Department of Science and Technology **Balik Scientist Program**









balikscientist bsp.dost.gov.ph bsp@dost.gov.ph





Innovating Nuclear Medicine Research and Services: Development of Emerging PET Radiopharmaceuticals for Early Cancer Staging and Assessment of **Biologic Functions in Cancer Cells**

Duration: 2022-2024

Host Institution: DOST - Industrial Technology Development Institute (ITDI)

Project Description

The project seeks to integrate electromagnetic radiation, data analytics, and modeling focus to develop a new treatment technology for cassava bacterial and fungal pathogens related diseases and insects, and to identify management protocols to reduce pest and disease (PD) impact on crops using environment- friendly solutions. The project will address 1) the treatment and management of PD using multi-discipline based on data science and machine learning approaches, and 2) ICT-based extension service to deliver tangible technology to mitigate PD damages.

Project 1: Development of National Capacity in the Production and Quality Control of PET Radiopharmaceuticals for Cancer Staging

Project 2: Development of Diagnostic PET Facilities for Health Care Management and **Applications**

Experts Needed

• Expert on Application of UV (UV-C) irradiation to suppress plants bacterial, fungal pathogens, and to control harmful pest incidents in field conditions.