

## Flavors of Sustainability: Philippine Indigenous Crops, Functional Food Products and Recipes in a Digital Library

- Name of Pitch Presenter: Prof. Liezl M. Atienza, RND, PHD
- Designation: Professor and Assistant to the Director
- Email address/Contact Details: <a href="mailto:lmatienza@up.edu.ph">lmatienza@up.edu.ph</a>
- Affiliation/Institution: Institute of Human Nutrition and Food, University of the Philippines Los Banos
- Country: Philippines
- Current initiatives/accomplishments related to the e-ASIA 13<sup>th</sup> Call for Proposals:
- 1. Philippine Indigenous Berries: In Vivo Studies on Toxicity and Effects on Biomarkers of Obesity and Associated Metabolic Disorders. **Project Leader**. Philippine Council for Health Research and Development. Department of Science and Technology. January 01, 2019-December 31, 2021. **Project fund: P15,000,000** (completed)
- 2. Nixtamalized Corn for Food Health and Nutrition: In vitro lipid-lowering effects of nixtamalized corn. **Study Leader**. DA-BAR. November 2019- October 2021. **Project Fund: P5,000,000** (completed)
- 3. In Vivo Investigation of the Effects of Philippine Duhat (*Syzgium Cumini* L.) On Biomarkers of Obesity and Associated Metabolic Disorders (Dyslipidemia and Hyperglycemia). **Proponent/Principal Investigator**. ECWRG. OVPAA-UP. May 01, 2019-October 31, 2020 **Project Fund: P500,000** (completed)
- 4. Lipid-Lowering Properties of Saba Banana Peel Pectin: In Vitro and In Vivo Studies. **Study Leader**. National Research Council of the Philippines. November 01, 2018-October 31, 2019. **Project Fund: PHP1,716,934.02** (completed)



## Sub-theme/Topic: Health and Food – Functional Food

## TRIPLE BURDEN OF MALNUTRITION









Moderate or Severe Food Insecure

Stunted Children

Overweight/
Obese Adults

Deaths due to NCDs



**BIODIVERSITY** 

Globally,

250,000-300,000 12,000

**Edible** Plant Species

**Known** Plant Species

200

**Utilized** Plant Species

with most abundant plant species

**GOAL:** Leverage Philippine indigenous and underutilized crops nationwide through functional food products and recipe development for a healthy Filipino citizenry.



## **Sub-theme/Topic: Health and Food – Functional Food**













Environmental and Economic sustainability









Recipe generator

Policy proposal

on production and utilization of Philippine indigenous and underutilized crops



develop a recipe generator tool (with nutrients and bioactives label) containing these sustainable and healthy standardized recipes for household, indigenous communities, institutional use (reference for school feeding programs, hospital and correctional diets, etc)

Food product development

create sustainable and healthy standardized recipes incorporating these indigenous and underutilized crops for food and nutrition security

develop high value functional food products and ingredients and nutraceuticals for disease prevention and health promotion

Profiling and creation of digital library

nutritional and functional properties of indigenous and underutilized crops including essential nutrients, dietary fiber, bioactive compounds such as phytochemical and antioxidant activity, glycemic index, prebiotic properties and immune-enhancing factors