

## TREC Followup Survey

This survey is a followup of the TREC Baseline Evaluation Survey. Your candid responses to the survey items will enable the National Cancer Institute to better understand the processes and outcomes of the TREC Initiative. Investigators' collective responses to the survey will provide useful information about the ongoing activities and accomplishments of the TREC centers and suggest ways in which TREC-related research and training activities can be enhanced. *Your responses will remain confidential.* Thank you in advance for your participation — we greatly appreciate your time and assistance.

*5/7/2008 note from Joe:*

This marked-up version of the TREC T2 survey includes skip instructions programmed into WebSurveyor for online administration. The survey will not be administered in paper format (so, no worries about the formatting of this paper version).

When multiple WebSurveyor pages are combined here on a single page (for easier use), a horizontal line marks the page breaks.

**Consent to Take Part in The TREC Follow-up Survey**

Principal Investigator:

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Other Investigators:

|                |                                 |              |
|----------------|---------------------------------|--------------|
| Dan Stokols    | University of California-Irvine | 949-824-5294 |
| Richard Moser  | National Cancer Institute       | 301-496-0273 |
| Linda Nebeling | National Cancer Institute       | 301-435-6816 |
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| Kara Hall      | National Cancer Institute       | 301-594-1237 |
| Brandie Taylor | National Institutes of Health   | 301-496-1265 |

**Why is this study being done?**

The purpose of this form is to let you know about a research study being done at Fred Hutchinson Cancer Research Center. It tells you about the purpose, risks and benefits, and describes what is involved in the study. It also tells you what other choices you have.

You are being asked to take part in this study since you are an investigator in the initiative titled Transdisciplinary Research on Energetics and Cancer (TREC). The major purposes of this project are to evaluate the effectiveness of transdisciplinary collaboration in advancing the research into energetics and cancer and to gain an understanding of key factors that enhance or impede the success of transdisciplinary scientific research on energetics and cancer. This is a research study, which includes only participants who choose to take part.

**How many people will take part in the study?**

About 100 people will take part in this study.

**What will happen if I take part in this research study?**

You will be asked to complete an on-line survey questionnaire now, and to complete similar questionnaires no more frequently than annually to allow us to see how the TREC centers evolve. Topics covered in these questionnaires will include your collaborative history with your TREC colleagues, your approach to conducting research, the resources available at your institution, your impressions of the environment in your TREC center, and your opinions and experiences about scientific training. Each survey will take about 15-30 minutes to complete. You may find some of the questions to be sensitive in nature.

**How long will I be in the study?**

This study will continue as long as the TREC initiative continues to be funded. Currently, TREC is funded through September 2010.

**What risks can I expect from being in the study?**

Some of the surveys will ask questions about your relationships with your TREC colleagues, the answers to which, if made public, might cause you embarrassment or compromise your relationships with them. We are taking many steps to prevent this risk. The data that you enter are transmitted using strong encryption. The data will be collected by an external contract research organization (Westat) who will also create a password-protected database with access restricted to the NCI program office and to the members of the transdisciplinary evaluation team in the Division of Cancer Control and Population Sciences who have no affiliation with TREC. The NCI transdisciplinary evaluation team will have access to unmasked data since they may need to use this information to modify program activities if issues are found. The data that will be analyzed by the TREC Coordination Center will be stripped of all potentially identifying information, including names, institutional

affiliations, and areas of expertise. All data reports, presentations, and publications will present only aggregate data and no individual will be identified.

It is possible that in some instances, participants in TREC scientific meetings and team discussions may feel self-conscious or embarrassed, knowing that any disagreements among research associates that might occur over the course of their collaboration may be reported in these surveys.

**Are there benefits to taking part in the study?**

You will not personally benefit from this research. It is hoped that this research will provide new insights into the factors that promote or hinder transdisciplinary research and training.

**Will my information be kept private?**

Data from this study will be maintained in password-protected databases for the duration of the TREC initiative. Organizations that may look at these data for research, quality assurance, or data analysis include

- \* Fred Hutchinson Cancer Research Center
- \* University of California-Irvine
- \* National Institutes of Health (NIH)
- \* U.S. Office for Human Research Protections (OHRP)
- \* Institutional Review Boards (IRB)
- \* Westat

Summary data (i.e., non-individual-level data) such as means of continuous variables and tables of categorical data, will be shared with TREC investigators to provide feedback on the status of their TREC center. TREC investigators may be involved in directing analyses and writing publications arising from these data; however they will still see only summary data and these summaries will be masked as described above for the TREC Coordination Center.

**What are the costs of taking part in this study?**

There are no additional costs to you as a result of participation in this research study.

**Will I be paid to take part in this research study?**

You will not be paid for taking part in this study.

**What are my rights if I take part in this study?**

Taking part in this study is your choice. You may choose either to take part or not to take part in the study. If you decide to take part in this study, you may leave the study at any time. No matter what decision you make, there will be no penalty to you and you will not lose any of your regular benefits. Consenting to this study is not a requirement of TREC investigators and your decision to not participate will not impact your participation in TREC in any way.

**Who can answer my questions about the study?**

For questions about this study, contact Mark Thornquist at 206-667-2931. For questions about your rights while taking part in this study, call the Fred Hutchinson Cancer Research Center Institutional Review Board at 206-667-5900. If you have any questions about your rights as a research participant, please contact Ms. Karen Hansen in the Institutional Review Office at Fred Hutchinson Cancer Research Center at 206- 667-4867.

**Signature**

I have read this consent and I understand the information. I agree to take part in this study.

1) [\[participant name is pre-filled here\]](#)

- Yes, I agree to participate [\[if YES, continue with survey on next page\]](#)
- No, I do not agree to participate [\[if NO, go to exit page below\]](#)

[The text below is the exit page for non-consenting participants]:

You selected not to participate. If you selected this in error please press the "Previous Page" button.

Thank you for your time.

If you have any questions or concerns about the survey, please contact [DCCPS-EVAL@westat.com](mailto:DCCPS-EVAL@westat.com).

## A. General Information

1) Name: PRE-POPULATED

[Note: this NAME item is shown on the first screen in the WebSurveyor version and at the consent agree/disagree signature line]

2) Title/Rank: DROP DOWN LIST

3) Your research center: DROP DOWN LIST

FHCRC     USC     UMN     Case

4) Your role in TREC center research:

- Investigator (e.g., PI, Co-PI, pilot project investigator, associate, core or project director, scientist, member)
- Professional research staff (e.g., statistician, research associate, post doc, fellow, research lab, data or web technician)
- Student/research support (e.g., research assistant, student)
- Other research role (Please specify): \_\_\_\_\_

5) Your highest degree: \_\_\_\_\_

6) Number of years since receiving your highest degree: \_\_\_\_\_

7) Are you within 5 years of graduation from a highest degree?

- Yes
- No

## B. Research Orientation

8) Please indicate how strongly you agree or disagree with each of the following statements:

|  | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree |
|--|-------------------|-------------------|---------|----------------|----------------|
| 1. I tend to be more productive working on my own research projects than working as a member of a collaborative research team.   |                   | •                 | •       | •              | •              |
| 2. There is so much work to be done within my field that it is important to focus my research efforts with others in my own discipline.  | •                 | •                 | •       | •              | •              |
| 3. The research questions I am often interested in generally do not warrant collaboration from other disciplines.  | •                 | •                 | •       | •              | •              |
| 4. While working on a research project within my discipline, I sometimes feel it is important to seek the perspective of other disciplines when trying to answer particular parts of my research question. | •                 | •                 | •       | •              | •              |
| 5. Although I rely primarily on knowledge from my primary field of interest, I usually work interactively with colleagues from other disciplines to address a research problem.                            | •                 | •                 | •       | •              | •              |
| 6. The benefits of collaboration among scientists from different disciplines usually outweigh the inconveniences and costs of such work.   | •                 | •                 | •       | •              | •              |
| 7. In my collaborations with others I integrate research methods from different disciplines.   | •                 | •                 | •       | •              | •              |
| 8. In my own work, I typically incorporate perspectives from disciplinary orientations that are different from my own.   | •                 | •                 | •       | •              | •              |
| 9. Although I was trained in a particular discipline, I devote much of my time to understanding other disciplines in order to inform my research.  | •                 | •                 | •       | •              | •              |
| 10. In my collaborations with others I integrate theories and models from different disciplines.   | •                 | •                 | •       | •              | •              |

**C. Collaborative Processes**

9) Please evaluate the *collaboration within your TREC center over the past twelve months*

|   | Very Poor | Poor | Fair | Good | Excellent |
|---|-----------|------|------|------|-----------|
| 1. Communication among collaborators.                               | •         | •    | •    | •    | •         |
| 2. Ability to capitalize on the strengths of different researchers. | •         | •    | •    | •    | •         |
| 3. Resolution of conflicts among collaborators.                     | •         | •    | •    | •    | •         |
| 4. Productivity of collaborative meetings.                          | •         | •    | •    | •    | •         |
| 5. Overall productivity of collaboration.                           | •         | •    | •    | •    | •         |

10) Please indicate how strongly you agree or disagree with the following statements about TREC collaborations *over the past twelve months*.

|  | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree |
|--|-------------------|-------------------|---------|----------------|----------------|
| 1. In general, I feel that I can trust the colleagues with whom I collaborate. | •                 | •                 | •       | •              | •              |
| 2. In general, I find that my collaborators are open to criticism.             | •                 | •                 | •       | •              | •              |
| 3. In general, collaboration has improved my research productivity.            | •                 | •                 | •       | •              | •              |

## D. Collaborative Activities

11) Please indicate the frequency with which you typically engage in each of the activities listed below.

|   | Never | Rarely | Once<br>a<br>Year | Twice<br>a<br>Year | Quarterly | Monthly | Weekly |
|---|-------|--------|-------------------|--------------------|-----------|---------|--------|
| 1. Read journals or publications outside of your primary field  | •     | •      | •                 | •                  | •         | •       | •      |
| 2. Attend meetings or conferences outside of your primary field   | •     | •      | •                 | •                  | •         | •       | •      |
| 3. Participate in working groups or committees with the intent to integrate ideas with other participants   | •     | •      | •                 | •                  | •         | •       | •      |
| 4. Obtain new insights into your own work through discussion with colleagues who come from different fields or disciplinary orientations          | •     | •      | •                 | •                  | •         | •       | •      |
| 5. Modify your own work or research agenda as a result of discussions with colleagues who come from different fields or disciplinary orientations | •     | •      | •                 | •                  | •         | •       | •      |
| 6. Establish links with colleagues from different fields or disciplinary orientations that have led to or may lead to future collaborative work   | •     | •      | •                 | •                  | •         | •       | •      |
| 7. Collaborate with members of your own TREC centers on developmental projects  | •     | •      | •                 | •                  | •         | •       | •      |
| 8. Collaborate with members of other TREC centers on developmental projects   | •     | •      | •                 | •                  | •         | •       | •      |
| 9. Collaborate with investigators from other TREC centers in ways other than developmental projects   | •     | •      | •                 | •                  | •         | •       | •      |

## E. TREC Transdisciplinary Training

*Transdisciplinary training* in this context refers to the:

- a. incorporation of *one or more substantive foci* in which the concepts, methods, and findings from two or more scientific fields are brought together and integrated in a novel fashion (e.g., through the development of a new conceptual framework that bridges concepts and methods associated with each field)
- b. incorporation of a *process-oriented component* that introduces participants to the unique qualities and requirements of transdisciplinary collaboration
- c. requires a *sustained reciprocal exchange of information* among trainers and trainees over the course of successive collaborative interactions, rather than a one-way episodic delivery of information by experts to non-experts

12) Please indicate how strongly you agree or disagree with each of the following statements:

|  | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree |
|--|-------------------|-------------------|---------|----------------|----------------|
| 1. When training cancer researchers, one should make an effort to include as many disciplinary perspectives as possible.                         | •                 | •                 | •       | •              | •              |
| 2. Transdisciplinary training is very difficult to conduct.  | •                 | •                 | •       | •              | •              |
| 3. The benefits of transdisciplinary training outweigh its costs.  | •                 | •                 | •       | •              | •              |
| 4. Transdisciplinary training increases the likelihood that trainees will conduct transdisciplinary research in the future.                      | •                 | •                 | •       | •              | •              |
| 5. Transdisciplinary training sacrifices focus by diluting training across too many fields.  | •                 | •                 | •       | •              | •              |
| 6. Transdisciplinary training leads to higher quality scholarship than a discipline-specific approach to training.                               | •                 | •                 | •       | •              | •              |
| 7. Transdisciplinary training increases the likelihood that trainees will conduct research that will translate into practice to benefit society. | •                 | •                 | •       | •              | •              |

13) Please indicate whether or not each of the following **TREC activities** took place at your institution *over the past twelve months*.

| TREC ACTIVITY  | Yes | No | Not sure |
|--|-----|----|----------|
| 1. Journal club  | •   | •  | •        |
| 2. Writing group (e.g., publication, manuscript, proposal)   | •   | •  | •        |
| 3. Grantsmanship training  | •   | •  | •        |
| 4. Attendance at colloquia/symposia  | •   | •  | •        |
| 5. Presentation at colloquia/symposia  | •   | •  | •        |
| 6. Career development seminar/workshop   | •   | •  | •        |
| 7. Courses/workshops outside one's primary discipline  | •   | •  | •        |
| 8. Research mentoring in the lab or group setting  | •   | •  | •        |
| 9. Spatial proximity to faculty mentors (e.g. sharing space nearby)  | •   | •  | •        |
| 10. Access to an electronic information network (e.g. intranet, shared drives)   | •   | •  | •        |
| 11. Collaborations among faculty mentors   | •   | •  | •        |
| 12. Collaborations among new investigators within a research lab or team   | •   | •  | •        |
| 13. Collaborations between new investigators and faculty mentors   | •   | •  | •        |
| 14. Other activities specifically targeted to new investigators:<br>[If YES, then continue to #14. If NO or NOT SURE, skip to #15] | •   | •  | •        |

14) Which other training activities took place at your center *over the past 12 months*?

**TEXT BOX to be manually filled**

15) Please indicate how strongly you agree or disagree with each of the following statements about the impact of the training your TREC center offered *over the past twelve months*.

| TREC training experience...   | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree | Does Not Apply |
|---|-------------------|-------------------|---------|----------------|----------------|----------------|
| 1. Enhanced a new investigator's work in his/her primary discipline   | •                 | •                 | •       | •              | •              | •              |
| 2. Further stimulated a new investigator's interest in conducting cross-disciplinary research                                 | •                 | •                 | •       | •              | •              | •              |
| 3. Deepened a new investigator's knowledge and skills beyond what departmental research could offer.                          | •                 | •                 | •       | •              | •              | •              |
| 4. Strengthened a new investigator's desire to pursue scientific discovery and research through transdisciplinary approaches. | •                 | •                 | •       | •              | •              | •              |
| 5. Made a new investigator more likely to pursue a career in cancer-related energy balance research.                          | •                 | •                 | •       | •              | •              | •              |
| 6. Exposed new investigators to broader career possibilities.   | •                 | •                 | •       | •              | •              | •              |
| 7. Stimulated a new investigator to 'think outside the box.'  | •                 | •                 | •       | •              | •              | •              |
| 8. Helped new investigators to internalize a transdisciplinary perspective as a norm for their own research.                  | •                 | •                 | •       | •              | •              | •              |
| 9. Changed the way a new investigator pursues a research idea because of his/her involvement in transdisciplinary research.   | •                 | •                 | •       | •              | •              | •              |

16) Have you served as a mentor in the TREC multiple-mentor training program?

- Yes
  - No [\[If NO, skip to #18\]](#)
- 

17) Please indicate how strongly you agree or disagree with the following statements.

|  | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree |
|--|-------------------|-------------------|---------|----------------|----------------|
| 1. The multiple-mentor training has enhanced my collaborations with colleagues in other disciplines.   | •                 | •                 | •       | •              | •              |
| 2. The multiple-mentor training has expanded my perspectives of scientific research and discovery<br><a href="#">[After completing this item, skip to #29]</a> | •                 | •                 | •       | •              | •              |

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18) Are you a TREC new investigator (e.g., Pre-doc, Post doc, Fellow)?

- Yes
  - No [\[If NO, skip to #30\]](#)
- 

### **Mentoring Experience within TREC**

19) How many mentors do you have within TREC? \_\_\_\_\_  
[\[If 0, skip to #29\]](#)

20) Do you have a primary TREC mentor?

- Yes
  - No [\[If NO, skip to #24\]](#)
- 

21) Your answers to the previous questions indicate you have at least two mentors in TREC and that neither is your primary mentor. Please explain this below for us to better understand your mentoring situation. Thank you!  
**TEXT BOX to be manually filled**

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22) Have you had regularly scheduled meetings with your primary mentor since your involvement with TREC?

- Yes
- No

23) Over the past 12 months, approximately how many hours per week would you estimate you spent working directly with your primary mentor?

\_\_\_\_\_ hours per week

24) Please select the primary discipline of your first, or primary mentor in TREC:

**DROP DOWN LIST**

If you selected other, please specify:

**TEXT BOX to be manually filled** [\[Response not required\]](#)

[\[If number of mentors in #19 is 1, skip to #27\]](#)

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25) Please select the primary discipline of your second, or secondary mentor in TREC:

**DROP DOWN LIST**

If you selected other, please specify:

**TEXT BOX to be manually filled** [\[Response not required\]](#)

[\[If number of mentors in #19 is 2, skip to #27\]](#)

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26) Please select the primary discipline of your third, or tertiary mentor in TREC:

**DROP DOWN LIST**

If you selected other, please specify:

**TEXT BOX to be manually filled** [\[Response not required\]](#)

27) Please indicate how strongly you agree or disagree with the following statements about your TREC mentoring experience with your *first*, or primary mentor.

|   | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree |
|---|-------------------|-------------------|---------|----------------|----------------|
| 1. My mentor takes a personal interest in my career.                  | •                 | •                 | •       | •              | •              |
| 2. My mentor helps me coordinate my professional goals.               | •                 | •                 | •       | •              | •              |
| 3. My mentor has devoted special time and consideration to my career. | •                 | •                 | •       | •              | •              |
| 4. I share personal problems with my mentor.                          | •                 | •                 | •       | •              | •              |
| 5. I exchange confidences with my mentor.                             | •                 | •                 | •       | •              | •              |
| 6. I consider my mentor a friend.                                     | •                 | •                 | •       | •              | •              |
| 7. I try to model my behavior after my mentor.                        | •                 | •                 | •       | •              | •              |
| 8. I admire my mentor's ability to motivate others.                   | •                 | •                 | •       | •              | •              |
| 9. I respect my mentor's ability to teach others.                     | •                 | •                 | •       | •              | •              |

[If number of mentors in #19 is 1, skip to #29]

28) Please indicate how strongly you agree or disagree with the following statements about your TREC mentoring experience with your *second*, or secondary mentor.

|   | Strongly Disagree | Somewhat Disagree | Neutral | Somewhat Agree | Strongly Agree |
|---|-------------------|-------------------|---------|----------------|----------------|
| 1. My mentor takes a personal interest in my career.                  | •                 | •                 | •       | •              | •              |
| 2. My mentor helps me coordinate my professional goals.               | •                 | •                 | •       | •              | •              |
| 3. My mentor has devoted special time and consideration to my career. | •                 | •                 | •       | •              | •              |
| 4. I share personal problems with my mentor.                          | •                 | •                 | •       | •              | •              |
| 5. I exchange confidences with my mentor.                             | •                 | •                 | •       | •              | •              |
| 6. I consider my mentor a friend.                                     | •                 | •                 | •       | •              | •              |
| 7. I try to model my behavior after my mentor.                        | •                 | •                 | •       | •              | •              |
| 8. I admire my mentor's ability to motivate others.                   | •                 | •                 | •       | •              | •              |
| 9. I respect my mentor's ability to teach others.                     | •                 | •                 | •       | •              | •              |

29) How would you describe your satisfaction with your TREC mentoring experience?

| <b>Very Dissatisfied</b> | <b>Somewhat Dissatisfied</b> | <b>Neutral, or Mixed</b> | <b>Somewhat Satisfied</b> | <b>Very Satisfied</b> |
|--------------------------|------------------------------|--------------------------|---------------------------|-----------------------|
| <input type="radio"/>    | <input type="radio"/>        | <input type="radio"/>    | <input type="radio"/>     | <input type="radio"/> |

30) How would you describe the effectiveness of the TREC training processes in general?

| <b>Completely Ineffective</b> | <b>Somewhat Ineffective</b> | <b>Neutral, or Mixed</b> | <b>Somewhat Effective</b> | <b>Completely Effective</b> |
|-------------------------------|-----------------------------|--------------------------|---------------------------|-----------------------------|
| <input type="radio"/>         | <input type="radio"/>       | <input type="radio"/>    | <input type="radio"/>     | <input type="radio"/>       |

31) Please list the top three benefits TREC training has provided:

**TEXT BOX to be manually filled** [\[no response required\]](#)

32) Please list the top three areas that TREC training could be improved:

**TEXT BOX to be manually filled** [\[no response required\]](#)

33) Are there any issues that you would like to share with us about TREC collaborations and training?

**TEXT BOX to be manually filled** [\[no response required\]](#)

*Thank you very much for your time and input!*

[\[Once 'submit survey' is selected, the participant has no more access the survey\]](#)

*- end -*