Understanding and Addressing Misinformation among Populations that Experience Health Disparities (R01 - Clinical Trials Optional)

Technical Assistance Webinar
RFA-MD-22-008
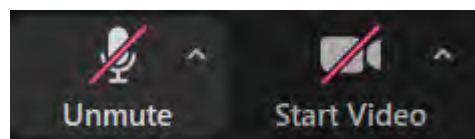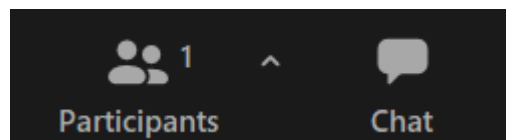
May 6, 2022, 3:00pm EDT

NATIONAL CANCER INSTITUTE

National Institute on Minority Health and Health Disparities

Webinar Tips

- Please remain on mute during presentation.

- Submit questions at any time using the Chat feature.

- Questions will be answered during the Q&A session at the end of the webinar as time permits.

- The slides and recording of today's webinar will be available on the NIMHD website: www.nimhd.nih.gov

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Agenda

I. RFA background, objectives, and expectations
    I. NIMHD
    II. NCI

II. Peer review of applications

III. Timeline for submission, review, and selection of applications

IV. Participant questions

NOTE: Questions about specific aims will not be addressed

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I. RFA background, objectives, and expectations

Key Definitions

Misinformation: health information that is inaccurate, false, or misleading based on current scientific consensus

Disinformation: the deliberate dissemination of misinformation with intentions to influence public opinion and behavior, often using deceptive strategies

References:
1. Chou, W.-Y. S., Gaysynsky, A., & Cappella, J. N. (2020). Where We Go From Here: Health Misinformation on Social Media. American Journal of Public Health, 110(S3), S273-S275.
2. Office of the Surgeon General (OSG). (2021). _Confronting Health Misinformation: The U.S. Surgeon General's Advisory on Building a Healthy Information Environment_. US Department of Health and Human Services.
3. Kington, R. S., Arnesen, S., Chou, W.-Y. S., Curry, S. J., Lazer, D., & Villarruel, A. M. (2021). Identifying Credible Sources of Health Information in Social Media: Principles and Attributes. _NAM Perspectives._

RFA Objectives

1) Understand the underlying mechanisms of, and
2) test interventions to address and mitigate

the impact of health-related misinformation and disinformation on health disparities and the populations that experience health disparities

Applications can request up to $500,000 direct costs <u>per year</u> for up to five years.

Background

- Misinformation and disinformation hampers public health efforts

- Misinformation and disinformation pose a threat to public health and health equity

- Certain individuals and communities may be more vulnerable, due to factors including:
    - Reliance on social media for information/lack of access to other sources of information
    - Historic/current distrust
    - Lower educational attainment
    - Lower health literacy

Background (Cont.)

- Lack of factual information/misunderstanding is not the only relevant factor
    - Cognitive, affective, and social processes underlie belief in misinformation and sharing

- Mechanisms, pathways, and processes by which misinformation and disinformation impact the health of **populations that experience health disparities** need to be determined and addressed

NIMHD Research Framework

		Levels of Influence*			
		Individual	**Interpersonal**	**Community**	**Societal**
Domains of Influence (Over the Lifecourse)	**Biological**	Biological Vulnerability and Mechanisms	Caregiver–Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient–Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
Health Outcomes		Individual Health	Family/ Organizational Health	Community Health	Population Health

https://www.nimhd.nih.gov/about/overview/research-framework/nimhd-framework.html

Initiative Description

Research to address and mitigate the harmful impacts of misinformation and disinformation among populations that experience health disparities through a multidisciplinary approach that recognizes psychosocial factors, structural racism, mistrust, and marginalization of communities:

- Consider special communities

- Health contexts of interest: COVID-19, HIV/AIDS, STIs, vaccines, genetic testing, cancer, and tobacco use and cessation, others

- Outcomes of interest include: physical and mental health, health decision-making, behavior change, adherence to evidence-based prevention and treatment guidelines/recommendations, and morbidity and mortality

- Encouraged to work closely with key informants and community partners

Research Priorities: NIMHD

Etiology, including:

- Examining the roles of **structural racism and distrust** in science and medicine and their impact on misinformation and disinformation reception, dissemination, and decision-making
- Examining the **pathways and mechanisms** by which misinformation and disinformation differentially impact populations that experience health disparities
- Examining **health literacy efforts by organizations and community** to reduce the spread and impact of misinformation

Interventions, including:

- Evaluating **evidence-based communication strategies** to combat misinformation promulgated through social media or person-to-person in various settings
- Developing and evaluating **interventions that address health and science literacy and numeracy** in the organizational and community context or at those levels
- **Partnering with public, private, and community stakeholders** to develop and/or evaluate mass dissemination and communication campaigns and interventions designed to engender trust and confidence in science and evidence-based decision-making

Research Priorities: NCI

•***Assessing the impact of cancer-related misinformation*** (e.g., on healthcare delivery across the cancer continuum, on patient-provider relationships, on decision-making, on cancer-related outcomes)

•***Identifying influential sources of cancer misinformation, understanding their motives, and ascertaining the tactics they use*** across different platforms, languages, and contexts

•***Developing and testing mitigation strategies*** to combat cancer misinformation through multilevel solutions

•***Facilitating the dissemination of critical, evidence-based cancer information*** in clinical systems and community settings

•***Identifying communities that are particularly susceptible to cancer-related misinformation, elucidating factors that make them vulnerable, and developing targeted mitigation interventions***

•***Application of novel tools and mixed methods approaches to monitor the information environment in real-time***, ***identify the dynamics of cancer misinformation spread, and analyze non-textual data*** (e.g., videos and images).

Applicants are encouraged to build non-traditional partnerships with community organizations, media outlets, and technology platforms to understand and address cancer misinformation.

Details available here: https://grants.nih.gov/grants/guide/notice-files/NOT-CA-22-066.html

II. Peer Review of Applications

NIH Peer Review System for Grant Applications

First Level of Review
Scientific Review Group
NIMHD - Special Emphasis Panel

Second Level of Review
NIH Institute/Center Council

Peer Review RFA-MD-22-008: R01 - Clinical Trials Optional

- Applications will be evaluated for completeness and compliance with application instructions by the Center for Scientific Review.

- Program Staff from participating Institutes (NIMHD and NCI) will assess the application for responsiveness to the RFA-MD-22-008.

NIMHD Scientific Review Branch will coordinate and manage the review of the applications.

- Applications will be assigned to a special emphasis panel (SEP).
    - Use eRA Commons to access administrative information relating to your application.
- Administrative Review of Applications
    - Based on FOA RFA-MD-22-008 requirements and NIH peer review policy and procedures.
- Scientific Expertise
    - As defined in the FOA: RFA-MD-22-008
    - Collective expertise based on content of the applications
    - At least 3 reviewers will be assigned to each application
- Roster will be posted approximately 30 days before the meeting.
    - Do **not** contact the members of the review panel (NOT-OD-22-044)
- Post Submission Materials:
    - Applicants are required to follow the instructions for post-submission materials, as described in the policy NOT-OD-19-083 and NOT-OD-22-113.

Application Review Information ([Section V](#))

Reviewers will consider the criteria described in [section V](#) of the FOA: RFA-MD-22-008 in the determination of scientific and technical merit.

Read this section carefully and make sure the questions included in [section V](#) of the FOA: RFA-MD-22-008 are addressed.

- In addition to the standard review questions, make sure that the <u>FOA specific questions are addressed</u> (see example in the next slide).

- If your application is a <u>clinical trial</u>, make sure the specific questions related to the clinical trials are addressed as well.

Scored Review Criteria:
- Significance
- Investigator(s)
- Innovation
- Approach
- Environment

Significance

Does the project address an important problem or a critical barrier to progress in the field? Is the prior research that serves as the key support for the proposed project rigorous? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?

Standard review questions

In addition, for applications <u>involving clinical trials</u>

- Are the scientific rationale and need for a clinical trial to test the proposed hypothesis or intervention well supported by preliminary data, clinical and/or preclinical studies, or information in the literature or knowledge of biological mechanisms? For trials focusing on clinical or public health endpoints, is this clinical trial necessary for testing the safety, efficacy or effectiveness of an intervention that could lead to a change in clinical practice, community behaviors or health care policy? For trials focusing on mechanistic, behavioral, physiological, biochemical, or other biomedical endpoints, is this trial needed to advance scientific understanding?

Clinical trials applications

Specific to this FOA :

- To what extent can the proposed project advance understanding of multilevel factors related to the processing of, belief in, and/or sharing of misinformation/disinformation among populations that experience health disparities?

- To what extent does the proposed project focus on mechanisms or pathways hypothesized to impact the spread, uptake, decision-making or other behaviors, attitudes or beliefs hypothesized to be associated with misinformation/disinformation and identified health disparities?

- To what extent does the proposed project focus on an intervention to reduce the effects or understand how misinformation/disinformation may affect a health disparity outcome within populations that experience health disparities?

- To what extent can the project contribute to the development and implementation of interventions that address multilevel factors associated with reducing the health impact of misinformation in U.S. populations that experience health disparities?

Additional questions for this FOA

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Additional Review Criteria

- Study Timeline (NOT-OD-17-118) - if the application is designated as clinical trial.

- Protection for Human Subjects -
    - Human subjects are involved and/or the proposed activities meet the criteria for one or more of the categories of research that are exempt under 45 CFR Part 46.
    - For research that involves human subjects, 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.

- Inclusion of Women, Minorities and Individuals Across the Lifespan
    - For applications that involve human subjects and/or NIH-defined clinical research, reviewers 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.

- Vertebrate Animals
    - Worksheet for applications involving animals

- Biohazards
- Resubmission

Additional Review Considerations

- Applications from Foreign Organizations: Not applicable
- Select Agents Research
- Resource Sharing Plans
    - (1) Data Sharing Plan; (2) Sharing Model Organisms; and (3) Genomic Data Sharing Plan (GDS)
- Authentication of Key Biological and/or Chemical Resources
    - For applications involving key biological and/or chemical resources
- Budget and Period of Support

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Review Process

The NIH utilizes a 9-point rating scale (1 = exceptional; 9 = poor) for all applications.

- The same scale is used for overall impact scores and for criterion scores.
  https://grants.nih.gov/grants/peer/guidelines_general/scoring_system_and_procedure.pdf

Each reviewer assigned to an application gives a separate score for each of the five review criteria (i.e., Significance, Investigator(s), Innovation, Approach, and Environment) and a preliminary overall impact score.

- The preliminary scores are used to determine which applications will be discussed at the meeting.

Final Impact Score is based on the average of all voting reviewers X 10.

- Scores range from 10 (exceptional) to 90 (poor).

The final impact score for each discussed application is reported on the summary statement and can be found in your eRA Commons account approximately 30 days after the review meeting.

Impact scores are not provided for applications that are not discussed (ND).

Any questions before the peer review meeting, please feel free to contact me by email:
karen.nieveslugo@nih.gov

If you have further questions after the peer review meeting about the summary statement contents, you should contact a Program Officer (PO) listed on the summary statement and/or your eRA Commons account.

Peer Review Resources

- The Center for Scientific Review (CSR) has produced a series of webinars and videos to give you an inside look at how scientists from across the country review NIH grant applications for scientific and technical merit: click here.

- Resources for using eRA Commons: click here.

- Problems with submission process: click here.
  - Always contact eRA Service desk

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III. Timeline for submission, review, and selection of applications

Key Dates

Posted: March 22, 2022

Letter of Intent: April 30, 2022 | October 13, 2022

Application Due: May 31, 2022 | November 13, 2022

Review Dates: July 2022 | March 2023

Council Dates: August 2022 | May 2023

Earliest Start Dates: September 2022 | July 2023

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IV. Participant Questions

Questions

Please type your questions via the chat feature.