



THE OHIO STATE UNIVERSITY

FFH + TDAI PLANNING Grants



2022 - 2023
Request for proposals

INTRODUCTION

Artificial intelligence (AI) and machine learning (ML) methodologies have the potential to provide new insights on the complex relationship between diet and overall health. From integration of large ‘omics’ datasets to the use of computer vision to capture dietary intake, there are countless ways that AI/ML can be used to advance food, nutrition, and health research.

The Foods for Health Research Initiative (FFH) and Translational Data Analytics Institute (TDAI) are excited to join forces and release **a new PLANNING grant opportunity** focused on the intersection of AI/ML, food, nutrition, and health.

FFH-TDAI Planning Awards will provide funds and resources needed for new interdisciplinary teams to formulate compelling research questions.

Topics of high interest for both awards include, but are not limited to:

- Advanced analysis and integration of multiple ‘omic’-type datasets
- Advanced analysis and integration of ‘omic’ datasets across sample types (e.g. connecting food and biological samples for food intake biomarkers)
- Analysis of diet-host-microbiome relationships
- Development of tools to capture dietary intake data
- New or improved methods of dietary pattern analysis
- Development of predictive tools for precise dietary recommendations
- Integration of data related to human behavior, dietary choice, and health outcomes.
- Wearable or sensor technology to facilitate new insights on health outcomes from food/nutritional interventions

Please direct questions to Matt Teegarden (teegarden.3@osu.edu) and Jenny Grabmier (grabmeier.3@osu.edu).

PLANNING Awards

The inaugural PLANNING award will provide up to \$10,000 in direct costs for a one-year planning period. The purpose of this funding mechanism is to encourage integration of research across artificial intelligence, data science, and the food-nutrition-health continuum by providing resources to develop new interdisciplinary teams.

Submissions are accepted on a rolling basis. Up to 3 awards will be funded in 2023.

Eligibility

- This opportunity is open to all FFH and TDAI core and affiliate faculty
- Two faculty members will serve as Co-PIs, one must be data science/AI-focused and the other focused on food-nutrition-health. Multi-departmental and multi-college collaborations are strongly encouraged.
- Additional co-investigators may also be listed
- The same individual may not serve as a co-PI on more than one PLANNING award application.

Projects

Potential activities funded by this award include, but are not limited to:

- Organizing conferences or symposia around topics of interest with the intent to further build the research community
- Facilitated team development and strategic planning
- Small proof-of-concept studies

NOTE: Be sure to review the Expected Outcomes in section below.

In-kind staff resources from FFH and TDAI are available upon request. Examples include:

- Workshop design, facilitation, and hosting support
- Registration management
- Event and meeting space

Award Terms

- All awards will be transferred to and administered by the home department of one Co-PI. The administrating department must be indicated on the budget template. Funds will be valid for one year from the date of initial fund transfer.
- No faculty salaries, faculty fringe benefits, or capital equipment will be supported.
- Events funded by this award must be hosted on an Ohio State campus. Groups proposing events hosted off-campus must provide justification for doing so.
- Funds may be used to pay for travel associated with speaking costs of outside speakers. Planned travel should be conducted in accordance with the University policy in place at the time of travel.

Award Terms (continued)

- 100% of funds will be transferred at the start of the award period.
- No-cost extensions are discouraged, though permissible only in extenuating circumstances.
- A final report must be submitted by the end of the one-year award period. Failure to submit a final report will result in disqualification from future funding opportunities under this RFA.

Note: Be sure to review the Expected Outcomes section below.

- FFH and TDAI must be acknowledged in all resulting publications and presentations
- The FFH worktag (cc10677) and TDAI worktag (cc13305) must be included at 0% effort level in the associated PA005 for any future proposal submissions that use outcomes that result from this award. This will allow both FFH and TDAI to track effort and return on investment to ensure the longevity of this program.

Expected Outcomes

Expected outcomes will range depending on the proposed work. Optimally, recipients of this award are expected to submit joint publication(s) to peer-reviewed journal(s) and/or joint application(s) for internal or extramural funding related to the project within one year of initial fund transfer. Concept papers/whitepapers detailing the outcome of funded activities will be accepted with sufficient justification.

Application Format

Note that applications are limited to two pages including figures and tables. Section IV is not counted towards the page limit. Applications must be saved as a single PDF using the naming convention “co-PI Name co-PI Name_PLAN23.pdf” (e.g., Smith Brown_PLAN23.pdf). Documents should be single-spaced with ½ in margins and 11-point type (Calibri or Times New Roman). Sections will include:

I. Introduction

- a. Title of proposal
- b. Co-PIs including names, colleges, and departments
- c. Lay abstract (250 words max)
- d. Background rationale, including why Ohio State can lead in the selected topic
- e. Objectives

II. Approach

- a. If proposing a conference, symposium, or similar activity, include information on: a draft agenda, potential invitees, potential speakers, in-kind staff resources from FFH and/or TDAI that will be required, anticipated number of attendees. Also provide detail on how the event will be planned (e.g. pre-conference workshops to determine agenda, scientific organizing committee, etc).
- b. If proposing facilitated team development or similar activity, include information on potential facilitators and a draft schedule of meetings
- c. If proposing a small proof-of-concept study, include typical materials and methods information.

Application Format (continued)

III. Outcomes

- a. Describe anticipated results of activities and the value (technical and otherwise) that they will bring.
- b. Describe next steps that will be taken once the project is completed.
- c. Highlight potential pitfalls and approaches that will be used to overcome or account for them.

III. Supporting Materials (not included in 2-page limit)

- a. Works cited/references
- b. Timeline: briefly describe how work will progress over the 12-month period.
- c. Budget: use the approved template, no other template will be accepted ([linked here](#))
- d. Budget Narrative: justify costs, including how cost/sample is calculated (if applicable), for large events please provide a detailed budget model.
- e. Team: provide the name, contact information, title, affiliations, and expertise of each team member.

Submission

Applications must be saved as a single PDF using the naming convention “co-PI Name co-PI Name_PLAN23.pdf” (e.g., Smith Brown_PLAN23.pdf).

Applications will be accepted, evaluated, and awarded on a rolling basis any time between November 1, 2022 and October 31, 2023. A total of three awards are anticipated to be funded.

Completed applications can be submitted at the following link:

<https://go.osu.edu/ffhtdai-planninggrantsubmissions>