Attachment 24:
NRMN Site Visit & Case Studies Protocol

Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. **An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.** Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: NIH, Project Clearance Branch, 6705 Rockledge Drive, MSC 7974, Bethesda, MD 20892-7974, ATTN: PRA (0925-xxxx*). Do not return the completed form to this address.

NRMN Qualitative Evaluation Narrative

The qualitative component of the NRMN evaluation will largely focus on processes and procedures that build capacity and infrastructure for NRMN to work as a cooperative to increase the representation and success of under-represented people in biomedical research. The evaluation will consist of both site visits and a case study. Overall, this qualitative inquiry will capture what cannot be measured elsewhere or has been otherwise overlooked, and aids in the triangulation of findings.

NRMN SITE VISIT PLAN

Site Visit Focus

Site Visits will largely focus on describing the activities NRMN implementing and promoting to support URG bio-medical research training. Site visits will offer the CEC the opportunity to provide a narrative description of the relationships amongst NRMN's core program areas and a characterization of the overarching NRMN collective.

Site visits are an occasion for NRMN to showcase the defining features of their programs as well as to discuss any challenges related to program implementation and evaluation. Site visits provide an opportunity for a three-way exchange of information between NRMN, the CEC and NIH that will allow for critical face-to-face learning to transpire. They are venue through which to develop trusting relationships that help to promote knowledge exchange and learning from the evaluation.

Site Visit Guiding Evaluation Questions

The following evaluation questions will be answered through collection of qualitative site visit data.

1. How is NRMN, and its supplement and pilot programs, implementing their vision for advancing URG bio-medical research training?

Sub- Questions:

a) How do the Mentoring and Networking, Mentor Training, Professional Development and Research Resources and Outreach cores within NRMN interact with one another?
b) How does NRMN and its cores interact with the supplemental and pilot programs sponsored by NIH?

Site Visit Protocol

Semi-structured observation will be conducted in bi-annual planning meetings held by NRMN. Participants will include faculty and staff charged with implementing NRMN and its four cores, as well as implementation partners, such as BUILD sites, supplement and pilot programs. Observation protocol is included in Appendix A.

Site Visit Timeline

Planning meetings hosted by NRMN are scheduled two times per grant year. As such, site visits will be conducted over the course of one-two days by a team of CEC faculty and staff in coordination with NIH project officers and scientists in grant year 3, 4, and 5. To the extent possible, there will be continuity in team membership across the site visits. Additional CEC staff may attend the site visit as deemed necessary.

NRMN CASE STUDY PLAN

Case Study Focus

The primary focus of the NRMN case study it to describe how the NRMN program is enhancing stakeholder capacity to attract, serve, and promote the success of URGs in biomedical research. The NRMN case studies will focus on the processes and procedures that build capacity and infrastructure to advance bio-medical research training. This work requires an understanding and analysis of how to build and successfully implement the "systems" "structures" at consortium- and program-levels to achieve this goal. The primary theoretical/conceptual framework that will guide the analysis of case study is the consortium level logic model, developed by the CEC.

Case Study Guiding Evaluation Questions

The overarching evaluation questions are:

1) How is NRMN working to increase the representation and success of under-represented people in biomedical research through training and career development of individuals of diverse backgrounds, communities and cultures?
2) To what extent is NRMN integrated within the programs and activities of BUILD and other partner institutions?

Additional evaluation questions include:
- How and to what extent do Mentoring and Networking, Mentor Training, Professional Development and Research Resources and Outreach cores – as well as the NRMN supplement and pilot programs - work in collaboration to achieve Diversity Consortium goals?
- How are the strategies that are being implemented by NRMN and its cores enhancing student, faculty, and institutional participation and engagement in bio-medical research training for URGs?
- How and to what extent do these cores collaborate and interact with BUILD sites?

NRMN Case Study Participants and Timeline

Table 1 details the participants, data collection methods, and timeline proposed for the NRMN evaluation.

Semi-structured observations will be conducted of the NRMN Core Co-PI's, project management staff, and participants at one-to-two program events planned by each NRMN program core on an annual basis. Observation protocols are provided in Appendix B.

NRMN case study interview participants will include the principal investigator (PI), co-principal investigators (Co-PI's) and management staff from each core, supplement and pilot program as well as participant mentors/coaches and mentees. Interview protocols are provided in Appendix C.

Mentor and coach sample: Mentor and coach interviewees will be purposefully selected from a population of mentors who agree to be contacted for further/future interviews after completing the CEC NRMN tracking survey. We will select a sample of 10 mentors each year to participate in a semi-structured interview. Interviewees will be selected so that our sample includes mentors and coaches from across the NRMN core programs, level of NRMN mentor training (i.e., "certified" mentors), as well as career stage (early (0-8 years), mid (9-20 years), and later (21+ years)).

Mentee and coached sample: Mentee and coached person interviewees will be purposefully selected from those who agree to be contacted for further/future interviews after completing the CEC NRMN follow-up survey. We will select a sample of 10 mentees each year to participate in a semi-structured interview. Interviewees will be selected

so that our sample includes mentees from across the NRMN cooperative programs as well as career stage (undergraduate student, graduate student, post-doctoral fellow, early-career researcher (0-8 years).

Table 1. NRMN case study participants, methods, and timeline

Title	Semi-Structured Observation	Individual Interviews	Estimated Timeline
NRMN Principal Investigator	x	x	Annual
RROC Core			
Co-Principal Investigator(s)	x	x	Annual
Program Manager(s)	x	x	Annual
MTC Core			
Co-Principal Investigator(s)	x	x	Annual
Program Manager(s)	x	x	Annual
RMNC Core			
Co-Principal Investigator(s)	x	x	Annual
Program Manager(s)	x	x	Annual
PDC Core			
Co-Principal Investigator(s)	x	x	Annual
Program Manager(s)	x	x	Annual
Supplement Projects			
Co-Principal Investigator(s)	x	x	Annual
Program Manager(s)	x	x	Annual
Pilot Projects			
Project Lead		x	Completion of the project
Mentoring/Coaching Participants			
Faculty Mentors/Coaches x 10/year		x	Annual
Student/Junior Faculty Mentees/Coachees x		x	Annual
Other NRMN Participants			
Core Program Event Participants	x		Annual

APPENDIX A:
NRMN SITE VISIT SEMI-STRUCTURED OBSERVATION PROTOCOL

The purpose of observation in this context is to gain a contextualized understanding of the ways in which different groups of NRMN stakeholders (i.e., program leadership, program implementers, and partners) interact and collaboratively strategize to advance NRMN's overarching objective of increasing URG participation and engagement in bio-medical research. While this can often be a dynamic, fluid process wherein observable details may frequently change, or which may be spontaneously revealed, there are several key areas of interest that are considered most relevant to this research inquiry. These are as follows:

DOMAIN	KEY AREAS OF INTEREST
Context	Persons/roles present
	Stated purpose/objectives
	Meeting agenda (planned and as it is actually implemented)
	Questions, answers, comments raised (and by who)
Capacity of core, institution, or organization to successfully implement NRMN activities	Successes and challenges in implementation
	Benefits and drawbacks of partner collaboration in implementation
	Negotiation of human, financial, time resource allocations
Goal-setting and progress monitoring	Planning implementation timelines
	Achievement of, and challenges in achieving scheduled milestones
	Strategic planning to achieve NRMN program objectives
	Perceived stakeholder accountability to implementation partners (e.g., NRMN-core, core-core, NRMN-pilot, NRMN-supplement, NRMN-partner institution)
	Perceived stakeholder accountability to evaluation theory of success (e.g., output, intermediate outcomes, and long-term outcomes)
Identifying and cultivating potential synergies across program activities	Alignment of goals and objectives
	Alignment of implementation timelines
	Alignment of program resources (human and financial)
	Investments in establishing/sustaining partnerships
Identifying and resolving barriers to effective collaboration across program activities	Identification of systemic, structural, procedural weaknesses in links between NRMN stakeholders
	Actionable next steps developed to resolve identified issues
	Evidence of follow-up and implementation of action items
Addressed/unaddressed, prioritized/un-prioritized programmatic needs	Resource and support needs identified by various NRMN stakeholders
	Response to, and consideration of expressed needs by implementing partners
	Perspective and opinions that take precedence in determining implications for action
Systems, structures, and processes required to promote NRMN partnership sustainability	Identification of factors promoting long-term NRMN partnership sustainability
	Resource allocation (human, financial, time) in support of sustainability needs

Data-informed decision-making	Data sources presented
	Perceived reliability/quality of data presented
	How discussion and dialogue is facilitated (and by who) around data interpretation
	What and how data are used to inform next steps
	Perspectives and opinions that take precedence in determining implications for action
	Expressed data needs

APPENDIX B: NRMN CASE STUDY SEMI-STRUCTURED OBSERVATION PROTOCOL

The purpose of observation in this context is to gain a contextualized understanding of the ways in the NRMN cores (i.e., program leadership, program implementers, and partners) implement NRMN core events to advance NRMN's overarching objective of increasing URG participation and engagement in bio-medical research. While this can often be a dynamic, fluid process wherein observable details may frequently change, or which may be spontaneously revealed, there are several key areas of interest that are considered most relevant to this research inquiry. These are as follows:

DOMAIN	KEY AREAS OF INTEREST
Context	Persons/roles present
	Stated purpose/objectives
	Meeting agenda (planned and as it is actually implemented)
	Questions, answers, comments raised (and by who)
Capacity of core to successfully implement NRMN core event	Successes and challenges in implementation
	Benefits and drawbacks of partner collaboration in implementation
	Negotiation of human, financial, time resource allocations
Participant engagement	Interaction with and between participants throughout event
	Perceived participant interest, valuation, and response to event content
	Perceived participant understanding of core event as it related to NRMN goals and objectives
Contributions of event to overarching NRMN goals	Perceived stakeholder accountability to implementation partners
	Perceived stakeholder accountability to evaluation theory of success (e.g., output, intermediate outcomes, and long-term outcomes)
Identifying and cultivating potential synergies across program activities	Alignment of activity-based goals and objectives to NRMN as a whole
	Alignment of activity-specific implementation timelines
	Alignment of activity-specific program resources (human and financial)
	Partner involvement across NRMN core events
Identifying and resolving barriers to effective collaboration across program activities	Identification of systemic, structural, procedural weaknesses in links between NRMN stakeholders across NRMN core events
Addressed/unaddressed, prioritized/un-prioritized programmatic needs	Resource and support needs identified by core stakeholders
	Response to, and consideration of expressed needs by implementing partners
	Perspective and opinions that take precedence in determining implications for action

APPENDIX C: NRMN CASE STUDY SEMI-STRUCTURED INTERVIEW PROTOCOL
Principal Investigator/Co-Principal Investigators/Core Management Staff
In-person Interview (Approximately 1 hour)

This semi-structured interview protocol contains a list of prompts to be drawn from in interviews with individuals participating in the NRMN Case Study. As a flexible framework, questions may be added or omitted from the interview in response to participant feedback. Interview questions, however, are expected to stay within the content areas detailed below. (Interviews will each be preceded by approved processes of participant consent.)

Understanding Overall NRMN Implementation
1) How would you characterize NRMN's overall mission/vision?
   a) Please provide an overall summary of the roles and responsibilities of [each of the NRMN cores/your core] in advancing NRMN's mission/vision.
2) From your perspective, what about your current programming elicits faculty engagement and participation in [NRMN/core name] programming?
   a) What impediments might exist to greater [mentor/coach] engagement and participation?
3) [if applicable] From your perspective, what about your current programming elicits student engagement and participation in [NRMN/core name] programming?
   a) What impediments might exist to greater student engagement and participation?

Understanding collaboration amongst NRMN cores
4) How would you describe collaboration amongst the NRMN cores? [Probe for specific examples]
   a) What are some of the systems, structures, and processes that support collaboration amongst the cores?
   b) What would an ideal level of collaboration look like?
   c) What are some of the challenges in establishing an ideal level of collaboration between the cores?
   d) How would you describe knowledge sharing and learning amongst the cores? (including data) [Probe for specific examples]

Understanding NRMN participants
5) How would you characterize NRMN's mentors and coaches (ex. generally, where are they drawn from?) and their needs as mentors or coaches?
   a) In what ways do you feel that [NRMN/core name] addresses and/or supports those needs?
6) How would you characterize NRMN's mentees (ex. generally, where are they drawn from?) and their needs as mentees?
   a) In what ways do you feel that [NRMN/core name] addresses and/or supports those needs?

Understanding BUILD partnerships
7) In what ways has [NRMN/core name] collaborated with BUILD institutions?
   a) How would you characterize NRMN's engagement with BUILD institutions?
8) What are some of the challenges in establishing effective partnerships with BUILD institutions?
   a) In your estimation, what elements are essential to sustaining collaboration with BUILD institutions?

Understanding work with pilot and supplement programs
9) How would you characterize NRMN's engagement with the pilot and supplement programs?
   a) What are some of the challenges in establishing effective partnerships with the pilot and supplement programs?
   b) In your estimation, what elements are essential to sustaining collaboration with pilot and supplement programs?

Sustainability

10) Assuming that NIH funding ends after another 5-10 years, how could your core continue its work?
   a) What indicators are there (if any) of institutional commitments to sustaining your efforts? (where, elaborate)

11) Can you think of any practices or policies that have changed as a result of NRMN that might continue even if the program does not?

Reflection
10) Overall, how would your characterize NRMN's work to date?
   a) Do you feel that additional supports, systems, or structures could enhance NRMN's ability to successfully implement this programming? If so, what?
   b) Are there any questions I haven't asked, or are there additional points you would like to raise that we have not yet discussed?

NRMN CASE STUDY SEMI-STRUCTURED INTERVIEW PROTOCOL
Pilot Program Lead – Phone-based Interview (Approximately 30 minutes)

This semi-structured protocol contains a list of possible prompts to be drawn from in interviews with individuals participating in the NRMN Case Study. As a flexible framework, questions may be added or omitted from the interview in response to participant feedback. Interview questions, however, are expected to stay within the content areas detailed below. (Interviews will each be preceded by approved processes of participant consent.)

Understanding NRMN participation and engagement
1) Please tell me your name, your current area of study, and what inspired your interest in pursuing bio-medical research? Are you an undergraduate student, a graduate student, a post-doctoral student, or a junior faculty member?
2) How did you find out about NRMN programming and specifically the pilot program?
3) Why did you decide to participate in NRMN programming and specifically the pilot program?
4) To what extent are in you involved in NRMN programming other than as a recipient of a pilot program award? (What activities do you participate in, and how involved in those activities are you?)

Participant feedback on NRMN programming and pilot program
5) In your opinion, has participation the pilot program been beneficial to you as [*title*]? If so, how? If not, why not?
   a) In particular, what (if any) opportunities or experiences has NRMN participation exposed you to that you might not otherwise have experienced?
   b) What might improve your experiences as a NRMN participant?
      i) In particular, are there systems, structures, or processes that could further improve your participation in NRMN activities?
      ii) Are there particular skill areas you feel could be further addressed by NRMN programming?

6) In what ways do you feel that having a pilot study has been beneficial to you as a [*title*] in bio-medical research?
7) In what ways, if any, do you feel that your experience as a pilot study lead could be improved to better support you as an URG bio-medical researcher?
8) In what ways, if any, has participation in the pilot program resulted in new (not previously existing) relationships with other investigators? How would you describe these relationships? To what extent do you think these relationships may help to promote your career as a bio-medical researchers?
9) In what ways, if any, will the data generated from this pilot program be used to inform additional research? NIH funding proposals?
10) In what ways, if any, will the data generated from this pilot program yielded peer-reviewed publications or conference presentations?

Reflection
1) Would you recommend NRMN participation to others? Why or why not?
2) What, in your opinion, would further incentivize additional pilot leads to participate in BUILD programming?
3) What barriers, if any, exist for greater participation of pilot program leads in the more general NRMN programming?

NRMN CASE STUDY SEMI-STRUCTURED INTERVIEW PROTOCOL
Mentor/Coach Participants – Phone-Based Interview (Approximately 1 hour)

This semi-structured interview protocol contains a list of possible prompts to be drawn from in interviews with individuals participating in the NRMN Case Study. As a flexible framework, questions may be added or omitted from the interview in response to participant feedback. Interview questions, however, are expected to stay within the content areas detailed below. (Interviews will each be preceded by approved processes of participant consent.)

Understanding NRMN participation and engagement
1) Please tell me your name, your title, your department, and your current area(s) of research.
2) How did you find about NRMN programs?
3) Why did you decide to participate in NRMN programs?
4) To what extent are in you involved in NRMN programs? (What activities do you participate in, and how involved in those activities are you?)

Participant feedback on overall NRMN programming
5) In your opinion, has participation in these activities been beneficial to you as a (mentor or coach) to URG's?
   a) What (if any) opportunities or experiences has NRMN participation exposed you to that you might not have otherwise experienced?
   b) What might improve your experiences as a NRMN participant?
      i) Are there systems, structures, or processes that could further improve your participation in NRMN activities as a (mentor or coach) to URG's?
      ii) Are there systems, structures, or processes that could further improve how useful or meaningful your engagement has been in NRMN activities as a (mentor or coach) to URG's?
      iii) Are there any particular mentoring skill areas you feel could be further addressed by NRMN programming?
      iv) How, if it all, did NRMN training help you address diversity issues in your mentoring/coaching of URG's?
         (1) Can you give me an example of when you used that information/skill?

Participant feedback on mentoring/coaching
6) How many mentees do you currently (advise or coach) as a result of your participation in NRMN?
   a) How did you initially connect with them?
7) What do you discuss in mentoring sessions with your mentee?
   a) How often would you say you meet with your mentee(s), and for how long?
8) In what ways do you feel that being a faculty (mentor or coach) has been beneficial to URG's in bio-medical research?
9) In what ways, if any, do you feel that your NRMN training experiences could be improved to better support you as a (mentor or coach) to URG's in bio-medical research?

Reflection
10) Would you recommend NRMN participation to other faculty? Why or why not?
   a) What, in your opinion, would further incentivize additional faculty to participate in BUILD programming?
   b) What barriers, if any, exist to greater participation in NRMN programming overall? What do you think would be the best ways to reduce those barriers?
   c) Do you have anything else you would like to say about the NRMN programs?

NRMN CASE STUDY SEMI-STRUCTURED INTERVIEW PROTOCOL
Mentee/Coachee Participants – Phone-based Interview (Approximately 30 minutes)

This semi-structured interview protocol contains a list of prompts to be drawn from in interviews with individuals participating in the NRMN Case Study. As a flexible framework, questions may be added or omitted from the interview in response to participant feedback. Interview questions, however, are expected to stay within the content areas detailed below. (Interviews will each be preceded by approved processes of participant consent.)

Understanding NRMN participation and engagement

1) Please tell me your name, your current area of study, and what inspired your interest in pursuing bio-medical research? Are you an undergraduate student, a graduate student, a post-doctoral student, or a junior faculty member?
2) How did you find out about NRMN programming?
3) Why did you decide to participate in NRMN programming?
4) To what extent are in you involved in NRMN programming? (What activities do you participate in, and how involved in those activities are you?)

Participant feedback on overall NRMN programming

5) In your opinion, has participation in these activities been beneficial to you as [*title – student, post-doc, junior faculty*]? If so, how? If not, why not?
   a) In particular, what (if any) opportunities or experiences has NRMN participation exposed you to that you might not otherwise have experienced?
   b) What might improve your experiences as a NRMN participant?
      i) In particular, are there systems, structures, or processes that could further improve your participation in NRMN activities?
      ii) Are there particular skill areas you feel could be further addressed by NRMN programming?

Participant feedback on mentoring

6) Tell me about your NRMN mentor, including how long you have been working with them.
   a) How did you initially connect with them?
7) What do you discuss in mentoring sessions with your faculty mentor?
   a) How often would you say you meet with your mentor and for how long?
8) In what ways do you feel that having a faculty mentor has been beneficial to you as a [*title*] in bio-medical research?
9) In what ways, if any, do you feel that your mentoring experience could be improved to better support you as an URG bio-medical researcher?
10) In what ways do you feel your NRMN mentor has, or has not acknowledged and respected your cultural, racial and/or gender background?
11) In what ways, if any, do you feel that your faculty mentor could be better prepared to support you as a URG [*title*] in bio-medical research?

Reflection

12) Do you plan to pursue a career in bio-medical research?
    a) What are the motivating factors behind this decision?
13) Would you recommend NRMN participation to other URG [*title*]? Why or why not?
    a) What, in your opinion, would further incentivize additional [*title*] to participate in NRMN programming?
    b) What, if any, barriers to participation exist amongst URG [*title*]?