Supplemental Digital Appendix 1

Focus Group Guide for Junior Investigators at Five Institutions, to Inform Development of a Junior Investigator Training Program Developed to Diversify the Biomedical Research Workforce, 2016

Introduction

I want to thank you all again so much for taking the time to join us. This might be a bit of a challenge due to us being in different places, but I just wanted to mention that if you have anything to say, feel free to speak up – don't try to stand back out of courtesy. We always try to make sure everybody gets a chance to speak at some point or another. One of the challenges of moderating focus groups remotely is that sometimes people can be kind of shy about when they are going to speak, because they don't know when another person is going to speak. I want to let you know that the session is going to be recorded as an audio file so we can recall what you said and be true to your words and thoughts. We will produce a transcript based that, but your individual identities will not be associated with the transcript in any way – in other words, any identifying information like your names, will not be added in the transcripts. As we go through these questions, again, we want to hear from as many different people as possible, and I may occasionally call on somebody to give answers if I haven't heard from somebody in a while. If however, you would prefer not to answer, it's completely optional and so, if that happens, and you don't want to answer, just let me know. Ok? Is everybody good to get going?

Part I – General

- So I'd like to start with a quick introduction, could everyone tell me their names and positions at the university?
 - o If you think that your particular status or position at the university is important to your answer, please go ahead and remind us of what that is, just so we have that documented.
- How big a priority is it to you to start a research program or do you have a research program going, and how important is it for you to continue it?
- How big a priority is research at your institution?
- What barriers do you perceive to start or continue a research program?
 - o Probes:
 - Administrative barriers
 - Time barriers
 - Financial barriers
 - Training barriers or gaps
- Do you have any experience with research?
- Do you have any protected time for research? If so, how much?

- What resources are available for research?
- What kind of training do you think you would need to successfully start a research program? (E.g., training in grant writing, writing papers/abstracts, doing poster/presentations, putting together a research team, etc.)
 - o Trainings they already have
 - Possible gaps
- How much time would you be able to give to that kind of training if it were available?

Part II – Specific to LEADS

Ok. Now we're moving into the second part of the focus group. So, we have wanted to identify how important was to you, your institution, and for your career, as well as any barriers you perceived to perusing research. The second part of the focus group is describing the LEADS program, which is a training program, or web-based training program that is being put together through the University of Pittsburgh, as well as co-investigators at a number of other institutions around the country. I want to describe what we are thinking and get your reactions to that.

So the goal of the LEADS program would be the development of practical skills relevant to getting research up and running. Participating in the program would mean taking 12 training modules over 1 year. The topics of those modules are still being determined, and so if there are particular topics that would be especially useful for you, please go ahead and let us know, but there would be 12 training modules that would be done over a year. Each module would be 3-4 weeks long, and there would be one meeting that you would need to attend per week with a cohort that was going through the same module with you at the same time. Going along with that, there would be some practical assignments in each module that would allow you to practice skills that were being taught in the module as well as to get feedback on those.

• Would you be interested in participating in a program like this?

The time commitment would be 8 hours per week and 1 hour for the meeting.

- How do you feel about that?
 - o Is that feasible in your current schedule?
 - o What would make it feasible?
 - o If you have no protected time, how much could you give?
- What do you see as the biggest advantage to participating?
- What do you see as the biggest challenge to participating?
- What would increase your motivation to participate? Is there anything that could make this possible? (E.g., formal letter to your department head, formal designation to put on a CV, CME/CEU credit, badges, certificate, support or pressure from leadership, recognition)
- Is there anything else we should know?

Supplemental Digital Appendix 2

Interview Script for Senior Investigators at Five Institutions, to Inform Development of a Junior Investigator Training Program Developed to Diversify the Biomedical Research Workforce, 2016

Part I – General

- Could you tell me how long you have been working at the university and your position in the institution?
- How big a priority is it for mentees, students, or junior staff to start a research program, and for those who already have a research program, how important is it for them to continue it?
- How big a priority is research at your institution?
- What barriers do you perceive mentees, students, or junior faculty have to start or continue research programs?
 - o Probe:
 - Administrative barriers
 - Time barriers
 - Financial barriers
 - Training barriers
- How much research experience do mentees, students or junior faculty at your institution have?
- Do they have any protected time for research? If so, how much?
- What resources do they have available for research?
- What kind of training do you think they would need to successfully start a research program? (E.g., Training in grant writing, writing papers/abstracts, doing poster/presentations, putting together a research team, etc.)
 - o Trainings they already have
 - o Possible gaps
- How much time do you think they would be able to give to that kind of training if it were available?
- What are the barriers at your institution for mentees to submit grants?

Part II – Specific to LEADS

The second part of the interview is describing the LEADS program, which is a training program, or web-based training program that is being put together through the University of Pittsburgh, as well as co-investigators at a number of other institutions around the country. I want to describe what we are thinking and get your reaction to that.

So the goal of the leads program would be the development of practical skills relevant to getting research up and running. Participating in the program would mean taking 12 training modules over 1 year. The topics of those modules are still being determined, and so if there are any particular topics that would be especially useful, please go ahead and

let me know, but there would be 12 training modules that would be done over a year. Each module would be 3–4 weeks long, and there would be one meeting that participants would need to attend per week with a cohort that was going through the same module with you at the same time. Going along with that, there would be some practical assignments in each module that would allow participants to practice skills that were being taught in the module as well as to get feedback on those.

• Would mentees, students, and junior staff be interested in participating in a program like this?

The time commitment would be 8 hours per week and 1 hour for the meeting.

- How do you feel about this?
 - o Is that feasible with their current schedule?
 - o If they have no protected time, how much do you think they could give?
 - Do you think they could receive protected time if they asked to receive it in order to take this sort of training?
- What do you see as the biggest advantage in participating?
- What do you see as the biggest challenge in participating?
- What would increase their motivation to participate? IS there anything that could make this possible? (E.g., formal letter to your department head, formal designation to put on a CV, CME/CEU credit, badges, certificate, support or pressure from leadership, recognition)
- Is there anything else we should know?