

Curriculum-at-a-Glance

The Workshop is geared to early career basic, clinical and population scientists who are interested in energy balance and cancer research from transdisciplinary and translational perspectives.

Broad Topics	Sample Sessions
Basic Sciences	Animal models, pre-clinical research methods
Cancer Biology and Epidemiology	Cancer biology and etiology, cancer rates, screening, treatment, side effects
Energy Balance and Cancer	What we know and don't know – diet, physical activity, observational and interventional studies, mediation, effect modification, racial/ethnic and SES differences
Cancer Endpoints	Risk, recurrence, mortality, patient-reported outcomes, biomarkers/mechanisms
Review of Studies	TREC, NHS, WHI, WINS, WHEL, CHALLENGE, PAL, WISER, HOPE, WALC, and Cooperative Group
Research Methods	Study design, power calculation, data management, statistics, transdisciplinary research, laboratory safety, research ethics
Grant Writing	Regulatory concerns, specific aims, eligibility criteria, recruitment, data collection, authorship, conflict of interest
Once funded, now what?	Study start up, advertising, hiring staff
Career Development	Networking, media relations, promotions

Senior Advisory Board

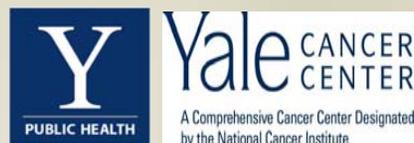
Melinda Irwin, PhD, MPH
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 Linda Nebeling, PhD, MPH, RD, FAND
 Marian Neuhouser, PhD, RD
 Ruth Patterson, PhD
 Kathryn Schmitz, PhD, MPH, FACSM

Course Faculty

Seminars, group sessions, and one-on-one meetings are led by approximately 20 senior experts in the field. See our full list of faculty at TRECTraining.yale.edu.

For More information

Visit us on the web at
TRECTraining.yale.edu
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¹ Rosenfield PI. The potential of transdisciplinary research for sustaining and extending linkages between the health and social sciences. *Soc Sci med* 1992;35:1343-57.

² Schmitz KH, Gehlert S, Patterson RE, et al. TREC to WHERE? Transdisciplinary Research on Energetics and Cancer. *Clin Cancer Res* 2016;22(7):1565-1571.

³ Lam TK, Spitz M, Schully SD, Khoury MJ. "Drivers" of Translational Cancer Epidemiology in the 21st Century: Needs and Opportunities. *CEBP* 2013;22(2):181-188.



**Transdisciplinary Research
 on Energetics and Cancer**

**Training Workshop for
 Early Career Investigators**



NCI-Funded R25CA203650

Hosted by
 Yale Cancer Center | School of Public Health



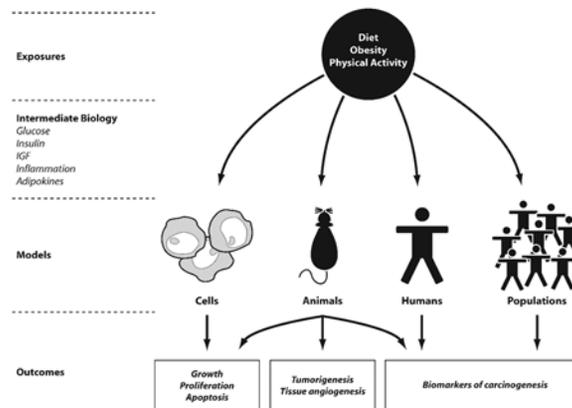
Program Overview

We are building an inspiring community of transdisciplinary researchers in energetics and cancer and invite you to apply to our mentored energy balance and cancer education program: the Transdisciplinary Research on Energetics and Cancer (TREC) Training Workshop. Funded by a five-year grant from the National Cancer Institute, this unique program builds capacity in transdisciplinary (TD) energy balance and cancer research. The Workshop is designed for junior faculty and post-doctoral fellows—primarily individuals in early careers who want to pursue TD research in energy balance and cancer. The Workshop places strong emphasis on mentoring, developing and applying TD competencies, and a curriculum specifically focused on energetics and cancer. Mentors and teaching faculty represent a diverse array of professional disciplines, from basic scientists to clinicians to behavioral and population scientists. Our in-person Workshop integrates didactic presentations and professional networking across senior and early career scientists, utilizing formal learning with informal transdisciplinary collaboration.

Scientific Relevance

The prevalence of obesity in the US and globally has increased significantly over the last three decades, with more than two-thirds of US adults categorized as obese or overweight. Obesity is quickly overtaking tobacco use as the leading preventable cause of developing and dying of cancer, and it is primarily caused by poor diet and physical inactivity which are also independent risk factors for cancer development and mortality. Given the rising prevalence of obesity, poor diet and physical inactivity, known in combination as “energy balance” or “energetics”, as well as their associations with cancer risk factors, innovative research, clinical care and training of scientists in the transdisciplinary model are needed to lower the prevalence of these risk factors and, in turn, lower cancer incidence and mortality rates.

Why Transdisciplinary (TD)?

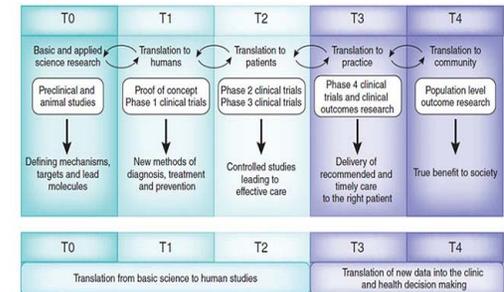


Transdisciplinary research has been defined as research in which knowledge is exchanged, resources are shared, and discipline-specific approaches are modified to address a shared scientific goal.¹ The NCI-funded Transdisciplinary Research on Energetics and Cancer (TREC) Initiative was an exemplar in TD team science, enabling

scientists to transcend discipline-specific silos to create a new intellectual laboratory to address the complex public health problems associated with obesity and cancer. We draw on the years of success of TREC as the basis to train the next generation of TD researchers in energetics and cancer.²

Translational Research

“ ‘Knowledge is not enough; we must apply. Willing is not enough; we must do.’ This quite by Goethe encapsulates the overarching goal of cancer epidemiology: to apply knowledge gained through scientific discovery to improve population health.”³



When is Workshop Offered?

This annual, 5-day in residence program is offered in **June** at the **Water’s Edge Resort in Westbrook, CT**. Costs are covered. Applications are competitive and due in January. Apply on-line: TRECTraining.yale.edu.

Are you Eligible?

We welcome applications from doctorally-trained individuals interested in prioritizing TD research in energy balance and cancer across the cancer continuum. Fellows should be early career investigators (i.e., junior faculty and postdocs). Each cohort includes diverse scholars from a range of disciplines (e.g., basic scientists, clinicians, social/behavioral scientists), institutions, and geography.