

## EXPERT'S PROFILE

**Name of Grantee** : EIZADORA T. YU, PhD  
**Area of Expertise** : Biotechnology (Mass Spectrometry Instrumentation)  
**Inclusive Dates of Contract as BSP Awardee** : Long-Term Program  
August 2014 – August 2016  
**Host Institution** : UP Institute of Chemistry

## EDUCATIONAL BACKGROUND

**PhD in Biochemistry & Molecular Biology**, University of Maryland Baltimore County,  
March 2006  
**MS in Chemistry**, University of the Philippines, October 1999  
**BS in Chemistry**, University of the Philippines, April 1995

## PROFESSIONAL EXPERIENCE

2011 – present **Senior Member of Technical Staff**  
2006 – 10 **Postdoctoral Fellow**  
Sandia National Laboratories  
Livermore, CA

2001 – 06 **Graduate Research Associate**  
University of Maryland  
Baltimore County  
MD, USA

1997 – 99 **Graduate Research Assistant**  
Marine Science Institute  
University of the Philippines

## TEACHING EXPERIENCE

Sandia National Laboratories (2006 – present)  
Livermore, CA

University of Maryland (2001 – 06)  
Baltimore County, MD

University of the Philippines (1999 – 2000; 1995 – 97)  
Diliman, Quezon City

## TO BE ACCOMPLISHED AS BS AWARDEE :

### *UP Institute of Chemistry*

1. Establish core capability in bioanalytical mass spectrometry/proteomics at UP Diliman by training students and research staff;
2. Conduct lectures and workshops on biochemistry, bioanalytical mass spectrometry techniques and data analysis; and

3. Teach undergraduate and graduate biochemistry courses.

#### ***Food and Nutrition Research Institute***

1. Provide technical assistance on functional characterization of mutations/single base changes underlying lifestyle-related diseases particularly on the screening of priority mutations that may be improved by dietary interventions;
2. Provide technical assistance on isolation, chemical characterization, and structural elucidation of bioactive components, i.e. *Moringa oleifera*, that have direct interactions with DNA mutations; and
3. Conduct of in-house lectures and workshops on several molecular biology and biochemistry techniques including DNA and RNA purification, DNA cloning and mutagenesis, single nucleotide polymorphisms analysis, genome annotation, and DNA sequence analysis.

#### ***UP Marine Science Institute***

1. Provide assistance to the Moringa Program funded by DOST-PCHRD, particularly on structural characterization of antimicrobial peptides and synthesis of peptide analogs using mass spectrometry; and
2. Provide assistance in the isolation of peptides from venomous snails through structural elucidation using mass spectrometry