Department of Health and Human Services

Part 1. Overview Information

Participating Organization(s)

Centers for Disease Control and Prevention (CDC (http://www.cdc.gov/))

CDC and CDC/NIOSH disclaimer:

The policies, guidelines, terms, and conditions of the HHS Centers for Disease Control and Prevention (CDC) stated in this Notice of Funding Opportunity (NOFO) might differ from those used by the HHS National Institutes of Health (NIH). If written guidance for completing this application is not available on the CDC website, then CDC will direct applicants elsewhere for that information.

Components of Participating Organizations

National Institute for Occupational Safety and Health (NIOSH) (http://www.cdc.gov/niosh/)

Funding Opportunity Title

Occupational Safety and Health Education and Research Centers (T42)

Activity Code

T42 (//grants.nih.gov/grants/funding/ac_search_results.htm?text_curr=t32&Search.x=0&Search.y=0&Search_Type=Activity)

Announcement Type

Reissue of RFA-OH-23-003 (https://grants.nih.gov/grants/guide/rfa-files/RFA-OH-23-003.html)

Related Notices

None

Funding Opportunity Number (FON)

RFA-OH-25-002

Companion Notice of Funding Opportunity

NONE

Number of Applications

Only one is allowed.

A current recipient or applicant of the NIOSH T03, Occupational Safety and Health Training Project Grants award is not eligible to apply for an award or a sub-award under this Funding Opportunity Announcement.

Section III. 3. Additional Information on Eligibility.

Assistance Listing Number(s)

93.262

Funding Opportunity Purpose

The National Institute for Occupational Safety and Health (NIOSH (https://www.cdc.gov/niosh/)), Centers for Disease Control and Prevention (CDC (https://www.cdc.gov/)), invites grant applications for Education and Research Centers (ERCs) that are focused on occupational safety and health (OSH) training. NIOSH is mandated to provide an adequate supply of qualified personnel to carry out the purposes of the Occupational Safety and Health Act, and the ERCs are one of the primary means for meeting this mandate.

ERCs are academic institutions that provide high-quality interdisciplinary graduate and post-graduate training, research training, continuing education, and outreach in the core OSH disciplines of industrial hygiene, occupational health nursing, occupational medicine, and occupational safety, as well as allied disciplines.

Research and research training are integral components of ERCs, with ERC faculty and NIOSH trainees conducting research on issues related to the NIOSH National Occupational Research Agenda (NORA (https://www.cdc.gov/nora/default.html)) and emerging issues to advance the OSH field.

NIOSH ERCs have regional presence to ensure that the training and research they support is beneficial to workers across the nation.

ERCs serve as resources for our nation's workforce through continuing education, outreach and strong collaboration with professional associations, worker advocacy groups, businesses, industries, and public health agencies. ERCs work with other institutions and organizations, including Minority Serving Institutions and other NIOSH supported training programs to have a positive impact on worker health, safety, and well-being.

Key Dates

Posted Date

Publication Date: October 8, 2024

To receive notification of any changes to RFA-OH-25-002, return to the synopsis page of this announcement at www.grants.gov (https://www.grants.gov/) and click on the "Send Me Change Notification Emails" link. An email address is needed for this service.

Open Date (Earliest Submission Date)

October 8, 2024

Letter of Intent Due Date(s)

30 days prior to the application due date

Application Due Date(s)

December 17, 2024, October 23, 2025, October 22, 2026, October 21, 2027, October 26, 2028

On-time submission requires that electronic applications be error-free and made available to CDC for processing from the NIH eRA system on or before the deadline date. Applications must be submitted to and validated successfully by Grants.gov no later than 5:00 PM U.S. Eastern Time.

Applicants will use a system or platform to submit their applications through Grants.gov and eRA Commons to CDC. ASSIST, an institutional system to system (S2S) solution, or Grants.gov Workspace are options. ASSIST is a commonly used platform because it provides a validation of all requirements prior to submission and prevents errors.

For more information on accessing or using ASSIST, you can refer to the ASSIST Online Help Site at: https://era.nih.gov/erahelp/assist (https://era.nih.gov/erahelp/assist). Additional support is available from the NIH eRA Service desk via http://grants.nih.gov/support/index.html (//grants.nih.gov/support/index.html).

E-mail: commons@od.nih.gov (mailto:commons@od.nih.gov)

Phone: 301-402-7469 or (toll-free) 1-866-504-9552

Hours: Monday - Friday, 7 a.m. to 8 p.m. Eastern Time, excluding Federal holidays

Note: HHS/CDC grant submission procedures do not provide a grace period beyond the application due date time to correct any error or warning notices of noncompliance with application instructions that are identified by Grants.gov or eRA systems (i.e., error correction window).

AIDS Application Due Date(s)

Not Applicable.

Scientific Merit Review

(http://grants1.nih.gov/grants/funding/submissionschedule.htm#reviewandaward)February 2025, February 2026, February 2027, February 2028, February 2029

Advisory Council Review

May 2025, May 2026, May 2027, May 2028; May 2029

Earliest Start Date

July 1, 2025, July 1, 2026, July 1, 2027, July 1, 2028, July 1, 2029

Expiration Date

October 30, 2028

Due Dates for E.O. 12372

Not Applicable

Required Application Instructions

It is critical that applicants follow the Multi-Project (M) Instructions in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400), except where instructed to do otherwise (in this NOFO or in a Notice from the *NIH Guide* for *Grants and Contracts* (//grants.nih.gov/grants/guide/url_redirect.php?id=11164)). Conformance to all requirements (both in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400) and the NOFO) is required and strictly enforced.

Page Limitations: Pages that exceed the page limits described in this NOFO will be removed and not forwarded for peer review, potentially affecting an application's score.

Applications that do not comply with these instructions may be delayed or not accepted for review.

Telecommunications for the Hearing Impaired: TTY 1-888-232-6348

Apply electronically.

Executive Summary

Purpose. The National Institute for Occupational Safety and Health (NIOSH (https://www.cdc.gov/niosh/)), Centers for Disease Control and Prevention (CDC) (https://www.cdc.gov/), invites grant applications for Education and Research Centers (ERCs) that are focused on graduate occupational safety and health (OSH) training. NIOSH is mandated to provide an adequate supply of qualified personnel to carry out the purposes of the Occupational Safety and Health Act, and the ERCs are one of the primary means

for meeting this mandate. ERCs are academic institutions that provide high-quality interdisciplinary graduate and post-graduate training, research training, continuing education, and outreach in the core OSH disciplines of industrial hygiene, occupational health nursing, occupational medicine, and occupational safety, as well as allied disciplines.

Research and research training are integral components of ERCs, with ERC faculty and NIOSH trainees conducting research on issues related to the NIOSH National Occupational Research Agenda (NORA) and emerging issues to advance the OSH field. NIOSH ERCs have regional presence to ensure that the training and research they support is beneficial to workers across the nation.

ERCs serve as resources for our nation's workforce through continuing education, outreach and strong collaboration with professional associations, worker advocacy groups, businesses, industries, and public health agencies.

ERCs work with other institutions and organizations, including Minority Serving Institutions and other NIOSH supported training programs to have a positive impact on worker health, safety, and well-being.

Mechanism of Support. This is a grant.

Funds Available and Anticipated Number of Awards. The number of awards is contingent upon CDC / NIOSH appropriations and the submission of a sufficient number of meritorious applications. CDC / NIOSH anticipates funding up to 18 awards. The total amount of funds to be awarded under this program is approximately $32 million dollars each year.

Budget and Period of Performance. New applicants must submit for 3 years of support. Renewal applications must submit for 5 years of support. Revision applications must not exceed the length of the current award and must be for a period of at least two years. No revision applications allowed for centers entering their final year of the period of performance.

Budget and Period of Performance. The estimated total funding (direct and indirect) for the first budget year (12 months) is $1.8 million. The estimated total funding (direct and indirect) for the entire Period of Performance, 3-5 years, is $5.4 million - $9 million.

Application Research Strategy Length. Page limits for the Research Strategy and Program Plan are specified in Section IV. Application and Submission Information of this announcement.

Eligible Institutions/Organizations. Institutions/organizations listed in Section III.1 are eligible to apply.

Eligible Project Directors/Principal Investigators (PDs/PIs). Individuals with the skills, knowledge, and resources necessary to carry out the proposed research and training are invited to work with their institution/organization to develop an application for support. CDC does not make awards to individuals directly.

Number of PDs/PIs. Only 1 PI is allowed for the NOFO.

Number of Applications. Only 1 application is allowed. PLEASE NOTE: Effective April 4, 2022, applicants must have a unique entity identifier (UEI) at the time of application submission. The UEI replaced the Data Universal Numbering System (DUNS) and is generated as part of SAM.gov registration. Current SAM.gov registrants have already been assigned their UEI and can view it in SAM.gov and Grants.gov. Additional information is available on the GSA website (https://www.gsa.gov/about-us/organization/federal-acquisition-service/technology-transformation-services/integrated-award-environment-iae/iae-systems-information-kit/unique-entity-id-is-here), SAM.gov (https://sam.gov/content/home), and Grants.gov-Finding the UEI (https://grantsgovprod.wordpress.com/2021/09/14/how-to-find-an-applicants-uei-within-grants-gov/).

Application Type. New, Renewal, Resubmission and Revision.

Application Materials. See Section IV.1 for application materials.

Hearing Impaired. Telecommunications for the hearing impaired are available at: TTY: 1-888-232-6348.

There are several options available to submit your application through Grants.gov to NIH and Department of Health and Human Services partners. You **must** use one of these submission options to access the application forms for this opportunity.

1. Use the NIH ASSIST system to prepare, submit and track your application online.

   Apply Online Using ASSIST

2. Use an institutional system-to-system (S2S) solution to prepare and submit your application to Grants.gov and eRA Commons (https://public.era.nih.gov/commons/) to track your application. Check with your institutional officials regarding availability.

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Part 2. Full Text of Announcement

Section I. Notice of Funding Opportunity Description

Statutory Authority

Occupational Safety and Health Act of 1970, Section 20(a) and 21(a), 29 US Code 669(a) & 670 (a);

Federal Mine Safety and Health Act, Section 501(a), 30 US Code 1 & 951(a); and

Public Health Service Act, Section 301(a) and 405, 42 US Code 241 and 284.

1. Background and Purpose

The United States Public Health Service (USPHS) is committed to achieving a society in which all people live long, healthy lives. The vision, mission, and goals are found in Healthy People 2030 (https://health.gov/healthypeople), a USPHS-led national activity to achieve better health in the United States by the year 2030. This Notice of Funding Opportunity (NOFO) is linked to the goals of Healthy People 2030, that are intended to prevent work-related diseases, injuries, and deaths while improving worker health, safety, and well-being.

As noted by Healthy People 2030 (https://health.gov/healthypeople), the health and well-being of the U.S. workforce is central to the strength of the economy. Because people spend so much time working, their work environment has a major impact on their health. Many people get injured or die on the job, and develop health conditions from exposure at work, such as hearing loss, skin diseases and lung problems. Tailored interventions can help reduce work-related injuries, illnesses, and deaths, and promote worker well-being.

The Occupational Safety and Health Act of 1970 mandates that NIOSH provide an adequate supply of qualified personnel to carry out the purposes of the Occupational Safety and Health Act. NIOSH ERCs have a key role in meeting this mandate and contribute to the Institute's core mission of preventing workplace injuries and illnesses.

In 1977, NIOSH supported 9 ERCs in 9 states and 5 Health and Human Services (HHS (https://www.hhs.gov/)) Federal Regions. Presently, NIOSH supports 18 ERCs across all 10 HHS Regions. Over 20,700 individuals graduated from ERCs in the core and allied disciplines in occupational safety and health (OSH) from 1977 - 2023. As capacity in OSH practice and research has increased, the number and rates of work-related injuries, illnesses, and fatalities have decreased (BLS, 2021 (https://www.bls.gov/)).

The far-reaching impact of the COVID-19 pandemic highlights the vital role OSH (https://www.who.int/publications/i/item/WHO-2019-nCoV-workplace-actions-policy-brief-2021-1) has in the United States and beyond. From occupational exposures that led to illness and death to the mental and economic stressors the pandemic placed across individuals, workplaces and communities, ERCs responded rapidly to the needs of their students, staff and faculty and regional stakeholders by providing broad-based approaches to protection from the virus. This included guidance on proper use and decontamination of personal protective equipment, respirator fit testing, social distancing for worksites, and the use of physical protective barriers. Many ERCs developed communication products, resource guides, online courses, and webinars on safe work practices during the pandemic.

ERCs will continue to train OSH practitioners and researchers with the knowledge and skills to respond to natural, man-made, environmental, and public health disasters. Historically, ERCs have provided expertise in worker health and safety following events such as hurricanes (Katrina, Maria, and Harvey), the Deepwater Horizon oil spill, illicit drug exposures to law enforcement and emergency medical services, and Ebola and influenza outbreaks. ERC's responses have included outreach activities and research training opportunities that highlighted the expertise of ERC's faculty, staff, and trainees.

Healthy People 2023 and other National Strategic Priorities

According to Healthy People 2030 (https://health.gov/healthypeople), more than 160 million people participate in the U.S. labor force, and their work has an intrinsic connection to their safety, health, and well-being. Decades of public health surveillance and research have demonstrated that work-related injuries adversely affect employers, workers, and communities. Workplace settings vary widely in size, sector, design, location, processes, culture, and resources. In addition, workers themselves have different ages, genders, education levels, cultural backgrounds, health practices, vulnerabilities, and levels of access to preventive health care. This translates into great diversity and disparity in the safety and health risks for each industry sector and the need for tailored interventions.

Public Health Impact

Work-related illnesses continue to have a significant public health impact, and part of NIOSH's (https://www.cdc.gov/niosh/about/index.html#:~:text=Our%20mission%20To%20develop%20new%20knowledge%20in%20the,health%20and%20to%20transfer%20that%20kn mission is to train the next generation of OSH practitioners and researchers. Recent work by Felknor, et al (2020 (https://www.who.int/publications/i/item/WHO-2019-nCoV-workplace-actions-policy-brief-2021-1)) speaks to the 'rapid and profound changes in the future of work that will have significant implication for the education and training of OSH professionals and the workforce'. NIOSH's network of ERCs is critical in developing OSH professionals prepared to respond to the changing nature of work. These changes are the result of technological advances, globalization, new and emerging risks, occupational health disparities associated with the changing demographics of the US workforce, climate and other factors. The ERCs provide well-trained graduates and professionals for federal, state, and local government agencies; not-for-profit agencies; industry; academia; business; healthcare; and labor organizations. ERCs strive to improve the safety and health of workers across settings through training, research training, continuing education, and outreach.

Relevant Work

ERC key personnel and trainees collaborate with stakeholders to develop innovative approaches to improving workplace safety and health, by the translation of Research to Practice (r2p) (https://www.cdc.gov/niosh/r2p/about/index.html) and Prevention through Design (PtD) (https://www.cdc.gov/niosh/ptd/about/index.html). NIOSH ERCs translate scientific discoveries into practice through effective training, research, continuing education (CE), and outreach. To learn more about the breadth and depth of NIOSH ERCs, visit NIOSH s website (https://www.cdc.gov/niosh/extramural-programs/php/index.html).

2. Approach

ERCs are located in accredited academic institutions across the country. ERCs provide graduate, post-graduate degree and academic certificate training in core and allied disciplines of OSH. ERCs provide interdisciplinary research training to identify, assess, address, and improve OSH. Through outreach activities ERCs engage communities to increase awareness in OSH. Through comprehensive, integrated programs, ERCs improve the safety, health, and well-being of our nation's workforce.

Needs Assessment. ERCs must document that their proposed academic, research training, CE programs and outreach programs meet specific regional or national workforce needs and demands. Surveys of employers, alumni, participants (from CE and/or Outreach activities), and other stakeholders may be used to document these needs.

Regional Presence. As centers of excellence in OSH training, education, and research training, ERCs serve as valuable regional and national resources. ERCs should demonstrate collaborative efforts by working with a diverse and broad range of organizations, institutions, businesses, federal, state, and / or local public health and regulatory agencies, labor, worker advocacy groups and professional associations. ERCs are strongly encouraged to engage diverse partners in their region and to facilitate synergistic approaches to OSH.

Applicants must identify other ERCs, NIOSH-supported Training Project Grants (TPGs (https://www.cdc.gov/niosh/extramural-programs/php/about/tpgs.html)) and other NIOSH-supported centers in their HHS Federal Region (https://www.hhs.gov/about/agencies/iea/regional-offices/index.html), and describe how they will collaborate and build OSH capacity, while avoiding overlap of services.

Objectives / Outcomes. Centers may have different strengths, experiences, research training opportunities, capacities and focus areas on training, education, and outreach, but all should have objectives and outcomes that positively impact the US workforce. The objectives and outcomes should help NIOSH provide an adequate supply of highly qualified personnel to carry out the purposes of the OSH Act. NIOSH ERCs have a key role in helping meet this mandate and contribute to the NIOSH's core mission of providing leadership to prevent workplace injuries and illnesses.

Target Population. Through the NIOSH ERCs a broad range of worker populations may be positively impacted. The applicant should clearly describe the potential public health impact of their ERC through their academic training, outreach, continuing education, and research training (if applicable).

Collaboration / Partnerships. ERCs should have a regional presence through collaborations and partnerships with key stakeholders in OSH, such as professional associations, worker advocacy groups, businesses, industries, and public health agencies. ERCs should work with other institutions and organizations, including Minority Serving Institutions (MSIs) and other NIOSH supported training programs to have a positive impact on worker health, safety, and well-being.

Evaluation/Performance Measurement. Each ERC must have an Evaluation and Planning Core to carry out the specific aims and objectives of the ERC and plan for new, dynamic situations to promote worker health, safety, and well-being. Evaluation activities should be center-wide and for each ERC component. The ERC should define the metrics that will be used to measure and track outputs and outcomes. Specific information on evaluation can be found at CDC's Office of Policy, Performance, and Evaluation. (https://www.cdc.gov/evaluation/php/evaluation-framework/index.html)

Translation Plan. When relevant to the goals of the ERC, applicants should describe how the findings and or training may be used to promote, enhance or advance the translation of the research into practice or may be used to inform public health policy to move the OSH field forward. NIOSH has established the Research to Practice (r2p) (https://www.cdc.gov/niosh/r2p/about/index.html) approach to reduce or eliminate occupational illnesses and injury by increasing the transfer and translation of knowledge, interventions, and technologies into highly effective prevention practices and products in the workplace.

Institutional Commitment. Institutional commitment and the sustainability of an ERC should be demonstrated. While the stability of an ERC may be enhanced by an institutional commitment of full-time faculty and administrative staff (ERC Center Director, Deputy Director and Program Directors), NIOSH recognizes the changing nature of work in academia. Justification should be provided if key personnel (ERC Center Director, Deputy Director, and Program Directors) are not full-time employees of the institution.

Recognizing many Americans are working longer and enjoying productive work, NIOSH (https://www.cdc.gov/niosh/centers/productive-aging.html) has not made succession planning for ERC leadership a requirement in this funding opportunity.

NIOSH funds may be used to defray the costs of salary support for faculty and staff directly related to ERC activities. Faculty salary support may not exceed 50% (.50 FTE) for any one faculty member. An exception is the CE Program Director. The CE Program Director may be faculty or administrative staff and may receive up to 75% salary support (.75 FTE). Salary support for administrative personnel is not limited but should be clearly justified and within a distribution of 70/30 with 70% of funds allocated for trainee costs and 30% allowed for trainee related costs,

Travel for ERC Leadership. ERC Leadership should plan to participate in annual meetings to foster collaboration and strong communication with NIOSH and other NIOSH-supported programs. Center Directors should budget travel support for one meeting each year in the Evaluation and Planning Core budget. Program Directors for other components should include travel support for one meeting each year in their program's budget.

ERC Composition and Budget

Applicants may request up to $1.8 million each year in total costs (direct and indirect costs). Indirect costs are limited to 8% of modified total direct costs as defined in 2 CFR 200.1.

This is a training grant, and funds are not authorized for renovation of facilities. Requests for purchasing equipment must be strongly justified and shown to add to the success of the overall training objectives of the ERC.

More information on a complete application is provided in Part II, Section IV.

ERCs are comprised of required and optional components. Required components are (1) Academic Training Programs, 2) an Evaluation and Planning Core, (3) a Continuing Education Program and, (4) an Outreach Program. Optional components include a Pilot Project Research Training Program and a Targeted Research Training Program.

ERCs must provide high-quality graduate training in a minimum of three academic programs. At least two of the Academic Training Programs must be in the disciplines of Industrial Hygiene (IH), Occupational Health Nursing (OHN), Occupational Medicine (OM), or Occupational Safety (OS). Applicants should clearly identify each academic programs as core or an allied discipline.

Table 1 provides a summary of the funding information for the ERC required and optional components.

Table 1. Summary of ERC Components

ERC Cores and Programs	Funding Information	Required	Optional
Academic Training Programs There is a required minimum of 3 Academic Training Programs. At least 2 academic training programs must be from the core disciplines of IH, OHN, OM, or OS. Additional academic programs may be in either a core or an allied discipline. There should be no more than 10 academic programs proposed. Applicants may request support for allied disciplines which they determine are, and justify as being, closely related and relevant to their regional or national OSH training needs. No minimum number of trainees is required for any one academic program. Applicants must fully justify the need for all programs and their capacity to meet training demand. Applicants may request trainee support for academic certificate training programs in core and allied disciplines. Trainee support for academic certificate programs is limited to tuition and fees and is included in the minimum 70% allocation toward trainee direct costs. Academic certificate trainees	A minimum of 70% of the Academic Training Programs' budget must go to trainee costs that provide stipends, tuition and fees, and travel. A maximum of 30% of the Academic Training Core budget may go to support training-related expenses that include salary support for faculty and staff, supplies, equipment, and non-trainee travel. This 70/30 allocation of funding may be applied across all academic training programs in aggregate (core, allied and certificate programs) and need not be applied to each individual academic training program. This 70/30 allocation applies to direct costs.	X	

should be clearly identified in academic training program budgets.			
Evaluation and Planning Core includes Center Administration, Evaluation and Planning, Interdisciplinary Activities, Advisory Council, and Executive Committee. An **Emerging Issues Program is** optional under the Evaluation and Planning Core.	Up to $280,000 direct costs / year Up to $50,000	X	X
Continuing Education (CE) Program supports activities that provide high-quality learning opportunities and professional growth to OSH practitioners and other allied disciplines.	Up to $150,000 direct costs/year.	X	
Outreach Program supports activities with businesses, community groups, worker advocacy groups, local, state, and federal agencies, or other institutions within the region to implement innovative strategies that meet area needs in awareness and positively impact worker health, safety, and well-being.	Up to $75,000 direct costs/year.	X	
Pilot Project Research Training Program supports pilot projects of new investigators from the applicant institution or other research institutions in the ERC's region.	Up to $100,000 direct costs /year; each funded pilot project may receive up to $20,000 for a period of 12-18 months.		X
Targeted Research Training Program supports the research training needs of trainees and students from other disciplines who receive NIOSH support during their academic training program. TRT funds may also be used to support post-doctoral training in an OSH core or allied discipline.	Up to $300,000 direct costs/year. A minimum of 70% of requested funds must go to support trainee costs that provide stipends, tuition and fees, and travel. Tuition and fees for post-doctoral trainees should be limited to coursework that enhances their learning experience. A maximum of 30% may go toward training-related expenses that include salary support for faculty and staff, supplies, and non-trainee travel.		X

Overall Description of an ERC

Centers will have different strengths, focus areas, experiences and capacities. NIOSH ERCs are essential to moving the OSH field forward. Developing highly skilled and knowledgeable OSH practitioners and researchers to advance worker health, safety and well-being is crucial to address issues that are multi-regional, national, and global in scope.

ERCs focus on the core OSH disciplines of IH, OHN, OM, and OS and must support at least 2 of the core disciplines through their academic training program. Allied disciplines are also offered through many of the ERCs. Allied disciplines include, but not limited to, occupational health psychology, Total Worker Health, mining safety, agricultural safety and health, and ergonomics.

ERCs serve as resources for our nation's workforce through continuing education and outreach in their region. ERCs have strong collaborations with professional associations, worker advocacy groups, businesses, industries and public health agencies.

ERCs may also support research training programs through Pilot Project Research Training Programs and Targeted Research Training. ERCs conduct research on priorities in NORA (https://www.cdc.gov/nora/default.html) and emerging issues.

The applicant must provide an overall description of the ERC addressing the burden of occupational injuries and illnesses within the region, the regional and national need to an ERC in their region and the ERC's impact or potential for impact to improve worker health, safety, and well-being. The narrative should address significance, investigators, innovation, approach, and environment. Applicants may indicate this in the Research Strategy of their application.

Academic Training Programs (Required)

Our nation's workforce and workplaces are dynamic, with challenges that require solutions to eliminating and preventing work-related injuries and illnesses. State-of-the-art approaches to training and education are encouraged to ensure that ERC graduates are well-equipped to respond to the ever-changing needs for protecting our nation's workforce.

NIOSH ERCs should provide high-quality graduate training in a minimum of three academic programs. At least two academic training programs must be in the core disciplines of IH, OHN, OM, or OS. The other academic training programs may be core disciplines or allied disciplines relevant to the field of OSH. This should be clearly stated in the Overall section of the application.

For each academic training program, the applicant should thoroughly describe:

- A documented need for the program.
- The Program Director's qualifications in managing an effective academic training program.
- The program's curriculum, with core competencies that will fully prepare trainees to be effective and successful in OSH.
- The program's faculty and their qualifications and history of success in OSH academic training, research, mentoring and/or practice.
- The program's accreditation status (if applicable).
- Graduates' experiences with career advancements including job placement and certifications earned (if applicable).
- The program's academic certificate program (if applicable), to include application process, curriculum, and completion and placement history; and
- An evaluation plan to determine the program's effectiveness and impact.

NIOSH funding may be used to support OM residents (OMR) in the following pathways, as described by The American Board of Preventive Medicine (https://www.theabpm.org) under Certification Requirements: Residency Pathway, Complementary Pathway, and Special Pathway.

Physicians in the Complementary and Special Pathways are eligible for NIOSH support to encourage more qualified physicians to enter the field of occupational medicine. The Complementary and Special Pathways must be administered by an occupational medicine program accredited by the Accreditation Council for Graduate Medical Education (https://www.acgme.org/).

Allied Disciplines. Allied disciplines are important and relevant to the OSH field and in preventing work-related injury and illnesses. As with core disciplines, training programs in allied disciplines should be approved plans of study by the institution. These may include, but are not limited to, ergonomics, industrial toxicology and biomarkers, construction safety and health, occupational injury prevention, occupational epidemiology, occupational health psychology, occupational health services research, occupational health physics, Total Worker Health, mine safety, and agricultural safety and health. Applicants may request support for allied disciplines which they determine are, and justify as being, closely related and relevant to their regional or national OSH training needs.

Essential Components. Academic training programs should have a history of attracting highly qualified and motivated applicants and of maintaining a critical mass of students for a viable, sustainable program. Academic programs should have highly qualified faculty with a strong teaching record and history of independent research support or occupational health practice.

The academic training program curriculum should be comprehensive and fully prepare trainees to advance the OSH field. Occupational medicine residency programs must be fully accredited by the ACGME. Accreditation of other training programs is not required but is encouraged if appropriate to the field (for example, ABET accreditation for engineering and industrial hygiene programs).

An ERC may provide training in core or allied OSH programs for which needs are documented and available resources allow. This funding opportunity allows support for up to 10 academic training programs. Each academic program should provide trainees with core competencies to be successful in their field of study. Clinical rotations and field experiences across settings are encouraged to provide trainees with a broad understanding of the working environment. Applicants are also encouraged to consider non-discipline specific competencies (leadership, management, surveillance, strategic foresight, and communication skills), see Felknor, et al (2020). (https://pubmed.ncbi.nlm.nih.gov/33007820/)

NIOSH funding may be used to support graduate training in core and allied disciplines for advanced degrees at the master's and doctoral levels in relevant academic programs, including, but not limited to: MSN, MOH, MSPH, MPH, MS, DrPH, ScD, PhD, and DNP. NIOSH funding may also be used to support students in academic certificate programs in core and allied disciplines of OSH. Undergraduate degrees and non-academic certificate programs are not authorized under this program.

Required Academic Content. Trainees must be instructed in the responsible conduct of research (https://grants.nih.gov/policy/research-misconduct/rcr). NIOSH follows the NIH (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html) policies for this requirement. Topics include research misconduct and questionable research practices; data management; scientific rigor and reproducibility; responsible authorship and publication; peer review; conflicts of interest in research; mentor/mentee responsibilities and relationships; collaborative science; civility issues in research environments, including but not limited to, harassment, bullying, and inappropriate behavior; policies regarding laboratory safety, biosafety, and human and animal research subjects; views about scientists as responsible members of society; social and environmental impacts of research; and contemporary ethical issues in biomedical research.

Academic Certificate Programs. Academic certificate programs in core and allied disciplines at the graduate level may use NIOSH funds to provide trainee support for tuition and fees only. NIOSH certificate trainees must meet the admission requirements for the academic certificate program of the institution. NIOSH funds may not be used for stipends, travel, or other non-tuition expenses. The certificate program must be described and recognized as a formal academic program by the applicant institution, with courses and experiences to enhance professionals' skills, knowledge, and practice in OSH. The need for academic certificate training must be fully documented.

NIOSH Trainee Citizenship. Trainees must be U.S. citizens, or noncitizen nationals of the United States or have been lawfully admitted for permanent residence. Permanent residents must have a valid Alien Registration Receipt Card (Form I-551). Noncitizen nationals are individuals, who, although not citizens of the United States, owe permanent allegiance to the United States. They generally are people born in outlying possessions of the United States (e.g., American Samoa and Swains Island).

Individuals with temporary or student visas are not eligible for NIOSH support.

Trainee Expense. Allowable costs include payment of stipends, tuition, fees, student travel and student health insurance.

Stipends. A stipend is provided as a subsistence allowance for trainees to help defray living expenses during the training experience. It is not provided as a condition of employment with either the federal government or the sponsoring institution. A student must be in a full-time status to be eligible for a stipend. Full-time is generally defined as devoting at least 40 hours each week to training activities or as specified by the institution and its own policies. Support for part-time students is limited to tuition and fees only. Part-time status may be determined by the institution’s policies.

Stipends may not exceed the published NIH stipend levels (https://www.niaid.nih.gov/grants-contracts/salary-cap-stipends), with applicants determining the most appropriate allocation of stipends based on local and regional need and competition. An exception is for Occupational Medicine Residents (OMRs). Stipends for OMRs may be requested above the NIH NRSA guidelines if the applicant institution requires a higher post graduate year level. Justification for paying above the NIH NRSA stipend level must be submitted to CDC / NIOSH and include documentation of the institution's requirements. The request with documentation should be sent by email to NIOSH Scientific Program Official on official letterhead.

Stipend Supplementation. Recipients may supplement stipends from non-Federal funds provided the supplementation is without any additional obligation for the trainee. An organization can determine what amount of stipend supplementation, if any, will be provided according to its own formally established policies governing stipend support. These policies must be consistently applied to all individuals in a similar training status regardless of the source of funds. Federal funds may not be used for stipend supplementation unless specifically authorized under the terms of the program from which funds are derived. Under no circumstances may NIOSH training grant funds be used for supplementation.

Compensation. CDC / NIOSH recognizes that trainees may seek part-time employment coincidental to their training program to further offset their expenses. Trainees may spend on average, an additional 25% of their time (e.g., 10 hours per week) in part time research, teaching, or clinical employment, so long as those activities do not interfere with, or lengthen, the duration of their training.

However, CDC / NIOSH expects that compensation from research grants will be for limited part-time employment apart from the normal full-time training activities. Compensation may not be paid from a research grant that supports the same research that is part of the trainee’s planned training experience as approved in a CDC / NIOSH training grant application.

Under no circumstances may the conditions of stipend supplementation or the services provided for compensation interfere with, detract from, or prolong the trainee’s approved training program. The ERC Center Director must approve all instances of employment on research grants to verify that the circumstances will not detract from, or prolong, the trainee s progress in the training program.

Inquiries from recipients, or trainees related to tax implications associated with being awarded federal funds as part of a federally funded training program, should be directed to the Internal Revenue Service.

Tuition and Fees. The institution may request tuition and fees (including health insurance for the trainee only). Tuition and fees should be applied consistently to all individuals in a similar training status at the institution, without regard to the source of the support.

For OMRs, applicants may request funds for other necessary costs for residency training, such as malpractice insurance and other required expenses applicable to residency programs at the institution.

With the emergence of Undergraduate-Graduate programs (also called 3+2 and Concurrent programs), CDC / NIOSH recognizes the need to support students that may not have received an undergraduate degree but are taking graduate level courses in a NIOSH approved academic program. These students are allowed to receive NIOSH support if they have been accepted into the university's graduate school and into the ERC's academic program. Payment for tuition is limited to courses assessed at the graduate tuition rate. The Statement of Appointment form should clearly state when the undergraduate degree will be awarded and that the trainee is seeking a graduate degree (for example MS, MPH, MSPH).

Trainee Travel. CDC / NIOSH recognizes the critical role of travel to enhance the learning experience of trainees. Training grant funds may be used for travel to support a NIOSH appointed trainee to attend a scientific conference. A conference is defined as a meeting, retreat, seminar, symposium or any event that involves attendee travel. Reimbursement for this travel is appropriate when it is necessary for the individual's training and when the costs incurred are within the period of grant-supported training. Prior approval is not required if the travel has been requested and justified in the application.

Foreign Travel for Trainees. Foreign travel is defined as any travel outside of Canada and the US and US territories and possessions. Recipients must comply with the requirement that US flag air carriers must be used to the maximum extent possible when commercial air transportation is the means of travel between the US and a foreign country or between foreign countries. This requirement shall not be influenced by factors of cost, convenience, or personal travel preference. Prior approval is required and should provide details on dates of travel, purpose of travel and estimated costs.

Required Training Period. The required training period for a student to receive NIOSH support is 9 months. A training period of less than 9 months must be justified and submitted to NIOSH before or with Statement of Appointment.

Trainee support is limited to 5 years of aggregate NIOSH support at the predoctoral level and 3 years of aggregate NIOSH support at the postdoctoral level. Approval to go beyond these time limits must be strongly justified and receive prior approval by NIOSH Scientific Program Official.

Statement of Appointments (PHS Form 2271). Appointments must be submitted for trainees appointed or reappointed to the training grant within 30 days of receiving support. Recipients must submit the PHS 2271 data electronically using the NIH xTrain (https://www.era.nih.gov/help-tutorials/xtrain) system within 30 days of the trainee receiving support. An appointment or reappointment may begin at any time during the budget period, but not before the budget period start date of the grant year. Terminations should be completed shortly (within 30 days) after trainee has completed training or is no longer in the program.

Payback. CDC / NIOSH Training Grants to do not require payback.

Training Related Expenses. NIOSH will provide funds to help defray other training expenses, such as health insurance, staff salaries, consultant costs, research supplies, and faculty/staff travel directly related to the research training program.

Applicants may request trainee support for graduate Academic Certificate Training programs in core or allied disciplines of OSH. Trainee support for certificate programs is limited to tuition and fees and is included in the minimum 70% allocation of direct trainee costs.

Budget justifications should clearly describe trainee costs and training-related expenses. Trainee costs directly support the trainees and include stipends, tuition and fees, and travel for NIOSH trainees. Training-related expenses help defray the costs of salary support for key personnel, consultants, supplies, and non-trainee travel. This is a training grant, and the purchase of equipment must be strongly justified and requires prior approval by CDC / NIOSH.

Total direct trainee costs must be at least 70% of the overall Academic Training Programs' budget. Applicants should prepare a separate budget and justification for each academic training program requested. The 70% trainee cost allocation must be met across the combined total budgets of all academic programs (includes core, allied and certificate programs) and need not be applied to each individual training program. Applicants may request trainee support for graduate Academic Certificate Training programs in core or allied disciplines of OSH. Trainee support for certificate programs is limited to tuition and fees and is included in the minimum 70% allocation of direct trainee costs. The number and support requested for certificate trainees should be clearly identified separately from support requested for graduate degree trainees in the academic training program budgets.

Evaluation and Planning Core (Required)

The Evaluation and Planning Core is necessary to carry out the specific aims and objectives of an ERC and plan for new directions and response to dynamic situations to promote worker health, safety, and well-being. The Core should include Administration, Evaluation and Planning, Interdisciplinary Activities, Executive Committee, and Advisory Council. An Emerging Issues Program is optional.

Elements of an effective Evaluation and Planning Core include (1) the coordination and integration of ERC components and activities; (2) a program logic model and an evaluation plan that uses the input of key stakeholders and needs assessment data in forming the overall ERC strategic plan, defines metrics that will be used to measure and track outputs and outcomes, and describes the intended long-term goals and potential impact of the ERC and each ERC component; (3) the organization and input of an external Advisory Council; and (4) a plan for interactions with other NIOSH-supported Centers, TPGs and other appropriate groups or organizations. The ERC should have a strategic plan complete with a vision, mission and goals that specifically addresses building a diverse and cutting-edge public health workforce.

Center Administration. An ERC must have a strong leader and leadership team committed to the success of the ERC and its components. The leadership provides the administration and integration of all ERC programs including strategic foresight, short-term and long-term planning, as well as daily management of the ERC's operations. An organizational chart may be included to illustrate the structure, interactions, and key personnel of the ERC.

Applicants should describe inputs, outputs, intermediate outcomes, and expected long-term outcomes in their logic models. The CDC document "Applying the Knowledge to Action Framework (https://www.cdc.gov/chronic-disease/media/pdfs/k2a-framework-6-2015.pdf?CDC_AAref_Val=https://www.cdc.gov/chronicdisease/pdf/K2A-Framework-6-2015.pdf)" is a useful resource.

Interdisciplinary Activities. ERCs must plan interdisciplinary activities to enhance NIOSH trainees skills and knowledge across disciplines. This plan should include a comprehensive listing of courses and activities, including field experiences, webinars, clinical rotations, and other opportunities which promote strong, meaningful interactions with ERC trainees and faculty. NIOSH trainees and ERC faculty should be fully engaged in these activities to support an understanding and awareness of the interdisciplinary nature of OSH practice and research.

Executive Committee. This committee should include the ERC Director, Deputy Director, Academic Training Program Directors, Research Training Program Directors (if applicable), Continuing Education and Outreach Program Directors and others needed for the successful operation of the ERC.

Advisory Council. The ERC should establish an external Advisory Council of stakeholders in OSH and should include recognized leaders across sectors representing labor, industry, business, government agencies, academic institutions, and professional associations. The Advisory Council may include alumni of the ERC. The Board should meet at least annually and provide counsel to the ERC's Executive Committee on setting and reaching goals and ensuring that the ERC is progressive, dynamic, and meeting local, regional, and national OSH workforce needs. The ERC should strive to have a diverse Advisory Council that reflects the region they serve.

The applicant must clearly describe the Evaluation and Planning Core activities and the integration of all ERC components for a strong, dynamic, and sustainable ERC.

Applicants may request up to $280,000 direct costs to support the Evaluation and Planning Core to support Center administration, evaluation planning and activities, Advisory Council meetings, Executive Committee meetings, and interdisciplinary activities and an optional emerging issues program.

Emerging Issues Program. This program is optional and under the direction and discretion of the ERC Director to support new initiatives, emerging issues, and provide just-in-time support for ongoing activities. Applicants may request up to $50,000 for this program.

Continuing Education Program (Required)

ERCs should develop innovative and collaborative Continuing Education (CE) programs of high quality and relevance to OSH professionals' disciplines. CE is regarded as a critical link between academic and research training and OSH practitioners.

CE programs may use a variety of modalities, including workshops, classroom instruction, and online and other virtual teaching methods, to reach their targeted audience. Needs assessments should support the choice of topics, subject matter, course content, length of training and teaching methods. ERCs are encouraged to build partnerships with public and private institutions and agencies, non-profits, and professional associations to support CE programs and provide new ways of delivering leading-edge programs. CE programs should take advantage of the available expertise of ERC faculty and other collaborators. ERC faculty should contribute to the CE program through course development, content, presentations and/or evaluation. Collaboration with OSH stakeholders and innovative and efficient approaches to CE are strongly encouraged, including options to support regional or national consortia or webinars for CE for OSH professions.

While an ERC may provide CE content in any number of areas, ERCs are not required to provide CE to all OSH disciplines. For example, an ERC that does not have an approved OM residency program is not required to provide CE or CME in occupational medicine.

A CE activity may target professions outside the realm of OSH to provide new skills and enhanced knowledge in worker protection and well-being. For example, a CE offering targeting family physicians, internists, nurse practitioners or physician assistants with content on work-related injuries and illness prevention and treatment, and workers' compensation is appropriate and may address an identified need.

CE efforts should be based on the documented needs of OSH practitioners, employers, and other stakeholders in the ERC's region and build on the strengths and areas of expertise of the ERC.

CE programs should use effective training techniques, tools, and delivery modalities to engage the adult learner and to prepare skilled and knowledgeable practitioners in OSH. CE programs should be a mechanism for the transfer of knowledge into workplace practices and policies to improve worker safety, health, and well-being.

A successful CE program should strive to have a broad reach through collaboration with other ERCs, TPGs, professional associations, federal/state/local agencies and municipalities, institutions, nonprofits, and other stakeholders. Where appropriate, Continuing Education Units from approved providers should be awarded.

NIOSH recognizes that CE and Outreach programs may naturally overlap and ERCs may have activities that seem to fit into both CE and Outreach categories.

For the Continuing Education Program (up to $150,000 direct costs/year), include support for activities designed to build skills and knowledge in practicing OSH professionals and others that have a strong stake in protecting and enhancing the health, safety, and well-being of workers.

Outreach Program (Required)

Outreach is broad in scope and includes activities that will have a positive impact on a diverse workforce. There should be efforts to reach vulnerable worker populations, underserved and underrepresented groups, and activities to meet local, regional, or national needs.

Examples of impactful ERC outreach may include:

- An awareness seminar given to local government employees on worker well-being and Total Worker Health .
- Activities for undergraduate, high school and elementary students to increase awareness of meaningful and successful careers in OSH.
- Participation in community awareness events following a natural or man-made disaster on safe work practices.
- Social media efforts to reach part-time, contingent and 'gig' workers promoting job safety.
- Presentations to or collaborations with schools or technical colleges outside the OSH realm of on worker health and protection.
- A visiting faculty program involving labor and management leaders.
- Cooperative and collaborative arrangements with associations and community groups to promote worker well-being.
- Partnerships with non-profits and worker advocacy groups, low-wage workers, immigrant populations, and groups that serve these populations to promote worker health, safety, and well-being.
- Providing interviews and information to the media on OSH topics.

This list is not comprehensive. ERCs have a history of taking innovative approaches in outreach and pivoting to meet the demands and needs of their targeted audience.

NIOSH recognizes that Outreach and CE programs may naturally overlap and ERCs may have activities that seem to fit into both Outreach and CE categories.

For the Outreach Program (up to $75,000 direct costs/year), include support for activities designed to build skills and knowledge in practicing OSH professionals and others that have a strong stake in protecting and enhancing the health, safety, and well-being of workers.

Pilot Project Research Training Program (Optional)

This program is optional and supports projects relevant to the NORA (https://www.cdc.gov/nora/). Pilot project programs are intended to explore and develop new and creative prevention, intervention, and translation projects, and they are considered an important and integral part of the support provided to an ERC. Applicants receiving support from this program should be junior faculty, new faculty investigators, or mentored students. The research plan should include a mentoring plan and identify the mentor(s) who will be supporting and advising the research trainee. The Program Director should have the qualifications to effectively manage and support the goals.

This program will enable investigators to collect sufficient data to pursue subsequent support through other funding mechanisms. Examples of pilot projects include:

- Provide initial support to develop innovative approaches or lines of investigation in OSH.
- Stimulate investigators from other fields to apply their expertise to OSH issues.
- Develop new partnerships to address occupational health disparities and health outcomes.
- Provide initial support for a translational or research-to-practice projects.
- Obtain preliminary data, mine existing datasets, or pursue critical data gaps, and support trainee research projects.

The administrative framework for management of the ERC's Pilot Project Research Training Program should meet certain minimal requirements. Management of the program must include mechanisms to ensure:

1. Appropriate announcement of the availability of pilot project funding.

2. Merit review of pilot project proposals and documentation that projects address a NORA topic. Copies of all proposals, with documentation of their reviews, relative ranking, and final action must be retained by the Center. These records should include a categorization of the projects funded by NORA area.

3. Complete and accurate records of subsequent results of each pilot project (abstract, RO1/R21 submission/award, dissertation, etc.) recipient.

4. Appropriate IRB review and approval for all pilot projects involving human subjects to ensure protection of the rights and welfare of human subjects (see 45 Code of Federal Regulations 46). This must be obtained prior to project funding and applies to projects conducted by other institutions. The IRB must be registered with the DHHS Office of Human Research Protections and must have a current Federal wide Assurance Number. Documentation of IRB approval of protocols, and copies of currently approved consent forms, must be maintained in the ERC administrative files. Documentation of IRB approvals for pilot projects must be submitted as a component of ERC annual progress reports. "IRB Approval" means full, final IRB approval. In addition, all ERC project protocols must comply with all applicable Federal and State regulations.

Applicants may request up to $100,000 direct costs/year and should include a detailed budget for support of pilot research projects. The budget should provide support for new investigators and/or research trainees from the applicant institution or other institutions, including MSIs. Individual pilot projects may be funded for up to $20,000 each with a performance period of 12 18 months.

Targeted Research Training Program (Optional)

Through this optional component, ERCs are encouraged to provide research training that is responsive to the NORA (https://www.cdc.gov/nora/) and generate new knowledge in the field of OSH. The research training is expected to clearly enhance an individual s potential to develop into a productive, independent researcher to address challenges in protecting workers health and safety and to advance research findings into the workplace.

This training program should allow trainees from various disciplines to acquire a strong set of skills in research study and design, epidemiological methods, biostatistics, measures of outcomes, determining impact, and ethical and regulatory principles of research. In addition to the core competencies in research, trainees should be knowledgeable in non-discipline-specific competencies such as leadership, management, and communication. Strong communication skills in research to practice (https://www.cdc.gov/niosh/r2p/) are needed to move the field of OSH forward.

Trainees must be instructed in the responsible conduct of research. NIOSH follows the NIH policies (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html) for this requirement. Topics should include scientific integrity, conflict of interest, responsible authorship, policies for handling misconduct, data management, data sharing, policies regarding human and animal subjects for research, the role of Institutional Review Boards (IRB), the assistance IRBs provide to researchers, and research ethics.

This program should be under the direction of an experienced, highly qualified OSH investigator. Trainees supported in the program may be degree-seeking students from OSH core or allied disciplines, or students from other disciplines interested in applying their knowledge and skills to a specific OSH research question. For graduate students, support may include stipends, tuition and fees, and travel. The program may also support post-doctoral trainees in a core OSH or allied field. Post-doctoral students may receive stipends, and travel. The prospective trainee must have completed a doctoral degree in a discipline relevant to OSH or a field that qualifies them to conduct mentored research in OSH. The proposed post-doctoral training will consist of 1-3 years of mentored research training in relevant topic area(s).

Post-doctoral Research Training: Prospective post-doctoral trainees will apply and compete for these positions, and the successful candidate will be matched with a suitable mentor and have an advisory committee that consists of the primary mentor and one or more faculty advisors to guide progress.

To demonstrate adequate faculty resources for mentoring, the ERC faculty should have sufficient expertise and experience to mentor post-doctoral candidates. Evidence for the latter should include a detailed description of the proposed faculty mentor track record in training doctoral and post-doctoral trainees, and a record of where graduates now work. Mentors should have an established track record of research and research training in areas related to OSH and be members of the ERC academic training core. Faculty active grant support, resources and environment for advanced research training should be described in the narrative. Resource faculty, who are not proposed primary mentors, but who bring added expertise (for example, biostatistics, toxicology, and behavioral science) may be included as members of trainees' advisory committees. Supported trainees should participate in ERC interdisciplinary activities to fully understand the broad scope of OSH.

Applicants may request up to $300,000 direct costs/year and should include support for trainee costs (which may include stipends, tuition and fees, and travel) and training-related expenses to help defray the costs of salary support for faculty and staff, consultants, equipment, and supplies. Total direct trainee costs must be at least 70% of the overall budget. Trainees supported in the program may be degree-seeking students from OSH or non-OSH core or allied disciplines, and post-doctoral trainees in an OSH core or closely allied program area. Trainees' research training should be directed by an ERC faculty or faculty with strong research experience in OSH or an allied discipline.

See Section VIII. Other Information for award authorities and regulations.

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 - An application that is submitted for funding for the first time. Includes multiple submission attempts within the same round.

Renewal (formerly Competing Continuation) - Previous years of funding for the project have elapsed. Competing for additional years of funding to continue original project.

Revision (formerly Competing Supplement) - Request for additional funds for a current award to expand the scope of work. Applicants should contact the awarding agency for advice on submitting any revision/supplement application.

Resubmission (formerly Revision or Amended Application) - For NOFOs with multiple receipt dates. Application previously reviewed. A revised or amended application addresses reviewer feedback.

The OER Glossary (//grants.nih.gov/grants/guide/url_redirect.php?id=11116) and the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400) provide details on these application types. Only those application types listed here are allowed for this NOFO.

Clinical Trial?

Not Applicable

Funds Available and Anticipated Number of Awards

The number of awards is contingent upon CDC/NIOSH appropriations and the submission of a sufficient number of meritorious applications.

CDC / NIOSH anticipates funding up to 18 awards through this announcement depending on the quality of the applications and funds available.

The total amount of funds to be awarded under this program is approximately $32 million dollars each year for new applications, competing renewal applications, and continuing awards. The number of new competing and competing renewal awards will vary depending on the number of awards that have ended.

Award Budget

Application budgets are limited to $1.8 million total costs (direct and indirect for each budget period.

Award Project Period

New applicants must submit for 3 years of support.

Renewal applications must submit for 5 years of support.

Revision applications must not exceed the length of the current award.

The revision application, combined with the current grant award shall not exceed the $1.8 million total costs. Revision applications for new academic and/or research training programs must be for a period of at least 2 years.

Award Ceiling: $9,000,000.

Award Floor: $4,000,000.

The period of performance for an application submitted in response to this NOFO must not exceed 5 years. Throughout the period of performance, CDC / NIOSH's commitment to continuation of awards will depend on the availability of funds, evidence of satisfactory progress by the recipient (as documented in required reports), and CDC/NIOSH's determination that continued funding is in the best interest of the federal government.

If you are successful and receive a Notice of Award, in accepting the award, you agree that the award and any activities there under are subject to all provisions of 2 CFR 200, 45 CFR Part 75, currently in effect or implemented during the period of the award, other Department regulations and policies in effect at the time of the award, and applicable statutory provisions.

HHS grants policies as described in the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf) will apply to the applications submitted and awards made from this NOFO.

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 CDC/NIOSH support as Public or Private Institutions of Higher Education:

o Hispanic-serving Institutions

o Historically Black Colleges and Universities (HBCUs)

o Tribally Controlled Colleges and Universities (TCCUs)

o Alaska Native and Native Hawaiian Serving Institutions

o 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)

Local 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)

Other

- Native American Tribal Organizations (other than federally recognized tribal governments)
- Faith-based or Community-based Organizations

Foreign Organizations

Non-domestic (non-U.S.) Entities (Foreign Organizations) **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 HHS Grants Policy Statement (//grants.nih.gov/grants/guide/url_redirect.php?id=11118), **are not** allowed.

Required Registrations

Applicant Organizations

Applicant organizations must complete and maintain the following registrations as described in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400) 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. Failure to complete registrations in advance of a due date is not a valid reason for a late submission, please reference HHS Grants Policy Statement (https://www.hrsa.gov/sites/default/files/grants/hhsgrantspolicy.pdf) for additional information.

System for Award Management (SAM) (https://grants.nih.gov/grants/guide/url_redirect.php?id=82390) 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.

o NATO Commercial and Government Entity (NCAGE) Code (//grants.nih.gov/grants/guide/url_redirect.php?id=11176) Foreign organizations must obtain an NCAGE code (in lieu of a CAGE code) in order to register in SAM.

o Unique Entity Identifier (UEI)- A UEI is issued as part of the SAM.gov registration process. The same UEI must be used for all registrations, as well as on the grant application.

eRA Commons (https://grants.nih.gov/grants/guide/url_redirect.php?id=11123) - Once the unique organization identifier is established, organizations can register with eRA Commons in tandem with completing their Grants.gov registration; all registrations must be in place by time of submission. 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.

Grants.gov (//grants.nih.gov/grants/guide/url_redirect.php?id=82300) Applicants must have an active SAM registration in order to complete the Grants.gov registration.

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

All PD(s)/PI(s) must have an eRA Commons account. PD(s)/PI(s) should work with their organizational officials to either create a new account or to affiliate their existing account with the applicant organization in eRA Commons. 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 training and 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 CDC/NIOSH support.

Responsiveness

Upon receipt, applications will be evaluated for completeness by NIH/CSR and CDC/NIOSH. CDC/NIOSH will review all applications for responsiveness. Incomplete and/or non-responsive applications will not be reviewed. The following criteria/questions will be used in determining responsiveness:

- Applications that exceed the allowable period of performance will be considered non-responsive and will not be reviewed. Applicants submitting a new application must request a period of performance of 3 years. Applicants submitting renewal applications must request a period of performance of 5 years. Applicants submitting a revision application must not exceed the length of the current grant award and must be for a period of at least 2 years.
- Applicants must include Academic Training Programs, an Evaluation and Planning Core, a Continuing Education Program, and an Outreach Program. For Academic Training Programs core disciplines are Industrial Hygiene, Occupational Health Nursing, Occupational Medicine Residency and Occupational Safety. At least 3 Academic Training Programs must be offered with 2 being core disciplines.
- For Academic Training Programs, applications must include at least 2 of the 3 the academic programs identified as core disciplines (Core disciplines are: Industrial Hygiene, Occupational Health Nursing, Occupational Medicine Residency and Occupational Safety).
- Applications must include Data Tables for each Academic Training Program (NIOSH Tables 1 and 2) and Continuing Education Program (NIOSH Table 3). More information on Data Tables may be found in Section IV. Application and Submission Information. 2. Content and Form of Application Submission, Multi-Project (M) Instructions (https://grants.nih.gov/grants/how-to-apply-application-guide/forms-h/multi-project-forms-h.pdf). Applicants that do not provide Data Tables will be considered non-responsive and will not be reviewed.
- Applicants must be able to award graduate and post-graduate degrees (if offering Occupational Medicine) as detailed under Section I. Notice of Funding Opportunity Description. 2. Approach.
- The application's total cost (direct and indirect) for each 12-month budget period is within the ceiling of $1.8 million. Applications that exceed this budget in any year will be considered non-responsive and will not be reviewed.
- The applicant's direct trainee cost requested for Academic Training Programs (in aggregate) must fit the 70/30 rule as described in ERC Composition and Budget, Table 1. Summary of funding information for Academic Training Programs.

2. Cost Sharing

This NOFO does not require cost sharing as defined in the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf).

3. Additional Information on Eligibility

Number of Applications

Only one application is allowed.

A current recipient or applicant of the NIOSH T03, Occupational Safety and Health Training Project Grants award is not eligible for an award or a sub-award under this Funding Opportunity Announcement.

CDC/NIOSH will not accept duplicate or highly overlapping applications under review at the same time per HHS Grants Policy Statement. (//grants.nih.gov/grants/guide/url_redirect.php?id=82415)

This means that the CDC/NIOSH will not accept:

- A new (A0) application that is submitted before issuance of the summary statement from the review of an overlapping new (A0) or resubmission (A1) application.
- A resubmission (A1) application that is submitted before issuance of the summary statement from the review of the previous new (A0) application.

In addition, CDC/NIOSH will not accept any application in response to this NOFO that is essentially the same as one previously reviewed, or as one currently pending initial peer review unless the applicant withdraws the pending application. Resubmission applications may be submitted, according to the Policy on Resubmission Applications from the SF 424 (R&R) Application Guide but must include an Introduction addressing the previous peer review critique (Summary Statement).

As defined in the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf), applications received in response to the same notice of funding opportunity announcement generally are scored individually and then ranked with other applications under peer review in their order of relative programmatic, technical, or scientific merit. HHS/CDC will not accept any application in response to this NOFO that is essentially the same as one currently pending initial peer review, unless the applicant withdraws the pending application.

Applications that are incomplete or non-responsive to the eligibility criteria listed in this section will not be reviewed.

Section IV. Application and Submission Information

1. Requesting an Application Package

Applicants will use a system or platform to submit their applications through Grants.gov and eRA Commons to CDC. ASSIST, an institutional system to system (S2S) solution, or Grants.gov Workspace are options. ASSIST is a commonly used platform because, unlike other platforms, it provides a validation of all requirements prior to submission and prevents errors.

To use ASSIST, applicants must visit https://public.era.nih.gov (https://public.era.nih.gov) where you can login using your eRA Commons credentials, and enter the Notice of Funding Opportunity Number to initiate the application, and begin the application preparation process.

If you experience problems accessing or using ASSIST, you can refer to the ASSIST Online Help (https://www.era.nih.gov/erahelp/assist/) . Additional support is available from the NIH eRA Service Desk (https://www.era.nih.gov/need-help).

E-mail: commons@od.nih.gov (mailto:commons@od.nih.gov)

Phone: 301-402-7469 or (toll-free) 1-866-504-9552

Hours: Monday - Friday, 7 a.m. to 8 p.m. Eastern Time, excluding Federal holidays

2. Content and Form of Application Submission

It is critical that applicants follow the Multi-Project (M) Instructions (https://grants.nih.gov/grants/how-to-apply-application-guide/forms-h/multi-project-forms-h.pdf) in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400), except where instructed in this notice of funding opportunity to do otherwise and where instructions in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400) are directly related to the Grants.gov downloadable forms currently used with most CDC/NIOSH opportunities. Conformance to the requirements in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400) is required and strictly enforced. Applications that are out of compliance with these instructions may be delayed or not accepted for review.

The package associated with this NOFO includes all applicable mandatory and optional forms. Please note that some forms marked optional in the application package are required for submission of applications for this NOFO. Follow the instructions in the SF 424 (R&R) Application Guide to ensure you complete all appropriate optional components.

When using ASSIST, all mandatory forms will appear as separate tabs at the top of the Application Information screen; applicants may add optional forms available for the NOFO by selecting the Add Optional Form button in the left navigation panel.

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 allows NIOSH 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 activity. Include a list of the academic programs (must have at least 3 graduate academic programs; and 2 must be either Industrial Hygiene, Occupational Health Nursing, Occupational Medicine or Occupational Safety).
- Names, e-mail addresses, and telephone numbers of the PI and PDs.
- Participating institution(s).
- Number and title of this funding opportunity.

The letter of intent should be sent to:

Michael Goldcamp, PhD
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
Telephone: 304-285-5951
Email: mgoldcamp@cdc.gov (mailto:mgoldcamp@cdc.gov)

Required and Optional Components

A complete application has many components, both required and optional. The forms package associated with this NOFO in Grants.gov includes all applicable components for this NOFO, required and optional. In ASSIST, all required and optional forms will appear as separate tabs at the top of the Application Information screen.

Page Limitations

All page limitations described in the How to Apply Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400) and the Table of Page Limits (https://grants.nih.gov/grants/guide/url_redirect.php?id=11133) must be followed.

Available Component Types	**Page Limits for Research Strategy or Program Plan**
Overall	6
Acad Train Program (Use for the Academic Training Programs)	15
Eval Plan Core (Use for the Evaluation and Planning Core)	10
Con Ed (Use for Continuing Education Program)	10
Outreach (Use for the Outreach Program)	5
Pilot Program (Use for the Pilot Project Research Training Program)	10

Available Component Types	Page Limits for Research Strategy or Program Plan
Targeted Research (Use for the Targeted Research Training Program)	15

Follow the additional page limits specified in this table.

Section of Application	Page Limits
Introduction to Resubmission and Revision Applications	1
Plan for Instruction in the Responsible Conduct for Research	1
Plan for Instruction in Methods for Enhancing Reproducibility	1
Multiple PD/PI Leadership Plan	Not applicable for this funding opportunity announcement
Progress Report	5
Biosketches	5

Additional page limits described in the SF 424 Application Guide (https://grants.nih.gov/grants/how-to-apply-application-guide/forms-f/multi-project-forms-f.pdf) and the Table of Page Limits (https://grants.nih.gov/grants/guide/url_redirect.php?id=11133) must be followed.

Progress Reports for all components are allowed. Progress Reports are limited to 5 pages in addition to the page limits listed in the table. For example, the Continuing Education Program has a page limit of 10 for the Program Plan, plus a 5-page limit for a Progress Report. Progress Reports for renewals can be submitted in line #6 of PHS 398 Research Training Program Plan, others may use line #16. If using PHS 398 Research Plan submit using line #11.

Note: References and NIOSH Data Tables are not included in the page limits.

Format for Attachments

Designed to maximize system-conducted validations, multiple separate attachments are required for a complete application. When the application is received by the agency, all submitted forms and all separate attachments are combined into a single document that is used by peer reviewers and agency staff. Applicants should ensure that all attachments are uploaded to the system.

CDC requires all text attachments to the Adobe application forms be submitted as PDFs and that all text attachments conform to the agency-specific formatting requirements noted in the SF 424 (R&R) Application Guide at How to Apply - Application Guide (https://grants.nih.gov/grants/how-to-apply-application-guide.html).

Application guides for FORMS-H application packages are posted to the How to Apply - Application Guide (https://grants.nih.gov/grants/how-to-apply-application-guide.html) page.

Submission Dates & Times

Part I. Overview Information contains information about Key Dates. Applicants are strongly encouraged to allocate additional time and submit in advance of the deadline to ensure they have time to make any corrections that might be necessary for successful submission. This includes the time necessary to complete the application resubmission process that may be necessary if errors are identified during validation by Grants.gov and the NIH eRA systems.
The application package is not complete until it has passed the Grants.gov and NIH eRA Commons submission and validation processes. Applicants will use a platform or system to submit applications.

ASSIST is a commonly used platform because it provides a validation of all requirements prior to submission. If ASSIST detects errors, then the applicant must correct errors before their application can be submitted. Applicants should view their applications in ASSIST after submission to ensure accurate and successful submission through Grants.gov. If the submission is not successful and post-submission errors are found, then those errors must be corrected, and the application must be resubmitted in ASSIST.

Applicants are able to access, view, and track the status of their applications in the eRA Commons.

Information on the submission process is provided in the SF-424 (R&R) Application Guidance and ASSIST User Guide at https://era.nih.gov/files/ASSIST_user_guide.pdf (https://era.nih.gov/files/ASSIST_user_guide.pdf).

Note: HHS/CDC grant submission procedures do not provide a grace period beyond the grant application due date time to correct any error or warning notices of noncompliance with application instructions that are identified by Grants.gov or eRA systems (i.e., error correction window).

Applicants who encounter problems when submitting their applications must attempt to resolve them by contacting the NIH eRA Service desk at:
http://grants.nih.gov/support/index.html (//grants.nih.gov/support/index.html)

- Email: commons@od.nih.gov (mailto:commons@od.nih.gov)
- Phone: 301-402-7469 or (toll-free) 1-866-504-9552

Hours: Mon-Fri, 7 a.m. to 8 p.m. Eastern Time (closed on Federal holidays)
Problems with Grants.gov can be resolved by contacting the Grants.gov Contact Center at:
Toll-free: 1-800-518-4726
https://www.grants.gov/support (https://www.grants.gov/support)
support@grants.gov (mailto:support@grants.gov)
Hours: 24 hours a day, 7 days a week; closed on Federal holidays

It is important that applicants complete the application submission process well in advance of the due date time.

After submission of your application package, applicants will receive a "submission receipt" email generated by Grants.gov. Grants.gov will then generate a second e-mail message to applicants which will either validate or reject their submitted application package. A third and final e-mail message is generated once the applicant's application package has passed validation and the grantor agency has confirmed receipt of the application.

Unsuccessful Submissions: If an application submission was unsuccessful, the applicant must:

1. Track submission and verify the submission status (tracking should be done initially regardless of rejection or success).
a. If the status states "rejected", be sure to save time stamped, documented rejection notices, and do #2a or #2b.

2. Check emails from both Grants.gov and NIH eRA Commons for rejection notices.
a. If the deadline has passed, he/she should email the Grants Management contact listed in the Agency Contacts section of this announcement explaining why the submission failed.
b. If there is time before the deadline, correct the problem(s) and resubmit as soon as possible.

Insert the date the application is due at www.grants.gov (https://www.Grants.gov). The minimum period is 60 days from the NOFO publication date unless a waiver is approved.

Electronically submitted applications must be submitted no later than 11:59 p.m., ET, on the listed application due date.

Instructions for the Submission of Multi-Component Applications

The following section supplements the instructions found in the How to Apply Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400), and should be used for preparing a multi-component application.

Revision applications must include an Overall component and the components that are affected by the revision. Therefore, the component requirements listed below may not apply to the revision application.

The application should consist of the following components:

- Overall: Required.
- Academic Training Programs: Required, at least 3 academic programs, but no more than 10 academic programs.
  - *Note:* Academic Training Programs will be listed in the final application in the order they were entered in ASSIST as Academic Training Program 1, Academic Training Program 2, Academic Training Program 3, etc.
- Evaluation and Planning Core: Required
  - *Note:* Emerging Issues within the Evaluation and Planning Core is optional.
- Continuing Education Program: Required.
- Outreach Program: Required.
- Pilot Project Research Training Program: Optional
- Targeted Research Training Program: Optional

Overall Component

When preparing your application, use Component Type **Overall.**

All instructions in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400) must be followed, with the following additional instructions, as noted.

SF 424 (R&R) Cover (Overall)

Complete entire form.

PHS 398 Cover Page Supplement (Overall)

Complete entire form.

Research & Related Other Project Information (Overall)

Follow standard instructions.

- **Project Summary/Abstract.** Provide a succinct summary of the proposed work for the entire Center. Typically, 30 lines or less. Identify academic programs as core or allied.
- **Project Narrative.** In 1-3 sentences, describe the relevance of the training, research training (if applicable), continuing education, and outreach efforts proposed by the Center to the field of public health.
- **Facilities and Other Resources.** Provide a description of all resources for all proposed components in the Facilities and Other Resources attachment. The information will be used to evaluate the quality of the overall environment for the Center.
- **Equipment.** Do not include. Equipment should be identified in the appropriate components. Equipment that is shared across components should be described in the Evaluation and Planning Core. This is a training grant, and the purchase of equipment must be strongly justified and associated with strengthening and enriching the learning experience of the trainees.

Project/Performance Site Location(s) (Overall)

Enter primary site only.

A summary of Project/Performance Sites in the Overall section of the assembled application image in eRA Commons compiled from data collected in the other components will be generated upon submission.

R&R Senior/Key Person Profile (Overall)

Include only the Center Director / Principal Investigator (PI). The Center Director should be an experienced leader in OSH and must be able to integrate, manage and provide guidance across all ERC programs proposed.

Each Senior / Key person, including Center Director / PI, is allowed one biosketch for the entire application. If an individual is participating in multiple programs, attach the same biosketch to any single component. The biosketches must be comprehensive, covering multiple roles if an individual has different roles within the application.

A summary of Senior/Key Persons followed by their Biographical Sketches in the Overall section of the assembled application image in eRA Commons will be generated upon submission.

Budget (Overall)

The only budget information included in the Overall component is the Estimated Project Funding section of the SF 424 (R&R) Cover. New, renewal and revision applications should complete NIOSH Budget and FTE Tables found at NIOSH Office of Extramural Program's website (https://www.cdc.gov/niosh/extramural-programs/php/funding/workforce-development.html), these

pages do not count towards the page limits. Submit as a pdf under Other Attachments or Other Plans.

The preparation of the budget should follow the CDC Budget Preparation Guidelines. (https://www.cdc.gov/grants/documents/Budget-Preparation-Guidance.pdf)

A budget summary in the Overall section of the assembled application image in eRA Commons compiled from detailed budget data collected in the other components will be generated upon submission.

PHS 398 Research Plan (Overall)

Introduction to Application: For Resubmission and Revision applications ONLY, an Introduction to Application is required in the Overall component.

Specific Aims: Describe the aims of the overall ERC and outline how each component will contribute to these aims.

Research Strategy: Provide an overall description of the ERC addressing the burden of occupational injuries and illnesses within the region, the regional and national need for an ERC in their region and the ERC's impact or potential for impact to improve worker health, safety, and well-being. The narrative should address significance, investigators, innovation, approach, and environment.

Progress Report and Publications List: A five-page Progress Report is allowed. Related publications within the last 5 years for the overall proposed center, whether for new or renewal applicants, should be attached.

Vertebrate Animals: Not applicable.

Select Agent Research: Not applicable.

Multiple-PD/PI Leadership Plan: Not applicable.

Consortium / Contractual Arrangements: If applicable.

Letters of Support: Include signed letters of support or collaboration from participating institutions. These can be included in the overall component, or with specific components if closely related to the aims in those programs.

Resource Sharing Plan: Note: The Data Management and Sharing Plan will be attached in the Other Plan(s) attachment in FORMS-H application forms packages.

Individuals are required to comply with the instructions for the Resource Sharing Plans as provided in the SF 424 (R&R) Application Guide.

All applications, regardless of the amount of direct costs requested for any one year, should address a Data Sharing Plan.

Individuals are required to comply with the instructions for the Resource Sharing Plans as provided in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400).

Other Plan(s): Data Management Plan; Generally, not applicable for Training Grants.

Applicants that plan to collect public health data must submit a Data Management Plan (DMP) in the Other Plan(s) section of the PHS 398 Research Plan Component of the application. A DMP is required for each collection of public health data proposed. Applicants who contend that the public health data they collect or create are not appropriate for release must justify that contention in the DMP submitted with their application for CDC funds.

The DMP may be outlined in a narrative format or as a checklist but, at a minimum, should include:

A description of the data to be collected or generated in the proposed project;

Standards to be used for the collected or generated data;

Mechanisms for providing access to and sharing of the data (include a description of provisions for the protection of privacy, confidentiality, security, intellectual property, or other rights - this section should address access to identifiable and de-identified data);

A statement (required) of any limitations you may encounter with sharing data collected or generated under this award with CDC (such as legal, regulatory, policy, or technical concerns);

Statement of the use of data standards that ensure all released data have appropriate documentation that describes the method of collection, what the data represent, and potential limitations for use; and

Plans for archiving and long-term preservation of the data or explaining why long-term preservation and access are not justified (this section should address archiving and preservation of identifiable and deidentified data).

The AR-25 outlines the components of a DMP and provides additional information for investigators regarding the requirements for data accessibility, storage, and preservation. Examples of DMPs may be found at USGS (https://www.usgs.gov/data-management/data-management-plans).

Authentication of Key Biological and/or Chemical Resources: Not applicable

Appendix: Follow all instructions for the Appendix as described in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400). Do not use the appendix to circumvent page limits. A maximum of 5 PDF documents are allowed in the appendix. The number of pages in each PDF document should not exceed 10.

PHS Human Subjects and Clinical Trials Information (Overall)

Not applicable for Training Grants.

Academic Training Programs (Required)
When preparing your application, use Component Type **Acad Train Program.**

SF 424 (R&R) Cover (Academic Training Programs)
Complete only the following fields:

Applicant Information

Type of Applicant (optional)

Descriptive Title of Applicant's Project (Indicate if the Academic Training Program is core or allied)

Proposed Project Start/Ending Dates

PHS 398 Cover Page Supplement (Academic Training Programs)

R&R Other Project Information (Academic Training Programs)
Human Subjects: Answer only the Are Human Subjects Involved? and 'Is the Project Exempt from Federal regulations? questions.

Vertebrate Animals: Answer only the Are Vertebrate Animals Used? question.

Project Narrative: Do not complete. Note: ASSIST screens will show an asterisk for this attachment indicating it is required. However, eRA systems only enforce this requirement in the Overall component and applications will not receive an error if omitted in other components.

Project /Performance Site Location(s) (Academic Training Programs)
List all performance sites that apply to the specific component.

R&R Senior/Key Person Profile (Academic Training Programs)
The Academic Program Director should have the expertise to manage all aspects of the academic training program.

In the Project Director/Principal Investigator section of the form, use Project Role of Other with Category of Program Director and provide a valid eRA Commons ID in the Credential field.

In the additional Senior/Key Profiles section, list Senior/Key persons that are working in the component. Include a single Biographical Sketch for each Senior/Key person listed in the application regardless of the number of components in which they participate. When a Senior/Key person is listed in multiple components, the Biographical Sketch can be included in any one component.

PHS Human Subjects and Clinical Trials Information (Academic Training Programs)

Not applicable for Training Grants.

R&R Budget (Academic Training Programs)
Budget forms appropriate for the specific component will be included in the application package.

For each Academic Training Program complete E. Participant/Trainee Support Costs

For this NOFO, CDC / NIOSH requires a detailed budget for the initial budget year and a budget for each consecutive year of support.

A minimum of 70% of the Academic Training Programs budget must go to trainee costs that provide stipends, tuition and fees, and travel. A maximum of 30% of the Academic Training Programs budget may go to support training-related expenses that include salary support for faculty and staff, supplies, equipment, and non-trainee travel. This 70/30 allocation of funding may be applied across all academic training programs in aggregate (core, allied and certificate programs) and need not be applied to each individual academic training program. This 70/30 allocation applies to direct costs.

If applicable, use SF 424 R&R Subaward Budget Attachment Forms for each consortium/subaward recipient.

The preparation of the budget should follow the CDC Budget Preparation Guidelines. (https://www.cdc.gov/grants/documents/Budget-Preparation-Guidance.pdf)

PHS 398 Research Training Program Plan (Academic Training Programs)
Introduction to Application: For Resubmission and Revision applications, an Introduction to Application is required for each component.

Training Program Section

Program Plan: Describe the Academic Training Program's strategy for an interdisciplinary, high-quality training experience for trainees. Provide details on the Academic Training Program and Environment, qualifications and strengths of the Training Program and Environment, Program Director and the Program Faculty, Trainees, and Training Record.

Plan for Instruction in the Responsible Conduct of Research: Describe the plan for instructing trainees on scientific integrity and ethical principles in research. Individuals are required to comply with the instructions for Plan for Instruction in the Responsible Conduct of Research as provided in the SF 424 (R&R) Application Guide.

Plan for Instruction in Methods for Enhancing Reproducibility: Not applicable.

Multiple PD/PI Leadership Plan: Not applicable.

Progress Report: Describe the accomplishments of the Academic Training Program during the last period of performance for renewal applications. New applications should describe accomplishments over the past 5 years (if applicable). Summarize the accomplishments of the trainees, faculty, and key personnel. This should include responses to the program's previous review (if applicable). The Progress Report is limited to 5 pages.

Faculty, Trainees, and Training Record Section

Participating Faculty Biosketches: Follow instructions in SF 424 Application Packages.

Letters of Support: Provide letters of support that are specific to the Academic Training Program.

Data Tables: NIOSH Tables 1 and 2 for academic training programs are required and must be submitted as data tables. Found at NIOSH Office of Extramural Program's website (https://www.cdc.gov/niosh/extramural-programs/php/about/ercs.html), these pages do not count towards the page limits. The tables capture data on past performance of the academic programs. Applicants should summarize, in the body of the application, key data from the NIOSH Tables that highlight the characteristics of the applicant pool, the educational and career outcomes of participants, and other factors that contribute to the overall positive impact and success of the program.

Other Training Program Section

Vertebrate Animals: Not applicable.

Select Agent Research: Not applicable.

Consortium /Contractual Arrangements: If applicable.

Other Plans - Data Management: Generally, not applicable for Training Grants.

Appendix: Do not use the appendix to circumvent page limits. Only documents that are key for the review of the program, such as course syllabi, course descriptions and survey results should be included. A maximum of 5 PDF documents are allowed in the appendix. The number of pages in each PDF document should not exceed 10. Additionally, up to 3 publications may be included that are not publicly available.

Follow all instructions for the Appendix as described in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400).

Evaluation and Planning Core (Required)

When preparing your application, use Component Type **Eval Plan Core.'**

All instructions in the SF 424 (R&R) Application Guide must be followed, with the following additional instructions, as noted.

SF 424 (R&R) Cover (Evaluation and Planning Core)

Complete only the following fields:

- Applicant Information
- Type of Applicant (optional)
- Descriptive Title of Applicant's Project
- Proposed Project Start/Ending Dates

PHS 398 Cover Page Supplement (Evaluation and Planning Core)

R&R Other Project Information (Evaluation and Planning Core)

Human Subjects: Answer only the Are Human Subjects Involved? and 'Is the Project Exempt from Federal regulations? questions.

Vertebrate Animals: Answer only the Are Vertebrate Animals Used? question.

Project Narrative: Do not complete. Note: ASSIST screens will show an asterisk for this attachment indicating it is required. However, eRA systems only enforce this requirement in the Overall component and applications will not receive an error if omitted in other components.

Application guide states that Project Narrative is required. However, it is only required for the Overall component.

Project /Performance Site Location(s) (Evaluation and Planning Core)

List all performance sites that apply to the specific component.

R&R Senior/Key Person Profile (Evaluation and Planning Core)

In the Project Director/Principal Investigator section of the form, use Project Role of Other with Category of Center Director and provide a valid eRA Commons ID in the Credential field. In the additional Senior/Key Profiles section, list Senior/Key persons that are working in the component. Include a single Biographical Sketch for each Senior/Key person listed in the application regardless of the number of components in which they participate. When a Senior/Key person is listed in multiple components, the Biographical Sketch can be included in any one component. The Center Director should be the lead for the Evaluation and Planning Core. The biographical sketch should indicate a strong capacity in managing a complex, multidisciplinary center.

PHS Human Subjects and Clinical Trials Information (Evaluation and Planning Core)

Not applicable.

R&R Budget (Evaluation and Planning Core)

Budget forms appropriate for the specific component will be included in the application package.

For this NOFO, CDC / NIOSH requires a detailed budget for the initial budget year and a budget for each consecutive year of support.

The budget for the Evaluation and Planning Core should include support for the required programs: Center Administration, Evaluation and Planning, Interdisciplinary Activities, Advisory Council, and Executive Committee. These are required components within the Evaluation and Planning Core. Applicants may request up to $280,000 direct costs / year. An Emerging Issues Program is optional, and applicants may request up to $50,000 direct costs / year.

The preparation of the budget should follow the CDC Budget Preparation Guidelines. (https://www.cdc.gov/grants/documents/Budget-Preparation-Guidance.pdf)

PHS 398 Research Plan (Evaluation and Planning Core)

Introduction to Application: For Resubmission and Revision applications, an Introduction to Application is required for each component.

Specific Aims: Describe the aims of the Evaluation and Planning Core.

Research Strategy: Provide an overall description of the Evaluation and Planning Core. The narrative should address significance, investigators, innovation, approach, and environment.

Progress Report and Publications List: A five-page Progress Report is allowed. Related publications within the last 5 years for the overall proposed center, whether for new or renewal applicants, should be attached.

Vertebrate Animals: Not applicable.

Select Agent Research: Not applicable.

Multiple-PD/PI Leadership Plan: Not applicable.

Consortium / Contractual Arrangements: If applicable.

Letters of Support: Include signed letters of support for the Evaluation and Planning Core.

Resource Sharing Plan: Note: The Data Management and Sharing Plan will be attached in the Other Plan(s) attachment in FORMS-H application forms packages.

Individuals are required to comply with the instructions for the Resource Sharing Plans as provided in the SF 424 (R&R) Application Guide.

All applications, regardless of the amount of direct costs requested for any one year, should address a Data Sharing Plan.

Individuals are required to comply with the instructions for the Resource Sharing Plans as provided in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400).

Other Plan(s): Data Management Plan; Generally, not applicable for Training Grants.

Applicants that plan to collect public health data must submit a Data Management Plan (DMP) in the Other Plan(s) section of the PHS 398 Research Plan Component of the application. A DMP is required for each collection of public health data proposed. Applicants who contend that the public health data they collect or create are not appropriate for release must justify that contention in the DMP submitted with their application for CDC funds.

Authentication of Key Biological and/or Chemical Resources: Not applicable

Appendix: Follow all instructions for the Appendix as described in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400). Do not use the appendix to circumvent page limits. A maximum of 5 PDF documents are allowed in the appendix. The number of pages in each PDF document should not exceed 10.

Continuing Education Program (Required)

When preparing your application, use Component Type **Con Ed.**

SF 424 (R&R) Cover (Continuing Education Program)

Complete only the following fields:

Applicant Information

Type of Applicant (optional)

Descriptive Title of Applicant's Project

Proposed Project Start/Ending Dates

PHS 398 Cover Page Supplement (Continuing Education Program)

Research & Related Other Project Information (Continuing Education Program)

Project /Performance Site Location(s) (Continuing Education Program)

List all performance sites that apply to the specific component.

R&R Senior/Key Person Profile (Continuing Education Program

In the Project Director/Principal Investigator section of the form, use Project Role of Other with Category of Program Director and provide a valid eRA Commons ID in the Credential field. In the additional Senior/Key Profiles section, list Senior/Key persons that are working in the component. Include a single Biographical Sketch for each Senior/Key person listed in the application regardless of the number of components in which they participate. When a Senior/Key person is listed in multiple components, the Biographical Sketch can be included in any one component. The Continuing Education Program Director should have the expertise to manage all aspects of the Continuing Education Program successfully.

PHS Human Subject and Clinical Trials Information (Continuing Education)

Not applicable.

R&R Budget (Continuing Education Program)

Budget forms appropriate for the specific component will be included in the application package.

For this NOFO, CDC / NIOSH requires a detailed budget for the initial budget year and a budget for each consecutive year of support.

Applicants may request up to $150,000 direct costs/year.

If applicable, use SF 424 R&R Subaward Budget Attachment Forms for each consortium/subaward recipient.

The preparation of the budget should follow the CDC Budget Preparation Guidelines. (https://www.cdc.gov/grants/documents/Budget-Preparation-Guidance.pdf)

PHS 398 Research Training Program Plan (Continuing Education Program)

Introduction to Application: For Resubmission and Revision applications, an Introduction to Application is required.

Program Plan. Describe the strategies the Continuing Education Program will take to determine the educational needs of their targeted population and how the needs will be met. Discuss the Significance of the Continuing Education Program, Key Personnel, Innovation, Approach and Environment.

Plan for Instruction in the Responsible Conduct of Research: Not applicable.

Plan for Instruction in Methods for Enhancing Reproducibility: Not applicable.

Multiple PD/PI Leadership Plan: Not applicable.

Progress Report: Describe the accomplishments of the Continuing Education Program during the last period of performance for renewal applications. New applications should describe accomplishments over the past 5 years (if applicable). Summarize the accomplishments of the program, faculty, and key personnel. This should include responses to the program's previous review (if applicable). The Progress Report is limited to 5 pages.

Participating Faculty Biosketches: Follow instructions in SF 424 Application Packages.

Letters of Support: Provide letters of support for the Continuing Education Program.

Data Tables: NIOSH Tables for the Continuing Education Program (Table 3) are required and must be submitted as data tables. Found on the NIOSH Office of Extramural Program's website (https://www.cdc.gov/niosh/extramural-programs/php/about/ercs.html), these pages do not count towards page limits. Applicants should summarize, in the body of the application, key data from the NIOSH Tables that highlight the activities of the Continuing Education Program.

Other Training Program Section

Vertebrate Animals: Not applicable.

Select Agent Research: Not applicable.

Consortium /Contractual Arrangements: If applicable.

Other Plans - Data Management: Generally, not applicable for Training Grants.

Appendix: Only limited items are allowed in the Appendix. Do not use the appendix to circumvent page limits. Only documents that are key for the review of the program should be included. A maximum of 5 PDF documents are allowed in the appendix. The number of pages in each PDF document should not exceed 10. Additionally, up to 3 publications may be included that are not publicly available.

Outreach Program (Required)

When preparing your application, use Component Type **Outreach.**

All instructions in the SF 424 (R&R) Application Guide (https://grants.nih.gov/grants/how-to-apply-application-guide.html) must be followed, with the following additional instructions, as noted.

SF 424 (R&R) Cover (Outreach Program)

Complete only the following fields:

Applicant Information

Type of Applicant (optional)

Descriptive Title of Applicant's Project

Proposed Project Start/Ending Dates

PHS 398 Cover Page Supplement (Outreach Program)

Enter Human Embryonic Stem Cells in each relevant component.

R&R Other Project Information (Outreach Program)

Human Subjects: Answer only the Are Human Subjects Involved? and 'Is the Project Exempt from Federal regulations? questions.

Vertebrate Animals: Answer only the Are Vertebrate Animals Used? question.

Project Narrative: Not applicable.

Project /Performance Site Location(s) (Outreach Program)

List all performance sites that apply to the specific component.

R&R Senior/Key Person Profile (Outreach Program)

In the Project Director/Principal Investigator section of the form, use Project Role of Other with Category of Program Director and provide a valid eRA Commons ID in the Credential field. In the additional Senior/Key Profiles section, list Senior/Key persons that are working in the component. Include a single Biographical Sketch for each Senior/Key person listed in the application regardless of the number of components in which they participate. When a Senior/Key person is listed in multiple components, the Biographical Sketch can be included in any one component. The Program Director of the Outreach Program should have the experience and expertise to manage all aspects of the Outreach Program.

PHS Human Subjects and Clinical Trials Information (Outreach Program)

Not applicable.

R&R Budget (Outreach Program)

Budget forms appropriate for the specific component will be included in the application package.

For this NOFO, CDC / NIOSH requires a detailed budget for the initial budget year and a budget for each consecutive year of support.

Applicants may request up to $75,000 in direct costs / year to support the Outreach Program.

If applicable, use SF 424 R&R Subaward Budget Attachment Forms for each consortium/subaward recipient.

The preparation of the budget should follow the CDC Budget Preparation Guidelines. (https://www.cdc.gov/grants/documents/Budget-Preparation-Guidance.pdf)

PHS 398 Research Plan (Outreach Program)

Introduction to Application: For Resubmission and Revision applications, an Introduction to Application is required.

Introduction to Application: For Resubmission and Revision applications, an Introduction to Application is required for each component.

Specific Aims: Describe the aims of the Outreach Program.

Research Strategy: Provide an overall description of the Outreach Program. The narrative should address Significance, Key Personnel, Innovation, Approach, and Environment.

Progress Report and Publications List: A five-page Progress Report is allowed. Related publications within the last 5 years for the overall proposed center, whether for new or renewal applicants, should be attached.

Vertebrate Animals: Not applicable.

Select Agent Research: Not applicable.

Multiple-PD/PI Leadership Plan: Not applicable.

Consortium / Contractual Arrangements: If applicable.

Letters of Support: Include signed letters of support for the Outreach Program.

Resource Sharing Plan: Note: The Data Management and Sharing Plan will be attached in the Other Plan(s) attachment in FORMS-H application forms packages. If applicable.

Individuals are required to comply with the instructions for the Resource Sharing Plans as provided in the SF 424 (R&R) Application Guide.

All applications, regardless of the amount of direct costs requested for any one year, should address a Data Sharing Plan.

Individuals are required to comply with the instructions for the Resource Sharing Plans as provided in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400).

Other Plan(s): Data Management Plan; Generally, not applicable for Training Grants.

Applicants that plan to collect public health data must submit a Data Management Plan (DMP) in the Other Plan(s) section of the PHS 398 Research Plan Component of the application. A DMP is required for each collection of public health data proposed. Applicants who contend that the public health data they collect or create are not appropriate for release must justify that contention in the DMP submitted with their application for CDC funds.

Authentication of Key Biological and/or Chemical Resources: Not applicable

Appendix: Follow all instructions for the Appendix as described in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400). Do not use the appendix to circumvent page limits. A maximum of 5 PDF documents are allowed in the appendix. The number of pages in each PDF document should not exceed 10.

Pilot Project Research Training Program (Optional)

When preparing your application, use Component Type **'Pilot Program.'**

SF 424 (R&R) Cover (Pilot Project Research Training Program)

Complete only the following fields:

- Applicant Information
- Type of Applicant (optional)
- Descriptive Title of Applicant's Project
- Proposed Project Start/Ending Dates

PHS 398 Cover Page Supplement (Pilot Project Research Training Program)

R&R Other Project Information (Pilot Project Research Training Program)

Human Subjects: Answer only the Are Human Subjects Involved? and 'Is the Project Exempt from Federal regulations? questions.

Vertebrate Animals: Answer only the Are Vertebrate Animals Used? question.

Project Narrative: Do not complete.

Project /Performance Site Location(s) (Pilot Project Research Training Program)

List all performance sites that apply to the specific component.

R&R Senior/Key Person Profile (Pilot Project Research Training Program)

In the Project Director/Principal Investigator section of the form, use Project Role of Other with Category of Program Director and provide a valid eRA Commons ID in the Credential field. In the additional Senior/Key Profiles section, list Senior/Key persons that are working in the component. Include a single Biographical Sketch for each Senior/Key person listed in the application regardless of the number of components in which they participate. When a Senior/Key person is listed in multiple components, the Biographical Sketch can be included in any one component. The Program Director of the Pilot Project Research Training Program should have the expertise and ability to successfully manage all aspects of the program.

PHS Human Subjects and Clinical Trials Information (Pilot Project Research Training Program)

Obtain appropriate IRB review and approval for pilot projects involving human subjects to ensure protection of the rights and welfare of human subjects (45 Code of Federal Regulations 46). This must be obtained prior to pilot project funding and includes pilot projects conducted at other institutions. The IRB must be registered with the DHHS Office of Human Research Protections and must have a current Federal wide Assurance Number.

Documentation of IRB approval and approved consent forms must be maintained by the ERC. Documentation of IRB approvals for pilot projects must be submitted with ERC's annual Research Performance Progress Report. "IRB Approval" means full, final IRB approval. In addition, pilot project protocols must comply with all applicable Federal and State regulations.

R&R Budget (Pilot Project Research Training Program)

Budget forms appropriate for the specific component will be included in the application package.

For this NOFO, CDC / NIOSH requires a detailed budget for the initial budget year and a budget for each consecutive year of support. Pilot Project Research Training Programs may request up to $100,000 direct costs /year; each funded pilot project may receive up to $20,000 for a period of 12-18 months.

If applicable, use SF 424 R&R Subaward Budget Attachment Forms for each consortium/subaward recipient.

The preparation of the budget should follow the CDC Budget Preparation Guidelines. (https://www.cdc.gov/grants/documents/Budget-Preparation-Guidance.pdf)

PHS 398 Research Plan (Pilot Project Research Training Program)

Introduction to Application: For Resubmission and Revision applications, an Introduction to Application is required.

Specific Aims: Describe the aims of the Pilot Project Research Training Program

Research Strategy: Provide details on the Pilot Project Research Training Program and environment, research training program director, research training program faculty, research mentoring and research training records.

Progress Report: Describe the accomplishments of the ERC's Pilot Project Research Training Program during the last period of performance for renewal applications. New applications should describe accomplishments over the past 5 years (if applicable). Summarize the accomplishments of the recipients of pilot projects, outcomes, and outputs. This should include responses to the program's previous review (if applicable). The Progress Report is limited to 5 pages.

Participating Faculty Biosketches: Follow instructions in SF 424 Application Packages.

Letters of Support: Provide letters of support that are specific to the ERC's Pilot Project Research Training Program.

Data Tables: Not applicable.

Other Training Program Section

Vertebrate Animals: Not applicable.

Select Agent Research: Not applicable.

Consortium /Contractual Arrangements: If applicable.

Other Plans - Data Management: The Data Management and Sharing Plan will be attached in the Other Plan(s)attachment in FORMS-H application forms packages. If required, the Data Management and Sharing (DMS) Plan must be provided in the Overall component.

All applicants planning research (funded or conducted in whole or in part by CDC/NIOSH) that results in the generation of scientific data are required to comply with the instructions for the Data Management and Sharing Plan. All applications, regardless of the amount of direct costs requested for any one year, must address a Data Management and Sharing Plan. The Data Management and Sharing (DMS) Plan must be provided in the Overall component.

Appendix: Only limited items are allowed in the Appendix. Do not use the appendix to circumvent page limits. Only documents that are key for the review of the program should be included. A maximum of 5 PDF documents are allowed in the appendix. The number of pages in each PDF document should not exceed 10. Additionally, up to 3 publications may be included that are not publicly available.

Targeted Research Training Program (Optional)

When preparing your application, use Component Type **'Targeted Research.'**

SF 424 (R&R) Cover (Targeted Research Training Program)

Complete only the following fields:

Applicant Information

Type of Applicant (optional)

Descriptive Title of Applicant's Project

Proposed Project Start/Ending Dates

PHS 398 Cover Page Supplement (Targeted Research Training Program)

R&R Other Project Information (Targeted Research Training Program)

Project Narrative: Do not complete.

Project /Performance Site Location(s) (Targeted Research Training Program)

List all performance sites that apply to the specific component.

R&R Senior/Key Person Profile (Targeted Research Training Program)

In the Project Director/Principal Investigator section of the form, use Project Role of Other with Category of Program Director and provide a valid eRA Commons ID in the Credential field. In the additional Senior/Key Profiles section, list Senior/Key persons that are working in the component. Include a single Biographical Sketch for each Senior/Key person listed in the application regardless of the number of components in which they participate. When a Senior/Key person is listed in multiple components, the Biographical Sketch can be included in any one component. The Program Director should have the expertise and experience to provide strong leadership, direction, and management of the Targeted Research Training Program for the program to be successful and sustainable.

PHS Human Subjects and Clinical Trials Information (Targeted Research Training Program)

If applicable.

R&R Budget (Targeted Research Training Program)

Budget forms appropriate for the specific component will be included in the application package.

For this NOFO, CDC / NIOSH requires a detailed budget for the initial budget year and a budget for each consecutive year of support.

For this component up to $300,000 direct costs/year is allowed.

A minimum of 70% of the Targeted Research Training Programs budget must go to trainee costs that provide stipends, tuition and fees, and travel. A maximum of 30% of the Academic Training Programs budget may go to support training-related expenses that include salary support for faculty and staff, supplies, equipment, and non-trainee travel. This 70/30 allocation of funding may be applied across all academic training programs (plus Targeted Research Training Program) in aggregate (core, allied and certificate programs) and need not be applied to each individual academic or research training program. This 70/30 allocation applies to direct costs.

If applicable, use SF 424 R&R Subaward Budget Attachment Forms for each consortium/subaward recipient.

The preparation of the budget should follow the CDC Budget Preparation Guidelines. (https://www.cdc.gov/grants/documents/Budget-Preparation-Guidance.pdf)

PHS 398 Research Training Program Plan (Targeted Research Training Program)

Introduction to Application: For Resubmission and Revision applications, an Introduction to Application is required.

Program Plan: Provide details on the Targeted Research Training Program and environment, research training program director, research training program faculty, research mentoring and research training records.

Plan for Instruction in the Reasonable Conduct of Research.

Plan for Instruction in Methods for Enhancing Reproducibility: Not applicable.

Multiple PD/PI Leadership Plan: Not applicable.

Progress Report: Describe the accomplishments of the ERC's Targeted Research Training Program over the last period of performance for renewal applications. New applications should describe accomplishments over the past 5 years (if applicable). This should include responses to the program's previous review (if applicable). The Progress Report is limited to 5 pages.

Participating Faculty Biosketches: Follow instructions in SF 424 Application Packages.

Letters of Support: Provide letters of support for the ERC's Targeted Research Training Program.

Data Tables: Not applicable.

Other Training Program Section

Vertebrate Animals: Not applicable.

Select Agent Research: Not applicable.

Consortium /Contractual Arrangements: If applicable.

Other Plans - Data Management: Generally, not applicable for training grants.

Appendix: Only limited Appendix materials are allowed. Do not use the appendix to circumvent page limits. Only documents that are key for the review of the program should be included. A maximum of 5 PDF documents are allowed in the appendix. The number of pages in each PDF document should not exceed 10. Additionally, up to 3 publications may be included that are not publicly available.

Follow all instructions for the Appendix as described in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400).

3. Unique Entity Identifier and System for Award Management (SAM)

See Part 1. Section III.1 for information regarding the requirement for obtaining a unique entity identifier and for completing and maintaining active registrations in System for Award Management (SAM), NATO Commercial and Government Entity (NCAGE) Code (if applicable), eRA Commons, and Grants.gov.

4. Submission Dates and Times

Part I. Overview Information contains information about Key Dates and times. 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. When a submission date falls on a weekend or Federal holiday

(https://grants.nih.gov/grants/guide/url_redirect.php?id=82380), the application deadline is automatically extended to the next business day.

Organizations must submit applications to Grants.gov (//grants.nih.gov/grants/guide/url_redirect.php?id=11128) (the online portal to find and apply for grants across all Federal agencies) using ASSIST or other electronic submission systems. Applicants must then complete the submission process by tracking the status of the application in the eRA Commons (https://grants.nih.gov/grants/guide/url_redirect.php?id=11123), NIH's electronic system for grants administration. NIH and Grants.gov systems check the application against many of the application instructions upon submission. Errors must be corrected and a changed/corrected application must be submitted to Grants.gov on or before the application due date and time. If a Changed/Corrected application is submitted after the deadline, the application will be considered late.

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 How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400).

5. Intergovernmental Review (E.O. 12372)

This initiative is not subject to intergovernmental review. (https://grants.nih.gov/grants/policy/nihgps/html5/section_10/10.10.1_executive_orders.htm)

6. Funding Restrictions

All CDC/NIOSH awards are subject to the terms and conditions, cost principles, and other considerations described in the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf).

Expanded Authority:

Recipients are permitted expanded authorities in the administration of the award. Carryover of unobligated balances from one budget period to a subsequent budget period is allowed. Unobligated funds may be used for purposes within the scope of the project as originally approved. See

HHS Grants Policy Statement. (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf)

All CDC/NIOSH awards are subject to the federal regulations, in 45 CFR Part 75, terms and conditions, and other requirements described in the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf). Pre-award costs may be allowable as an expanded authority, but only if authorized by CDC.

Public Health Data:

CDC requires that mechanisms for, and cost of, public health data sharing be included in grants, cooperative agreements, and contracts. The cost of sharing or archiving public health data may also be included as part of the total budget requested for first-time or continuation awards.

Program Income:

Any program income generated under this grant or cooperative agreement will be used in accordance with the Addition alternative. Under the addition alternative, program income is added to the funds committed to the project/program and are used to further eligible project/program objectives.

Note: The disposition of program income must have written prior approval from the GMO.

Unobligated Funds:

Recipients will report use, or intended use, of unobligated funds in Section 12 Remarks of the annual Federal Financial Report submitted in eRA Commons. If the GMO determines that some or all the unobligated funds are not necessary to complete the project, the GMO may restrict the recipient' s authority to automatically carry over unobligated balances in the future, use the balance to reduce or offset CDC funding for a subsequent budget period, or use a combination of these actions.

Rebudgeting of amounts less than 25% of a category is allowed if within category commitments for trainee costs or trainee-related costs. For example, rebudgeting of stipends to tuition/fees is allowable without prior approval. Prior approval is required if requesting rebudgeting from trainee costs to trainee-related costs.

Significant rebudgeting occurs when expenditures in a single direct cost budget category deviate (increase or decrease) from the categorical commitment level established for the budget period by 25% or more of the total costs awarded. For example, if the award budget for total costs is $200,000, any rebudgeting that would result in an increase or decrease of more than $50,000 in a budget category is considered significant rebudgeting. This requires CDC/NIOSH prior approval.

7. Other Submission Requirements and Information

Applications must be submitted electronically following the instructions described in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400). Paper applications will not be accepted.

For information on how your application will be automatically assembled for review and funding consideration after submission go to: http://grants.nih.gov/grants/ElectronicReceipt/files/Electronic_Multi-project_Application_Image_Assembly.pdf (//grants.nih.gov/grants/ElectronicReceipt/files/Electronic_Multi-project_Application_Image_Assembly.pdf).

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 How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400). If you encounter a system issue beyond your control that threatens your ability to complete the submission process on-time, you must follow the Dealing with System Issues (https://grants.nih.gov/grants/how-to-apply-application-guide/due-dates-and-submission-policies/dealing-with-system-issues.htm) guidance. For assistance with application submission, contact the Application Submission Contacts in Section VII.

Important reminders:

All PD(s)/PI(s) and component Project Leads must include their eRA Commons ID in the Credential field of the Senior/Key Person Profile form**.** 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 CDC/NIOSH.

It is also important to note that for multi-project applications, this requirement also applies to the individual components of the application and not to just the Overall component.

The applicant organization must ensure that the unique entity identifier provided on the application is the same identifier used in the organization's profile in the eRA Commons and for the System for Award Management. Additional information may be found in the How to Apply - Application Guide (https://grants.nih.gov/grants/guide/url_redirect.php?id=82400).

See more tips (//grants.nih.gov/grants/guide/url_redirect.php?id=11146) for avoiding common errors.

Upon receipt, applications will be evaluated for completeness and compliance with application instructions by the NIH Center for Scientific Review and CDC/NIOSH. CDC / NIOSH will screen all applications for responsiveness. Applications that are incomplete or non-compliant will not be reviewed. Applicants will be requested to withdraw non-responsive applications.

Duplication of Efforts

Applicants are responsible for reporting if this application will result in programmatic, budgetary, or commitment overlap with another application or award (i.e., grant, cooperative agreement, or contract) submitted to another funding source in the same fiscal year. Programmatic overlap occurs when (1) substantially the same project is proposed in more than one application or is submitted to two or more funding sources for review and funding consideration or (2) a specific objective and the project design for accomplishing the objective are the same or closely related in two or more applications or awards, regardless of the funding source. Budgetary overlap occurs when duplicate or equivalent budgetary items (e.g., equipment, salaries) are requested in an application but already are provided by another source. Commitment overlap occurs when an individual's time commitment exceeds 100 percent, whether or not salary support is requested in the application. Overlap, whether programmatic, budgetary, or commitment of an individual s effort greater than 100 percent, is not permitted. Any overlap will be resolved by the CDC with the applicant and the PD/PI prior to award.

Report Submission: The applicant must upload the report under Other Attachment Forms. The document should be labeled: "Report on Programmatic, Budgetary, and Commitment Overlap.

Application Submission
Applications must be submitted electronically following the instructions described in the SF 424 (R&R) Application Guide. PAPER APPLICATIONS WILL NOT BE ACCEPTED.

Applicants must complete all required registrations before the application due date. Section III.6 "Required Registrations" contains information about registration.

For assistance with your electronic application or for more information on the electronic submission process, visit Applying Electronically (http://grants.nih.gov/grants/guide/url_redirect.php?id=11144 (//grants.nih.gov/grants/guide/url_redirect.php?id=11144)).

Important reminders: All Senior/Key Personnel (including Program Directors/Principal Investigators (PD/PIs) must include their eRA Commons ID in the Credential field of the Senior/Key Person Profile Component of the SF 424(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 CDC.

It is also important to note that for multi-project applications, this requirement also applies to the individual components of the application and not to just the Overall component.

The applicant organization must ensure that the UEI 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 SF 424 (R&R) Application Guide.

If the applicant has an FWA number, enter the 8-digit number. Do not enter the letters FWA before the number. If a Project/Performance Site is engaged in research involving human subjects, the applicant organization is responsible for ensuring that the Project/Performance Site operates under and appropriate Federal Wide Assurance for the protection of human subjects and complies with 45 CFR Part 46 and other CDC human subject related policies described in Part II of the SF 424 (R&R) Application Guide and in the HHS Grants Policy Statement.

See more resources to avoid common errors and submitting, tracking, and viewing applications:

http://grants.nih.gov/grants/ElectronicReceipt/avoiding_errors.htm (//grants.nih.gov/grants/ElectronicReceipt/avoiding_errors.htm)

http://grants.nih.gov/grants/ElectronicReceipt/submit_app.htm (//grants.nih.gov/grants/ElectronicReceipt/submit_app.htm)

https://era.nih.gov/files/ASSIST_user_guide.pdf (https://era.nih.gov/files/ASSIST_user_guide.pdf)

http://era.nih.gov/erahelp/ASSIST/ (http://era.nih.gov/erahelp/ASSIST/)

Upon receipt, applications will be evaluated for completeness by the CDC Office of Grants Services (OGS) and responsiveness by OGS and the Center, Institute or Office of the CDC. 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 the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf). Any instructions provided here are in addition to the instructions in the policy.

Section V. Application Review Information

1. Criteria

Only the review criteria described below will be considered in the review process. As part of the CDC mission (https://www.cdc.gov/about/cdc/index.html) and NIOSH mission (https://www.cdc.gov/niosh/about/index.html), all applications submitted to the CDC/NIOSH in support of public health research are evaluated for scientific and technical merit through the CDC/NIOSH peer review system.

For this announcement, note:

Applicants must be able to award graduate and post-graduate degrees in OSH disciplines.

As part of the initial merit review, all applicants will receive a written summary statement consisting of the following elements:

- A summary evaluation of the Overall Center (considering all components)
- A separate evaluation of each Academic Training Program
- A separate evaluation of the Evaluation and Planning Core
- A separate evaluation of the Continuing Education Program
- A separate evaluation of the Outreach Program

A separate evaluation for each optional Research Training Program (if proposed).

Overall Impact - Overall Center

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

Scored Review Criteria Overall Center

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 Center that by its nature is not innovative may be essential to advance the OSH field.

Significance

Significance is evaluated by considering the impact the ERC has in meeting regional and national needs the ERC has identified for OSH training. Does the creation or continuation of an ERC advance the field of OSH? Does the ERC have a robust history of training students to be practitioners and leaders in research to address challenging OSH issues in an interdisciplinary manner? Is there evidence of regional and national collaboration with a diverse and broad range of organizations to enhance worker well-being? Is there evidence of the applicant's ability to track academic program graduates and post-doctorates after completion of their program to determine impact?

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

Investigator(s)

Does the ERC leadership team have experience in managing a complex, multi-component center in OSH in an institutional environment? Is the ERC Center Director highly qualified to lead the ERC? Does the ERC leadership have qualifications and experiences in OSH? Is the ERC faculty highly qualified, with a strong history of obtaining support through other mechanisms (federal, state, or private sector)? Is there evidence of high-quality outputs, and outcomes through research or practice from ERC faculty and staff, which have contributed to improvements in worker health and safety? Is there evidence of past collaborations between the ERC faculty and NIOSH trainees across disciplines? the level of commitment for the PI and PDs adequate to manage the ERC?

Are the PD/PIs, collaborators, and other researchers well suited to the project? 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 project?

Innovation

Does the ERC propose innovative approaches to achieving and maintaining highly effective training, research training, continuing education, outreach, translation of research to practice, and prevention through design, all relevant to the OSH field? Does the ERC work to positively impact the well-being, safety, and health of workers in their region with considerations for the changing nature of work? Is there an innovative approach in recruiting individuals for all ERC programs, including continuing education, outreach, and research training programs (if applicable)? Does the ERC propose innovative approaches across all components?

Approach

Is there a well-described strategy for a successful, fully integrated, interdisciplinary ERC? Are there plans for recruiting high-quality trainees in the different OSH fields and specific plans for recruiting candidates from a wide range of backgrounds? Does the ERC engage key stakeholders, trainees and graduates, an Advisory Council, in its activities for a synergistic and regional approach? Are outputs, outcomes, and measures of impact for the overall ERC and ERC components clearly defined? Are challenges in collaboration, recruitment, and retention clearly stated?

Environment

Is there evidence of institutional commitment to support the goals of the ERC across programs? Will the ERC programs benefit from unique features of the academic, public health and scientific environment, or collaborative arrangements? Are the facilities and equipment appropriate to support the described training, research training, and continuing education and outreach activities?

Overall Impact - Each Individual Components

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

Scored Review Criteria (Academic Training Programs)

Each academic training program will be reviewed separately. The following review criteria are used to evaluate each academic training program and academic certificate program (if applicable): 1) Training Program and Environment, 2) Academic Training Program Director, 3) Academic Training Program Faculty, 4) Trainees, and 5) Training Record.

Training Program and Environment

Does the proposed academic training program fill a gap in regional or national workforce need that the ERC has identified? Does the applicant describe the potential impact of the program in meeting the regional and national needs for OSH training? Do the objectives, design and direction of the proposed academic training program ensure outstanding, interdisciplinary OSH training? Is the proposed training program designed to prepare students for successful and productive careers in OSH practice and/or research? Does the academic training program, through courses, training experiences, interdisciplinary experiences and other activities promote participation by all NIOSH trainees in highly significant, high-quality events? Does the academic training program have innovative approaches in recruiting to a wide range of potential students? Is there a rigorous evaluation plan to determine the effectiveness of the training program, including interdisciplinary activities? Are there plans to obtain and incorporate feedback from stakeholders, including current and former NIOSH trainees? Is there a formal plan to provide oversight of trainee progress and high-quality mentoring for career guidance to provide the highest possible level of trainee success? Does the academic training program have a successful retention history? Does the training program's past performance reflect successful recruitment and graduation of highly qualified and motivated trainees (success may be determined by the number of NIOSH trainees, trainee awards, presentations and publications, and employment history)? Is there a critical mass of faculty and students to sustain the program? Does the training program address the distinct workplace characteristics and worker health needs in the ERC's region or target area? Is the curriculum consistent with a high-quality program? Are the training and research facilities and environment conducive to preparing trainees for successful careers as leaders in OHS practice or research? Is there evidence of an Institutional commitment to the training program's goals?

In addition to the review criteria above, academic certificate programs should describe the unique needs the proposed program will address and how certificate trainees will use their training to advance their OSH practice. What training needs will the academic certificate meet? What special recruitment strategies have been developed to identify well-qualified, highly motivated trainees? Are the application, review and selection processes for academic certificate trainees clearly described? Will the

academic certificate program be coordinated with the academic degree programs in the same specialty area to enhance trainee's learning experience? Is there a rigorous evaluation plan to determine the effectiveness of the academic certificate program?

Academic Training Program Director

Does the Program Director have the scientific background, expertise, and administrative and training experience to provide strong leadership, direction, management, and administration of the proposed training program? Does the Program Director plan to commit sufficient effort to ensure the program's success? Does the Program Director have a strong track record in successfully training and mentoring students, including students from underrepresented and underserved populations?

In addition to the review criteria above, the academic certificate program should have a Program Director with the expertise to provide trainees with a learning experience that heightens their knowledge and skills in OSH practice. Does the Program Director have experience providing leadership for adynamic, relevant academic certificate program?

Academic Training Program Faculty

Is the faculty highly qualified, with strong histories of teaching, mentoring and obtaining support through other mechanisms (federal, state, or private sector)? Are the faculty accomplished OSH practitioners, or research investigators as evidenced by peer-reviewed publications? Are enough experienced academic training program faculty, with appropriate expertise and funding, available to support and mentor the trainees proposed in the application? Does the ERC faculty have a strong record of training and mentoring? Is there an appropriate mix of junior and established faculty, and is there a mechanism by which junior faculty will obtain guidance to ensure their successful training and mentoring of trainees?

In addition to the review criteria above, the academic certificate program should offer a course of study with coursework taught by experienced, qualified program faculty. Does the faculty have experience providing teaching and mentoring for certificate trainees? Is there evidence of program faculty's successful involvement in teaching certificate trainees?

Trainees

Is there a recruitment plan with strategies to attract well-qualified, highly motivated candidates for the training program, including students from a wide range of backgrounds? Is there a competitive applicant pool in sufficient numbers to warrant the proposed size of the training program? Does the application present a well-defined and transparent process, and set of criteria, for trainee selection? Is there a sufficient strategy to monitor trainee progress to ensure the highest possible level of success for each trainee?

In addition to the review criteria above, academic certificate programs should clearly describe the applicant pool, eligibility requirements and admissions process for certificate trainees. Is there a strategy to monitor certificate trainee progress to ensure the highest possible level of success for the trainee?

Training Record

How successful are NIOSH trainees in obtaining careers that advance the field of OSH? Are most students obtaining degrees within an appropriate timeframe? How well does this program integrate with and complement other programs (academic training programs, interdisciplinary activities, outreach, and continuing education in the ERC)? For trainees on a research path, is there evidence of career advancement and development, such as grants awarded, special honors or awards, a record of publications or patents?

In addition to the review criteria above for the academic training program and academic certificate program, the following review criteria are applicable:

Are trainees instructed in the responsible conduct of research, including scientific integrity, conflict of interest, responsible authorship, data management, data sharing, and policies for handling misconduct and regarding the use of human and animal subjects? In addition to the review criteria above, academic certificate programs should clearly describe the process and requirements for successful completion to obtain the academic certificate. Is there a strategy to capture a certificate trainee's career advancement after successful completion?

Is there a well-described strategy for a successful, fully integrated, interdisciplinary ERC? Are there plans for recruiting high-quality trainees in the different OSH fields and specific plans for recruiting candidates from a wide range of backgrounds? Does the ERC engage key stakeholders, trainees, graduates, and an Advisory Council, in its activities for a synergistic and regional approach? Are outputs, outcomes, and measures of impact for the overall ERC and ERC components clearly defined? Are challenges in collaboration, recruitment, and retention clearly stated?

Scored Review Criteria (Evaluation and Planning Core)

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 Center that by its nature is not innovative may be essential to advance a field.

Significance

Significance is evaluated by considering the impact the ERC has in meeting regional and national needs for OSH training. Does the creation or continuation of an ERC advance the field of OSH? Does the ERC have a robust history of training students to be practitioners and leaders in research to address challenging OSH issues in an interdisciplinary manner? Is there evidence of regional and national collaboration with a diverse and broad range of organizations to enhance worker well-being? Is there evidence of the applicant's ability to track academic program graduates and post-doctorates after completion of their program to determine impact?

Investigator(s)

Does the ERC leadership team have experience in managing a complex, multi-component center in OSH in an institutional environment? Is the ERC Center Director highly qualified to lead the ERC? Does the ERC leadership have qualifications and experiences in OSH? Is the ERC faculty highly qualified, with a strong history of obtaining support through other mechanisms (federal, state, or private sector)? Is the level of commitment for the PI and PDs adequate to manage the ERC?

Innovation

Does the ERC propose innovative approaches to achieving and maintaining highly effective training, research training, continuing education, outreach, translation of research to practice, and prevention through design, all relevant to the OSH field? Does the ERC work to positively impact the well-being, safety, and health of workers in their region with considerations for the changing nature of work? Does the ERC propose innovative approaches across all components?

Approach

Is there a well-described strategy for a successful, fully integrated, interdisciplinary ERC? Are there plans for recruiting high-quality trainees in the different OSH fields and specific plans for recruiting candidates from various groups? Does the ERC engage key stakeholders, trainees and graduates, an Advisory Council, in its activities for a synergistic and regional approach? Are outputs, outcomes, and measures of impact for the overall ERC and ERC components clearly defined? Are challenges in collaboration, recruitment, and retention clearly stated?

Environment

Is there evidence of institutional commitment to support the goals of the ERC across programs? Will the ERC's programs benefit from unique features of the academic, public health and scientific environment, or collaborative arrangements? Are the facilities and equipment appropriate to support the described training, research training, and continuing education and outreach activities?

Scored Review Criteria (Continuing Education Program)

Significance

Is there evidence that the CE Program is successful as indicated by the number of trainees and training courses for OSH and allied professions, the diversity of courses offered, and course evaluations? Is there evidence that the CE Program has a broad reach through collaboration with other ERCs, TPGs, professional associations, and other OSH stakeholders?

For a renewal application, does the CE Program’s past performance indicate a strong record of training OSH and allied practitioners as evidenced by the breadth and quality of the completed courses, and the number of trainees?

Key Personnel

Are the CE Program Director and staff qualified with respect to expertise in OSH and in developing, managing, and evaluating a CE program? Is there administrative support for an effective, sustainable CE Program?

Innovation

Does the ERC's CE Program propose new and innovative approaches to CE relevant to the OSH field? Does the plan include new and or improved ways of delivering CE programs?

Approach

Is the CE Program well-designed and does it meet contemporary educational standards? Is consideration given to collaboration with other providers of OSH training within the ERC’s region? To what extent do ERC faculty participate in planning, developing, presenting, or evaluating CE courses? Does the CE Program encourage NIOSH ERC trainees to attend CE offerings relevant to their field of study? Is consideration given to unique training needs for the ERC’s region or target area? Is there an adequate evaluation plan, including feedback from participants and CE faculty / presenters, for the CE Program?

Environment

Are there sufficient resources available to the CE Program for successful delivery of high-quality educational programs for the adult learner? Is there evidence of an institutional commitment to CE Program goals?

Scored Review Criteria (Outreach)

Significance

Will the proposed activities have the potential to increase awareness and have a positive impact on worker health, safety, and well-being? Is there evidence that the Outreach Program is responsive to regional needs for worker safety, health, and well-being?

For renewal applications, does the Outreach Program have a successful history of activities that positively impact worker health, safety, and well-being?

Key Personnel

Does the leadership for the Outreach Program (Program Director and staff) have expertise in OSH, and in developing, managing, and evaluating an outreach program in an institutional setting? Is there adequate administrative support for an effective outreach program?

Innovation

Does the ERC's Outreach Program propose new and innovative approaches in outreach that are relevant to OSH? Does the plan include reaching vulnerable worker populations, including underserved and underrepresented worker populations in their region?

Approach

Is the Outreach Program designed to have positive impact on worker health, safety, and well-being? Has consideration been given to collaboration with OSH stakeholders in the region? Are ERC faculty and NIOSH trainees encouraged to participate in outreach activities? Is there evidence of an interdisciplinary approach to the proposed outreach activities? Is there an evaluation plan to determine if the Outreach Program is having a positive impact? Are there plans to incorporate feedback to improve outreach activities?

Environment

Are there sufficient resources available for the successful delivery of high-quality outreach efforts? Will the Outreach in OSH Program benefit from the environment in which the ERC is located? Is there evidence of an institutional commitment to Outreach in OSH Program goals?

Scored Review Criteria (Pilot Project Research Training Program)

Training Program and Environment

Are the goals for the Pilot Project Research Training (PPRT) Program well-described and relevant to NIOSH NORA or other emerging issues that impact worker health, safety, and well-being? Is the plan to conduct the PPRT program adequate? This includes the adequacy of procedures for soliciting and accepting applications, the scientific review process, funding projects, and program quality assurance. Does the applicant encourage participation by other investigators interested in OSH either within the institution or regional institutions? Is the plan for announcing the PPRT Program funding adequate and include promoting the program to underserved and underrepresented students and faculty? Does the applicant provide a plan for retaining all proposals, with documentation of their reviews, relative ranking, and final action? Is there a mechanism for tracking the results of each pilot project study (abstract, R01/R21 submission, dissertation, etc.)? Do the objectives, design, and direction of the proposed PPRT program indicate innovative and relevant research opportunities for junior faculty, new faculty investigators, or mentored students? Is there a rigorous evaluation plan to determine the effectiveness and impact of the PPRT program? Is there a formal plan to provide oversight of research progress and as well as high-quality mentoring to provide the highest possible level of investigator success? Are there plans to obtain and incorporate feedback on the program from stakeholders, including current and former recipients for PPRT support?

For renewal applications, does the PPRT Program's past performance reflect successful recruitment of highly qualified and motivated investigators (success may be determined by the number of new investigators funded, researcher awards, presentations and publications, and career development)? Does the PPRT Program have a successful history for reaching underserved and underrepresented investigators?

Research Training Program Director

Does the Program Director have sufficient scientific background and expertise to provide strong leadership, direction, and management of the PPRT Program? Does the Program Director have sufficient experience and ability to fulfill the administrative and operational responsibilities of the proposed PPRT? Is the Program Director’s level of effort adequate to manage the diversity and complexity of the program?

Research Training Program Faculty

Are there enough experienced research training faculty, with appropriate expertise and funding, to support the breadth and depth of the PPRT Program proposed in the application? Is there evidence of a qualified pool of faculty to serve as mentors to the PPRT investigators? Do PPRT mentors have strong records as researchers, including successful competition for research support in areas directly related to the proposed PPRT program?

For renewal applications, do program faculty and key personnel have strong research, publication, and mentoring records? Is there clear evidence of fostering the development of independent investigators through the PPRT Program?

Research Mentoring

Is there evidence of an adequate plan to foster and develop research capacity for junior faculty, new investigators, and mentored students? Is there a recruitment plan with strategies to attract well-qualified, highly motivated candidates for the PPRT program, including faculty and students from underrepresented and underserved populations? Is there a competitive applicant pool in sufficient numbers to warrant the proposed size of the PPRT program?

For renewal applications, is there evidence that researchers or new investigators have successfully competed for subsequent research funding? Is there evidence that mentored students have advanced in their research capacity?

Research Training Record

Are there adequate plans for monitoring and evaluating the completion of research projects in an appropriate timeframe? Are there adequate plans for fostering the development of mentored students as independent investigators?

For renewal applications, do most recipients of PPRT support complete pilot research projects in an appropriate timeframe? Do mentored students complete appropriate research training activities in a suitable timeframe? Is there evidence of productive research or practitioner careers, such as faculty advancement, investigator-initiated grants, special honors or awards, publications or patents, or promotion to scientific positions, for researchers, new investigators, or mentored students? Are new investigators or mentored students appropriately instructed in the responsible conduct of research, including scientific integrity, conflict of interest, responsible authorship, data management, data sharing, and policies for handling misconduct and regarding the use of human and animal subjects?

Scored Review Criteria (Targeted Research Training Program)

Training Program and Environment

Do the objectives, design, and direction of the proposed Targeted Research Training (TRT) Program indicate innovative and relevant research training opportunities in OSH with a strong interdisciplinary approach? Is the proposed research training program designed to prepare students for successful and productive careers in OSH practice and / or research? Is there a formal plan to provide oversight of research progress and appropriate mentoring in research career advancement to provide the highest possible level of trainee success? Is there a rigorous evaluation plan to determine the quality, effectiveness and impact of the TRT Program? Does the evaluation plan obtain and incorporate feedback from stakeholders, including recipients of TRT support? Do the program faculty and key personnel have a record of providing the skills, knowledge, education, and mentoring necessary for trainees to successfully compete for outstanding positions and career development in business, industry, academia and other institutions or agencies? Does the TRT program have a successful history for underserved and underrepresented trainees? Does the research training program’s past performance reflect successful recruitment and graduation of highly qualified and motivated trainees (success may be determined by the number of NIOSH trainees, trainee awards, presentations and publications, and research career advancement and / or employment history)? Does the research training program address the distinct workplace characteristics and worker health needs in the ERC’s region or target area? For post-doctoral research training, is there a clear plan for matching trainees with suitable mentors, establishing advisory committees consisting of a primary mentor and one or more faculty advisors to guide progress, and monitoring trainee progress?

Research Training Program Director

Does the Program Director have the scientific background, expertise, and administrative and training experience to provide strong leadership, direction, management, and administration of the proposed research training program? Does the Program Director plan to commit sufficient effort to ensure the program’s success? Does the Program Director have a strong track record in successfully training and mentoring research trainees? For post-doctoral research training, does the Program Director have adequate experience to provide academic and research leadership for the proposed program? Is the Program Director’s level of effort adequate to manage the diversity and complexity of the program?

Research Training Program Faculty

Are enough experienced research training faculty, with appropriate expertise and funding, available to support the trainees? Are enough experienced preceptors/mentors, with appropriate expertise and funding, available to support the research trainees proposed in the application? For post-doctoral research training, is the research training faculty part of the ERC? If not, does the faculty contribute specific expertise that enhances the opportunity for post-doctoral research training? Does the faculty have demonstrated experience with successful training of post-doctoral researchers in OSH? Is there sufficient other research support to leverage diverse and innovative post-doctoral OSH training?

Researcher Mentoring

Is there evidence of an adequate plan to foster and develop research capacity? Is there a recruitment plan with strategies to attract well-qualified, highly motivated candidates for the research training program, including faculty and students from underrepresented and underserved populations? Is there a competitive applicant pool in sufficient numbers to warrant the proposed size of the research training program? Does the application present a well-defined and transparent process, and set of criteria, for research trainees? Is there a sufficient strategy to monitor trainee progress to ensure the highest possible level of success for each trainee? Does post-doctoral training include matching trainees with suitable mentors, establishing advisory committees (primary mentor and one or more faculty advisors), and monitoring trainee progress?

Research Training Record

How productive are trainees in terms of research accomplishments and in achieving productive scientific careers, as evidenced by successful completion for research grants, receipt of honors or awards, high-impact publications, receipt of patents, promotion to scientific leadership positions and or such other measures of success? For new applications, is there a record of past performance of students and fellows (if applicable) in similar training programs? How well does the TRT program integrate with and complement other ERC programs? Are new investigators and mentored students appropriately instructed in the responsible conduct of research, including scientific integrity, conflict of interest, responsible authorship, data management, data sharing, and policies for handling misconduct and regarding the use of human and animal subjects? For post-doctoral training, is there an adequate plan for monitoring the progress or advancement toward research independence? Do post-doctoral trainees complete research projects in an appropriate timeframe? Is there evidence of productive research or practitioner career advancement (such as faculty appointments or promotions, investigator-initiated grant awards, or publications or patents)?

Additional Review Criteria Overall

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

If the research involves human subjects but does not involve one of the six categories of research that are exempt under 45 CFR Part 46 (http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html) , 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 categories of research that are exempt under 45 CFR Part 46, the committee will evaluate: 1) the justification for the exemption, 2) human subjects involvement and characteristics, and 3) sources of materials. For additional information on review of the Human Subjects section, please refer to the Guidelines for the Review of Human Subjects (//grants.nih.gov/grants/guide/url_redirect.php?id=11175).

Inclusion of Women, Minorities, and Individuals Across the Lifespan

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 individuals of all ages (including children and older adults) to determine if it is justified in terms of the scientific goals and research strategy proposed. For additional information on review of the Inclusion section, please refer to the Guidelines for the Review of Inclusion in Clinical Research (//grants.nih.gov/grants/guide/url_redirect.php?id=11174).

Vertebrate Animals

The committee will evaluate the involvement of live vertebrate animals as part of the scientific assessment according to the following three points: (1) a complete description of all proposed procedures including the species, strains, ages, sex, and total numbers of animals to be used; (2) justifications that the species is appropriate for the proposed research and why the research goals cannot be accomplished using an alternative non-animal model; and (3) interventions including analgesia, anesthesia, sedation, palliative care, and humane endpoints that will be used to limit any unavoidable discomfort, distress, pain and injury in the conduct of scientifically valuable research. Methods of euthanasia and justification for selected methods, if NOT consistent with the AVMA Guidelines for the Euthanasia of Animals, is also required but is found in a separate section of the application. For additional information on review of the Vertebrate Animals Section, please refer to the Worksheet for Review of the Vertebrate Animals Section. (//grants.nih.gov/grants/guide/url_redirect.php?id=11150)

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.

Dual Use Research of Concern Reviewers will identify whether the project involves one of the agents or toxins described in the US Government Policy for the Institutional Oversight of Life Sciences Dual Use Research of Concern, and, if so, whether the applicant has identified an IRE to assess the project for DURC potential and develop mitigation strategies if needed.

For more information about this Policy and other policies regarding dual use research of concern, visit the U.S. Government Science, Safety, Security (S3) website at: http://www.phe.gov/s3/dualuse (http://www.phe.gov/s3/dualuse). Tools and guidance for assessing DURC potential may be found at: http://www.phe.gov/s3/dualuse/Pages/companion-guide.aspx (http://www.phe.gov/s3/dualuse/Pages/companion-guide.aspx).

Resubmissions

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

Renewals

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

Revisions

For Revisions, the committee will consider the appropriateness of the proposed expansion of the scope of the project. If the Revision application relates to a specific line of investigation presented in the original application that was not recommended for approval by the committee, then the committee will consider whether the responses to comments from the previous scientific review group are adequate and whether substantial changes are clearly evident.

Additional Review Considerations All Components

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

Not applicable.

Resource Sharing Plans

Reviewers will comment on whether the Resource Sharing Plan(s) (e.g., Sharing Model Organisms (https://sharing.nih.gov/other-sharing-policies/model-organism-sharing-policy#policy-overview)) or the rationale for not sharing the resources, is reasonable.

Authentication of Key Biological and/or Chemical Resources.

Not applicable.

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.

The applicant can obtain budget preparation guidance for completing a detailed justified budget on the CDC website: Application Resources (https://www.cdc.gov/grants/applying/application-resources.html).

Following this guidance will also facilitate the review and approval of the budget request of applications selected for award.

The budget can include both direct costs and indirect costs as allowed.

Indirect costs could include the cost of collecting, managing, sharing and preserving data.

Indirect costs on training grants are limited to a fixed rate of eight percent of MTDC exclusive of tuition and related fees, direct expenditures for equipment, and sub-awards in excess of $25,000. Indirect costs are limited to 8% of modified total direct costs as defined in 2 CFR 200.1.

2. Review and Selection Process

Applications will be evaluated for scientific, technical, and educational merit by an appropriate Scientific Review Group convened by CDC / NIOSH, in accordance with CDC 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:

- Will undergo a selection process in which all responsive applications will be discussed and assigned an overall impact / priority score.
- Will receive a written critique.

Applications will be assigned to CDC / NIOSH. Applications will compete for available funds with all other recommended applications submitted in response to this NOFO.

Appeals (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf) of initial peer review will not be accepted for applications submitted in response to this NOFO.

Following initial peer review, recommended applications will receive a second level of review by the NIOSH Secondary Review Committee for programmatic relevance and balance. 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 proposed new training programs to regional or national OSH training needs.
- Results (outputs and outcomes) and management of prior training program awards funded by CDC/NIOSH or others.
- Status of trainees within established academic programs and the continuity of support for trainees to complete their studies onto graduation.
- Contribution of proposed new training programs to the geographic distribution and balance of the NIOSH training portfolio comprised of TPGs and ERCs.
- Commitment of the applicant institution to supporting OSH education, research, training and outreach goals and activities of the center.

Review of risk posed by applicants.

Prior to making Prior to making a Federal award, CDC is required by 31 U.S.C. 3321 and 41 U.S.C. 2313 to review information available through any OMB-designated repositories of government-wide eligibility qualification or financial integrity information as appropriate. See also suspension and debarment requirements at 2 CFR parts 180 and 376.

In accordance with 41 U.S.C. 2313, CDC is required to review the non-public segment of the OMB-designated integrity and performance system accessible through SAM prior to making a Federal award where the Federal share is expected to exceed the simplified acquisition threshold, defined in 41 U.S.C. 134, over the period of performance. At a minimum, the information in the system for a prior Federal award recipient must demonstrate a satisfactory record of executing programs or activities under Federal grants, cooperative agreements, or procurement awards; and integrity and business ethics. CDC may make a Federal award to a recipient who does not fully meet these standards if it is determined that the information is not relevant to the current Federal award under consideration or there are specific conditions that can appropriately mitigate the effects of the non-Federal entity's risk in accordance with 45 CFR 75.207. CDC's review of risk may impact award eligibility.

In evaluating risks posed by applicants, CDC will use a risk-based approach and may consider any items such as the following:

(1) Financial stability;
(2) Quality of management systems and ability to meet the management standards prescribed in this part;
(3) History of performance. The applicant's record in managing Federal awards, if it is a prior recipient of Federal awards, including timeliness of compliance with applicable reporting requirements, conformance to the terms and conditions of previous Federal awards, and if applicable, the extent to which any previously awarded amounts will be expended prior to future awards;
(4) Reports and findings from audits performed under 45 CFR Part 75, subpart F, or the reports and findings of any other available audits; and
(5) The applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-Federal entities. Additionally, we may ask for additional information prior to the award based on the results of this risk review.

CDC must comply with the guidelines on government-wide suspension and debarment in 2 CFR part 180, and require non-Federal entities to comply with these provisions. These provisions restrict Federal awards, subawards and contracts with certain parties that are debarred, suspended or otherwise excluded from or ineligible for participation in Federal programs or activities.

If the application is under consideration for funding, CDC / NIOSH will request "just-in-time" information from the applicant as described in the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf).

This request is not a Notice of Award nor should it be construed to be an indicator of possible funding.

Prior to making an award, CDC reviews an applicant's federal award history in SAM.gov to ensure sound business practices. An applicant can review and comment on any information in the Responsibility/Qualification records available in SAM.gov. CDC will consider any comments by the applicant in the Responsibility/Qualification records in SAM.gov to ascertain the applicant's integrity, business ethics, and performance record of managing Federal awards per 45 CFR Federal awarding agency review of risk posed by applicants.

3. Anticipated Announcement and Award Dates

After the peer review of the application is completed, the PD/PI will be able to access their Summary Statement (written critique) via the eRA Commons (https://grants.nih.gov/grants/guide/url_redirect.php?id=11123). Refer to Part 1 for dates for peer review, advisory council review, and earliest start date.

Information regarding the disposition of applications is available in the NIH Grants Policy Statement Section 2.4.4 Disposition of Applications (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf).

Section VI. Award Administration Information

1. Award Notices

Any applications awarded in response to this NOFO will be subject to the UEI, SAM Registration, and Transparency Act requirements. If the application is under consideration for funding, HHS/CDC will request "just-in-time" information from the applicant as described in the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf).

PLEASE NOTE: Effective April 4, 2022, applicants must have a Unique Entity Identifier (UEI) at the time of application submission. The UEI replaced the Data Universal Numbering System (DUNS) and is generated as part of SAM.gov registration. Current SAM.gov registrants have already been assigned their UEI and can view it in SAM.gov and Grants.gov. Additional information is available on the GSA website (https://www.gsa.gov/about-us/organization/federal-acquisition-service/technology-transformation-services/integrated-award-environment-iae/iae-systems-information-kit/unique-entity-id-is-here), SAM.gov (https://sam.gov/content/home), and Grants.gov-Finding the (https://grantsgovprod.wordpress.com/2021/09/14/how-to-find-an-applicants-uei-within-grants-gov/) UEI (https://grantsgovprod.wordpress.com/2021/09/14/how-to-find-an-applicants-uei-within-grants-gov/).

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 recipient's business official.

Recipients must comply with any funding restrictions as described in Section IV.11. 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 allowable as an expanded authority, but only if authorized by CDC.

2. CDC Administrative Requirements

Overview of Terms and Conditions of Award and Requirements for Specific Types of Grants

If you receive an award, you must follow all applicable nondiscrimination laws. You agree to this when you register in SAM.gov (https://sam.gov/content/home). You must also submit an Assurance of Compliance (HHS-690) (https://www.hhs.gov/sites/default/files/form-hhs690.pdf). To learn more, see the HHS Office for Civil Rights website (https://www.hhs.gov/civil-rights/for-providers/laws-regulations-guidance/laws/index.html).

Generally applicable ARs:

NOTE: AR-37 is required on all NOFOs.

AR-1: Human Subjects Requirements (https://www.cdc.gov/grants/additional-requirements/ar-1.html)

AR-2: Requirements for Inclusion of Women and Racial and Ethnic Minorities in Research (https://www.cdc.gov/grants/additional-requirements/ar-2.html)

AR-3: Animal Subjects Requirements (https://www.cdc.gov/grants/additional-requirements/ar-3.html)

AR-7: Executive Order 12372, Intergovernmental Review of Federal Programs (https://www.cdc.gov/grants/additional-requirements/ar-7.html)

AR-9: Paperwork Reduction Act Requirements (https://www.cdc.gov/grants/additional-requirements/ar-9.html)

AR-10: Smoke-Free Workplace Requirements (https://www.cdc.gov/grants/additional-requirements/ar-10.html)

AR-11: Healthy People 2030 (https://www.cdc.gov/grants/additional-requirements/ar-11.html)

AR-12: Lobbying Restrictions (https://www.cdc.gov/grants/additional-requirements/ar-12.html)

AR-13: Prohibition on Use of CDC Funds for Certain Gun Control Activities (https://www.cdc.gov/grants/additional-requirements/ar-13.html)

AR-14: Accounting System Requirements (https://www.cdc.gov/grants/additional-requirements/ar-14.html)

AR-16: Security Clearance Requirement (https://www.cdc.gov/grants/additional-requirements/ar-16.html)

AR-17: Peer and Technical Reviews of Final Reports of Health Studies ATSDR (https://www.cdc.gov/grants/additional-requirements/ar-17.html)

AR-21: Small, Minority, And Women-owned Business (https://www.cdc.gov/grants/additional-requirements/ar-21.html)

AR-22: Research Integrity (https://www.cdc.gov/grants/additional-requirements/ar-22.html)

AR-24: Health Insurance Portability and Accountability Act Requirements (https://www.cdc.gov/grants/additional-requirements/ar-24.html)

AR-25: Data Management and Access (https://www.cdc.gov/grants/additional-requirements/ar-25.html)

AR-26: National Historic Preservation Act of 1966 (https://www.cdc.gov/grants/additional-requirements/ar-26.html)

AR-28: Inclusion of Persons Under the Age of 21 in Research (https://www.cdc.gov/grants/additional-requirements/ar-28.html)

AR-29: Compliance with EO13513, Federal Leadership on Reducing Text Messaging while Driving , October 1, 2009 (https://www.cdc.gov/grants/additional-requirements/ar-29.html)

AR-30: Information Letter 10-006, - Compliance with Section 508 of the Rehabilitation Act of 1973 (https://www.cdc.gov/grants/additional-requirements/ar-30.html)

AR-31: Research Definition (https://www.cdc.gov/grants/additional-requirements/ar-31.html)

AR-32: Appropriations Act, General Provisions (https://www.cdc.gov/grants/additional-requirements/ar-32.html)

AR-33: United States Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern (https://www.cdc.gov/grants/additional-requirements/ar-33.html)

AR-37: Prohibition on certain telecommunications and video surveillance services or equipment for all awards issued on or after August 13, 2020 (https://www.cdc.gov/grants/additional-requirements/ar-37.html)

3. Additional Policy Requirements

The following are additional policy requirements relevant to this NOFO:

HHS Policy on Promoting Efficient Spending: Use of Appropriated Funds for Conferences and Meetings, Food, Promotional Items and Printing Publications: This policy supports the Executive Order on Promoting Efficient Spending (EO 13589), the Executive Order on Delivering and Efficient, Effective, and Accountable Government (EO 13576) and the Office of Management and Budget Memorandum on Eliminating Excess Conference Spending and Promoting Efficiency in Government (M-35-11). This policy applies to all new obligations and all funds appropriated by Congress. For more information, visit the HHS website at: https://www.hhs.gov/grants/contracts/contract-policies-regulations/efficient-spending/index.html (https://www.hhs.gov/grants/contracts/contract-policies-regulations/efficient-spending/index.html).

Federal Funding Accountability and Transparency Act of 2006: Federal Funding Accountability and Transparency Act of 2006 (FFATA), P.L. 109 282, as amended by section 6202 of P.L. 110 252, requires full disclosure of all entities and organizations receiving Federal funds including grants, contracts, loans and other assistance and payments through a single, publicly accessible website, www.usaspending.gov (http://www.usaspending.gov/). For the full text of the requirements, please review the following website: https://www.fsrs.gov/ (https://www.fsrs.gov/).

Plain Writing Act: The Plain Writing Act of 2010, Public Law 111-274, was signed into law on October 13, 2010. The law requires that federal agencies use "clear Government communication that the public can understand and use" and requires the federal government to write all new publications, forms, and publicly distributed documents in a "clear, concise, well-organized" manner. For more information on this law, go to: https://www.plainlanguage.gov/ (https://www.plainlanguage.gov/).

Employee Whistleblower Rights and Protections: Employee Whistleblower Rights and Protections: All recipients of an award under this NOFO will be subject to a term and condition that applies the requirements set out in 41 U.S.C. 4712, Enhancement of contractor protection from reprisal for disclosure of certain information and 48 Code of Federal Regulations (CFR) section 3.9 to the award, which includes a requirement that recipients and subrecipients inform employees in writing (in the predominant native language of the workforce) of employee whistleblower rights and protections under 41 U.S.C. 4712. For more information see: https://oig.hhs.gov/fraud/whistleblower/ (https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Foig.hhs.gov%2Ffraud%2Fwhistleblower%2F&data=05%7C01%7CJohanna.Nestor%40hhs.gov%7Cf34ed74742564378251308da2473efc4%7Cd58addea

Copyright Interests Provision: This provision is intended to ensure that the public has access to the results and accomplishments of public health activities funded by CDC. Applicants may include reasonable publication costs and costs associated with submission, curation, management of data, and special handling instructions as allowable expenses in all research budgets. Pursuant to applicable grant regulations and CDC's Public Access Policy, Recipient agrees to submit into the National Institutes of Health (NIH) Manuscript Submission (NIHMS) system an electronic version of the final, peer-reviewed manuscript of any such work developed under this award upon acceptance for publication, to be made publicly available without any embargo or delay after publication. Also at the time of submission, Recipient and/or Recipient's submitting author must also post the manuscript through PMC without any embargo or delay after publication. The recipient must obtain prior approval from the CDC for any exception to this provision.

The author's final, peer-reviewed manuscript is defined as the final version accepted for journal publication and includes all modifications from the publishing peer review process, and all graphics and supplemental material associated with the article. Recipient and its submitting authors working under this award are responsible for ensuring that any publishing or copyright agreements concerning submitted articles reserve adequate right to fully comply with this provision and the license reserved by CDC. The manuscript will be hosted in both PMC and the CDC Stacks institutional repository system. In progress reports for this award, recipient must identify publications subject to the CDC Public Access Policy by using the applicable NIHMS identification number for up to three (3) months after the publication date and the PubMed Central identification number (PMCID) thereafter.

Language Access for Persons with Limited English Proficiency: Recipients of federal financial assistance from HHS must administer their programs in compliance with federal civil rights law. This means that recipients of HHS funds must ensure equal access to their programs without regard to a person's race, color, national origin, disability, age and, in some circumstances, sex and religion. This includes ensuring your programs are accessible to persons with limited English proficiency. Recipients of federal financial assistance must take reasonable steps to provide meaningful access to their programs by persons with limited English proficiency.

Dual Use Research of Concern: On September 24, 2014, the US Government Policy for the Institutional Oversight of Life Sciences Dual Use Research of Concern was released. Recipients (foreign and domestic) receiving CDC funding on or after September 24, 2015, are subject to this policy. Research funded by CDC, involving the agents or toxins named in the policy, must be reviewed to determine if it involves one or more of the listed experimental effects and if so, whether it meets the definition of DURC. This review must be completed by an Institutional Review Entity (IRE) identified by the funded institution.

Recipients also must establish an Institutional Contact for Dual Use Research (ICDUR). The award recipient must maintain records of institutional DURC reviews and completed risk mitigation plans for the term of the research grant, cooperative agreement or contract plus three years after its completion, but no less than eight years, unless a shorter period is required by law or regulation.

If a project is determined to be DURC, a risk/benefit analysis must be completed. CDC will work collaboratively with the award recipient to develop a risk mitigation plan that the CDC must approve. The USG policy can be found at http:// www.phe.gov/ s3/dualuse (http://www.phe.gov/s3/dualuse).

Non-compliance with this Policy may result in suspension, limitation, restriction or termination of USG-funding, or loss of future USG-funding opportunities for the non-compliant USG-funded research project and of USG-funds for other life sciences research at the institution, consistent with existing regulations and policies governing USG-

funded research, and may subject the institution to other potential penalties under applicable laws and regulations.

Data Management Plan(s): CDC requires that all new collections of public health data include a Data Management Plan (DMP). For purposes of this announcement, public health data means digitally recorded factual material commonly accepted in the scientific community as a basis for public health findings, conclusions, and implementation.

This requirement ensures that CDC is in compliance with the following; Office of Management and Budget (OMB) memorandum titled Open Data Policy Managing Information as an Asset (OMB M-13-13); Executive Order 13642 titled Making Open and Machine Readable the New Default for Government Information ; and the Office of Science and Technology Policy (OSTP) memorandum titled Increasing Access to the Results of Federally Funded Scientific Research (OSTP Memo).

The AR-25 https://www.cdc.gov/grants/additional-requirements/ar-25.html (https://www.cdc.gov/grants/additional-requirements/ar-25.html) outlines the components of a DMP and provides additional information for investigators regarding the requirements for data accessibility, storage, and preservation.

Certificates of Confidentiality: Institutions and investigators are responsible for determining whether research they conduct is subject to Section 301(d) of the Public Health Service (PHS) Act. Section 301(d), as amended by Section 2012 of the 21st Century Cures Act, P.L. 114-255 (42 U.S.C. 241(d)), states that the Secretary shall issue Certificates of Confidentiality (Certificates) to persons engaged in biomedical, behavioral, clinical, or other research activities in which identifiable, sensitive information is collected. In furtherance of this provision, CDC-supported research commenced or ongoing after December 13, 2016 in which identifiable, sensitive information is collected, as defined by Section 301(d), is deemed issued a Certificate and therefore required to protect the privacy of individuals who are subjects of such research. Certificates issued in this manner will not be issued as a separate document, but are issued by application of this term and condition to this award. See Additional Requirement 36 to ensure compliance with this term and condition. The link to the full text is at: https://www.cdc.gov/grants/additional-requirements/ar-36.html (https://www.cdc.gov/grants/additional-requirements/ar-36.html).

4. Reporting

Recipients will be required to complete Research Performance Progress Report (RPPR) in eRA Commons at least annually (see https://grants.nih.gov/grants/rppr/index.htm (https://grants.nih.gov/grants/rppr/index.htm); https://grants.nih.gov/grants/forms/report_on_grant.htm (https://grants.nih.gov/grants/forms/report_on_grant.htm)) and financial statements as required in the HHS Grants Policy Statement.

A final progress report, invention statement, equipment inventory list and the expenditure data portion of the Federal Financial Report are required for closeout of an award, as described in the HHS Grants Policy Statement.

Although the financial plans of the HHS/CDC CIO(s) provide support for this program, awards pursuant to this funding opportunity depend upon the availability of funds, evidence of satisfactory progress by the recipient (as documented in required reports) and the determination that continued funding is in the best interest of the Federal government.

The Federal Funding Accountability and Transparency Act of 2006 (Transparency Act), includes a requirement for recipients of Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards issued in FY2011 or later.

Compliance with this law is primarily the responsibility of the Federal agency. However, two elements of the law require information to be collected and reported by recipients:
1) information on executive compensation when not already reported through the SAM Registration; and
2) similar information on all sub-awards/ subcontracts/ consortiums over $25,000. It is a requirement for recipients of Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards issued in FY2011 or later. All recipients of applicable CDC grants and cooperative agreements are required to report to the Federal Subaward Reporting System (FSRS) available at www.fsrs.gov (//grants.nih.gov/grants/guide/url_redirect.php?id=11170) on all subawards over $25,000. See the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf)).

A. Submission of Reports

The Recipient Organization must submit:

Annual Performance Report (APR)/RPPR is due 120 days before the end of the current budget period, or the date identified in the guidance that CDC distributes. The RPPR form (https://grants.nih.gov/ grants/rppr/index. htm (https://grants.nih.gov/grants/rppr/index.htm); https://grants.nih.gov/grants/rppr/rppr_instruction_guide.pdf (https://grants.nih.gov/grants/rppr/rppr_instruction_guide.pdf)) is to be completed on the eRA Commons website. The progress report will serve as the non-competing continuation application. Although the financial plans of the HHS/CDC CIO(s) provide support for this program, awards pursuant to this funding opportunity are contingent upon the availability of funds, evidence of satisfactory progress by the recipient (as documented in required reports) and the determination that continued funding is in the best interest of the Federal government.

Annual Federal Financial Report (FFR) SF-425 (Reporting | Grants | CDC (https://www.cdc.gov/grants/already-have-grant/Reporting.html)) is required and must be submitted to the Payment Management System accessed through the FFR navigation link in eRA Commons or directly through PMS within 90 days after the budget period ends.

Closeout Reports: a final progress report, invention statement, equipment/inventory report, and the Final FFR (SF-425) are required 120 days after the end of the period of performance.

B. Content of Reports

1. Annual Performance Report (APR)/RPPR: The recipient's continuation application/progress report should include:

- Description of Progress during Annual Budget Period: Current Budget Period Progress reported on the RPPR form in ERA Commons (https://grants.nih.gov/grants/rppr/index.htm (https://grants.nih.gov/grants/rppr/index.htm)). Detailed narrative report for the current budget period that directly addresses progress towards the Measures of Effectiveness included in the current budget period proposal.
- Research Aims: list each research aim/project

a) Research Aim/Project: purpose, status (met, ongoing, and unmet), challenges, successes, and lessons learned

- Translation of Research (1 page maximum). When relevant to the goals of the research project, the PI should describe how the significant findings may be used to promote, enhance, or advance translation of the research into practice or may be used to inform public health policy. This section should be understandable to a variety of audiences, including policy makers, practitioners, public health programs, healthcare institutions, professional organizations, community groups, researchers, and other potential users. The PI should identify the research findings that were translated into public health policy or practice and how the findings have

been or may be adopted in public health settings. Or, if they cannot be applied yet, this section should address which research findings may be translated, how these findings can guide future research or related activities, and recommendations for translation. If relevant, describe how the results of this project could be generalized to populations and communities outside of the study. Questions to consider in preparing this section include:

- How will the scientific findings be translated into public health practice or inform public health policy?
- How will the project improve or effect the translation of research findings into public health practice or inform policy?
- How will the research findings help promote or accelerate the dissemination, implementation, or diffusion of improvements in public health programs or practices?
- How will the findings advance or guide future research efforts or related activities?
- Public Health Relevance and Impact (1 page maximum). This section should address improvements in public health as measured by documented or anticipated outcomes from the project. The PI should consider how the findings of the project relate beyond the immediate study to improved practices, prevention or intervention techniques, inform policy, or use of technology in public health. Questions to consider in preparing this section include:
- How will this project lead to improvements in public health?
- How will the findings, results, or recommendations been used to influence practices, procedures, methodologies, etc.?
- How will the findings, results, or recommendations contribute to documented or projected reductions in morbidity, mortality, injury, disability, or disease?
- Current Budget Period Financial Progress: Status of obligation of current budget period funds and an estimate of unobligated funds projected provided on an estimated FFR.
- New Budget Period Proposal.
- Detailed operational plan for continuing activities in the upcoming budget period, including updated Measures of Effectiveness for evaluating progress during the upcoming budget period. Report listed by Research Aim/Project.
- Project Timeline: Include planned milestones for the upcoming year (be specific and provide deadlines).
- New Budget Period Budget: Detailed line-item budget and budget justification for the new budget period. Use the CDC budget guideline format.
- Publications/Presentations: Include publications/presentations resulting from this CDC grant only during this budget period. If no publication or presentations have been made at this stage in the project, simply indicate Not applicable: No publications or presentations have been made."
- IRB Approval Certification: Include all current IRB approvals, specifically for Pilot Projects that engage human subjects research to avoid a funding restriction on your award. If the research does not involve human subjects, then please state so. Please provide a copy of the most recent local IRB and CDC IRB, if applicable. If any approval is still pending at time of APR due date, indicate the status in your narrative.
- Update of Data Management Plan: The DMP is considered a living document that will require updates throughout the lifecycle of the project. Investigators should include any updates to the project's data collection such as changes to initial data collection plan, challenges with data collection, and recent data collected. Applicants should update their DMP to reflect progress or issues with planned data collection and submit as required for each reporting period.

Additional Reporting Requirements:

An Annual Report suitable for public distribution must be submitted to the NIOSH Scientific Program Official at the end of the federal fiscal year (September 30). The report should include high impact outcomes from the ERC's programs. ERCs must also submit annual performance tables which will capture information on trainees, graduates, graduates' placement and continuing education outputs. The tables, along with instructions, will be provided by NIOSH each year.

Statement of Appointments (PHS Form 2271) must be submitted through xTrain system for each trainee appointed or reappointed to the training grant, including Targeted Research Training trainees within 30 days of receiving support. An appointment or reappointment may begin at any time during the budget period, but not before the budget period start date of the grant year. Terminations should be completed shortly (within 30 days) after trainee has completed training or is no longer in the program.

Annual Federal Financial Reporting:

The Annual Federal Financial Report (FFR) SF-425 is required and must be submitted through the Payment Management System (PMS) within 90 days after the end of the budget period. The FFR should only include those funds authorized and disbursed during the timeframe covered by the report. The Final FFR (SF-425) must indicate the exact balance of unobligated funds and may not reflect any unliquidated obligations. There must be no discrepancies between the Final FFR expenditure data and the Payment Management System's (PMS) cash transaction data.

Failure to submit the required information in a timely manner may adversely affect the future funding of this project. If the information cannot be provided by the due date, you are required to submit a letter explaining the reason and date by which the Grants Officer will receive the information.

Additional resources on the Payment Management System (PMS) can be found at https://pms.psc.gov (https://pms.psc.gov/).

Recipients must submit closeout reports in a timely manner. Unless the Grants Management Officer (GMO) of the awarding Institute or Center approves an extension, recipients must submit a Final FFR (SF-425), final progress report, and Final Invention Statement and Certification within 120 days after the end of the period of performance. Failure to submit timely and accurate final reports may affect future funding to the organization or awards under the direction of the same Project Director/Principal Investigator (PD/PI).

Organizations may verify their current registration status by running the List of Commons Registered Organizations query found at: https://era.nih.gov/registration_accounts.cfm (https://era.nih.gov/registration_accounts.cfm). Organizations not yet registered can go to https://commons.era.nih.gov/commons/ (https://commons.era.nih.gov/commons/) for instructions. It generally takes several days to complete this registration process. This registration is independent of Grants.gov and may be done at any time.

The individual designated as the PI on the application must also be registered in the Commons. The PI must hold a PI account and be affiliated with the applicant organization. This registration must be done by an organizational official or their delegate who is already registered in the Commons. To register PIs in the Commons, refer to the eRA Commons User Guide found at: https://era.nih.gov/docs/Commons_UserGuide.pdf (https://era.nih.gov/docs/Commons_UserGuide.pdf).

Final Reports: Final reports should provide sufficient detail for CDC to determine if the stated outcomes for the funded research have been achieved and if the research findings resulted in public health impact based on the investment. The recipient's final report should include:

Research Aim/Project Overview: The PI should describe the purpose and approach to the project, including the outcomes, methodology and related analyses. Include a discussion of the challenges, successes and lessons learned. Describe the collaborations/partnerships and the role of each external partner.

Translation of Research Findings: The PI should describe how the findings will be translated and how they will be used to inform policy or promote, enhance or advance the impact on public health practice. This section should be understandable to a variety of audiences, including policy makers, practitioners, public health programs, healthcare institutions, professional organizations, community groups, researchers and other potential end users. The PI should also provide a discussion of any research findings that informed policy or practice during the course of the Period of Performance. If applicable, describe how the findings could be generalized and scaled to populations and communities outside of the funded project.

Public Health Relevance and Impact: This section should address improvements in public health as measured by documented or anticipated outcomes from the project. The PI should consider how the findings of the project related beyond the immediate study to improved practices, prevention or intervention techniques, or informed policy, technology or systems improvements in public health.

Publications; Presentations; Media Coverage: Include information regarding all publications, presentations or media coverage resulting from this CDC-funded activity. Please include any additional dissemination efforts that did or will result from the project.

Final Data Management Plan: Applicants must include an updated final Data Management Plan that describes the data collected, the location of where the data is stored (example: a repository), accessibility restrictions (if applicable), and the plans for long-term preservation of the data.

Termination: CDC may impose other enforcement actions in accordance with 45 CFR 75.371- Remedies for Noncompliance, as appropriate.

The Federal award may be terminated in whole or in part as follows:

(1) By the HHS awarding agency or pass-through entity, if the non-Federal entity fails to comply with the terms and conditions of the award;

(2) By the HHS awarding agency or pass-through entity for cause;

(3) By the HHS awarding agency or pass-through entity with the consent of the non-Federal entity, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated; or

(4) By the non-Federal entity upon sending to the HHS awarding agency or pass-through entity written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if the HHS awarding agency or pass-through entity determines in the case of partial termination that the reduced or modified portion of the Federal award or subaward will not accomplish the purposes for which the Federal award was made, the HHS awarding agency or pass-through entity may terminate the Federal award in its entirety.

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 (https://www.grants.gov/web/grants/support.html) (Questions regarding Grants.gov registration and submission, downloading or navigating forms)
Contact Center Phone: 800-518-4726
https://www.grants.gov/support (https://www.grants.gov/support)
Email: support@grants.gov
Hours: 24 hours a day, 7 days a week; closed on Federal holidays

eRA Commons Help Desk (https://grants.nih.gov/support/index.html) (Questions regarding eRA Commons registration, tracking application status, post submission issues, FFR submission)
Phone: 301-402-7469 or 866-504-9552 (Toll Free)
TTY: 301-451-5939
https://www.era.nih.gov/need-help (https://www.era.nih.gov/need-help)
Email: commons@od.nih.gov (mailto:commons@od.nih.gov) Hours: Monday - Friday, 7am - 8pm U.S. Eastern Time; closed on federal holidays

Scientific/Research Contact

Elizabeth H. Maples, PhD, CIH
National Institution for Occupational Safety and Health
Centers for Disease Control and Prevention
Telephone: 404-498-2557
Email: emaples@cdc.gov (mailto:emaples@cdc.gov)

Peer Review Contact

E. Michael Goldcamp, PhD
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
Telephone: 304-285-5951
Email: mgoldcamp@cdc.gov (mailto:mgoldcamp@cdc.gov)

Financial/Grants Management Contact

Christina Park
Grants Management Officer
Office of Grants Services
Centers for Disease Control and Prevention)
Telephone: 404-498-5014
Email: lsk1@cdc.gov (mailto:lsk1@cdc.gov)

Section VIII. Other Information

All awards are subject to the terms and conditions, cost principles, and other considerations described in the HHS Grants Policy Statement (https://www.hhs.gov/sites/default/files/grants/grants/policies-regulations/hhsgps107.pdf).

Authority and Regulations

Awards are made under the authorization of Sections of the Public Health Service Act as amended and under the Code Federal Regulations.

Authority: This program is described in the Catalog of Federal Domestic Assistance (https://beta.sam.gov/help/assistance-listing) and is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency Review. Awards are made under the authorization of the Occupational Safety and Health Act of 1970, Section 20(a) and 21(a) (29 USC 669(a) and 29 USC 670); Federal Mine Safety and Health Act, Section 501(a), 30 USC 951(a); Section 301 of the Public Health Service Act as amended (42 USC 241) and under Federal Regulations 42 CFR Parts 52 and 86 and 45 CFR Part 75. All awards are subject to the terms and conditions, cost principles, and other considerations described in the HHS Grants Policy Statement (https://www.hrsa.gov/sites/default/files/grants/hhsgrantspolicy.pdf).