

Energy Balance Assessment Supplemental Funding

NATURE AND PURPOSE OF THIS RFA: The Center for Energy Balance in Cancer Prevention and Survivorship (CEB) encourages collaborative, trans-disciplinary research on energy balance and cancer. Energy balance research investigates the effects of diet, physical activity, and body composition on the development and progression of cancer and on cancer patients' quality of life. MD Anderson has numerous shared resources that provide services to support EB research, including assessments of physical fitness and body composition, physical activity, and dietary intake; microbiome sequencing; metabolite analysis; and measures of mouse energy intake and output. However, these resources operate on a fee-for-service basis, and the cost of including these services is often too high to include in pilot tests funded by seed money grants or start-up funds. The CEB offers funding (up to \$10,000/project) to support shared resource services included in Energy Balance pilot tests which generate preliminary data for a larger grant application. Preference will be given to projects with an approved IRB protocol already in place.

Examples of cores and shared resources supporting energy-balance research:

- <u>Assessment, Intervention and Measurement (AIM) Core</u> [i.e. exercise facility, fitness testing, anthropometrics, body composition measurements]
- <u>Microbiome Core Facility</u> [i.e. microbiome study consultation, data analysis of 16S sequencing, gut microbial profiling]
- <u>Bionutrition Research Core</u> [i.e. metabolic kitchen, dietary assessments and analysis, nutrient-controlled human feeding studies, nutrition education]
- <u>Mouse Metabolic Facility</u> [i.e. mice in home-cage design system monitoring metrics of food, water, bodyweight fluctuations, O₂, CO₂]
- <u>Metabolomics Facility</u> [i.e. metabolite analysis, assay setup, redox metabolism assays]
- <u>Keeling Center National Research Resources Programs</u> [i.e. primate behavioral management]
- Review additional MDACC Cores and Shared Resources here.

Examples of energy-balance related research utilizing MDACC shared resources:

- 1. Determination of changes in diet composition and timing of diet on leukemia bearing mice on tumor progression, metabolic activity, and physical activity. Shared Resource: Mouse Metabolic Facility
- Longitudinal dietary monitoring in patients on clinical trials to track changes or drops in macronutrient intake (e.g., kilocalories, % energy from protein or fat) or other specific nutrients (e.g., dietary methionine or fiber) – Shared Resource: Bionutrition Research Core
- 3. *High-intensity interval training for women at heightened risk for breast cancer* Shared Resource: Assessment, Intervention and Measurement Core

Budget limit: \$10,000 (1 year). Up to 2 projects will be funded in FY25.

Application deadlines: February 10, 2025. Application form, currently approved protocol (if applicable), and budget should be submitted electronically to <u>energybalance@mdanderson.org</u> by 5pm.

Eligibility: Full-time MD Anderson faculty, instructor through full professor. Tenured, tenure track, and non-tenure track.

Process:

- Contact core and/or shared resources for services and budget development
 - Submit application, consisting of:
 - \circ Application form
 - Project description: 6,000 character maximum [including spaces], containing an abstract for the overall study, objectives related to EB, rationale for including shared resource assessments, services requested, timeline, and future funding plans
 - Budget (generated by shared resource)
 - o List of collaborators

- Proposals will be reviewed and scored by the Center Co-Directors.
- Evaluation criteria: Project significance and relevance to energy balance research, innovation, approach and feasibility, and plans for future funding.



Post award:

- The core or shared resource will bill the Center for Energy Balance for payment directly.
- Funds should be expended within 12 months of approval, unless permission for an extension is given by the Center Director.
- Progress report due 12 months after award date. Brief follow-up report due 24 months after award date.

Acknowledgement:

• In all publications of findings derived by the use of these funds, the following acknowledgment must be included: "This work was supported by a grant from The University of Texas MD Anderson Cancer Center, Center for Energy Balance in Cancer Prevention and Survivorship."

• This support should be acknowledged by the grantee in all public communication of work resulting from this grant, including scientific abstracts (where permitted), posters at scientific meetings, press releases or other media communications, and Internet-based communications.

For more information regarding eligibility, preparation and submission of applications, contact: Rybecca Kirkpatrick, <u>RGKirkpatrick@mdanderson.org</u>

Attachments: Funding Application, Examples of EB Measures and Costs

Energy Balance Assessment: Supplemental Funding Application

Investigator Information

Name:	Degree(s):	Date:
Title:	Tenure:	
Department:	MDA Unit:	Ext.:
Application Title:		
Application Type: <u>New or Resubmission</u>		
Collaborators - Name and Dept. (faculty lev	vel only)	
Pro	otocol Information	
Does the project have an approved protoc	col?: Select: Protocol No:	
No. of participants approved: No. of	f participant accrued:	
Арј	plication Checklist	
 Application Form Budget- Developed in consultation with one of the second s	core and/or shared resources	

Currently Approved Protocol, if applicable

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Description of Research (6,000 characters maximum)

Include the following components in the description of research:

- $\hfill\square$ Abstract for the overall study,
- □ Study objectives related to Energy Balance(EB),
- $\hfill\square$ Rationale for including EB assessments ,
- □ Procedures for EB assessments, timeline, and
- □ Future funding plans.

Limit of 6,000 characters. Please list references on page 3. Do not alter this form.



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References (No character limit)

No character limit for references. Do not alter this form.