# Attachment 2: RFA-RM-13-017 (National Research Mentoring Network (NRMN))

### **Department of Health and Human**

### **Services Part 1. Overview Information**

Participating Organization(s)	National Institutes of Health (NIH)
Components of Participating Organizations	This Funding Opportunity Announcement (FOA) is developed as a Common Fund initiative ( <a href="http://commonfund.nih.gov/">http://commonfund.nih.gov/</a> ) through the NIH Office of the Director, Office of Strategic Coordination ( <a href="http://dpcpsi.nih.gov/osc/">http://dpcpsi.nih.gov/osc/</a> ). The FOA will be administered by the National Institute on Minority Health and Health Disparities (

#### **Key Dates**

Posted Date	December 19, 2013	
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Letter of Intent Due Date(s)	(Extended to <b>March 2, 2014</b> per <u>NOT-RM-14-004</u> ), Originally February 18, 2014
Application Due Date(s)	(Extended to April 2, 2014 per NOT-RM-14-004), Originally March 18, 2014
AIDS Application Due Date(s)	Not Applicable
Scientific Merit Review	June/July 2014
Advisory Council Review	August 2014
Earliest Start Date	September 2014
<b>Expiration Date</b>	(Extended to April 3, 2014 per NOT-RM-14-004), Originally March 19, 2014
Due Dates for E.O. 12372	Not Applicable

#### **Required Application Instructions**

It is critical that applicants follow the instructions in the PHS 398 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. While some links are provided, 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.

**Looking ahead**: NIH is committed to transitioning all grant programs to electronic submission using the SF424 Research and Related (R&R) format and is currently investigating solutions that will accommodate NIH's multiproject programs. See NOT-OD-13-075 and NIH's Applying Electronically website for more information.

Note: A new version of the paper PHS 398 application form and instructions (revised 8/2012) must now be used. Download the new application form and instructions from <a href="http://grants.nih.gov/grants/forms.htm">http://grants.nih.gov/grants/forms.htm</a>.

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#### Part 2. Full Text of Announcement

#### **Section I. Funding Opportunity Description**

#### **Background**

The NIH recognizes a unique and compelling need to promote diversity in the NIH-funded biomedical, behavioral, clinical, and social sciences (collectively termed "biomedical") research workforce. The NIH expects efforts that diversify the workforce to lead to the recruitment of the most talented researchers from all groups, improve the quality of the training environment, balance and broaden the perspective in setting research priorities, improve the ability to recruit subjects from diverse backgrounds into clinical research protocols, and improve the Nation's capacity to address and eliminate health disparities.

With this need in mind, the NIH Director requested input from the NIH Advisory Committee to the Director (ACD) regarding actions that the NIH should take to make transformative progress in this area. In 2012, the ACD Working Group on Diversity in the Biomedical Research Workforce explored ways to improve the recruitment of individuals from diverse backgrounds underrepresented in biomedical research, sustain their interest in, and prepare them for, successful biomedical research careers. (These individuals include persons from underrepresented racial and ethnic groups, people with disabilities, and people from disadvantaged backgrounds; see <a href="http://www.nsf.gov/statistics/showpub.cfm?TopID=2&SubID=27">http://www.nsf.gov/statistics/showpub.cfm?TopID=2&SubID=27</a>, and the latest NSF report on Women, Minorities, and Persons with Disabilities in Science and Engineering, <a href="http://www.nsf.gov/statistics/women/">http://www.nsf.gov/statistics/women/</a>.) The Working Group provided recommendations, endorsed by the ACD, about how to develop and support individuals from diverse backgrounds across the lifespan of a research career, from undergraduate study to acquisition of tenure in an academic position or the equivalent in a non-academic setting. In response to these recommendations, NIH has established the Common Fund Program "Enhancing the Diversity of the NIH-Funded Workforce" (see <a href="http://commonfund.nih.gov/diversity/">http://commonfund.nih.gov/diversity/</a>).

This Common Fund program is envisioned as a national collaborative forum through which awardee institutions, in partnership with the NIH, will develop and implement novel and innovative programs to engage individuals from diverse backgrounds and help them prepare for and succeed in biomedical research careers. This program is being developed in the context of existing programs through which NIH and other entities have made significant investments to engage scientists using a variety of training and mentoring approaches. Although existing programs may show positive outcomes for trainees and participants, progress towards achieving a more diverse NIH-funded workforce is still insufficient.

This program provides an opportunity to understand and address multi-dimensional factors (e.g., institutional, social, and individual levels) that strongly influence student success, professional development, and persistence within biomedical research career paths. It will build upon and move beyond existing programs and paradigms to support transformative approaches to student engagement, research training, mentoring, faculty development, and infrastructure development. Transformative approaches are ultimately expected to supplant less effective practices and methods to have a broad and sustained impact on the diversity of the NIH-funded biomedical research workforce.

#### Relevant questions for this funding opportunity include, but are not limited to:

What are the hallmarks of a successful biomedical research career at each phase of the training process? What motivates students to enter biomedical research career paths, and what factors contribute to their sustained participation? What factors (e.g., institutional, social, and individual) influence emerging scientists, particularly those from underrepresented backgrounds, to enter, exit, or sustain a biomedical research career, and how can these factors be addressed? What must happen during different training stages to ensure that trainees, particularly those from underrepresented backgrounds, develop the skills, knowledge, and competencies essential to successful biomedical careers, and careers in the NIH-funded biomedical research workforce? How do institutional structures and resources facilitate successful research training and professional development activities? How can approaches be designed so that their impact continues beyond the period of NIH funding?

The program will consist of three highly integrated initiatives, in which awardees will work together as the Diversity Program Consortium:

The Building Infrastructure Leading to Diversity (BUILD) Initiative:

Various approaches to increase undergraduate student persistence in the STEM-related fields have been implemented (Graham et al., *Science, 341,* 1455-1456). Student participation in research experiences has been associated with improved academic performance and sustained interest in research careers in the basic and biomedical sciences (for example, see Fechheimer et al., CBE--*Life Sciences Education, 10,* 156-163 and Russell et al., *Science, 316 (5824),* 548-549). Recognizing this approach, BUILD awards should emphasize research opportunities for students in a multi-pronged approach to enhance diversity in the NIH research workforce. Institutions are encouraged to consider additional innovative methods to engage and prepare students for success. Flexibility to innovate is a hallmark of the BUILD initiative. Applicants are encouraged to think creatively about how to address identified needs at their institutions and develop visionary approaches that encompass institutional, social, and individual factors.

#### The National Research Mentoring Network (NRMN) Initiative:

Lack of adequate mentoring is consistently described as a problem for trainees from all backgrounds. The NRMN initiative will develop a highly networked set of motivated and skilled mentors from various disciplines linked to mentees across the country – both from BUILD institutions and elsewhere – for individuals from the undergraduate to early career faculty level. In addition to linking individuals to mentors, the NRMN will develop best practices for mentoring, providing training opportunities for mentors, and providing networking and professional opportunities for mentees. The NRMN is expected to contribute substantially to attainment of hallmarks of successful research career progression for each career stage.

#### The Coordination and Evaluation Center (CEC):

The CEC will coordinate consortium-wide activities and evaluate BUILD and NRMN programs. The CEC will facilitate the development of consortium-wide hallmarks, including core competencies, of successful biomedical research career progression and examination of the impact of BUILD and NRMN programs according to these hallmarks. These consortium-wide development activities will be established through consensus in Executive Steering Committee meetings, which will be facilitated by the CEC (See Section VI for details about the Executive Steering Committee.) The CEC will coordinate the collection and reporting of data from BUILD and NRMN awardees. The CEC will also facilitate consortium-wide discussions of approaches, progress, and lessons learned, and will serve as the focal point for dissemination of information to the broader research training and mentoring communities.

The overarching goal of the Diversity Program Consortium is to enhance the diversity of well-trained biomedical research scientists who can successfully compete for NIH research funding and/or otherwise contribute to the NIH-funded workforce. The BUILD and NRMN initiatives are not intended to support replication or expansion of existing programs at applicant institutions (for example, simply increasing the number of participants in current NIH-funded research training or mentoring programs would not be responsive to this funding announcement). Promising practices and principles derived from the literature or from pilot programs may be leveraged to inform applicants' approaches and/or expansion of existing efforts in novel ways. These initiatives are intended to allow institutions to develop and pilot novel approaches to biomedical research training and mentoring and disseminate successful approaches.

This FOA addresses the NRMN initiative to establish a single, nationwide consortium of scientific leaders across a range of biomedical disciplines who will serve as external mentors for undergraduates, graduate students, postdoctoral scholars, and early career faculty from diverse backgrounds from BUILD awardee institutions and other institutions nationwide.

#### **Purpose/Objectives**

Mentoring is associated with increased self-confidence, educational and career satisfaction, career retention and advancement, and research productivity for individuals pursuing biomedical research careers. In addition, making investments in quality mentoring for emerging scientists and professionals helps them persist in scientific careers. Effective mentors can provide guidance to emerging scientists regarding career options and opportunities within the NIH-funded or NIH-supported biomedical workforce and help foster development of the necessary experience and skills needed to successfully compete for and obtain NIH funding. Unfortunately, not all individuals in the biomedical research workforce pipeline have access to mentors with relevant research or career development expertise. Mentoring is a key component of the Common Fund strategy to enhance the

diversity of the pool of highly trained biomedical researchers. In addition, it is critical to develop mentoring and networking resources that can be sustained and/or adopted by other organizations after NIH funding has ended. The NRMN is intended to address these needs.

#### Goals for the NRMN include the following:

- Working with the Diversity Program Consortium to establish core competencies and hallmarks of success at each stage of biomedical research careers (i.e., undergraduate, graduate, postdoctoral, early career faculty).
- Developing standards and metrics for effective face-to-face and online mentoring.
- Connecting students, postdoctoral fellows, and faculty in the biomedical research workforce with experienced mentors, including those with NIH funding, both in person and through online networks.
- Developing innovative strategies for mentoring and testing efficacy of these approaches.
- Active outreach is expected to be required to draw mentees into the network who otherwise would have limited access to research mentors.
- Developing innovative and novel methods to teach effective mentoring skills and providing training to individuals who participate as mentors in the NRMN.
- Providing professional development activities (grant writing seminars, mock study sections, etc.) and biomedical research career "survival" strategies, and/or facilitating participation in existing development opportunities outside the NRMN.
- Enhancing mentee access to information and perceptions about biomedical research careers and funding
  opportunities at the NIH and increasing understanding of the requirements and strategies for success in
  biomedical careers through mentorship.
- Creating effective networking opportunities for students, postdoctoral fellows, and early career faculty from diverse backgrounds with the larger biomedical research community.
- Enhancing ability of mentees to attain NIH funding.

The strategies and approaches used to achieve these goals are to be determined by the applicant and described in the application. Although fully developed mentoring strategies are expected to guide the NRMN, the application may also propose pilot projects to test novel mentoring activities. The application should also address the means by which the program will provide structured access to opportunities for mentored research, research training, fellowship support and career development, as well as the ongoing sustainability and/or portability of programs or resources developed to achieve these goals.

The NRMN awardee will be expected to establish robust partnerships with various organizations through which mentors may be recruited. The NRMN will collaborate with institutions in the BUILD program to provide mentorship to BUILD trainees and participants. The NRMN is also expected to provide mentorship and networking opportunities to undergraduates, graduate students, postdoctoral fellows, and early career faculty who are at institutions not in the BUILD program. Although the NRMN is expected to be a national network, beyond the inclusion of BUILD trainees and participants, the number of mentees and mentors included in the network is to be determined by the applicant and described in the application.

Applicants should explain how NRMN activities would be designed to complement rather than duplicate activities provided by the BUILD sites. Because details about BUILD activities at specific sites will not be available until after the BUILD awards are made, applicants should refer to the BUILD FOA (RFA-RM-13-016) to identify the broad categories of activities in which BUILD sites are expected to engage and summarize a strategy for meeting the complementary mentoring needs of BUILD trainees and participants.

The NRMN will be evaluated according to the hallmarks of success that will be defined by the Diversity Program Consortium and the CEC. Potential hallmark domains for the NRMN initiative could include, but are not limited to: enhanced engagement of mentees in biomedical research-related coursework and laboratory experiences, enhanced knowledge and perceptions about biomedical research and career options, enhanced satisfaction in mentoring, improved mentoring skills, enhanced access to relevant mentoring resources locally and/or nationally, and enhanced capacity for sustainability of NRMN activities.

Note: The coordination among the BUILD and NRMN programs for data collection and evaluation will be established with the support of the CEC after the awardees for these programs are selected. It is therefore not necessary for NMRN applicants to collaborate with specific CEC or BUILD applicants as part of their application.

#### **Technical Assistance Webinars**

Potential applicants are strongly encouraged to participate in one or more pre-application Technical Assistance webinars, which will provide an opportunity to clarify expectations for the FOA so applicant organizations can present their strongest case for support. The webinar is scheduled for January 2014. Additional information will be posted on the Common Fund website at <a href="http://commonfund.nih.gov/diversity/">http://commonfund.nih.gov/diversity/</a>.

#### **Section II. Award Information**

Funding Instrument	Cooperative Agreement: A support mechanism used when there will be substantial Federal scientific or programmatic involvement. Substantial involvement means that, after award, NIH staff will assist, guide, coordinate, or participate in project activities.
Application Types Allowed	New The OER Glossary and the PHS 398 Application Guide provide details on these application types.
Funds Available and Anticipated Number of Awards	The NIH Common Fund intends to commit \$2,225,000 in FY 2014 for a single NRMN award, contingent upon availability of funds.
Award Budget	Application budgets are limited to \$2,225,000 in total costs annually.
Award Project Period	The project period is 5 years.

NIH grants policies as described in the <u>NIH Grants Policy Statement</u> 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

- State Governments
- County Governments
- City or Township Governments
- Special District Governments
- Indian/Native American Tribal Governments (Federally Recognized)
- Indian/Native American Tribal Governments (Other than Federally Recognized)
- U.S. Territory or Possession

#### Other

- Independent School Districts
- Public Housing Authorities/Indian Housing Authorities
- Native American Tribal Organizations (other than Federally recognized tribal governments)
- Faith-based or Community-based Organizations
- · Regional Organizations

#### **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 <u>defined in the *NIH Grants Policy Statement*</u>, **are** allowed.

#### **Required Registrations**

#### **Applicant Organizations**

Applicant organizations must complete and maintain the following registrations as described in the PHS 398 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 <a href="NIH Policy on Late Submission of Grant Applications">NIH Policy on Late Submission of Grant Applications</a> states that failure to complete registrations in advance of a due date is not a valid reason for a late submission.

- <u>Dun and Bradstreet Universal Numbering System (DUNS)</u> 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.
- <u>eRA Commons</u> 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) account in
  order to submit an application.

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

All PD(s)/PI(s) 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. If the PD/PI is also the organizational Signing Official, they must have two distinct eRA Commons accounts, one for each role. Obtaining an eRA Commons account can take up to 2 weeks.

#### 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 underrepresented racial and ethnic groups as well as individuals with disabilities 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 PHS 398 Application Guide.

#### 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 <u>NIH Grants Policy Statement</u>), 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.

#### **Mentors**

The NRMN is expected to recruit researchers from diverse biomedical research disciplines and diverse backgrounds to serve as mentors, in order to ensure a robust mentorship program. Mentors from foreign institutions may be included; however, most mentors are expected to be from U.S. institutions.

#### **Mentees**

The NRMN is expected to offer mentorship and professional development activities to participants in the BUILD program as well as undergraduates, graduate students, postdoctoral fellows, and early career faculty from other institutions nationwide who are interested in pursuing biomedical research careers. The NRMN is expected to recruit mentees from diverse backgrounds.

Mentees must be U.S. citizens, U.S. non-citizen nationals, or permanent residents. Applications must describe the intended participants, and the eligibility and/or specific educational or research background characteristics for the different mentoring and networking activities provided in the NRMN.

#### Other Eligibility Requirements

Applicants are not required to be recipients of a planning grant under RFA-RM-13-002, "Planning Grants for the NIH National Research Mentoring Network (NRMN) (P20)."

Note: Applicants for BUILD or CEC awards are eligible to apply to this FOA. However, the CEC awardee or its partnering institutions will not be eligible to receive an NRMN award.

#### Section IV. Application and Submission Information

#### 1. Address to Request Application Package

Applicants are required to prepare applications according to the current PHS 398 application forms in accordance with the PHS 398 Application Guide.

#### 2. Content and Form of Application Submission

It is critical that applicants follow the instructions in the PHS 398 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.

#### **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 IC staff to estimate the potential review workload and plan the review.

By the date listed in <u>Part 1. Overview Information</u>, prospective applicants are asked to submit a letter of intent that includes the following information:

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

The letter of intent should be sent to:

Pamela L. Thornton, PhD, MSW
Common Fund Diversity Initiatives
National Institute on Minority Health and Health Disparities (NIMHD)
6707 Democracy Boulevard, Suite 800
Bethesda, MD 20892-5465
Telephone: 301-402-1366

Telephone: 301-402-1366 Email: pamela.thornton@nih.gov

#### **Application Submission**

Applications must be prepared using the PHS 398 research grant application forms and instructions for preparing a research grant application. Submit a signed, typewritten original of the application, including the checklist, and fivesigned photocopies and all copies of Appendix files in one package to:

Center for Scientific Review
National Institutes of Health
6701 Rockledge Drive, Room 1040, MSC 7710
Bethesda, MD 20892-7710 (U.S. Postal Service Express or regular mail)
Bethesda, MD 20817 (for express/courier service; non-USPS service)

#### **Page Limitations**

All page limitations described in the PHS 398 Application Guide and the <u>Table of Page Limits</u> must be followed, in addition to the following page limitations to the Research Strategy section of each component of the application.

Overall: 12 pages

• Administrative Core: 12 pages

Mentorship and Networking Core: 12 pages

• Mentor Training Core: 12 pages

Professional Development Core: 12 pages

#### Instructions for the Submission of Multi-Component Applications

The following section supplements the instructions found in the PHS 398 Application Guide, and should be used for preparing a multi-component application.

The application must consist of the following components:

- Overall: Required
- Administrative Core: Required, 1 maximum
- Mentorship and Networking Core: Required, 1 maximum
- Mentor Training Core: Required, 1 maximum
- Professional Development Core: Required, 1 maximum

#### Overall Component

All instructions in the PHS398 Application Guide must be followed, with the following additional instructions, as noted.

#### Face Page (Overall)

All instructions in the PHS 398 Application Guide must be followed.

# Description, Project/Performance Sites, Senior/Key Personnel, Other Significant Contributors, Human Embryonic Stem Cells (Overall)

All instructions in the PHS 398 Application Guide must be followed.

#### **Table of Contents (Overall)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Detailed Budget for Initial Budget Period (Overall)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Budget for Entire Proposed Period of Support (Overall)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Biographical Sketch (Overall)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Resources (Overall)**

All instructions in the PHS 398 Application Guide must be followed.

#### Research Plan (Overall)

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions:

**Specific Aims:** Describe the specific aims of the overall NRMN.

Research Strategy: Describe the overall vision for the network and the approach that will be used to achieve the NRMN goals identified in the Purpose/Research Objectives section of this FOA. Describe how the vision represents a significant advance over current mentoring strategies. Describe the vision for the attributes and skill sets that mentees must acquire to be successful in an NIH-funded or supported biomedical research career, i.e., the hallmarks of success, and how the NRMN will enable mentees at all levels to attain these hallmarks. Describe likely factors that contribute to decisions by students to exit biomedical research career training and how the mentoring activities will address these factors. Identify collaborating institutions and organizations and their roles in the network. Summarize the strengths of the applicant organization and collaborators, including relevant expertise in the development, coordination, and execution of mentoring, networking, and professional development programs. Describe how NRMN will leverage existing mentorship programs, including NIH-funded or other federally-funded programs, while not duplicating the existing programs. Describe the integration of all the core sections of the application that

follow, and provide a project timeline that incorporates activities from all cores. Describe the potential for network infrastructure and resources to be sustained and/or disseminated after the NIH funding period.

**Letters of Support:** Letters of collaboration by partnering institutions or organizations should be provided that describe the nature of their involvement and commitment. Letters reflecting collaboration with individuals rather than organizations should only be provided if individuals will be substantially involved in the leadership, development, or conduct of the project (e.g., expert consultants). Letters from individual mentors who will be included in the network should not be included.

**Resource Sharing Plan**: 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 PHS 398 Application Guide.

#### **Administrative Core**

All instructions in the PHS398 Application Guide must be followed, with the following additional instructions, as noted.

#### Face Page (Administrative Core)

All instructions in the PHS 398 Application Guide must be followed.

# Description, Project/Performance Sites, Senior/Key Personnel, Other Significant Contributors, Human Embryonic Stem Cells (Administrative Core)

All instructions in the PHS 398 Application Guide must be followed.

#### **Table of Contents (Administrative Core)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Detailed Budget for Initial Budget Period (Administrative Core)**

All instructions in the PHS 398 Application Guide must be followed. In addition, funds may be used to support staff time, travel, face-to-face and virtual meeting costs, technical support or services, or related expenses required for governance, management, and coordination of network activities. Expenses for foreign travel must be exceptionally well justified. Applicants should include costs for development and maintenance of the database used to collect, track and report NRMN activities, including mentor and mentee linkages. Funds for travel to the Annual Grantees Meeting, held in Bethesda, MD, should be included in the budget request. The first annual meeting will take place during October 2014.

#### **Budget for Entire Proposed Period of Support (Administrative Core)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Biographical Sketch (Administrative Core)**

All instructions in the PHS 398 Application Guide must be followed.

#### Resources (Administrative Core)

All instructions in the PHS 398 Application Guide must be followed.

#### **Research Plan (Administrative Core)**

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions:

Specific Aims: This section should include the specific aims of the Administrative Core and how they relate

to the overall NRMN aims.

**Research Strategy:** Describe the NRMN's organizational and governance structure and explain the roles and responsibilities of Administrative Core personnel. Describe the processes to be used to allocate and prioritize fiscal and other resources, as well as procedures for ensuring timely and effective communication among the project cores and across the NRMN as a whole. Include a management plan that describes the composition and roles of any committees or boards proposed to help manage or oversee NRMN activities, including the required Steering Committee. External advisors (i.e., those not otherwise involved in the project as Senior/Key Personnel or other significant contributors) should not be identified by name in the application.

Identify the infrastructure available to support collection, cleaning, storage, and reporting of data from mentees and mentors. (A preliminary listing of evaluation variables is identified in Section VI.3, Reporting). Describe the expertise of personnel who will work collaboratively with the CEC to develop data collection and analysis protocols, as well as ensure data integrity, privacy, and security.

**Resource Sharing Plan**: 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 PHS 398 Application Guide.

#### **Mentorship and Networking Core**

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions, as noted.

#### Face Page (Mentorship and Networking Core)

All instructions in the PHS 398 Application Guide must be followed.

# Description, Project/Performance Sites, Senior/Key Personnel, Other Significant Contributors, Human Embryonic Stem Cells (Mentorship and Networking Core)

All instructions in the PHS 398 Application Guide must be followed.

#### Table of Contents (Mentorship and Networking Core)

All instructions in the PHS 398 Application Guide must be followed.

# Detailed Budget for Initial Budget Period (Mentorship and Networking Core)

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions:

Funds may be used to support staff time, travel, technical support or services, or related expenses required to develop and conduct face to face and online mentorship and networking activities.

Additional allowable expenses include travel expenses for mentees or mentors to engage in in person mentoring or networking activities, and support of a pilot project program (see Research Strategy section below). Expenses for foreign travel must be exceptionally well justified. Salary support should only be provided for individuals who are substantially involved in the leadership, development, or conduct of the network.

# Budget for Entire Proposed Period of Support (Mentorship and Networking Core)

All instructions in the PHS 398 Application Guide must be followed.

#### Biographical Sketch (Mentorship and Networking Core)

All instructions in the PHS 398 Application Guide must be followed.

#### Resources (Mentorship and Networking Core)

All instructions in the PHS 398 Application Guide must be followed.

#### Research Plan (Mentorship and Networking Core)

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions:

**Specific Aims:** This section should describe the specific aims of the Mentorship and Networking Core and how they relate to the overall NRMN aims.

Research Strategy: Describe the structure and operation of the network and how it will support the vision established in the Overall Research Strategy. Describe the innovative approaches to mentoring that will be established, the rationale behind them, and the expected impact on each career stage. Include any specific eligibility criteria for particular mentee and mentor related activities, how mentees and mentors will be identified and recruited for inclusion in the network, how mentees will be connected with mentors, and strategies or incentives to retain mentors/mentees in the network. Describe in particular how mentees/mentors from backgrounds underrepresented in the biomedical workforce will be recruited for participation in the NRMN. Describe strategies to reach and engage individuals with limited access to relevant mentoring resources at their home institutions. Describe the networking strategies that will be used to help connect mentees to peers, collaborators, resources, and opportunities. Describe how mentorship and networking activities will be tailored for each mentee career stage (undergraduate, graduate, postdoctoral, early career faculty) and across biomedical disciplines.

Though not required, applicants may propose a pilot project program. A pilot project program may be used to provide seed funding to pilot or evaluate new mentoring and/or networking activities. If a pilot project program is proposed, describe the overall scope of the pilot project program; expected number of projects to be supported each year; eligibility requirements; solicitation, submission, review, and selection criteria and processes; procedures for program oversight and evaluation; limits on dollars available and number of years of support per project. Do not include detailed proposals or descriptions of specific pilot projects.

**Resource Sharing Plan:** 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 PHS 398 Application Guide.

#### **Mentor Training Core**

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions, as noted.

#### **Face Page (Mentor Training Core)**

All instructions in the PHS 398 Application Guide must be followed.

# Description, Project/Performance Sites, Senior/Key Personnel, Other Significant Contributors, Human Embryonic Stem Cells (Mentor Training Core)

All instructions in the PHS 398 Application Guide must be followed.

#### **Table of Contents (Mentor Training Core)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Detailed Budget for Initial Budget Period (Mentor Training Core)**

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions:

Funds may be used to support staff time, travel, technical support or services, or related expenses required to develop and implement mentorship training activities.

Additional allowable expenses include travel costs for mentors to participate in in-person mentor training activities and support of a pilot project program (see Research Strategy section below). Expenses for foreign travel must be exceptionally well justified.

# **Budget for Entire Proposed Period of Support (Mentor Training Core)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Biographical Sketch (Mentor Training Core)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Resources (Mentor Training Core)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Research Plan (Mentor Training Core)**

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions:

**Specific Aims:** This section should include the specific aims of the Mentor Training Core and how they relate to the overall NRMN aims.

Research Strategy: Describe the conceptual model for effective mentoring and how it guides proposed mentoring activities. Describe the initial framework for the development of standards and metrics for effective face-to-face and online mentoring, as well as plans to refine or adjust these standards in response to feedback from NRMN members, NRMN evaluation data, or evidence from the field emerging over the course of the NRMN project period. Describe how identified standards of effective mentoring will guide development and content of mentor training opportunities. Describe specific training opportunities that will be offered to help mentors improve their mentoring skills and effectiveness (e.g., face-to-face and online techniques, assisting mentees with locating and applying for NIH-funded and other opportunities). Describe in particular training activities to improve the cultural competence of mentors to provide mentorship to mentees from diverse backgrounds. Describe how mentor training will be tailored for each mentee career stage (undergraduate, graduate, postdoctoral, early career faculty). Describe the impact that mentor training is expected to have on the mentors and their mentees and how this will be assessed.

Though not required, applicants may propose a pilot project program to provide seed funding to pilot or evaluate new mentor training strategies. If a pilot project program is proposed, describe the overall scope of the pilot project program; expected number of projects to be supported each year; eligibility requirements; solicitation, submission, review, and selection criteria and processes; procedures for program oversight and evaluation; limits on dollars available and number of years of support per project. Do not include detailed proposals or descriptions of specific pilot projects.

**Resource Sharing Plan:** 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 PHS 398 Application Guide.

#### **Professional Development Core**

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions, as noted.

#### Face Page (Professional Development Core)

All instructions in the PHS 398 Application Guide must be followed.

#### Description, Project/Performance Sites, Senior/Key Personnel, Other Significant Contributors, Human Embryonic Stem Cells (Professional Development Core)

All instructions in the PHS 398 Application Guide must be followed.

#### **Table of Contents (Professional Development Core)**

All instructions in the PHS 398 Application Guide must be followed.

# **Detailed Budget for Initial Budget Period (Professional Development Core)**

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions:

Funds may be used to support staff time, travel, technical support or services, or related expenses required to develop, implement, or facilitate participation in professional development activities.

Additional allowable expenses include travel expenses and salary support for mentees to participate in in-person professional development activities. Allowable salary support depends on the educational level/career status of the mentee, and percentage of time/effort devoted to the professional development activity. Allowable salary and fringe benefits must be consistent with the institutional salary policies for employees in similar positions, as well as the NIH policies regarding compensation (see NOT-OD-13-064). Expenses for foreign travel must be exceptionally well justified.

Funds may also be used to support a pilot project program (see Research Strategy below).

### Budget for Entire Proposed Period of Support (Professional Development Core)

All instructions in the PHS 398 Application Guide must be followed.

#### **Biographical Sketch (Professional Development Core)**

All instructions in the PHS 398 Application Guide must be followed.

#### **Resources (Professional Development Core)**

All instructions in the PHS 398 Application Guide must be followed.

#### Research Plan (Professional Development Core)

All instructions in the PHS 398 Application Guide must be followed, with the following additional instructions:

**Specific Aims:** This section should describe the specific aims of the Professional Development Core and how they relate to the overall NRMN aims.

Research Strategy: Describe professional development activities (such as grant writing seminars, mock grant reviews, scientific leadership training, professional shadowing, science and personnel management training, making application to NIH and other federal and private sources for training and career development support, etc.) that will be offered directly through the NRMN. Describe how professional development activities will be tailored for each mentee career stage (undergraduate, graduate, postdoctoral, early career faculty) and across biomedical disciplines. Describe and provide the rationale for any eligibility or selection criteria that will be used to select mentors and mentees for these programs, as well as strategies to make activities accessible to all those who are eligible or selected. Describe how the NRMN will identify and facilitate participation in additional professional development activities offered outside of the NRMN. Describe the impact that each professional development activity is expected to have on the participants and how this will be assessed.

Though not required, applicants may propose a pilot project program to provide seed funding to pilot or evaluate new professional development programs. If a pilot project program is proposed, describe the overall scope of the pilot project program; expected number of projects to be supported each year; eligibility requirements; solicitation, submission, review, and selection criteria and processes; procedures for program oversight and evaluation; limits on dollars available and number of years of support per project. Do not include detailed proposals or descriptions of specific pilot projects.

**Resource Sharing Plan:** 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 PHS 398 Application Guide.

#### Appendix for the Entire Application

Do not use the Appendix to circumvent page limits. Follow all instructions for the Appendix (please note all format requirements) as described in the PHS 398 Application Guide.

#### 3. Submission Dates and Times

Part I. Overview Information contains information about Key Dates.

Information on the process of receipt and determining if your application is considered "on-time" is described in detail in the PHS 398 Application Guide.

Applicants may track the status of the application in the <u>eRA Commons</u>, NIH's electronic system for grants administration.

#### 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.

Individuals supported by NIH training and career development mechanisms (K, T, or F awards) or the BUILD program may participate as mentees in the NRMN, but they may not receive salary or stipend supplementation through the NRMN.

#### 6. Other Submission Requirements and Information

Upon receipt, applications will be evaluated for completeness by the Center for Scientific Review and responsiveness by NIMHD, NIH. Applications that are incomplete and/or nonresponsive will not be reviewed.

#### Responsiveness Criteria

The NRMN is intended to provide mentorship, networking, and professional development activities to diverse mentees across a range of biomedical research disciplines from the undergraduate to early career faculty level. Applications that focus exclusively on a particular scientific discipline, research topic area, career stage (e.g., early career faculty), or demographic group are not responsive to this FOA.

Similarly, the NRMN is intended to provide mentorship and other opportunities relevant to the pursuit of a biomedical research career. Applications that focus on general science, technology, engineering, and mathematics (STEM) education, or on the preparation of individuals exclusively for clinical, teaching, or other non-research careers, are not responsive to this FOA.

#### **Post Submission Materials**

Applicants are required to follow the instructions for post-submission materials, as described in NOT-OD-13-030.

#### 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 - Overall

Reviewers will provide an overall impact score to reflect their assessment of the likelihood for the network 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 network proposed).

#### Scored Review Criteria - Overall

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. For example, a network that by its nature is not innovative may be essential to advance a field.

#### Significance

Does the network address an important problem or a critical barrier to progress in the field? If the aims of the network are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?

In addition, specific for this FOA: Does the vision established by the PI/PD(s) represent a significant advance over current mentoring strategies?

#### Investigator(s)

Are the PD(s)/PI(s), collaborators, and other researchers well suited to the network? If Early Stage Investigators or New Investigators, or in the early stages of independent careers, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)? 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 network?

In addition, specific for this FOA: Do the investigators show evidence of the ability to lead, develop, and direct a national network of collaborative mentorship efforts? Is experience in diverse mentoring approaches represented within the leadership of the network relevant and appropriate? Does the team have relevant representation from mentor communities from diverse disciplines related to biomedical research that can provide mentoring support across the career stages?

#### **Innovation**

Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

In addition, specific for this FOA: Does the application describe novel and innovative mentorship,

networking, and professional development strategies? Does the application identify novel and innovative strategies that are likely to expand the reach and inclusiveness of the NRMN beyond those of existing NIH-funded or other mentoring programs?

#### **Approach**

Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the network? Are potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?

If the network involves human subjects and/or NIH-defined clinical research, are the plans to address 1) the protection of human subjects from research risks, and 2) inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion or exclusion of children, justified in terms of the scientific goals and research strategy proposed?

In addition, specific for this FOA: Are the strategies used to achieve the intended NRMN goals of the application/network well-reasoned and comprehensive? Will all career stages and disciplines be well served? Is an appropriate rationale for the selection and inclusion of partner organizations provided? Is there an appropriate description of how the NRMN will leverage existing mentorship networks with particular attention to avoid redundancy? Are activities of the network cores well integrated? Is an achievable network timeline provided that includes critical milestones? Does the application address the potential sustainability and/or portability of network infrastructure and resources?

If a pilot project program is proposed in any of the cores, are there adequate institutional plans and procedures to assure compliance with applicable federal regulations and NIH policies for the protection of human research participants, including the evaluation of risks and protections in project proposals, appropriate ethical oversight of funded projects, and plans for monitoring data and safety in clinical research projects?

#### **Environment**

Will the scientific environment in which the work will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

#### Additional Review Criteria - Overall

As applicable for the network 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.

#### **Administrative Core**

- Is the organizational and governance structure well described and appropriate to manage and oversee the proposed NRMN strategy?
- Are the roles and responsibilities of the Administrative Core appropriate? Are they also clearly delineated?
- Are the processes to be used to allocate and prioritize fiscal and other resources appropriate?
- Is a feasible plan provided to ensure timely and effective communication across Cores and the network as a whole?
- Is an appropriate management plan included that describes the composition and roles of any committees or boards proposed to help manage and oversee NRMN activities?
- Is the infrastructure to support collection, cleaning, storage, and reporting of data to evaluate the impact and effectiveness of the NRMN appropriate?
- Are there personnel with appropriate expertise to collaborate with the CEC and Diversity Program
   Consortium to develop data collection and analysis protocols and to ensure data integrity, privacy, and

security for the evaluation of the NRMN?

#### **Mentorship and Networking Core**

- Are the structure and operation of the network described, including any specific eligibility criteria for mentees/mentors, how mentees and mentors will be identified and recruited for inclusion in the network, and how mentees will be connected with mentors? Are the planned structure and operation likely to be effective?
- Are strategies provided to recruit mentors/mentees from backgrounds underrepresented in the biomedical workforce in the network feasible? Are they likely to be successful?
- Are strategies provided to recruit and engage NRMN individuals with limited access to relevant mentoring resources at their home institutions feasible? Are they likely to be successful?
- Are strategies to provide appropriate networking opportunities for mentees within and outside of the network robust and likely to be effective?
- Are mentorship and networking opportunities appropriately tailored for each mentee career stage (undergraduate, graduate, postdoctoral, early career faculty)?

#### **Mentor Training Core**

- Is an appropriate conceptual model for effective mentoring well described and is it compelling? Is an appropriate description of how it guides proposed mentoring activities included?
- Is a clear and logical framework provided for the development of standards and metrics for effective face-to-face and online mentoring?
- Are the processes identified to refine or adjust mentorship standards in response to feedback, NRMN evaluation data, or evidence from the field appropriate?
- Is it clear how the identified mentorship standards will guide the development and content of proposed training opportunities?
- Are proposed training opportunities for mentors well described and appropriate?
- Are training opportunities appropriately tailored for each mentee career stage (undergraduate, graduate, postdoctoral, early career faculty)?
- Are training strategies to improve the cultural competence of mentors included, and are they robust? Do
  they address factors that are known to have an impact on the decision of mentees from underrepresented
  groups to pursue research careers?

#### **Professional Development Core**

- Are proposed professional development activities (such as grant writing seminars, mock grant reviews, professional shadowing, etc.) that will be offered through the NRMN appropriate?
- Are proposed professional development opportunities appropriately tailored for each mentee career stage (undergraduate, graduate, postdoctoral, early career faculty)?
- · Are the eligibility and/or selection criteria for professional development activities identified and justified?
- Are appropriate strategies identified to ensure that professional development activities are accessible to all eligible or selected mentees?
- Is the process for identifying and facilitating participation of NRMN mentees in non-NRMN professional
  development activities likely to be successful? Are professional development activities designed to
  facilitate awareness of and application for NIH and other federal and private funded biomedical research
  training and career development opportunities appropriate?

#### **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 <u>Guidelines for the Review of Human Subjects</u>.

#### 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 <u>Guidelines for the Review of Inclusion in Clinical Research</u>.

#### **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 Review of the Vertebrate Animal Section.

#### **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

Not Applicable

#### Renewals

Not Applicable

#### **Revisions**

Not Applicable

#### Additional Review Considerations - Overall

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.

#### **Applications from Foreign Organizations**

Not Applicable

#### **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) <u>Data Sharing Plan</u>; 2) <u>Sharing Model Organisms</u>; and 3) <u>Genome Wide Association Studies (GWAS)</u>.

#### **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 CSR in accordance with <a href="NIH peer review policy and procedures">NIH peer review policy and procedures</a>, using the stated <a href="review criteria">review criteria</a>. 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 response to this FOA.

Applications will be assigned on the basis of established PHS referral guidelines to the appropriate NIH Institute or Center and 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 <u>eRA Commons</u>.

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 <u>Section IV.5. Funding Restrictions</u>. 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.

#### **Prior Approval of Pilot Projects**

Awardee-selected projects that involve clinical trials or studies involving greater than minimal risk to human subjects require prior approval by NIH prior to initiation.

- The awardee institution will provide NIMHD with written study protocols that address risks and protections for human subjects in accordance with NIH's Instructions for Preparing the Human Subjects Section of the Research Plan, NOT-OD-12-129 (<a href="http://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-129.html">http://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-130.html</a>).
- The awardee institution will provide NIMHD with specific plans for data and safety monitoring, and will
  notify the IRB and NIMHD of serious adverse events and unanticipated problems, consistent with NIH
  DSMP policies.
- If live vertebrate animals are to be involved, follow NIMHD policy (NOT-MD-08-002).

#### 2. Administrative and National Policy Requirements

All NIH grant and cooperative agreement awards include the <u>NIH Grants Policy Statement</u> as part of the NoA. For these terms of award, see the <u>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 <u>Award</u> Conditions and Information for NIH Grants.</u>

#### **Cooperative Agreement Terms and Conditions of Award**

The following special terms of award are in addition to, and not in lieu of, otherwise applicable U.S. Office of Management and Budget (OMB) administrative guidelines, U.S. Department of Health and Human Services (DHHS) grant administration regulations at 45 CFR Parts 74 and 92 (Part 92 is applicable when State and local Governments are eligible to apply), and other HHS, PHS, and NIH grant administration policies.

The administrative and funding instrument used for this program will be the cooperative agreement, an "assistance" mechanism (rather than an "acquisition" mechanism), in which substantial NIH programmatic involvement with the awardees is anticipated during the performance of the activities. Under the cooperative agreement, the NIH purpose is to support and stimulate the recipients' activities by involvement in and otherwise working jointly with the award recipients in a partnership role; it is not to assume direction, prime responsibility, or a dominant role in the activities. Consistent with this concept, the dominant role and prime responsibility resides with the awardees for the project as a whole, although specific tasks and activities may be shared among the awardees and the NIH as defined below.

#### The PD(s)/PI(s) will have the primary responsibility for:

- All aspects of the study, including any modification of project design, conduct of the project, quality control, data analysis and interpretation, preparation of publications, and collaboration with other investigators will be verified, confirmed and established when necessary by the Steering Committee.
- Awardee will agree to the governance of the Steering Committee and, for issues affecting the consortium as a whole, of the Executive Steering Committee.
- Awardee will agree to accept close coordination, cooperation, and participation of the Enhancing the
  Diversity of the NIH-Funded Workforce Working Group in those aspects of scientific and technical
  management of the project as described under "NIH Program Staff Responsibilities."
- Awardee will provide goals and progress toward those goals at regular intervals as requested by the Steering Committee and the Executive Steering Committee.
- Awardee will ensure that resources (e.g. data sets; procedure manuals) developed as part of this project are made publicly available and that results are published in a timely manner.
- Awardee will adhere to the Executive Steering Committee policies regarding intellectual property, data release and other policies that might be established during the course of this activity that are consistent

- with applicable NIH policies, laws, and regulations.
- Awardee will retain custody of and have primary rights to the data and software developed under these
  awards, subject to Government rights of access consistent with current DHHS, PHS, and NIH policies.
  The CEC and consortium will develop plans for data sharing among awardees. All evaluation-related data
  will be shared with the NIH at the conclusion of the award.

### NIH staff have substantial programmatic involvement that is above and beyond the normal stewardship role in awards, as described below:

- The Project Scientists for the project will serve on the Steering Committee and the Executive Steering
  Committee. The Project Scientists may work with the awardees on any issues that come before these
  Committees.
- The Project Scientists will serve as a liaison between the awardee and the Enhancing the Diversity of the NIH-Funded Workforce Working Group. The Coordinators of the Enhancing the Diversity of the NIH-Funded Workforce Working Group will periodically report progress to the Director of the Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI), and the Chairs of the Working Group.
- The NIH reserves the right to withhold funding or curtail the study (of an individual award) in the event of (a) substantive changes in the agreed-upon work scope with which NIH cannot concur, (b) human subject ethical issues that may dictate a premature termination; (c) or project not progressing well.
- Support or other involvement of industry or any other third party in the study (e.g., participation by the
  third party; involvement of project resources or citing the name of the study or NIH support; or special
  access to project results, data, findings or resources) may be advantageous and appropriate. However,
  except for licensing of patents or copyrights, support or involvement of any third party will occur only
  following notification of and concurrence by NIH.
- Additionally, an NIH Program Official will be responsible for the normal scientific and programmatic stewardship of the award and will be named in the award notice.

#### Areas of joint responsibility include:

A Steering Committee will serve as the primary governing board for the cooperative agreement funded under this FOA. The Steering Committee membership will include the NIH Program Official, NIH Project Scientist(s), the PD(s)/PI(s) of the awarded cooperative agreement, who will serve as Steering Committee Chair(s), and two external members not involved in the project who are selected by the PD(s)/PI(s). Additional members of the Enhancing the Diversity of the NIH-Funded Workforce Working Group may be appointed to the Steering Committee by the co-chairs of the Working Group, but the total number of NIH votes may not exceed 1/3 of the Steering Committee voting membership. Other government staff may attend the Steering Committee meetings, if their expertise is required for specific discussions.

#### The Steering Committee will:

- Meet at least annually or as needed, with intermittent conference calls as needed.
- Develop recommendations for uniform procedures and policies necessary to meet the goals of the FOA
  and the goals of the Enhancing the Diversity of the NIH-Funded Workforce Program as a whole.
- Provide input to the PD/PI with respect to the activities of the NRMN, its coordination with BUILD sites and the CEC, and progress in meeting the goals of the FOA.
- Schedule the time for, and prepare concise (3 to 4 pages) summaries of, the Steering Committee
  meetings, which will be delivered to members of the group within 30 days after each meeting.
- Provide representation on the Executive Steering Committee (see below) to address issues relevant to the Diversity Program Consortium as a whole.

#### **Dispute Resolution:**

Any disagreements that may arise in scientific or programmatic matters (within the scope of the award) between award recipients and the NIH may be brought to Dispute Resolution. A Dispute Resolution Panel composed of three members will be convened. The three members will be a designee of the Steering Committee chosen without NIH staff voting, one NIH designee, and a third designee with expertise in the relevant area who is chosen by the other two. In the case of individual disagreement, the first member may be chosen by the

individual awardee. This special dispute resolution procedure does not alter the awardee's right to appeal an adverse action that is otherwise appealable in accordance with PHS regulation 42 CFR Part 50, Subpart D and DHHS regulation 45 CFR Part 16.

#### **Executive Steering Committee:**

An Executive Steering Committee (ESC) will be responsible for providing general oversight and guidance to the Diversity Program Consortium. The ESC membership will include one non-NIH member from the Steering Committee of each of the BUILD, NRMN, and CEC awards, the NIH Program Official and/or Project Scientists for each program, and a member of the Enhancing the Diversity of the NIH-Funded Workforce Working Group, who will serve as ESC Chair. The co-chairs of the Enhancing the Diversity of the NIH-Funded Workforce Working Group may appoint additional members from the Working Group to serve as members on the ESC, but the total number of NIH votes may not exceed 1/3 of the Executive Committee voting membership. Awardee members of the ESC will be required to accept and implement policies approved by the ESC. The CEC will be responsible for communicating ESC feedback and guidance to the BUILD, NRMN, and CEC Steering Committees.

The ESC will meet at least once annually, with intermittent conference calls as needed. The first ESC meeting will take place during the Annual Grantees Meeting in October, 2014.

Responsibilities of the ESC include the following:

- Form sub-committees as necessary to work through detailed issues that affect the Diversity Program Consortium as a whole.
- Define competencies to be targeted through BUILD and NRMN activities.
- Define hallmarks of success in biomedical research careers at various career stages.
- Develop policies for adoption of mentoring standards.
- Develop procedures and policies for sharing information between projects and with the wider community.
- Review and consider issues and progress of individual awardees so that lessons learned can be shared, and plans of the Diversity Program Consortium as a whole and of individual projects may be modified to have maximal impact.
- Contribute content and ideas for a program website managed by the CEC for the purposes of sharing information
- Develop a public summary of lessons learned across the Program as a whole and applicability of the lessons to the wider community.

#### 3. Reporting

When multiple years are involved, awardees will be required to submit the Non-Competing Continuation Grant Progress Report (PHS 2590 or RPPR) annually and financial statements as required in the NIH Grants Policy Statement.

The applicants should anticipate the need for data collection, collation, verification, and transmission of data relevant to the evaluation of NRMN activities. All undergraduate, graduate and postdoctoral mentees who participate in NRMN activities for at least one person month must be reported on progress reports, along with their eRA Commons IDs (see NOT-OD-13-097).

If the NIH implements new procedures or systems for tracking outcomes of trainees during the course of the NRMN award, the awardee will be expected to participate in these new procedures or systems in accordance with NIH policy.

A final progress report, invention statement, 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*.

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 <a href="https://www.fsrs.gov">www.fsrs.gov</a> on all subawards over \$25,000. See the <a href="https://www.fsrs.gov">NIH Grants Policy Statement</a> for additional information on this reporting requirement.

#### 4. Evaluation

The Diversity Program Consortium through its collaborative and inclusive governance structure will establish and define any additional data elements required to effectively evaluate the NRMN, including data intended to measure hallmarks of success at each career stage and the impact that the NRMN is having on mentee achievement of these hallmarks. The Consortium and/or the CEC will disseminate these requirements and obtain OMB clearance of recommended data as needed.

Evaluation of the NRMN initiative will be carried out continuously over the first five years of the program. The findings of this evaluation will determine whether the initiative will be continued for an additional five years as configured, continued with modifications, or discontinued.

In assessing the effectiveness of this Program, NIH may request information from CEC and other databases, PD(s)/PI(s), and NRMN mentees and mentors themselves. Where necessary, PD(s)/PI(s), mentees, and mentors in NRMN activities may be contacted after the completion of the NRMN program for periodic updates on subsequent educational or employment history and professional activities.

Examples of information collected for evaluation purposes for the NRMN may include, but are not limited to:

#### Individual mentee level:

- Successful completion of an undergraduate or graduate degree in a biomedical field; successful completion of postdoctoral research training in a biomedical field.
- Pending application for and/or enrollment in an advanced degree program in a biomedical field.
- Pending application for and/or appointment to a faculty position in a biomedical field.
- Subsequent participation in a formal research training and career development program in a biomedical field.
- Significant enhancement of mentee awareness of biomedical research careers, improved understanding
  of the requirements and strategies for success in those careers, and measurable enhancement of interest
  in research.
- Mentee attainment of consortium-wide hallmarks of success in biomedical research careers.
- Subsequent participation in research or employment in a biomedical field appropriate to career stage (e.g., ranging from research assistantships for undergraduates to early career faculty participating as investigators, etc.).
- Authorship on publications in peer-review journals, and presentations at scientific meetings in a biomedical field.
- Receipt of NIH or other peer-reviewed grants or fellowships.

#### Individual mentor level:

- Successful completion of mentor training programs.
- Satisfaction in mentoring as reported by the mentees and the mentors.
- Subsequent participation in formal training on NIH and other funding opportunities for biomedical training and careers
- Improved mentoring skills demonstrated by mentors as ascertained by metrics to be determined through the NRMN and CEC collaboration.

#### Program- or Network-level:

- Establishment of quality mentor training programs (applicable to in-person and online mentoring strategies) with measurable mentoring outcomes.
- Success recruiting and engaging mentees and mentors from diverse backgrounds and/or across the various career stages.
- Enhanced diversity of the NIH grant and fellowship applicant and recipient pools.
- Capacity for sustainability of NRMN activities.

The Diversity Program Consortium Executive Steering Committee and the CEC will advise with respect to any additional required data elements, format, and frequency of data reporting.

#### **Section VII. Agency Contacts**

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

#### **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: <a href="https://public.era.nih.gov/commonshelp">https://public.era.nih.gov/commonshelp</a>

TTY: 301-451-5939

Email: <a href="mailto:commons@od.nih.gov">commons@od.nih.gov</a>

GrantsInfo (Questions regarding application instructions and process, finding NIH grant resources)

Telephone: 301-435-0714 TTY: 301-451-5936

Email: <u>GrantsInfo@nih.gov</u>

#### Scientific/Research Contact(s)

Pamela L. Thornton, PhD, MSW

National Institute on Minority Health and Health Disparities (NIMHD)

Telephone: 301-402-1366
Email: pamela.thornton@nih.gov

#### Peer Review Contact(s)

Maribeth Champoux, PhD Center for Scientific Review (CSR)

Telephone: 301-594-3163
Email: <a href="mailto:champoum@csr.nih.gov">champoum@csr.nih.gov</a>

#### Financial/Grants Management Contact(s)

Priscilla Grant, JD

National Institute on Minority Health and Health Disparities (NIMHD)

Telephone: 301-594-8412 Email: grantp@mail.nih.gov

#### Section VIII. Other Information

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

#### **Authority and Regulations**

Awards are made under the authority of Sections 301, 402, and 405 of the Public Health Service Act as amended (42 USC 241, 282, and 284) and the Code of Federal Regulations, 42 CFR Parts 52 and 66, 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.