

# JOIN THE TABLE

## Apply to Become a Partner Lab with The Periodic Table of Food Initiative (PTFI)

The Periodic Table of Food Initiative (PTFI)® is a global scientific initiative advancing the characterization of food through standardized, high-resolution analytical methods. By bringing molecular precision to food composition analysis, PTFI enables researchers to uncover the full diversity of compounds in food, from essential nutrients to health-promoting specialized metabolites. Through the standardization of multi-omics tools, PTFI ensures that data generated across labs is comparable and reproducible, enabling global-scale data integration and discovery.

**We invite you to join the table as a PTFI partner lab, and help build the foundation of molecular-level food composition data to power advances in human and planetary health.**

### As a PTFI partner lab, you will receive access to our tools, data, and training resources:

- SOPs and technical requirements for PTFI tools and data generation
- An onboarding plan tailored to your instrumentation and research goals
- Training resources, lab-specific consulting, and ongoing support
- Custom, proprietary reagents for generating standardized multi-omics data at PTFI partner pricing
- Technology platform for processing and contributing your data to the PTFI open-access database

## STEPS TO BECOME A PTFI PARTNER LAB

### 1 Apply to join the PTFI Ecosystem

**Register for an account (or log in):**

<https://ptfi.versobio.com>

**Submit an Expression of Interest form to onboard PTFI tools:**

<https://ptfi.versobio.com/lab-onboarding-application>

Applications are reviewed by the PTFI Secretariat managed by the American Heart Association and the Alliance of Bioversity CIAT.

Selected institutions will formalize participation as a partner lab via a Memorandum of Understanding for Collaboration with the PTFI Secretariat.

### 2 Onboard PTFI Standardized Tools

Once you join our ecosystem, you will connect with our global community and receive access to PTFI tools and training. Our onboarding team provides training and support to build lab proficiency across all steps.

The onboarding process focuses on implementing a validated analytical workflow, using PTFI protocols from sample collection and processing, to Access and Benefit Sharing, metadata specification, and multi-omics analysis. PTFI's standardized protocols ensure that food composition data is comparable across laboratories worldwide while being ethically and legally compliant.

### 3 Contribute to Global Discovery

After onboarding, your lab will be qualified to contribute to the open-access PTFI food composition database. You'll be part of a global effort to generate high-quality data for publication, collaboration, and breakthrough insights in food, agriculture, health, and sustainability.

The PTFI is managed by the American Heart Association and the Alliance of Bioversity CIAT.



American  
Heart  
Association



Alliance  
Bioversity & CIAT

Technology Partner



The PTFI is an entity of The Rockefeller Foundation.



Capacity Strengthening Partners



COLORADO STATE  
UNIVERSITY



FOOD EDU



## REQUEST FOR EXPRESSIONS OF INTEREST

# Join The Periodic Table of Food Initiative (PTFI)® Ecosystem

## Apply to Onboard PTFI Standardized Multi-Omics Tools

### Our Mission

The Periodic Table of Food Initiative (PTFI) is a science-to-action network providing standardized tools, data, and training to map food quality of the world's edible biodiversity. We are mapping food quality based on biomolecular composition and associated food system metadata to address:

- *What is in food?*
- *How does this vary across food systems?*
- *What are the implications for nutrition and health?*

### Vision

We envision a world where each stakeholder involved in food and health systems is empowered to lead data-driven solutions for supporting healthy diets from sustainable food systems for enhanced human and planetary wellbeing.

### Ecosystem

The PTFI ecosystem is composed of global collaborators that have onboarded PTFI multi-omics tools. Our current ecosystem includes 25 collaborating labs in 15 countries, with a lab on each continent. We invite you to join the table as a PTFI partner lab, and help build the foundation of molecular-level food composition data to power advances in human and planetary health.

**Learn more about The Periodic Table of Food Initiative (PTFI) at our website** <https://foodperiodictable.org>

## Join The Periodic Table of Food Initiative (PTFI) Ecosystem

### Apply to Onboard PTFI Standardized Multi-Omics Tools

#### PTFI Standardized Multi-Omics Tools

The PTFI is bringing molecular precision to food composition analysis through the development and distribution of standardized multi-omics tools. These high-resolution tools enable researchers to uncover the full diversity of compounds in food, from essential nutrients to health-promoting specialized metabolites. Through the standardization of multi-omics tools, PTFI ensures that data generated across labs is comparable and reproducible, enabling global-scale data integration and discovery.

The PTFI's standardized multi-omics tools include:

##### Macronutrients

- Lipidomics for complex lipids
- FAMES for fatty acids
- Glycomics for fibers

##### Micronutrients

- Ionomics for minerals and metals

##### Small Molecules

- Metabolomics for small molecules

##### Metabolomics

- Targeted Metabolomics for flavonoids, carotenoids, tocopherols, and phytosterols
- Untargeted Metabolomics for small biomolecules (bioactives) and toxins

#### Human Serum

To link food and health, PTFI has further standardized multi-omics tools for human serum, enabling applications in clinical interventions. This research is advancing precision nutrition by identifying how dietary compounds interact with human biology, unlocking targeted dietary recommendations for disease prevention and treatment.

The PTFI's standardization efforts represent a major step forward in mass spectrometry-based omics analysis, in particular for the analysis of specialized metabolites and small molecules. To date, the individualized nature of methods within labs inhibited the comparison of data. The PTFI has cracked the daunting standardization challenge through the development of novel internal standard reagents, protocols, and data processing tools. Coupled with a unified data repository, The PTFI approach enables the comparison of multi-omics data and the generation of a knowledge resource to inform food systems solutions at a scale larger than ever before.

Learn more about the PTFI's standardized multi-omics tools at the PTFI Research Hub:

<https://ptfi.versobio.com>.

The PTFI's food composition data is made available through two customized open-access data interfaces for non-commercial use, including:

#### Verso Biosciences MarkerLab<sup>®</sup>

MarkerLab is a web-based visualization platform that makes multi-omics data accessible, interpretable and valuable for researchers.

#### American Heart Association's Precision Medicine Platform (PMP)

The PMP is a cloud-based system that allows researchers to collaborate and analyze datasets using the power of machine learning. Researchers can also upload their own data and integrate with The PTFI data to better understand the role of food in medicine. Learn more about exploring The PTFI data with PMP @ <https://precision.heart.org/ptfi-data-resource>.

### **Apply to Onboard PTFI's Standardized Multi-omics Tools**

Profiling food quality based on the comprehensive biomolecular composition of the planet's edible biodiversity is a bold undertaking, one that is too large for any one institution, country, or region. In recognition of the scale of this challenge, and the benefits of data and evidence at scale, we look forward to expanding our ecosystem of institutions equipped to implement The PTFI's standardized multi-omics tools.

### **Eligibility Requirements**

Applicants must have access to one or more of the required instruments at their institutions, and must have a record of previous multi-omics analysis.

- + GC-FID for FAMES
- + Selexion 6500 or 5500 DMS QQQ instrument for Lipidomics
- + ICP-MS for Ionomics
- + High resolution LC-MS instrument for Nontargeted Metabolomics
- + LC-MS instrument for Targeted Metabolomics

Applicants may include laboratories that provide food composition analysis, as well as fee-for-service labs that offer multi-omics analysis.

### **Due Date**

Applications for our next round of collaborating institutions to onboard PTFI's standardized multi-omics tools are due **August 30, 2025**.

### **Benefits of Joining the PTFI Ecosystem**

As a PTFI partner lab, you will receive access to our tools, data, and training resources including:

- SOPs and technical requirements for PTFI tools and data generation
- An onboarding plan tailored to your instrumentation and research goals
- Training resources, lab-specific consulting, and ongoing support
- Custom, proprietary reagents for generating standardized multi-omics data at PTFI partner pricing
- Technology platform for processing and contributing your data to the PTFI open-access database

After onboarding PTFI tools, your lab will be qualified to contribute to the open-access PTFI food composition database. This will enable you to compare your data to other food samples in the PTFI database while contributing to a global public good. You'll be part of a global effort to generate high-quality data for publication, collaboration, and breakthrough insights in food, agriculture, health, and sustainability.

### **Onboarding Timeline**

The PTFI onboarding process typically takes 3-9 months of engagement per analytical platform, from receipt of your onboarding package to validating PTFI tools in your lab.

### Onboarding Process (what to expect)

Once you join our ecosystem, you will connect with our global community and receive access to PTFI tools and training. Our onboarding team provides training and support to build lab proficiency across all steps for standardization for multi-omics based food composition analysis. The onboarding process focuses on implementing a validated analytical workflow using PTFI protocols from sample collection and processing to Access and Benefit Sharing, metadata specification, and multi-omics analysis. PTFI's standardized protocols ensure that food composition data is comparable across laboratories worldwide while being ethically and legally compliant.

### How to Apply

1. Register your PTFI Research Hub account (or log in) at <https://ptfi.versobio.com>
2. Submit an **Expression of Interest** form at <https://ptfi.versobio.com/lab-onboarding-application>  
*Please note, to complete the online application you will be required to upload a single PDF that includes:*
  - a. *Description of Rationale for Onboarding PTFI Tools (up to 2-pages, 11pt font).  
This description should address why you want to join the PTFI ecosystem and onboard our standardized multi-omics tools.*
  - b. *CV of Principal Investigator (Optional: include CV and/or description of expertise for other lab personnel.)*
  - c. *Optional: list of current projects and grant support*

### Application Review

Applications are reviewed by the PTFI Secretariat managed by the American Heart Association and the Alliance of Bioversity CIAT. Selected institutions will formalize participation as a partner lab via a Memorandum of Understanding for Collaboration with the PTFI Secretariat.

### Inquiries

Please send questions via email to [ptfi@heart.org](mailto:ptfi@heart.org)

THE PTFI IS MANAGED BY THE AMERICAN HEART  
ASSOCIATION AND THE ALLIANCE OF BIOVERSITY CIAT



THE PTFI IS AN ENTITY OF  
THE ROCKEFELLER FOUNDATION



TECHNOLOGY PARTNER

