



Oceanbio Laboratory,
University of the Philippines Visayas
Usa Marine Biological Institute, Kochi University &
Wakayama Prefecture Fisheries Institute



present this

Certificate of Participation

to

DONNA M. GUARTE

for rendering her valuable service as organizer and for participating in the

Training on Marine Fish Larvae Taxonomy

Given this 14th day of January 2019 at Graduate and Continuing Education Building,
University of the Philippines Visayas, Iloilo City, Philippines

DR. WILFREDO L. CAMPOS

Professor
University of the Philippines
Visayas



DR. IZUMI KINOSHITA

Professor/Director
Usa Marine Biological Institute,
Kochi University

DR. SHIGEO HARADA

Senior Researcher
Wakayama Prefecture Fisheries
Institute





OceanBio Laboratory
Division of Biological Sciences, College of Arts & Sciences
University of the Philippines Visayas, Miag-ao, Iloilo 5023 PHILIPPINES
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05 August 2018

Ms. Donna Guarte

PhD Student

Usa Institute of Marine Biology

Kochi University

Kochi, Japan

Dear Ms. Guarte,

The Philippines is recognized as the center of hotspots for marine fish biodiversity in the world, and it is imperative to conserve this natural richness in the face of pressures from both local activities (e.g., overfishing and habitat degradation) as well as changing global conditions (e.g., climate change). One means of addressing this concern is the scaling up of marine protected areas (MPAs) to form networks linked together ecologically through the transport of propagules (early stages) between likely sources and sinks. For this reason, it is important to develop the know-how to correctly identify early stages of various fish groups. While there is a growing interest in the country to address this subject, the lack of expertise has hindered further research on it.

In recognition of your extensive work and expertise, we wish to formally invite you to present a part of your dissertation on the early life history of marine fishes at the University of the Philippines Visayas (UPV) in Iloilo City.

A tentative program is attached for your review. Please feel free to inform us of any suggestions or comments on the proposed activities. Thank you very much for your interest in sharing your expertise with us and we look forward to hearing from you soon.

Sincerely,

A handwritten signature in black ink, appearing to read "Wilfredo L. Campos".

Wilfredo L. Campos, Dr. rer. nat.
Professor/Proponent

Program for Seminar/Training on Marine Fish Larvae: Tentative Program (10-14 January 2019, UPV Iloilo City)**Proponent:** Wilfredo L. Campos (Professor, Oceanbio Lab, CAS, UP Visayas)

	Time	Activity
09 Jan 19 (DAY 0)		Arrival in Iloilo
10 Jan 19 (DAY 1)	0800-0900	Registration
	0900-0905	Welcome
	0905-0915	Opening remarks
	0915-0920	Overview of Seminar & Training workshop
	0920-1000	Dr. Kinoshita
	1000-1020	Break
	1020-1040	<i>How active is transport in marine fish larvae?</i> (Wilfredo L. Campos, UPV-CAS)
	1040-1120	<i>Diversity and ecology of Gobiid larvae in nearshore waters of Japan</i> (Dr. S. Harada, Wakayama Prefecture Fisheries Institute)
	1120-1140	<i>Occurrence and early life histories of <u>Lateolabrax/Acanthopagrus</u> in estuaries in Vietnam</i> (Dr. Thanh Trun Tran, Univ. of Science, Vietnam Nat'l U-Hanoi)
	1140-1200	<i>Distribution & early life history of endemic fishes in Ariake Bay</i> (Shotaro Tojima, Usa Marine Biological Institute, Kochi University)
	1200-1300	Lunch
	1300-1320	<i>Review of Auxis (Scombridae) larvae using collections from Tosa Bay, Japan</i> (Donna M. Guarte, Usa Marine Biological Institute, Kochi University)
	1320-1340	<i>Patterns in the composition & distribution of fish larvae in coral reef systems</i> (Lucas R. Felix, OceanBio Lab, UPV)
	1340-1400	<i>Vertical distribution of eggs and larvae of <u>Maurolicus japonicus</u> (Sternoptychidae, Pisces), in Tosa Bay, Japan</i> (Liezal C. Paraboles)
	1400-1420	<i>Composition and distribution of fish larvae in the Zamboanga Upwelling System during the NE monsoon</i> (Ryan Dexter Piloton, OceanBio Lab, UPV)
	1420-1730	Other presentations/Group discussion
	1830-2030	Welcome Dinner
11 Jan 19 (DAY 2)	0830-0845	Overview of Training Lectures
	0845-0915	Biology & Ecology of fish larvae (Dr. Kinoshita)
	0915-1000	Ichthyoplankton studies & their objectives (Dr. Campos/Kinoshita)
	1000-1030	Break
	1030-1115	Otolith & Osteology studies (Dr. Kinoshita/Harada)
	1115-1200	Anatomy & diversity of form in fish early stages (Dr. Kinoshita/ Harada)
	1200-1300	Lunch
	1300-1400	Lab (familiarization w/ structure & form)
	1400-1445	Lecture on sampling/survey & methods (Dr. Kinoshita/Harada/Campos)
	1445-1500	Break
	1500-1545	Briefing on survey area & sampling methods (OceanBio staff)
	1545-1745	Preparations for sampling
	1745-1900	Dinner
	1900-2400	Field sampling (Iloilo River) (OceanBio staff)
12 Jan 19 (DAY 3)	0830-1230	Lecture on lab sample processing & use of dichotomous keys to families (Dr. Kinoshita/Harada)
	1330-1730	Lab sample processing & identification
13 Jan 19 (DAY 4)	0830-1230	Lectures on major & specific groups (Dr. Kinoshita/Harada)
	1330-1730	Lab sample identification
14 Jan 19 (DAY 5)	0830-1130	Discussion/Workshop: Formulation of Nation-wide Research Program
	1130-1230	Lunch
	1230-1430	Presentations of proposal(s)
	1430-	Departure



INSTITUTE OF FISHERIES POLICY AND DEVELOPMENT STUDIES
COLLEGE OF FISHERIES AND OCEAN SCIENCES
UNIVERSITY OF THE PHILIPPINES VISAYAS



AND

ENVIRONMENTAL DEFENSE FUND

present this **CERTIFICATE OF PARTICIPATION**

to

MS. DONNA GUARTE

for completion of **"Fisheries Science and Management Training-Workshop"**

11-12 September 2017

University of the Philippines Visayas, Iloilo City


DR. CRISPINO A. SACLAUSO
Dean, CFOS


DR. HAROLD M. MONTECLARO
Director, IFPDS


MS. EMILIE LITSINGER
Director, EDF Philippines



INSTITUTE OF FISHERIES POLICY AND DEVELOPMENT STUDIES
COLLEGE OF FISHERIES AND OCEAN SCIENCES
UNIVERSITY OF THE PHILIPPINES VISAYAS



AND

ENVIRONMENTAL DEFENSE FUND

presents this invitation

to

MS. DONNA GUARTE

to attend the **"Fisheries Science and Management Training-Workshop"**

on 11-12 September 2017

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DR. CRISPINO A. SACLAUSO
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MS. EMILIE LITSINGER
Director, EDF Philippines

Program

September 11, 2017

8:30 - 9:00

Opening Program

Prayer

National Anthem

Welcome Remarks

Dr. Harold Monteclaro

Ms. Emilie Litsinger

Introduction of participants from UPV and EDF

9:00 - 10:00

UPV presentations

Current researches, research interests and research needs

11:00-12:00

(1pm)

Current state of fisheries science and management around the world

Dr. Rob Fujita

12:00-1:00

Lunch

1:00-2:00

Roadmap

2:00-3:15

Overview of EDF's tools

3:15-3:30

Break/Snacks

3:45-5:00

How EDF teaches

September 12, 2017

8:30-10:00

Framework for Integrated Stock and Habitat Evaluation (FISHE) Overview

Dr. Jose A. Ingles

10:00-10:15

Break/Snacks

10:15-12:00

Deeper Dive: Audience Choice #2 (Sardines?)

12:00-1:00

Lunch

1:00-3:00

Deeper Dive: Audience Choice #3 / Policy Analysis (Sardines?)

3:00-3:15

Break/Snacks

3:15-5:00

Discussion, feedback of the EDF tools

Next steps for UPV-EDF Collaboration

Closing Remarks



OceanBio Laboratory
University of the Philippines Visayas
Miagao, Iloilo
Bohol Island State University



presents this

Certificate of Appreciation

to

Donna M. Guarte

for sharing her expertise as a resource person for the training on
Participatory Coastal Resource Assessment (PCRA)
held at Maberres Beach Resort, Matabo, Tubigon, Bohol, Philippines.

Given this 22nd of September 2016.


DR. WILFREDO L. CAMPOS

Professor/Project Leader
University of the Philippines Visayas



OceanBio Laboratory
Division of Biological Sciences, College of Arts & Sciences
University of the Philippines Visayas, Miag-ao, Iloilo 5023 PHILIPPINES
Tel.: +63 33 315 9271 Fax: +63 33 315 9271
Email: oceanbio2002@gmail.com



10 September 2016

Ms. Donna Guarte
Research Associate
OceanBio Laboratory
UP Visayas, Miagao

Dear Ms. Guarte,

In recognition of your work and expertise, we wish to invite you as resource person for the Training on Participatory Coastal Resource Assessment in west Danajon Bank, Bohol to be held at Maberres Beach Resort, Matabao, Tubigon, Bohol on September 19-22, 2016.

We will email the tentative program to you soon for your review. Thank you very much for your interest in sharing your expertise with us and we look forward to hearing from you soon.

Sincerely,


Wilfredo L. Campos , Dr. rer. nat.
Professor/Proponent

Program and activities to train LGU Partners and committee in each MPA selected.

Day	Time	Activity/Topic
Day 1	8:00AM 9:00 10:00 12:00NN 1:00PM	Arrival and registration Welcome address <ul style="list-style-type: none"> • Introduction of participants • Briefing/overview of the training Introduction to Coastal Environment and Management <ul style="list-style-type: none"> - Overview of coastal ecosystems - Importance of different coastal habitats and connectivity - Status of Coastal Resources in the Philippines L-U-N-C-H What is management and the need to manage coastal resources <ul style="list-style-type: none"> - Relevance of baseline resource data - Relevance to the resources and users Why use MPA for managing coastal marine habitats and fisheries <ul style="list-style-type: none"> - Benefits of MPA to fisheries - Benefits to habitats (ecological network)
Day 2	8:00AM 12NN 1:00PM	Introduction to Seagrass bed ecology Habitat Assessment <ul style="list-style-type: none"> - Seagrass cover, composition, biomass - Seagrass epifauna (macro-invertebrates) Theoretical exercise L-U-N-C-H Overview of Mangrove Ecosystem Assessment of mangrove habitat <ul style="list-style-type: none"> -Species composition, stages, DBH (diameter at breast height) -Canopy cover and others Theoretical exercise
Day 3	8:00AM 12NN 1:00PM	Coral reef Ecosystem Coral reef biology and ecology Assessment of coral reefs <ul style="list-style-type: none"> - Coral composition cover, lifeforms, bleaching and recruits - Reef Macro-invertebrates - Reef fish abundance L-U-N-C-H Theoretical exercise Orientation for the field activity Groupings of participants (3 different teams)
Day 4	8:00AM 12:00NN 1:00PM	Actual fieldwork (seagrass, mangrove & corals) L-U-N-C-H Data encoding/processing/summaries Group reporting
Day 5	8:00AM 12:00NN 1:00PM	Fisheries Profiling Fisheries Monitoring Catch and Effort recording L-U-N-C-H Theoretical exercise Data encoding/processing/summaries Feedback on training



JOHN B. LACSON FOUNDATION MARITIME UNIVERSITY

(Formerly Iloilo Maritime Academy)

M.H. del Pilar St., Molo, Iloilo City

presents this

Certificate of Appreciation

to

DONNA M. GUARTE

*for sharing her invaluable time and expertise as a resource person
during the Training on Under Water Reef Assessment and Monitoring Surveys for the
Technical Team of the Igang Bay Marine Sanctuary held at Taklong Island, National Marine Reserve,
Nueva Valencia, Guimaras*

Given this 8th day of August 2015.


DR. RONALD RAYMOND L. SEBASTIAN
Chief Executive Officer
JBLFMU



JOHN B. LACSON FOUNDATION MARITIME UNIVERSITY
M.H. del Pilar St., Molo, Iloilo City

5 July 2016

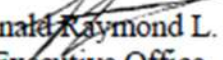
Dear Ms. Guarte,

The Igang Bay Marine Sanctuary was officially established in 2010 to ensure that the marine ecosystem in the area retain its ecological balance in the light of continuing population increase, the intensifying pressure from fishing and other uses of its marine resources, and the changing climate. A management regime that is effectively implemented and adaptive is necessary to achieve this long term goal. Thus, we would like to invite you to be one of the resource persons for the training program that addresses the need for adaptive management by building the capacity of the local technical team to monitor and assess the ecological conditions of reef areas in the area under protective management.

The training will focus on the reef monitoring, data analysis, data encoding, data interpretation and writing of the reports. *The activity aims a 5 day (8 hours/day) hands-on underwater assessment for the existing and expanded MPA at the Municipality of Nueva Valencia, Province of Guimaras.* After the training, the newly available personnel for underwater MPA assessment will assure a regular and more thorough underwater MPA assessment in the future. Moreover, the training will be used to review and refine the participants dive skills, for increased dive security and standardization as well as better underwater data collection thus, inclusion of the alliance coordinators, NGA and local academe- John B. Lacson Foundation Maritime University (JBLFMU).

Thank you for your time and kind consideration. We hope for a positive response from you soon.

Sincerely,


Dr. Ronald Raymond L. Sebastian
Chief Executive Office
JBLFMU

participants. After each lecture, field exercises were conducted to apply the method/s presented and to assess their learned skills. The training program is shown below.

Table 1. The training program on Underwater Reef Assessment and Monitoring surveys for the Technical Team of the Igang Bay Marine Sanctuary.

Date/Time	Activity	Resource Person
Day 1	Venue: UPV Marine Biological Station, Taklong Is.	
0700	Travel to venue (UPV MBS)	
0900	Opening/welcome	DMG
0930	Brief on the training	DMG
0945	Coral Reef Bottom Life form survey methods	DMG
1330	<i>Trial Dive 1 (Point-Intercept Transect (PIT))</i>	
1800	Post dive review	DMG/RDP/LRF
Day 2	Venue: UPV Marine Biological Station, Taklong Is.	
0800	Overview of coral reefs	WLC
0900	Status of coral reefs in the country	WLC
1000	Reef macroinvertebrate survey	RDP
1100	Reef fish visual census	LRF
1400	<i>Trial Dive 2 (PIT/reef macroinverts)</i>	
1800	Post dive review	DMG/RDP/LRF
2000	PIT Data encoding, processing & summary	DMG
Day 3	Venue: UPV Marine Biological Station, Taklong Is.	
0800	Pre-dive briefing	WLC
0900	<i>Dive survey 1 (PIT/reef macroinvertebrates)</i>	
1300	Post dive review	DMG/RDP/LRF
1500	Pack up & depart	
1800	Travel back to Iloilo	
Day 4	Venue: John B. Lacson Foundation Maritime University	
0800	What are MPAs	WLC
0900	Overview of MPA Mgt	WLC
1000	<i>Trial Dive 3 (tests on Reef fish surveys)</i>	LRF/RDP
1300	PIT Data encoding, processing & summary	DMG
	Reef inverts/ reef fish data encoding & processing	
1400	Data processing & analysis	WLC
	Replicates	
	Inside vs Outside comparisons	
	Year-to-year comparisons	
1530	Planning & design of monitoring program for IBMS	WLC
1630	Review of trial dive tests	DMG/LRF/RDP/WLC
1730	Awarding of certificates & closing	WLC



ISO 9001:2008

**The PHILIPPINE COUNCIL FOR AGRICULTURE, AQUATIC AND
NATURAL RESOURCES RESEARCH AND DEVELOPMENT
(PCAARRD)**

DEPARTMENT OF SCIENCE AND TECHNOLOGY (DOST)

presents this

Certificate of Completion

to

DONNA M. GUARTE

for having attended the

**TRAINING ON COASTAL FISH STOCK ASSESSMENT
(CoFSA)**

held on 11 to 15 December 2013
at PCAARRD, Los Banos, Laguna, Philippines.

Given this 15th day of December 2013.

PATRICIO S. FAYLON
Executive Director



Certificate Number:
AJA13-0034



PCAARRD-DOST
 PHILIPPINE COUNCIL FOR AGRICULTURE, AQUATIC AND NATURAL RESOURCES
 RESEARCH AND DEVELOPMENT
 Department of Science and Technology

MARINE RESOURCES DIVISION

2 December 2013

Ms. Donna M. Guarte
 Oceanbio Laboratory
 College of Arts and Sciences
 UP in the Visayas
 Iloilo City

Dear Ms. Guarte:

PCAARRD, in its efforts to provide training to its network partners in managing the fisheries/marine resources of the country, will conduct the training on "Coastal Fish Stock Assessment" (CoFSA) from December 11-15, 2013.

In general, this 5-day live-in training aims to provide fundamental concepts and principles of fish stock assessment as well as develop partnerships between those monitoring fisheries and those doing stock assessment analyses, in particular:

Knowing your involvement in coastal resources management and/or fisheries management/assessment, may we invite you to attend the said training which will be held at the C.B. Perez Room in PCAARRD, Los Baños, Laguna. Please bring your laptop that will be used during the training.

For the duration of the course, PCAARRD will provide food and accommodation as well as the necessary local transport to and from the training venue and the hotel. Your plane fare to and from the airport in Manila will be your counterpart for the training.

Please send in your Curriculum Vitae no later than December 9, 2013 for the Participant's Profile and for Registration purposes. We have enclosed the Confirmation Slip to be accomplished and send back to us the soonest time.

Thank you very much.

Very truly yours,

ESTER C. ZARAGOZA
 Officer-in-Charge

Training Course on COASTAL FISH STOCK ASSESSMENT (CoFSA)

The training course on CoFSA is a 5-day program that aims to develop partnerships between those monitoring fisheries and those doing the stock assessment analyses, the LGU and the academe.

Fish stock assessment essentially aims to determine impact of fishing on a resource. Accurately assessed resources should likely lead to well-managed fisheries. Properly managed fisheries in turn are more resilient to environmental changes than overfished or depleted ones. Capacitating localized personnel for fish stock assessment should present opportunities for developing a pool of fishery assessors who can readily service a management area. Providing this training to personnel who directly partake in managing the resource can improve uptake of management recommendations.

Given that Philippine coastal fisheries are one of the most diverse in the world, with the highly diverse stocks exploited by competing multi-gear, multi-sector fisheries, strategic efforts are necessary for implementing a sustainable harvest regime. The CoFSA training course paves the way in helping assess our fisheries toward rational management.

Course Objectives

At the end of the training, the participants should be able to:

- Understand the basic concepts of biostatistics and fish sampling in consideration of natural variability of fish populations;
- Gain in-depth knowledge on fundamental concepts and principles of fish stock assessment;
- Use available software package to estimate growth, mortality, recruitment and yield/production through analyses of size-frequency and catch/effort data;
- Design a program for collecting fisheries catch, effort and biological data needed for stock assessment; and
- Present a draft plan for fish stock assessment they formulated for their respective locality.

PROGRAM

Day 1: December 11 - Wednesday

(AM) - Arrival, Registration and Billeting of Participants

(PM) - Opening Program
Training Orientation
Leveling-off with Participants

Basic Biostatistics

(Program Continuation....)

Day 2: December 12 - Thursday

Principles of Biological Sampling with
Application to Fish Population
Exercises on Catch-Per-Unit-Effort
Monitoring & Biological Examination
of Samples

Day 3: December 13 - Friday

Growth, Mortality & Recruitment of Fish
Population
Yield-Per-Recruit Analysis, Virtual Population
Analysis & Surplus Production Models

Day 4: December 14 - Saturday

Basic Spreadsheet Statistical &
Histogram Analysis
Electronic Fish Stock Assessment (EFSA):
Growth, Mortality & Recruitment
Analysis

Day 5: December 15 - Sunday

Case Studies on Fish Stock Assessment
Critiquing of FSA Plan
Training Evaluation
Closing Program



PCAARRD-DOST

PHILIPPINE COUNCIL FOR AGRICULTURE, AQUATIC AND NATURAL RESOURCES
RESEARCH AND DEVELOPMENT
Department of Science and Technology

**Training Course on
COASTAL FISH STOCK ASSESSMENT
(CoFSA)**

11-15 December 2013
C.B. Perez Room, PCAARRD
Los Banos, Laguna

Organized and Conducted by the
Marine Resources Division

Donna M. Garte



This
Certificate of Appreciation
is given to

DONNA M. GUARTE

in recognition of valuable contributions to the training for **Participatory
Coastal Resource Assessment** held at Siraan Hot Spring Resort,
Anini-y, Antique.

Given this 26th of August 2012.



TERENCE PAUL U. DACLES

Integrated Coastal Management
Component, GIZ

This is to invite

Ms. Donna M. Guarte

as one of the resource persons for the training

Participatory Coastal Resource Assessment

to be held at Siraan Hot Spring Reort, Anini-y, Antique
on August 20-26, 2012



TERENCE PAUL DACLES
ICM Component, GIZ

Proposed Programme of Activities schedule		
Day	Time	Activity/Topic
Day 1	8:00 AM 10:00 AM 12:00 NN 1:00 PM	Registration Introduction to Coastal Environment and Management Overview of Coastal Ecosystems Importance of different coastal habitats and connectivity Status of Coastal Resources in the Philippines L-U-N-C-H What is management and the need to manage coastal resources Relevance of baseline resource data Relevance to resources & users Exercise/Test (How well do you know your coastal habitats)
Day 2	8:00 AM 12:00 NN 1:00 PM	Coral reef ecosystems Coral reef biology and ecology Assessment of Coral Reefs Coral composition, cover, life forms, bleaching and recruits Reef macro-invertebrates Reef fish (chosen families) abundance L-U-N-C-H Basic Mapping & Familiarization with the use of GPS Theoretical Exercise Data Encoding/ processing and summary of tables/figures
Day 3	8:00 AM 12:00 NN 1:00 PM	Overview of Seagrass bed ecology Habitat Assessment Seagrass cover, composition, biomass Seagrass epifauna (macroinvertebrates) L-U-N-C-H Monitoring and estimating suspended and sediment siltation Theoretical exercises Data encoding/summaries
Day 4	8:00 AM 12:00 NN 1:00 PM	Actual Fieldwork (Nogas Is. Anini-y) for Seagrass/Coral/Fish Participants will be grouped into different teams L-U-N-C-H Data encoding/processing/summaries Reporting
Day 5	8:00 AM 12:00 NN 1:00 PM	Mangrove Ecosystem Assessment of mangrove habitat Species composition, stages, DBH (diameter at breast height) Canopy cover and others L-U-N-C-H Actual Fieldwork (Nogas Is., Anini-y) Data encoding/processing/summaries Reporting
Day 6	8:00 AM 12:00 NN 1:00 PM 6:00 PM	Fisheries Profiling Fisheries monitoring Catch & effort recording L-U-N-C-H Exercises Data encoding/processing/summaries Feedback on training & planning PCRA
Day 7	8:00 AM	Departure from Anini-y



Certificate of Participation

This certificate is given to

Donna M. Guarte

for actively participating in the

*Vulnerability Assessment
Training & MPA Forum*

*RESILIENT STEWARDS CAN be PREPARED
for the climate change challenge*

held at Oracle Hotel & Residences, Quezon City on July 12-13, 2011.

Dr. Porfirio M. Aliño
ReSILIENT SEAS Program Leader
MSN Coordinator





This is to invite

Donna M. Guarte

to participate in the

Vulnerability Assessment Training & MPA Forum

Oracle Hotel & Residences, Quezon City on July 12-13, 2011

Dr. Porfirio M. Aliño
ReSILIENT SEAS Program Leader
MSN Coordinator



ICE
CREAM
COASTAL CLIMATE
RESEARCH AND ADAPTATION
PARTNERSHIP



Certificate of Participation

This certificate is given to

Donna Quarte

for actively participating in the

**Training Course on Climate Change Impacts Assessment and
Monitoring on Coastal Environment and Fisheries
for Visayas and Mindanao**

Organized by the Integrated Coastal Enhancement: Coastal Research, Evaluation
and Adaptive Management (ICE CREAM) for Climate Change Project
held at the VIP Hotel, Cagayan de Oro City on 13 to 15 January 2010.


Fr. Jose Ramon T. Villarin, SJ
Xavier University President


Porfirio M. Aliño, Ph.D.
ICE CREAM Program Leader