

Supplemental Digital Appendix 1

Interview Protocol Guide From a Qualitative Study With Female Early Stage Investigators in Health Sciences to Explore Facilitators for and Barriers to Career Progression Among Women, 2018^a

Would you please tell me a bit about your yourself?

Can you briefly describe your research interests to me?

I would like to start by asking you a few questions about how your family affects your professional success.

- 1) What attitudes do your parents, siblings, and important extended family members have about women in science—Towards women getting a doctoral degree and pursuing a research career?
 - a. Are you the first person in your family to obtain a doctoral degree and work as a postdoctoral fellow or professor?
 - b. What made you decide to get into academia?
 - c. What kinds of support do you get from your family in your career: From your parents, siblings, and important extended family members? From your partner? Kids? In what ways have they hindered you in your research career?
 - d. What are some costs of pursuing an academic research career on your family? What are some benefits? How are these costs or benefits unique to you as a woman?
- 2) What are your career goals? Do you foresee that you want to become a senior investigator? What we mean by senior investigator is someone who applies and secures a large NIH or other federal grant to conduct research.
 - a. What is your motivation for pursuing this type of career? (*as an independent senior investigator or otherwise*)?
- 3) How do you balance the demands of your work and family life?
- 4) Please tell me about your key mentors.
 - a. How would you describe their style of mentorship? (*Hands-on or hands-off?*)
 - b. How has the fact that you are different or similar in gender played a role in your relationship? How has it helped? How has it inhibited your relationship? What about your race and ethnicity?
- 5) Now would you describe your community of colleagues who are pursuing similar research as you? Please describe the size of your workgroup and the gender/race/ethnic composition.
 - a. How have your relationships with your colleagues been positive and supportive? How have they hindered your career development in any way? Do you have women colleagues that you collaborate with? How do you feel supported by other woman colleagues, if any?
 - b. Can you describe any team building barriers that you encounter in your workplace environment, if any?
 - c. How would you describe your satisfaction with your workplace environment?

- 6) How does your department support you along the path to becoming an independent researcher?
 - a. How does your department promote women? How do gender, race, and ethnicity play a role in the perceptions of the capabilities of faculty in your department—For example, how often does gender play a role in who is offered a leadership role? How about race/ethnicity?
 - b. How does your department provide opportunities to have a voice in the department, have a sense of belonging, and have opportunities to collaborate and be successful?
 - c. How equitable is your department? What is your level of compensation [work load/expectations/service] compared to other women and men at your level?

Now that I know about your family, mentorship, and workplace environment, let's talk about some of your individual characteristics that influence your work life and career advancement.

- 7) What internal factors support your productivity towards research independence, if any? *(or other career path of your preference)*
 - a. *For example, internal characteristics that positively contribute to your work experience—time management skills, confidence, perseverance, negotiation skills?*
- 8) What internal factors hinder your productivity towards research independence, if any?
 - a. *For example, internal characteristics that negatively affect your work experience—time management, lack of confidence, isolation, difficulty saying no, too willing to support others at personal expense*
- 9) We talked a little earlier about how you balance the demands of your work and personal life . . .
 - a. What values do you hold to make this balance possible? How are these shaped by your ethnicity/race? And gender?
- 10) How do you think that your gender, race, or ethnic background affects the expectations that your colleagues have of you with respect to your research?
 - a. Are there any misperceptions and miscommunication about your needs as a female early career investigator involved in health disparity research? If so, what are they?
 - b. Do you feel investigators are respected and considered for funding in a fair manner based on their gender and/or race/ethnicity?
- 11) Do you have any suggestions for programs or policies that would help you or other women in their research career advancement?

I want to thank you for taking the time to share these experiences with me. These are invaluable insights, and your participation will contribute to our formative research aimed to understand needs and ultimately support early career women investigators in the careers they choose. Is there anything else you would like to add or that you feel is missing from the interview?

Thank you.

Supplemental digital content for Fernandez SB, Clarke RD, Sheehan DM, Trepka M, Rose SM. Perceptual facilitators for and barriers to career progression: A qualitative study with female early stage investigators in health sciences. Acad Med.

^aParticipants were 15 early stage, female investigators pursuing careers in health sciences research at a large minority-serving institution in Florida.