF424 (R&R) Application Guide.

SF424(R&R) Project/Performance Site Locations

Follow all instructions provided in the SF424 (R&R) Application Guide.

SF424 (R&R) Other Project Information Component

Follow all instructions provided in the SF424 (R&R) Application Guide with the following additional modifications:

Facilities & Other Resources: Describe the training environment, both at the institution and, where applicable, at other relevant sites, including the facilities, laboratories, participating departments, computer services, and any other resources to be used in the development and implementation of the proposed program. List all thematically related sources of support for research training following the format for Current and Pending Support.

Other Attachments: A plan must be provided for the appointment of an Advisory Committee that will evaluate training plans, implementation of those plans, and their progress. The Committee should have the authority to recommend any mid-course changes needed to enhance the program. Composition, responsibilities, frequency of meetings, and other relevant information should be included. Describe the composition of the Advisory Committee, identifying the role and the desired expertise of members. Describe how the Advisory Committee will function in providing oversight of the development, implementation, and evaluation of the overall effectiveness of the program. Note that proposed Advisory Committee members should not be named in the application, particularly if they include individuals from outside the institution. Please name your file "Advisory_Committee.pdf".

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

Follow all instructions provided in the SF424 (R&R) Application Guide.

R&R Budget

Follow all instructions provided in the SF424 (R&R) Application Guide with the following additional modifications:

- Include all personnel other than the PD(s)/PI(s) in the Other Personnel section, including clerical and administrative staff.

PHS398 Cover Letter

Follow all instructions provided in the SF424 (R&R) Application Guide.

PHS398 Cover Page Supplement

Follow all instructions provided in the SF424 (R&R) Application Guide.

PHS 398 Research Plan Component

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

The **Research Strategy** section must be used to upload the **BEST Program Plan**, which must include the following components described below: Proposed **BEST** Program, Institutional Environment and Commitment, Program Director/Principal Investigator, Program Faculty/Staff, Program Participants Evaluation Plan and Dissemination Plan.

BEST Program Plan

Proposed BEST Program: Describe the program's specific purpose, short-term, intermediate, long-range goals, and intended outcomes. Explain the basis and rationale for the program and any evidence of past success upon which it may be based. Describe the educational level (pre- and/or postdoc if applicable) of the participants to be reached, and the time and duration of their participation. Describe in detail any new business and/or academic models that will be utilized to recruit, admit, support, and steer students and postdoctoral scientists to better prepare them for chosen careers. Describe in detail the activities of the program, including any courses to be developed, and how these will be integrated into the existing graduate program, and/or research-training regimen of the postdoctoral individuals. Describe how the program will reach across departmental, center, program and/or school boundaries to potentially reach all biomedical students and postdoctoral individuals. Describe how the program will be evaluated and, specifically, the evidence and data to be collected for this evaluation. In particular, describe the plans for tracking the program participants while in the program, but also the immediate next career step of PhD graduates and of scientists completing their postdoctoral experience (usually no more than 5 years duration) and moving into subsequent positions. Describe how successful approaches will be publicized and disseminated to other institutions.

Institutional Environment and Commitment: Describe the institutional environment, reiterating the availability of facilities and resources (described separately under “Facilities & Other Resources”), that can contribute to the planned **BEST** Program. Evidence of institutional commitment to the program is required. A letter of institutional commitment must be attached as part of Letters of Support. Appropriate institutional commitment should include the provision of adequate staff, facilities and resources that can contribute to the planned program. The letter of institutional commitment must also address the long term commitment to the goals of the program and anticipated plans for continuation of the novel curricula, internships, etc. after they are developed through this program. If partner organizations are expected to provide long term support via the participation of their staff and/or the support of internships or other training opportunities, letters of support from these organizations must also be included.

Program Director/Principal Investigator: Provide evidence that the director has a track record of being involved in such educational/training activities, or has the potential, because of his/her background, to successfully project a vision for and lead the proposed program. Describe arrangements for administration of the program, and provide evidence that the PD/PI is actively engaged in teaching and mentoring related to the goals of this program and the mission of NIH. Describe the director’s credentials as an organizer and administrator.

Program Faculty/Staff: Describe the characteristics and responsibilities of the participating faculty and other expert staff who will contribute to the success of this program; provide evidence that these individuals are actively engaged in activities related to the goals of the proposed program. Provide evidence that the participating faculty and expert staff have experience in training, mentoring, or are otherwise qualified to serve the goals of the proposed program. Provide evidence that the participating faculty support this program and support the students who participate in this program.

Program Participants: Provide details about the pool of expected participants, their educational or career level, their career intentions and qualifications. Describe how these individuals will have access to the program across departmental, program, center and/or school boundaries. Describe how the activities and “lessons learned” of this program will be disseminated to benefit all biomedical trainees.

Diversity Recruitment and Retention: The NIH recognizes a unique and compelling need to promote diversity in the biomedical, behavioral, clinical and social sciences workforce. The NIH expects efforts to diversify the workforce to lead to the recruitment of the most talented researchers from all groups; to improve the quality of the educational and training environment; to balance and broaden the perspective in setting research priorities; to improve the ability to recruit subjects from diverse backgrounds into clinical research protocols; and to improve the Nation’s capacity to address and eliminate health disparities. Nevertheless, reports from the National Science Foundation (NSF) (see <http://www.nsf.gov/statistics/wmpd/>) and others provide strong evidence that diversity remains an important problem that the entire research enterprise must actively address.

Accordingly the NIH continues to encourage institutions to diversify their student and faculty populations and thus to increase the participation of individuals currently underrepresented in the biomedical, behavioral, clinical and social sciences such as: individuals from underrepresented racial and ethnic groups, individuals with disabilities, and individuals from socially, culturally, economically, or educationally disadvantaged backgrounds that have inhibited their ability to pursue a career in health-related research.

Evaluation Plan: Applications must include a detailed plan for evaluating the activities supported by this award. The plan should provide information that clearly states what the program intends to do, what it hopes to accomplish, and the intended impact of the program. The application must specify metrics for monitoring the program (e.g., numbers, educational levels, and demographic characteristics of participants), as well as measures to gauge the short, intermediate, and long-term impact of the award on the career outcomes of the participants. As a component of this evaluation, applicants must obtain formal written feedback from participants and mentors early and often to help identify weaknesses and to provide suggestions for improvements in the program.

In developing their evaluation plans, prospective applicants should include plans for the collection of data to address the evaluation measures below. In parallel, the NIH will be gathering this information from awardees to conduct independent evaluations of the program. The nature of the proposed program might require additional or different data to be gathered, and the applicants should propose such additional data to be gathered in their application

Generic Data to be gathered by all awardees:

Graduate Students:

- Aggregate number and demographic characteristics of participants
- Degree of participation in activities contributing to the goals of the program
- Attitudes toward, and understanding of, career paths addressed by the program; how attitudes and understanding are affected by the program
- Perception of students regarding research faculty attitudes toward student participation in the program
- Productivity of participating students (including publications and time to degree(s))
- Graduate Degree(s) obtained
- Subsequent immediate job placement (be specific) or post-doctoral activity, including postdoctoral mentor
- Information on graduate students who pursued other degree programs as a result of this program's guidance, including when during the training period this change of track took place
- Current funding support (eg, NIH R01, F30, 31, 32, NSF, HHMI, society fellowships, etc.)

Postdoctoral Scientists (if applicable):

- Aggregate number and demographic characteristics of participants
- Degree of participation in activities contributing to the goals of the program
- Attitudes toward, and understanding of, career paths addressed by the program; how attitudes and understanding are affected by the program
- Perception of postdoctoral trainees regarding research faculty attitudes toward participation in the program
- Publications during the postdoctoral experience
- Subsequent competitive career development or research support (F32, K08, K99/R00, foundations, HHMI, etc.) and current funding status
- Detailed occupation information, including next immediate job description after the postdoctoral experience
- Number of years in the postdoctoral experience before obtaining next position

Faculty:

- Number of faculty from applicant and partner institutions who participate as mentors, instructors, preceptors for the training activities developed through program
- Number of faculty from applicant institutions who participate by virtue of having student and/or postdocs from their laboratories engaged in training activities of the program
- Degree of faculty participation in activities contributing to the goals of the program
- Attitudes toward program training goals and time of students spent outside the laboratory; how attitudes change as a result of the program

Dissemination Plan: A specific plan must be provided to disseminate nationally any findings resulting from, or materials developed under the auspices of the **BEST** program, e.g., sample curricula, web postings, presentations or exhibit booths at scientific meetings, workshops, teacher professional development programs or Information Sharing Environments (ISE)/media events such as community health fairs, Science Cafes, and social media.

Resource Sharing Plans

Individuals are required to comply with the instructions for the Resource Sharing Plans (Data Sharing Plan, Sharing Model Organisms, and Genome Wide Association Studies (GWAS)) as provided in the SF424 (R&R) Application Guide, with the following modifications:

Applications are expected to include a software dissemination plan if support for development, maintenance, or enhancement of software is requested in the application. There is no prescribed single license for software produced. However, the software dissemination plan should address, as appropriate, the following goals:

- Software source code should be freely available to biomedical researchers and educators in the non -profit sector, such as institutions of education, research institutions, and government laboratories. Users should be permitted to modify the code and share their modifications with others.
- The terms of software availability should permit the commercialization of enhanced or customized versions of the software, or incorporation of the software or pieces of it into other software packages.
- To preserve utility to the community, the software should be transferable such that another individual or team can continue development in the event that the original investigators are unwilling or unable to do so.

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.

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) using other electronic submission systems. 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](#).

Pre-award costs are allowable only as described in the [NIH Grants Policy Statement](#).

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 Component 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 and responsiveness by [components of participating organizations](#), NIH. Applications that are incomplete and/or nonresponsive will not be reviewed.

Post Submission Materials

Applicants are required to follow the instructions for post-submission materials, as described in NOT-OD-10-115.

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.

Overall Impact

Reviewers will provide an overall impact score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved, in consideration of the following review criteria and additional review criteria (as applicable for the project proposed).

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.

Significance

Does the proposed program address an important need in research and research-related training? Is there convincing evidence in the application that the proposed activity will significantly contribute to enhancing the training of the future biomedical research workforce ?

Investigator(s)

Is the PD/PI capable of providing both administrative and scientific leadership to the development and implementation of the proposed program? Is there evidence that an appropriate level of effort will be devoted by the program leadership to ensure the program's intended goal? Is there evidence that the participating faculty and other experts have experience in mentoring students and teaching science or other aspects of research and research-related careers ? Are the faculty and experts good role models for the participants by nature of their scientific and career accomplishments? If the project is collaborative or multi-PD/PI, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project ?

Innovation

Does the applicant make a strong case for this program effectively reaching an audience in need of the program's offerings ? Is the proposed program developing or utilizing innovative approaches and latest best practices to improve the knowledge and/or skills of the intended audience? Does the program clearly propose to go beyond the traditional training activities experienced by graduate students and postdoctoral scientists?

Approach

Does the proposed program clearly state its goals and objectives, including the educational level of the audience to be reached, the content to be conveyed, and the intended outcome ? Are appropriate partnerships in place to provide novel training experiences? (Note: partnerships are not required but are strongly encouraged as appropriate.) Is there evidence that the program is based on a sound rationale, as well as sound training concepts and principles? Is the plan for evaluation sound, does it include the evaluative elements outlined in this FOA, and likely to provide information on the effectiveness of the program? Are the planned recruitment and enlistment plans adequate to ensure a highly qualified and diverse participant pool from across the institution? Is the dissemination plan adequately detailed ? Is there evidence of strong institutional commitment to the short and long term goals of the program?

Environment

Will the scientific and training environment of the proposed program contribute to its intended goals? Is there a plan to take advantage of this environment and/or environments outside the training institution to enhance the educational value of the program? Is there tangible evidence of institutional commitment? Is there tangible evidence of faculty commitment? Where

appropriate, is there evidence of collaboration and buy-in among participating programs, departments, centers, schools and institutions?

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

Generally not applicable. Reviewers should bring any concerns to the attention of the Scientific Review Officer.

Inclusion of Women, Minorities, and Children

Generally not applicable. Reviewers should bring any concerns to the attention of the Scientific Review Officer.

Vertebrate Animals

Generally not applicable. Reviewers should bring any concerns to the attention of the Scientific Review Officer.

Biohazards

Generally not applicable. Reviewers should bring any concerns to the attention of the Scientific Review Officer.

Resubmissions

Not Applicable

Renewals

Not Applicable

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

Not Applicable

Applications from Foreign Organizations

Not Applicable

Select Agent Research

Not Applicable

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 research.

2. Review and Selection Process

Applications will be evaluated for scientific and technical merit by (an) appropriate Scientific Review Group(s) convened by the Center for Scientific Review, 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 selection 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.

[Appeals](#) of initial peer review will not be accepted for applications submitted in response to this FOA.

Applications will be assigned to the NIH Office of the Director or 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 national Advisory Council or Board. 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.
- Relevance of the proposed project to program priorities.

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](#).

3. Reporting

The Non -Competing Continuation Grant Progress Report ([PHS 2590](#) or [RPPR](#)) and financial statements as described in the [NIH Grants Policy Statement](#) are required annually. Continuation support will not be provided until the required forms are submitted and accepted.

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.

Failure by the grantee institution to submit required forms in a timely, complete, and accurate manner may result in an expenditure disallowance or a delay in any continuation funding for the award.

Other Reporting Requirements

A final progress report and the expenditure data portion of the Federal Financial Report are required for closeout of an award as described in the [NIH Grants Policy Statement](#).

4. Evaluation

In carrying out its stewardship of human resource-related programs, the NIH will periodically evaluate its DP7 programs. In assessing the effectiveness of its research training investments, NIH may request information from databases, PD/PIs, and from participants themselves. Where necessary, PD/PIs and participants may be contacted after the completion of a research training experience for periodic updates on participants' subsequent training or employment history and professional activities.

Section VII. Agency Contacts

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

Application Submission Contacts

[Grants.gov Customer Support](#) (Questions regarding Grants.gov registration and submission, downloading or navigating forms)

Contact Center Phone: 800 -518 -4726

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

eRA Commons Help Desk(Questions regarding eRA Commons registration, tracking application status, post submission issues)

Phone: 301 -402 -7469 or 866 -504 -9552 (Toll Free)

TTY: 301 -451 -5939

Email: commons@od.nih.gov

Scientific/Research Contact(s)

Patricia Labosky, Ph.D.

Program Leader

Office of Strategic Coordination

Division of Program Coordination, Planning and Strategic Initiatives

Office of the Director, NIH

Telephone: 301 -594 -

4863

Email: laboskypa@od.nih.gov

Peer Review Contact(s)

Larry Boerboom, Ph.D.

Chief

Cardiovascular and Respiratory Sciences Integrated Review Group
Center for Scientific Review (CSR)
Telephone: 301 -435 -8367
Email: boerbool@mail.nih.gov

Financial/Grants Management Contact(s)

Dede Rutberg, MBA
National Institute of Dental and Craniofacial Research (NIDCR)
Telephone: 301 -594 -4798
Email: rutbergd@mail.nih.gov

Michael Morse
Office of Strategic Coordination, Division of Program Coordination
Planning and Strategic Initiatives
Office of the Director, NIH
Telephone: 301 -435 -5446
Email: morsem@od.nih.gov

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 Sections 301 and 405 of the Public Health Service Act as amended (42 USC 241 and 284) and under Federal Regulations 42 CFR Part 52 and 45 CFR Parts 74 and 92.

[Weekly TOC for this Announcement](#)
[NIH Funding Opportunities and Notices](#)



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