

Translating Energy Balance From Bench to Communities: Application of Parallel Animal-Human Studies in Cancer
July 8-10, 2021
Virtual Conference

Day 1 (Thursday, July 8)

10:00AM-3:45PM CENTRAL * (does not include Twitter Session hours)

Welcome and Keynote Address

10:00 am – 11:10 am CENTRAL

10:00 am-10:15 am: Welcome

10:15 am – 11:10 am: Keynote Address: Transdisciplinary and Translational Approaches to Energy Balance and Cancer Research (Melinda Irwin, PhD, MPH; Yale University)

Lightning Poster Session

11:20 am – 11:50 am CENTRAL

3 concurrent poster sessions; 5 presenters per session (5 minutes each for presentation + 5-minute discussion at the end of each session):

- What you eat and when you eat: Relationships to cancer
 - Moderator: Mary Playdon, PhD, MPH; University of Utah
 - 11:20 Pilot study to model inter-meal fasting (IMF) in preclinical animal models for translation to human postmenopausal, obesity-related cancer – Susan Schembre
 - 11:25 Effects of Nutrition and Timed Dietary Interventions on Treatment for FLT3-ITD Positive Acute Myeloid Leukemia – Megan Rodriguez
 - 11:30 Beans to Enrich the Gut microbiome vs. Obesity’s Negative Effects: First results from the BE GONE Trial in high-risk colorectal patients – Carrie Daniel
 - 11:35 Excess TGF- β and high fat diet exacerbate musculoskeletal and metabolic complications of pathologic bone remodeling – Trupti Trivedi
 - 11:40 Feasibility of an observational food-tasting study among active-treatment pediatric cancer patients – Margaret Raber
 - 11:45 Discussion
- The role of activity and diet in symptom management
 - Moderator: Karen Basen-Engquist, PhD, MPH; MD Anderson Cancer Center
 - 11:20 Effect of Daily Physical Activity on Symptom Ratings during Chemotherapy for Breast Cancer: A Longitudinal Examination - Payton Solk
 - 11:25 Plasma Fatty Acid Composition in Treatment-Naïve Metastatic Pancreatic Cancer Patients are Associated with Clinical Indicators of Cachexia – Kristyn Gumper
 - 11:30 Longitudinal examination of sedentary behavior and symptom reporting in breast cancer patients undergoing chemotherapy – Whitney Welch
 - 11:35 Planning a remotely delivered exercise intervention to mitigate cognitive deficits from radiotherapy in adolescents and young adults (AYAs) with brain tumors – Maria Swartz
 - 11:40 Time-restricted eating to address persistent cancer-related fatigue among cancer survivors – Amber Kleckner
 - 11:45 Discussion
- Physical activity and exercise: Movement to impact cancer
 - Moderator: TBD

- 11:20 Increased Physical Activity Delays Development of Obesity-Induced Pancreatic Ductal Adenocarcinoma in Mice and Modulates Inflammation – Valentina Pita
- 11:25 Exercise may sensitize melanoma by altering ceramide metabolism – Jonghae Lee
- 11:30 Exercise may reduce immunosuppression in the pancreatic ductal adenocarcinoma tumor microenvironment – Sumedha Pareek
- 11:35 Associations between recreational physical activity and mTOR pathway protein expression in breast cancer – Ting-Yuan David Cheng
- 11:40 Mechanisms Driving Aerobic Exercise Induced Tumor Vascular Remodeling – Hannah Savage
- 11:45 Discussion

Session 1: Nutrition

Noon – 1:45 pm CENTRAL

12:00 Introduction (Carrie Daniel-MacDougall, PhD, MPH; MD Anderson Cancer Center)

12:05 Impacting Energy Balance in Human Studies: Intensity, Personalization, and Maintenance (Steven Clinton, MD, PhD; The Ohio State University)

12:25 Defining nutritional and circadian parameters for enhancing leukemia therapy (Joya Chandra, PhD; MD Anderson Cancer Center)

12:45 Reverse translation in nutrition- from observation to mechanism to intervention (Jennifer McQuade, MD; MD Anderson Cancer Center)

1:05 Short talk selected from abstracts (Interplay between diet and microbiota regulating breast cancer risk – Katherine Cook)

1:20 Moderated Panel Discussion

Moderator: Carrie Daniel-MacDougall, PhD, MPH; MD Anderson Cancer Center

5-minute overview from moderator followed by panel discussion with all session speakers

Break

1:45 pm – 2:00 pm CENTRAL

Session 2: Physical Activity and Exercise

2:00 pm - 3:45 pm CENTRAL

2:00 Introduction (Kathryn Schmitz, PhD, MPH; Penn State Cancer Institute)

2:05 Clinical studies of exercise and cancer treatment response (Kerry Courneya, PhD; University of Alberta)

2:25 Exercise impacts tumor biology and treatment efficacy: evidence in mice and men (Keri Schadler, PhD; MD Anderson Cancer Center)

2:45 Use of Companion Dogs with Cancer for Parallel Clinical Trials (Mark Dewhirst, DVM, PhD; Duke University School of Medicine)

3:05 Short talk selected from abstracts (Feasibility of Translating Cardio-Protective Acute Exercise and Caloric Restriction Interventions From Rodents to Patients – Amy Kirkham)

3:20 Moderated Panel Discussion

Moderator: Kathryn Schmitz, PhD, MPH; Penn State Cancer Institute

5-minute overview from moderator followed by panel discussion with all session speakers

Exhibitor Hour (exhibitors will be available to meet with conference attendees via Zoom)

3:45 pm – 4:45 pm CENTRAL

Twitter Poster Session

3:45 pm – 6:15 pm CENTRAL

Live Twitter discussion. Authors tweet using hashtag #EBCancer21. Authors will be limited to tweet up to 5 posts for their poster and are encouraged to comment, respond to threads, and engage with audience in the session.

Day 2 (Friday, July 9)

10:00AM–4:10PM CENTRAL

Exhibitor Hour

9:00 am – 10:00 am CENTRAL

Session 3: Body Composition

10:00 am – 11:45 am CENTRAL

10:00 Introduction (Moderator, Robert Chapkin, PhD, MSc; Texas A&M University)

10:05 Increased Physical Activity Delays Development of Obesity-Induced Pancreatic Ductal Adenocarcinoma and Modulates Inflammation (Zobeida Cruz-Monserrate, PhD; The Ohio State University Wexner Medical Center)

10:25 Breaking the Obesity, Inflammation, Breast Cancer Connection (Andrew Dannenberg, MD)

10:45 Focus on Visceral Adipose with Weight Loss Interventions in Obese Breast Cancer Survivors (Carol Fabian, MD; University of Kansas Medical Center)

11:05 Short talk selected from abstracts (Obesity-induced impairment of antitumor immunity is associated with an immunosuppressive tumor immune landscape – Barbara Pazdrak)

11:20 Moderated Panel Discussion

Moderator: Robert Chapkin, PhD, MSc; Texas A&M University

5-minute overview from moderator followed by panel discussion with all session speakers

Break

11:45 am – Noon CENTRAL

Lunch/Cancer Prevention and Control Grand Rounds

12-1:00 pm CENTRAL

Keynote: Breaking the Obesity-Cancer Link: New Targets and Strategies (Stephen Hursting, PhD; University of North Carolina)

Hot Topics – Part I

1:10 pm – 1:35 pm CENTRAL

Presenters have provided a pre-recorded brief summary/background or materials in their subject matter (available through the conference platform) and will host a live 25-minute discussion based on Hot Topics in cancer research.

1:10 pm – 1:35 pm

- Microbiome – Robert Jenq, MD; MD Anderson Cancer Center + Carrie Daniel-MacDougall, PhD, MPH; MD Anderson Cancer Center
- Immune Response - Jennifer McQuade, MD; MD Anderson Cancer Center + Emily LaVoy, PhD; University of Houston

Lightning Poster Session

1:40 pm – 2:10 pm CENTRAL

2 concurrent poster sessions; 5 presenters per session (5 minutes each for presentation + 5-minute discussion at the end of each session):

- Body composition as a driver of cancer development and prognosis
 - Moderator: Bette Caan, DrPH; Kaiser Permanente
 - 1:40 Obesity is associated with lower tumor metabolism in metastatic melanoma – Andrew Hahn
 - 1:45 Duavee® (bazedoxifene + conjugated estrogen) improves body composition and metabolic health without increasing cancer risk: Findings from a rat model of obesity and postmenopausal breast cancer with application to clinical studies. – Erin Giles
 - 1:50 Reducing Breast Cancer Risk with Project TONE: An Intervention to Trim Off Fat with Nutrition and Exercise among Postmenopausal Women with Normal BMI and High Adiposity – Nathan Parker
 - 1:55 Efficacy of a weight loss program prior to robot assisted radical prostatectomy in overweight and obese men with prostate cancer. – Rebekah Wilson
 - 2:00 The influence of adiposity on response to androgen signaling inhibition in men with metastatic castration-resistant prostate cancer – Andrew Hahn
 - 2:05 Discussion
- A deeper dive: Comparing intensity and type of physical activity
 - Moderator: Keri Schadler, PhD, MD Anderson Cancer Center
 - 1:40 Differential impact of varied exercise intensities on vasculature of orthotopic pancreatic cancer in mice – Riccardo Ballaro
 - 1:45 Effects of standing and sedentary behaviors on blood lipids and glucose among physically active individuals at high risk for colorectal cancer – Mary Hidde
 - 1:50 Effects of high-intensity interval training on cardiometabolic and inflammatory biomarkers in prostate cancer patients undergoing active surveillance: A randomized controlled trial – Dong-Woo Kang
 - 1:55 Effect of three different exercise interventions on pancreatic tumor growth with and without gemcitabine in mice – Priti Gupta
 - 2:00 Discussion

Hot Topics – Part II

2:15 pm – 2:40 pm [CENTRAL](#)

Presenters have provided a pre-recorded brief summary/background or materials in their subject matter (available through the conference platform) and will host a live 25-minute discussion based on Hot Topics in cancer research.

2:15 pm – 2:40 pm

- Metabolomics – Philip Lorenzi, PhD; MD Anderson Cancer Center + Robert Chapkin, PhD; Texas A&M University
- Innovative research designs and measures for clinical studies - Johanna Lampe, PhD, RD; Fred Hutchinson Cancer Research Center + Kirsten Ness, PT, PhD, FAPTA; St. Jude Children's Research Hospital

Session 4: Moving energy balance research toward clinical practice change

2:50 pm – 4:10 pm [CENTRAL](#)

2:50 Introduction (Moderator: Nigel Brockton, PhD; American Institute for Cancer Research)

2:55 What we know and what we don't know: Weight loss and Dietary Intake (Wendy Demark-Wahnefried, PhD, RD; The University of Alabama at Birmingham)

3:15 What we know and what we don't know: Exercise and Physical Activity (Neil Iyengar, MD, Memorial Sloan Kettering Cancer Center)

3:35 Panel Discussion “Level of evidence needed to change clinical practice”

Moderator: Nigel Brockton, PhD; American Institute for Cancer Research
5-minute overview from moderator followed by panel discussion with all session speakers
4:00 Closing Remarks (Karen Basen-Engquist, PhD, MD Anderson Cancer Center)

Day 3 (Saturday, July 10): Career skill building for early-stage investigators and trainees

8:00AM-1:10PM CENTRAL

Mentoring Office Hours

8:00 am – 12:00 pm CENTRAL

Attendees will be able to schedule 30-minute slots with mentors to meet individually or in small groups.

Mentors include:

- Melinda Irwin, PhD, MPH; Associate Dean of Research and Professor of Epidemiology; Yale University
- Robert Chapkin, PhD, MSc; Allen Endowed Chair in Nutrition and Chronic Disease Prevention; Texas A&M University
- Andrew Dannenberg, MD
- Stephen Hursting, PhD; Professor, Department of Nutrition; University of North Carolina
- Mark Dewhirst, DVM, PhD; Professor of Radiation Oncology; Duke University School of Medicine
- Karen Basen-Engquist, PhD, MPH; Professor; Behavioral Science; Co-Director, Center for Energy Balance in Cancer Prevention and Survivorship
- Steven Clinton, MD, PhD; Professor, Internal Medicine, The Ohio State University
- Kirsten Ness, PT, PhD, FAPTA; St. Jude Children's Research Hospital

Specific Aims Workshop

10:00 am – 11:50 am CENTRAL

Specific Aims Workshop for Trainees - This session will be aimed at trainees and early-stage investigators who are writing their first grant. The workshop will be led by Mark Dewhirst, DVM, PhD, prior Associate Dean of Faculty Mentoring Duke University School of Medicine 2011-2016. Dr. Dewhirst is trained in and has experience leading Specific Aims workshops for trainees and young investigators.

10:00 am – 10:30 am: Introduction

10:30 am – 11:10 am: Breakout groups

11:10 am – 11:50 am: Breakout group progress

Career Building Conversations

12:00 pm – 1:10 pm CENTRAL

12:00 pm – 12:20 pm Identifying appropriate collaborators from other fields (Melinda Irwin, PhD, MPH; Yale University)

12:20 pm – 12:40 pm Effective transdisciplinary communication (Carrie Cameron, PhD; MD Anderson Cancer Center)

12:40 pm – 1:00 pm Identifying funding opportunities (Susan, M. Czajkowski, PhD; National Cancer Institute, NIH, DHHS)

1:00 pm -1:10 pm – Closing remarks (Karen Basen-Engquist, PhD, MPH, MD Anderson Cancer Center)