

In the Driver's Seat: Driving towards a career in cancer prevention research

MD Anderson Cancer Center

THE UNIVERSITY OF TEXAS

Making Cancer History®

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Introduction

What is the Cancer Prevention Research Training Program (CPRTP)?

Funded by the National Cancer Institute for 35 years, the CPRTP provides students with mentored research experiences in cancer prevention and professional development, including career navigation, and aims to attract them to research careers in the field and to diversify the research workforce. For this 10-week R25 short-term research experience program, trainees actively engage in career development activities:



Career Conversation (career talks given by MDs/ Ph.Ds)

Informational Interview
(interviewing anyone of trainee's choice)

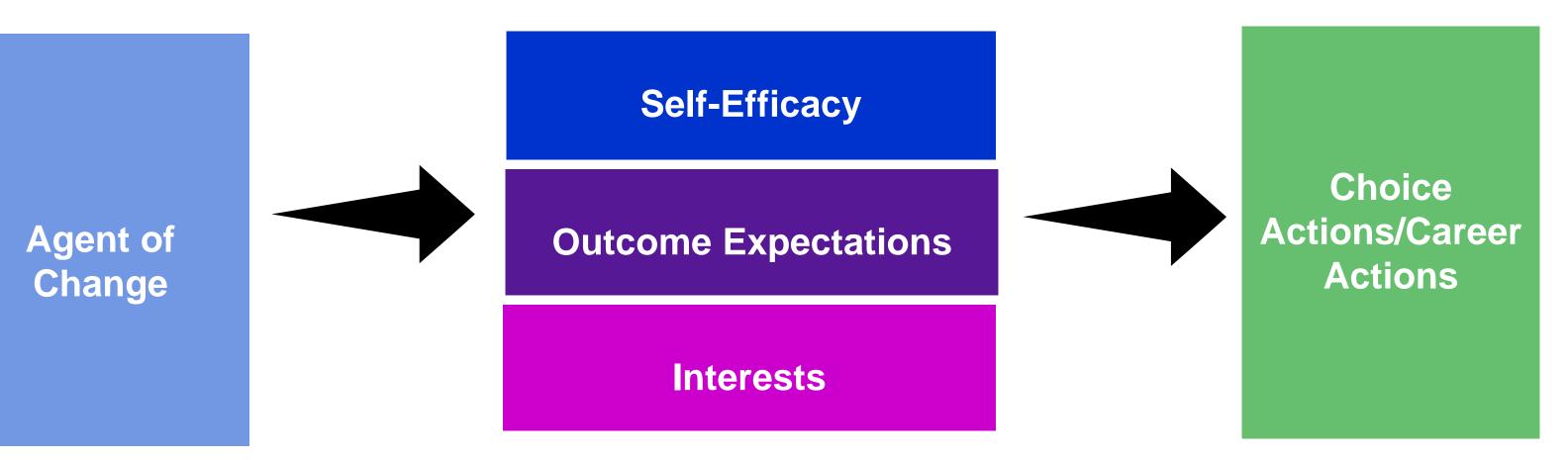


Elevator Speech (90 second speech on trainee's research)

Gap in Knowledge & Research Question: The influence of program activities to shape student career interests and decisions has not been described or evaluated. Here, we ask: How has the CPRTP informed student career navigation and self-perceived personal growth?

Method/Trainee Data

Figure 1: Lent, Brown & Hackett's (1994) Social Cognitive Career Theory



- Our team of 6 people had hour long weekly meetings to discuss each phase of project
- 2) Two members were each assigned to one of the three year's (2015-2017) trainee's essay reports regarding their summer CPRTP experience
- 3) Reports were analyzed for the following: Agents of Change & change as a result of the program
- 4) Three main themes emerged, informed by the Social Cognitive Career Theory (SCCT). Results of the program/smaller themes were also organized through this framework.

Demographic		Frequency	%
Gender	Female	53	76
	Male	17	24
Race	Asian	19	27
	African American	17	24
	White	18	26
	Hispanic or Latino	16	23
First gen. in	No	52	74
college	Yes	15	21
	No answer	3	4
Native Language	English	58	83
	Lang. other than English	12	17
	No	46	66
Disadvantaged	Yes	23	33
Background	Unknown	1	1
Training Status	College Student	27	39
	Graduate Research	31	44
	Assistance		
	Pharmacy Student	2	3
	Research Medical Student	10	14

Responsible Conduct of Research

To protect confidentiality, we worked with anonymized data, assigning pseudonyms to help "humanize" the comments during analysis. However, the team debated whether pseudonyms were appropriately assigned (e.g., matching cultural background and gender of student) and whether such a practice would increase or decrease potential bias of readers. While a decision has not been made, such discussions play an important role in ensuring responsible conduct of qualitative data analysis like ours.

Acknowledgements

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Results

Activity-based learning

(career conversations, informational interviews, etc.)

"These (research) presentations have *increased my understanding of the*overall structure of research studies and all of the factors that need to be taken into account when conducting and managing a research study."

"One of the things that I have learned about my informational interviews is to not feel intimidated or scared by the faculty members. Almost everyone once in their life feel like an impostor, a person who does not belong."

"Furthermore, the "Parachute" exercises have taught me that a *career should not only be a passion, but it* should also hopefully contain what I deem to be important in my life, such as work-life balance and location."

People

(mentors, peers, patients, faculty members)

"From collaborating to brainstorming to proofreading, my mentor, Dr. [name], was always excited to help and to teach me more about her work. Through the relationship, my interests in research and oncology have grown. I learned to never be afraid to ask questions, admit what I do not know and express my ideas and concerns."

"Lastly, a very meaningful experience that I wanted to highlight was when I talked to a crying cancer patient and she hugged me. This was very special to me because it gave me the chance to really connect to someone suffering from cancer, and to understand them better. This encounter further inspired me to pursue medicine, I want to be able to do more than just listen to a patient – I want to be able to provide them with high quality medical care."

"Being among likeminded individuals has helped in motivating be [sic] in achieving my goals as well as setting higher standards for myself, because now I know and believe I am capable of accomplishing them."

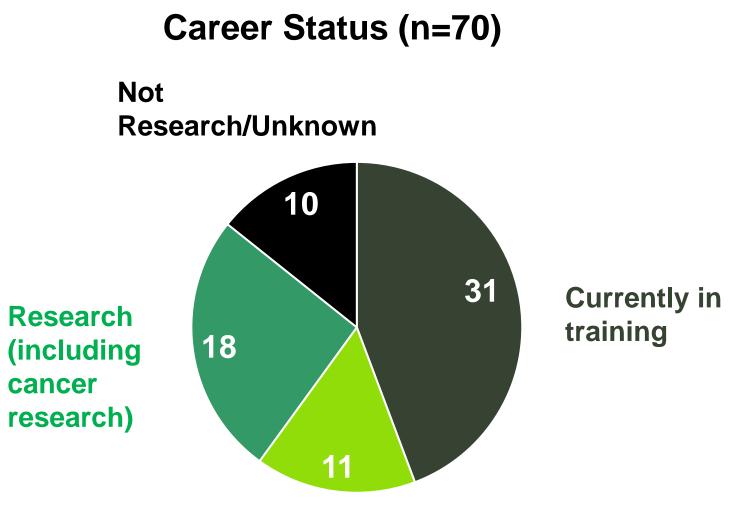
Hands-on experience (labs, manuscripts, research)

"I feel more confident in my abilities to start and complete a study, as well as to write about my research. I liked the feeling of going to clinic and then going to work on research. I was pushed to meet deadlines, get everything done on time, as well as to manage my other work back at graduate school."

"While conducting the scientific measurements, I think that I was able to really connect with the patients in a more subtle, human way. I think I have a need to find a career that affords both the pursuit of scientific inquiry AND the more subtle, human connection that is harder to measure yet seems so incredibly important to me. ..."

Discussion

- Excluding the trainees still in training, approximately 74% of the CPRTP trainees are currently holding a position in some clinical area or research field (including cancer research/cancer prevention research).
- While we cannot directly relate specific activities or even participation in the CPRTP to career paths pursued by alumni, many mention the helpfulness of the program and describe specific insights they have gained.
- Future follow-up efforts include issuing post-surveys for trainees who are currently in training. This will give us a better picture of what fields trainees end up pursuing. Hence, the CPRTP will know where it stands in diversifying and exposing more people to cancer research fields.



Clinical

References

-Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*(1), 79–122. https://doi.org/10.1006/jvbe.1994.1027

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