

## EXPERT'S PROFILE

**Name of Grantee** : Hernando P. Bacosa, PhD  
**Area of Expertise** : Environmental Studies  
**Inclusive Date of Contract as BSP Awardee** : May 7-August 4, 2018  
**Host Institution** : Western Philippines University  
Mindanao State University - Naawan  
**E-mail Address** : herbacs3001@gmail.com



## EDUCATIONAL BACKGROUND

Ph.D. Environmental Studies, Tohoku University, Japan, 2010  
M.Sc. Environmental Studies, Tohoku University, Japan, 2007  
Post-graduate Diploma in Ecosystem Management, Tohoku University, Japan, 2011  
B.Sc. Biology, Mindanao State University (*Magna Cum Laude*), Philippines

## PROFESSIONAL EXPERIENCES

**Post-doctoral Research Associate** (2017-present)  
Department of Marine Biology, Texas A&M University  
Galveston, Texas, USA

**Post-doctoral Research Fellow** (2013-2017)  
Marine Science Institute, The University of Texas at Austin, Texas

**Post-doctoral Research Fellow** (2012-2013)  
Japan Society for the Promotion of Science (JSPS) Post-doctoral fellowship for overseas researchers  
Tohoku University, Japan

**Science Research Specialist** (2003-2005)  
DOST-Philippine Textile Research Institute  
Taguig City, Philippines

## To Be Accomplished as a BSP Awardee (Deliverables):

1. Provide expert guidance on the following PCAARRD-funded projects:

## WPU

- Mechanizing the Production Systems in Philippine Seaweed Farms and Improving the Seaweed Culture Facility at PSU-MSL
- Assessing the status of Giant Clams and Advancing Culture Techniques

## MSU-Naawan

- Remote Sensing Information for Living Environmental and Nationwide Tool for Sentinel Ecosystems in our Archipelagic Seas (RESILIENT SEAS) for Climate Change
- Development of captive breeding and hatchery technology for White Teatfish (*Holothuria fuscogilva*)
- Expansion of the MSU Naawan Hatchery Facilities for Sea Cucumber Research Program

2. Conduct lectures and research seminars on environmental and marine pollution, bioremediation/biotechnology, environmental chemistry and analytical instrumentation, microfluids (lab-on-a-chip and its applications), interdisciplinary science and climate change  
Specific Topic: Microbial community dynamics of contaminated environments
3. Organize a series of workshop-seminars on spill response and remediation, analysis on next generation sequences and metagenomics
4. Assist in the preparation of research manuscript(s) for publication
5. Explore possible research collaboration with Tohoku University (Japan), Tsinghua University (China), KAIST (South Korea), University of Texas at Austin and Texas A&M (USA)
6. Act as Associate Editor of the Palawan Scientist and Journal of Environment and Aquatic Resources to assist the editorial boards in meeting the criteria for the inclusion of the publications in SCOPUS and/or Web of Science indexing
7. Provide consultation and guidance to students and researchers for the development of research topics in marine and environmental sciences
8. Assist in gathering preliminary data and conduct review of related literature for future research proposals