

CURRICULUM VITAE

Analyn A. Escorial



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Research Interest/Discipline : **Marine Conservation, Microbiology, Carbon Sequestration, Natural Products, Pharmacology, Nanotechnology**

Work Experience

Science Research Technician I

September 2024 – June 2025

Department of Environment and Natural Resources-Ecosystems Research and Development Bureau – Coastal Resources and Extension Center (CRERDEC)

- Assisted in the quarterly field data collection of biophysical and environmental variables in 3 sites (TSPS-Asturias; CIPLS, Leyte; Culasi, Antique).
- Collected seawater samples for subsequent phosphate, nitrate, and microbiological (*Vibrio* spp.) analysis.
- Conducted *in situ* water quality assessment in 3 project sites using a YSI Pro Quatro Multiparameter instrument and recorded and analyzed the results.
- Aseptically prepared culture medium (TCBS agar) and cultured *Vibrio* spp. from seawater samples collected from the field using the serial dilution method.
- Conducted Key Informant Interviews with people's organization, local government units, national government agencies, non-government organizations, and academe.
- Facilitated focus group discussions in 3 sites to determine the anthropogenic factors that affect Crown of Thorns Seastar (COTS) outbreak.
- Consolidated and analyzed the water quality, microbiological, key informant interview, and focus group discussion results.
- Assisted in the preparation of quarterly and annual reports for the STOP-COTS project and prepared a baseline report for Cuatro Islas Protected Landscape and Seascape.
- Organized MOU signing, Sustainability workshops, and Experts Consultation Workshop, including full coordination of venue, meal logistics and stakeholder engagement.

Student Field Research Assistant

February 2024

Undergraduate thesis: Vegetation Structure and Blue Carbon Storage Assessment in a Mangrove Forest in Cordova, Cebu

- Conducted carbon sequestration assessment by assisting in the field measurements of tree diameters at breast height (DBH) and identification of mangrove and roadside trees.
- Assisted in the estimation of foliage coverage of roadside trees.

Student Intern

July – August 2023

DOST-funded project: Project ISAAC (Isolation, Screening, and Antimicrobial Activity of Compounds from Actinobacteria in Mainit Hot Springs, Cebu, Philippines)

- Extracted secondary metabolites from isolated Actinobacteria through resin extraction.

- Performed antimicrobial susceptibility testing of Actinobacteria extracts against a panel of Gram-positive and Gram-negative bacteria and fungal pathogens to determine the bioactivity of the bacterial extracts

Student Research Assistant
Undergraduate thesis: Bio-retting of Philippine Corn Husk Using Isolated Bacillus Strains and its Effects on Fiber Properties

July 2023

- Conducted antimicrobial susceptibility testing to determine the bioactivity of bacterial strains isolated from bio-retted Philippine corn husk.
- Operated a variety of laboratory equipment, including Biosafety Cabinet (BSC), centrifuge, UV-Vis spectrophotometer, microscope, and autoclave.
- Identified bacterial isolates using microbiological techniques such as Gram staining and biochemical assays.

Educational Background

Duration:	2020-2024
Degree:	Bachelor of Science Biology
University:	University of the Philippines Cebu
Thesis title:	“Biosynthesis, Antibacterial Activity, and Toxicity of Silver Nanoparticles Synthesized by <i>Pseudomonas</i> spp. Isolated from Mainit Hot Spring”
Advisor:	Fleurdeliz Maglangit, Ph.D.
Awards and Distinctions:	<i>Cum Laude</i> Graduate, DOST-Sei RA 7687 Scholar, President’s Lister (2020-2022) and College Scholar (2022-2024)

Duration:	2014-2020
Degree:	Junior and Senior High School
High School:	Cebu City National Science High School
Awards and Distinctions:	Graduate with Honors and Recipient of CCNSHS alumni Scholar

Research Involvements

Duration	Research Involvement
July 2024 – June 2025	Application of Geo-Spatial Technologies and Online Public Monitoring Tool for Understanding Crown-of-Thorns Seastar (COTS) <i>Acanthaster cf. solaris</i> (Schreber, 1793) Outbreak Patterns and Trends in the Philippines (STOP-COTS Project) Role: Project Technical Staff
July – August 2023	Isolation, Screening, and Antimicrobial Activity of Compounds from Actinobacteria in Mainit Hot Springs, Cebu, Philippines Position: Undergraduate Student Intern

Professional Development: Participation in Trainings

Date	Conference and Venue
April 08, 2025	Marine Data 4 Sustainable Oceans Workshop by the Copernicus Marine Service, and Mercator Ocean International Venue: Zoom
March 27, 2025	Water Circulation Modelling Workshop Venue: CRERDEC Training Hall
July 10 – August 11, 2023	Isolation, Extraction, and Biological Assays of Natural Products Venue: University of the Philippines Cebu

Skills

Fieldwork skills:	Water sampling, Water quality analysis, Basic species identification (corals and mangroves), Proficient in field data collection, Familiar with socio-economic surveys (KIIs and FGDs)
Laboratory skills:	Aseptic Technique, Sterilization, Decontamination, Gram staining, Culture media preparation, Spread Plating, Inoculation, Serial Dilution, <i>Caenorhabditis elegans</i> Culture, antimicrobial susceptibility testing, spectrophotometry, silver nanoparticles synthesis, microscopy
Data Analysis Skills:	Basic RStudio for statistical analysis and data visualization, Basic Coral Point Count with Excel (CPCE), Proficient in Microsoft Office, Google Workspace, and Canva
Personal Skills:	Proficient in research and scientific writing, Knowledge of administrative works, Eager to work outdoors in difficult situations, Ability to work under pressure, Keen observation, and Adaptability.

References

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