

National Research Mentoring Network: The Science of Mentoring, Networking, and Navigating Career Transition Points (U01 – Clinical Trial Not Allowed)

RFA-RM-18-004



Webinar Outline

- I. Program Overview
- II. Application Overview
- III. Peer Review Overview

Disclaimer

This webinar and accompanying slides are for informational purposes only. They serve as an overview of the NRMN U01 and are not meant to be comprehensive in coverage of all required components of an application.

For any submission, applicants are responsible for following the instructions detailed in the FOA and any Related Notices included in the FOA's Overview Information section.

First Step in Preparing an Application



Read the FOA,
Guide Notices and
SF424 (R&R)
Application Guide
thoroughly.

Diversity Program Consortium Overarching Goal

- The Diversity Program Consortium is comprised of three highly integrated initiatives:
 - **BUILD:** Building Infrastructure Leading to Diversity (limited competition)
 - **NRMN: National Research Mentoring Network (open competition)**
 - **CEC:** Coordination and Evaluation Center (limited competition)
- To enhance diversity in the biomedical research workforce through the development, implementation, assessment, and dissemination of innovative approaches to:
 - Student engagement, training and mentoring
 - Faculty development
 - Institutional research training infrastructure





**DIVERSITY
PROGRAM
CONSORTIUM**
Supported by the National
Institutes of Health

Diversity Program Consortium

- The National Research Mentoring Network (NRMN) is a major component of the NIH Diversity Program Consortium (DPC) that is funded by the NIH Common Fund Initiative.
- All NIH Institutes and Centers participate in Common Fund initiatives.
- NRMN and the DPC are administered by the National Institute of General Medical Sciences ([NIGMS](#)) on behalf of the NIH Common Fund.



National Research Mentoring Network 2.0

Funding Opportunity Announcements:

- National Research Mentoring Network (NRMN) Coordination Center (U24 - Clinical Trial Not Allowed)
 - <https://grants.nih.gov/grants/guide/rfa-files/RFA-RM-18-003.html>
- National Research Mentoring Network (NRMN) Resource Center (U24 - Clinical Trial Not Allowed)
 - <https://grants.nih.gov/grants/guide/rfa-files/RFA-RM-18-002.html>
- National Research Mentoring Network: The Science of Mentoring, Networking, and Navigating Career Transition Points (U01 – Clinical Trial Not Allowed)
 - <https://grants.nih.gov/grants/guide/rfa-files/RFA-RM-18-004.html>

National Research Mentoring Network 2.0

The NRMN is a nationwide consortium that was designed to **enhance mentoring and career development** of individuals from diverse backgrounds, including those from groups underrepresented in the biomedical research workforce.

All grantees of the NIH DPC are expected to **share** their data with the DPC Consortium via their engagement and interactions with the NRMN Coordination Center.

National Research Mentoring Network (NRMN) Coordination Center (U24)

The **NRMN Coordination Center** will provide infrastructure and expertise surrounding data collection, storage, and reporting for the NRMN.

Additionally, the PD(s)/PI(s) and personnel involved with the award are expected to work with the [DPC's Coordination and Evaluation Center \(CEC\)](#) to develop data collection and analysis protocols, as well as to ensure data integrity, privacy, and security.

The NRMN Coordination Center should include individuals with expertise in multi-site evaluation as well as in coordination, communication, and consensus-building among diverse groups of stakeholders.

The PD(s)/PI(s) should have expertise with data management and analysis.

National Research Mentoring Network (NRMN) Resource Center (U24)

The **NRMN Resource Center** will provide a web-based mentoring and networking portal with the objective of promoting the sustained interest of individuals from diverse backgrounds.

The NRMN website is intended to serve as a national resource for mentorship, networking, and professional development for individuals at various career stages.

This Resource Center will be responsible for reporting on the outputs and services and will serve as a platform for publicly available mentoring resources and tools, including effective practices.

National Research Mentoring Network (NRMN) Resource Center (U24)



NIGMS Feedback Loop Blog
A catalyst for interaction with the scientific community



National Institute of
General Medical Sciences

TAG ARCHIVES: WEBINARS

Webinar for NRMN Coordination Center and NRMN Resource Center Applicants



Posted by [Dr. Mercedes Rubio](#) on April 9, 2018
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If you're preparing a grant application for either the [National Research Mentoring Network \(NRMN\) Coordination Center \(U24\)](#) or the [NRMN Resource Center \(U24\)](#) for the June 11 receipt date, don't miss our upcoming webinar:

Monday, April 30, 1:00 p.m. ET

During the webinar, we'll provide an overview of the [NRMN Coordination Center](#) and the [NRMN Resource Center](#) funding announcements and answer your questions. You may [send questions](#) before the webinar or post them in the chat box during the event.

To access the webinar, visit the [WebEx Meeting page](#) and enter the meeting number (access code) 622 059 858 and the password PxH2Dy3Q. If you are unable to attend online, you can call 1-650-479-3208 from anywhere in the United States or Canada and enter the meeting number above.

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<https://loop.nigms.nih.gov/2018/04/webinar-for-nrmn-coordination-center-and-nrmn-resource-center-applicants/>

NRMN U01 Overview

National Research Mentoring Network 2.0

Funds Available

Amounts Include Indirect

Coordination Center (U24)
(previous NRMN Administrative Core)

NIH intends to commit up to \$1.1M total costs per year
Number of awards=1

Resource Center (U24)
(previous Mentorship and Networking Core)

NIH intends to commit \$1.1M total costs per year
Number of awards=1

Science of Mentoring, Networking, and Navigating Career Transition (U01)

NIH intends to commit \$7.8M total costs per year
Number of awards=up to 15 awards

Award Project Period

Up to 5 years

National Research Mentoring Network 2.0

Key Features	
Application Due Date	June 11, 2018 , by 5:00 PM local time of applicant organization
Scientific Merit Review	October - November 2018 at NIGMS
Advisory Council Review	January 2019
Earliest Start Date	July 2019
Cooperative Agreement	There will be substantial Federal scientific or programmatic involvement.

National Research Mentoring Network: The Science of Mentoring, Networking, and Navigating Career Transition Points

The Science of Mentoring

Research should be designed to inform the biomedical or STEM research training community about which kinds of mentoring relationships, strategies and approaches have significant impacts on academic and professional successes.

Professional Networks

How can individuals from diverse backgrounds build and sustain effective professional networks to promote their career advancement and network structure?

Navigation of Critical Transition Points

Interventions that aid in the timely transition and career progression of individuals.

- Research should include a focus on institutional and organizational contexts.
- Results should be applicable to a broad range of institution types.

National Research Mentoring Network: The Science of Mentoring, Networking, and Navigating Career Transition Points (U01)

Expectations

- Robust experimental designs
 - Randomized control trial approaches, case controls, matched pair design or other rigorous designs appropriate to the research questions.
- The mentoring and networking interventions/experiments should;
 - Be outcomes based (e.g., success in career transition, grant submissions, publications)
 - Inform the biomedical community on what factors influence and foster a sustained career in the biomedical research workforce and why those factors have an influence.
 - NOT to be centered only on psychosocial factors (e.g., engagement, belonging, science identity, self-efficacy, career satisfaction)
- The research questions are expected **to move beyond** participation satisfaction, self-reporting of perceived skills gained, or self-reporting of effectiveness.

National Research Mentoring Network: The Science of Mentoring, Networking, and Navigating Career Transition Points (U01)

- Experiments/Studies should inform about the **effectiveness** of the **duration**, **frequency**, and **intensity** of an intervention and whether those effects can be enhanced by reinforcement sessions.
- Experiments should provide the scientific community with sound evidence of short, medium, and long-term effects of an intervention's efficacy.
- The experiments should be **cost-effective**, **realistic**, **adaptable**, and **sustainable** at a broad range of institutions.

Is the U01 for me?

- Do I have testable hypotheses?
- Do I have a theory or guiding paradigm?
- What is my **control** group?
- Do I propose a robust experimental design (e.g., including RCT approaches, case controls, matched pair design or other rigorous designs) or is my study primarily descriptive?
- Does my intervention focus on supporting individuals from diverse backgrounds, including those from [underrepresented](#) groups?

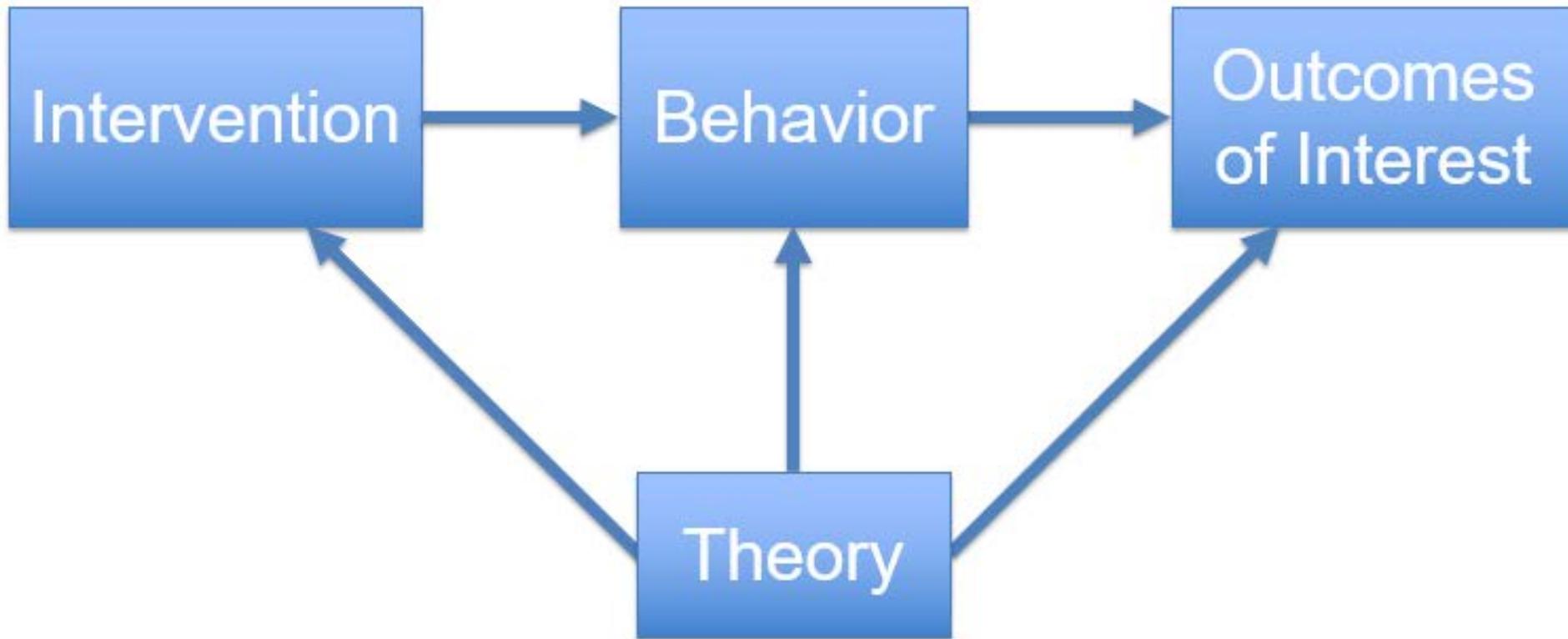
Is the U01 for me?

- Do my research questions help the field understand **why** something works? Or is it descriptive in nature (e.g. participation satisfaction, self-reporting of perceived skills gained, or self-reporting of effectiveness)?
- Do I have an adequate sample size to make generalizations (e.g., goes beyond a single institution)?
- Is my Project a training program in disguise?
 - Training programs often are atheoretical and are often not hypothesis based
- Is my Project an evaluation of an existing program in disguise?
 - Program evaluations often are atheoretical and are often not hypothesis based

A Possible Approach

- **Objective** – To test the efficacy of a (given) intervention/experiment to increase (what) (i.e., increase NIH submissions; tenure promotion, admissions, etc.)?
- **Theory** – I will be using X theory. What theory guides your experiment?
- **Design** – Randomized controlled trial from starting date through end date, with data collection before and after intervention and a specified interval (if applicable). A booster/treatment/exposure/activity will be administered at a given number of months (if applicable).
 - What will the experimental group get? What will the control/comparison group get as a “treatment?”
- **Participants** – Who are they? Why them? Control group/comparison group?
- **Experiment** – What is it? And how will participants be stratified to the intervention arm versus the control/comparison group?
- **Main Outcome Measure** – What is the expected outcome of the interventions? Grant submission? Tenure track position? Tenure promotion? Improved mentoring skills?

Training Initiatives ≠ Scientific Experiments



Peer Review Overview

Application Review Information

I. Criteria

A. Overall Impact – Overall

B. Scored Review Criteria – Overall

1) Significance

2) Investigator(s)

3) Innovation

4) Approach

5) Environment

Preparing for a Scorable and Successful Application



Read Section V:
Application Review
Information, thoroughly.
Pay close attention to
“Specific to this FOA”
statements.

Examples of “Specific to this FOA”

Approach:

- Do the aims of the project align with the stated goals of the DPC and the NRMN? Will the investigators adhere to the evaluation practices of the DPC, including using the hallmarks of success?
- Is there a stated commitment to working as part of a NRMN consortium with a NRMN Coordination Center and the NRMN Resource Center?

Sample of Integrated NRMN Outputs, Outcomes and CWEP Outcomes

Table 2 Sample of Integrated NRMN Outputs, Outcomes and CWEP Outcomes

NRMN Outputs and Short-term Outcomes ^a	Medium & Long-term, CWEP Outcomes ^b
Number and types (gender, race & ethnicity, career stage) of mentors and mentees participating in NRMN activities, accessing resources and/or engaging in mentoring relationships through NRMN	Increased participation in mentoring activities (faculty ^c) Increased participation in mentoring activities by URGs (trainees ^d)
Increased mentee self-efficacy in research tasks and addressing difficult situations in research settings	Psychosocial variables including academic and scientific self-efficacy
Increased commitment to cultural change in promoting diversity in biomedical research; increased intention to change institutional culture, policies, structures, and/or activities related to mentoring access	Increased institutional commitment to sustaining activities
Increased number and percentage of faculty/post-docs satisfied with gains in skills/knowledge/confidence / regarding how to write winning grants	Increased research productivity in grant submissions and awards as PI, multi-PI and/or collaborator
Number and type of professional development opportunities offered to the community through NRMN or in partnership with NRMN	Increase, enhance, and/or develop inter-institutional collaborations to achieve BUILD (and related) outcomes related to research, mentorship, and faculty development

^a The NRMN integrated logic model includes additional outcomes not noted here

^b Taken from the consortium wide hallmarks/logic model

^c Faculty includes anyone in the mentoring role and may include graduate students, post-docs, faculty and other researchers/advisors/ coaches

^d Trainees include undergraduates, graduate students, post-docs and junior faculty

Source: Guerrero et al. BMC Proceedings 2017, 11 (Suppl 12): 14.

<https://bmcproc.biomedcentral.com/articles/supplements/volume-11-supplement-12>

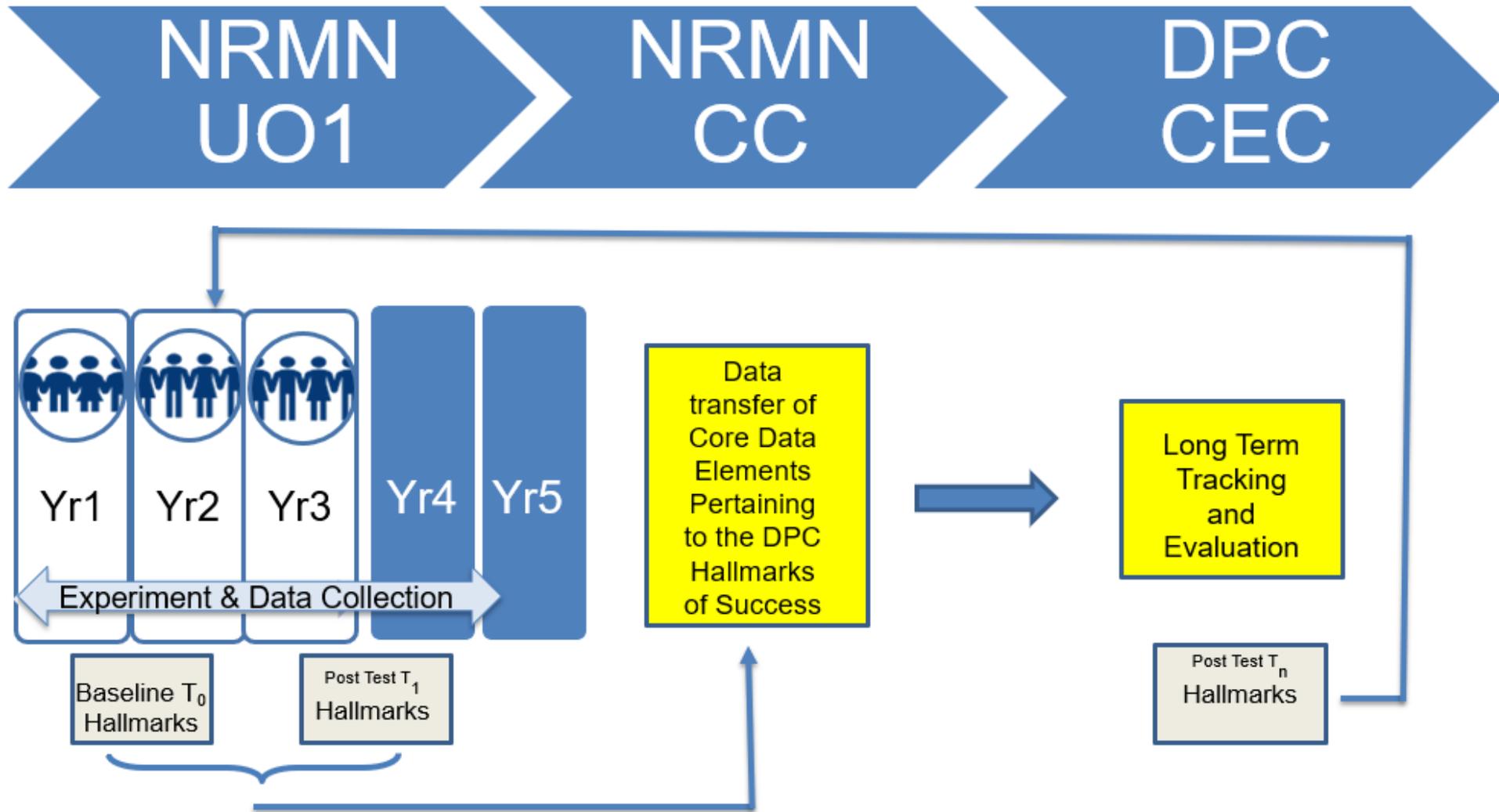
NRMN-Related Hallmarks

- Psychosocial variables (including Perceptions of Culture and Environment, Identity, Attitudes, Aspirations)
- Access to consistent mentoring (academic, research, career)
- Self-Efficacy (researcher, mentor, instructor)
- Change/Increase in self-efficacy as instructor, mentor, and/or researcher focused only on instructor

Hallmarks can be found:

<https://www.nigms.nih.gov/training/dpc/Pages/success.aspx>

DPC Consortium Wide Evaluation



Sample Hallmark Question

Indicate to what extent the following statements are true of you:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	I choose not to answer
I have a strong sense of belonging to the community of scientists	1	2	3	4	5	9
I derive great personal satisfaction from working on a team that is doing important research	1	2	3	4	5	9
I have come to think of myself as a 'scientist'	1	2	3	4	5	9
I feel like I belong in the field of science	1	2	3	4	5	9

Sample Hallmark Question

Please indicate how frequently each of the following occurred in your relationship with your primary research mentor.

	Never	Rarely	Sometimes	Frequently	All of the time	I choose not to answer
My mentor created opportunities for me to bring up issues of race/ethnicity as they arose	1	2	3	4	5	9
My mentor encouraged me to think about how the research related to my own lived experience.	1	2	3	4	5	9
My mentor was willing to discuss race and ethnicity, even if it may have been uncomfortable for him/her.	1	2	3	4	5	9
My mentor raised the topic of race/ethnicity in our research mentoring relationship when it was relevant.	1	2	3	4	5	9
My mentor approached the topic of race/ethnicity with me in a respectful manner	1	2	3	4	5	9

Some Tips

Tip #1: Read the FOA



Read the FOA,
Guide Notices and
SF424 (R&R)
Application Guide
thoroughly.

Tip #2: Familiarize Yourself with the DPC

- DPC websites:

<https://www.diversityprogramconsortium.org/>

<https://www.nigms.nih.gov/training/dpc/Pages/default.aspx>

- DPC Hallmarks:

<https://www.nigms.nih.gov/training/dpc/Pages/success.aspx>

- BMC Proceedings:

<https://bmcproc.biomedcentral.com/articles/supplements/volume-11-supplement-12>

- NRMN Website:

<https://nrmnet.net/>

Tip #3: Non-Responsive

- Applications with the following will be deemed non-responsive and will be withdrawn without review:
 - A description to simply provide a mentoring service without a testable hypothesis, mentoring intervention framework and a clearly articulated population with the appropriate controls.
 - An application that does not address mentoring interventions/experiments that will focus on supporting individuals from diverse backgrounds, including those from [underrepresented](#) groups.
 - A research plan proposed by the PD(s)/PI(s) that **duplicates** their efforts on other federally funded grants.
 - A description of a narrow project that will provide results that are not generally applicable to the broader biomedical research community.

Tip #4: Clinical Trails

Clinical Trials are **not allowed** in this FOA.

Educational interventions/experiments do **not** fall under the Clinical Trails category, regardless of methodological approach.

Tip #5: Appendix

New policy eliminates most Appendix material for NIH applications submitted after January 25, 2017.

<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-16-129.html>

Please review the notice, so that you can be aware of what is allowed.

Tip #6: Resource Sharing Plans

- Required for any application seeking \$500,000 or more in direct costs in any single year
- https://grants.nih.gov/grants/policy/data_sharing/
- Sample: <https://www.niaid.nih.gov/research/sample-data-sharing-plan>

Tip #7: Show commitment to playing nice in the sandbox

- NRMN awardees will be required to work with the DPC Coordination and Evaluation Center (CEC).
- We encourage applicants to review the consortium-wide [hallmarks of success](#) and the [data sharing agreement](#) which will continue during the second phase.
- Being able to work along others to ensure the success of the DPC overall goals is vital.

Questions?

Some Submitted Questions

- Why is there a contradiction between no clinical trials and robust experimental methods?
 - From our point of view, no contradiction exists.
 - The NRMN U01 experiments are in the realm of educational interventions/experiments versus “patient/illness related” research.
- Will current NRMN or BUILD awardees receive priority when applying for the U01?
 - No, the review panel will assess the best science based on the experiments proposed, the rigor based on robust experimental designs, feasibility, and generalizability.

Some Submitted Questions, *cont.*

- What does the “U” in front of the “01” mean?
 - The “U” indicates that the award will be part of a Cooperative Agreement.
 - A Cooperative Agreement is a support mechanism used when there will be substantial Federal scientific or programmatic involvement. Substantial involvement means that, after award, NIH scientific or program staff will assist, guide, coordinate, or participate in project activities. See Section VI.2 of the FOA for additional information about the substantial involvement.
- What is a suggested budget?
 - The type of experiment you set up should determine the budget. The intent of the U01s is to encourage the best science possible by developing experiments that will help us understand “why” something works.

Some Submitted Questions, *cont.*

- Must these grants already have involvement with BUILD or NRMN?
 - No, this RFA is not intended to be only for current DPC grantees.
 - We are interested in the best science, so we welcome applications from the broader community and individuals with great experiments.
- What career phase should we focus on?
 - This is up to you. We hope to receive proposals with experiments in a range of career phases, excluding high school level participants.
- What disciplines fall under by the biomedical umbrella?
 - Consider disciplines that have longstanding representation in NIH funding.
 - You may want to also refer some of the definitions provided by NSF.

Some Submitted Questions, *cont.*

- Is there something that we should budget for that is unique to being part of a consortium?
 - The Diversity Program Consortium holds an annual meeting and applicants should request funds to attend this required meeting for all of the PI's of the grant.
 - The NRMN awardees will also be a consortium, so budget for a meeting related to NRMN specific efforts.
 - **One DPC annual meeting + One NRMN annual meeting**
- Do retrospective studies fit this call?
 - We are interested in gaining knowledge about causation. Retrospective might not help us determine causation or make reasonable attributions to the experiment/intervention.



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NRMN Team



Thank you!
Questions?

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