June 8, 2010

### **Interview Guide, TREC Trainees**

### **INTRODUCTION**

(Script:) Thanks, again, for agreeing to participate in this interview. Before we start, I wanted to tell you a little bit about our goals for these interviews.

The NCI feels the TREC initiative has made important contributions to our understanding of how to successfully implement cross-disciplinary research and training in energetics and cancer. This summer, the NCI Science of Team Science team is conducting interviews with TREC center participants and TREC program staff at the NCI, to record strategies for success and lessons learned from TREC. We'll be using the results of these interviews to showcase the TREC initiative, and produce a manuscript highlighting our findings.

This interview should last about an hour. Do you have any questions before we begin? (Address any questions. Then *begin recording*.)

# ORIENTATION/ICE BREAKER QUESTION

 To start out, could you tell me: how have you been involved in the TREC center at [INSTITUTION NAME]? (We want to record whether the individual is a: center director, core director, project director, trainee, etc. Its also fine if we hear a little bit about their scientific projects with the TREC center.)

# ENGAGING IN CROSS-DISCIPLINARY COLLABORATIONS: FACILITATING FACTORS AND CHALLENGES

One of the goals of the TREC initiative has been to foster *cross-disciplinary collaboration* in various stages across the research process, such as the formation of research questions, the methods that are used, and the ways that findings are analyzed and interpreted. We are interested in learning about the strategies TREC centers have used to achieve this goal.

I'm going to start by asking you some questions about *cross-disciplinary collaboration*. Then I'm going to ask you some questions about *transdisciplinary* research, using a particular definition of that term.

- 2. First, based on your experiences with TREC, *what factors have helped to facilitate or support productive cross-disciplinary collaborations*? For example, things like interpersonal processes within teams, leadership, infrastructure, or institutional policies?
  - a. What strategies have you and your collaborators used to facilitate productive <u>cross-disciplinary</u> collaboration?
  - b. *Have there been any factors at your TREC center, or at your institution, more broadly,* that have helped to facilitate or support productive <u>cross-disciplinary</u> collaboration? For example: leadership, infrastructure, or institutional policies?
- **3.** Based on your experiences with TREC, what challenges have emerged related to engaging in productive <u>cross-disciplinary collaborations</u>?
- 4. Were any of the challenges addressed? And if so, how?

# ENGAGING IN TRANSDISCIPLINARY RESEARCH

Now I want to ask you specifically about what our team is calling "<u>trans</u>disciplinary research." Some researchers who study scientific collaboration differentiate between "<u>trans</u>disciplinary research" (or "TD research") and <u>cross-</u>disciplinary research.

They define TD research as a unique level of cross-disciplinary collaboration that involves: an <u>"Integrative</u> process whereby researchers from different disciplines work jointly to develop and use a shared conceptual framework that synthesizes and extends discipline-specific theories, concepts, methods, and approaches, to address a common problem."

- 5. Can you reflect on the extent to which your research projects with the TREC center reflect this particular definition of <u>transdisciplinary</u> research, with its emphasis on the "integration" of disciplines?
  - a. (If more positive:) Can you give me an example?
  - b. (If more negative:) Why do you think that your research has not been transdisciplinary, according to this definition?

6. Can you reflect on the extent to which your TREC center, as a whole, has engaged in research that reflects this particular definition of transdisciplinary research?

#### ENGAGING IN TRANSDISCIPLINARY RESEARCH: FACILITATING FACTORS AND CHALLENGES

- 7. (If positive on #5 and/or #6, ask #7. Otherwise skip to #8:) You mentioned a number of factors that helped to facilitate or support cross-disciplinary research at your TREC center. Were there any <u>additional</u> factors that helped to facilitate <u>transdisciplinary</u> research, as I just defined it? For example, things like interpersonal processes within teams, leadership, infrastructure, or institutional policies?
  - a. *Were there any particular strategies that you and your collaborators used* to facilitate transdisciplinary research, as I just defined it?
  - b. *Have there been any factors at your TREC center, or at your institution, more broadly,* that have helped to facilitate or support transdisciplinary research, as I just defined it? For example: leadership, infrastructure, or institutional policies?
- 8. You mentioned a number of challenges that emerged related to engaging in cross-disciplinary collaboration. Were there any <u>additional</u> challenges that emerged related to engaging in transdisciplinary research, as I just defined it?
- 9. Were any of the challenges addressed? And if so, how?

### TRAINING QUESTIONS

Now, I want to ask you about your experiences as a trainee with the TREC center.

- 10. As compared to your peers who have not been TREC trainees, have you received any unique support or experiences, through TREC?
  - a. Have you received any unique support or experiences to train you in conducting crossdisciplinary or <u>trans</u>disciplinary research? And if so, what were these?
- **11.** Have there been any unique challenges to being a TREC trainee? (Probe only if they need prompting: For example, were there any challenges related to the multi-mentor model, or challenges related to being trained in a cross-disciplinary environment, instead of in a single discipline?)

- **12.** How has being a TREC trainee influenced you, intellectually or professionally? (Probes: research approaches, career goals, career trajectory)
- **13.** Do you have any recommendations about how TREC can better support trainees in developing skills for cross-disciplinary and <u>trans</u>disciplinary research?

### WRAP UP QUESTION

14. That completes my questions for you. Is there any other feedback you'd like to share, before we end the interview?

Thank you very much for your time.