

Name: Deborah Gnana Selvam A.

Designation: Assistant Professor

Department: Microbiology

Date of Joining: 21. 6. 2017

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**Educational Qualification:**

Degree	Subject	College / University & Place	Year Completed
PhD	Faculty of Marine Sciences (Spl. in Microbiology)	Cochin University of Science and Technology	2017
ICAR-NET	Agricultural Microbiology	ICAR-ASRB	2013
MSc	Immunology and Microbiology	The American College, Madurai	2008
BSc	Zoology (Spl. In Biotechnology)	Lady Doak College, Madurai	2006

**Specialisation in Teaching:**

A passionate lecturer who loves teaching microbiology to all kinds of learners and enjoys watching them appreciate the beauty of biology.

**Specialisation in Research:** I love research on the antibiotic resistance of microbes.

**Research Interests:**

*Vibrio sp.*, *Escherichia coli*, *Staphylococcus aureus*, Antibiotic resistant bacteria, biodegradation of xenobiotics such as plastics, synthetic dyes.

**Other Work Experience:**

Designation	Institution / Company	Year - From (month/year) To (month/year)
Nil		

**Administrative /Academic Position/s (held / currently holding):**

Positions held / currently holding	Year - From (month/year) To month/year)
Assistant Professor, Department of	June 2017- Present

Microbiology, The American College.	

### Membership in Professional Bodies:

1. Society of Marine Biologists, India.

### Publications:

#### Books:

#### Book Chapter:

1. **Deborah Gnana Selvam A.**, Thatheyus A.J. (2018) Microbial Degradation of Petroleum Hydrocarbons: An Overview. In: Kumar V., Kumar M., Prasad R. (eds) Microbial Action on Hydrocarbons. Springer, Singapore.

### Articles Published in International Journals:

- **Deborah Gnana Selvam, A.**, Mujeeb Rahiman, K. M. and Mohamed Hatha, A. A. (2012). An Investigation into Occasional White Spot Syndrome Virus Outbreak in Traditional Paddy Cum Prawn Fields in India. *The Scientific World Journal*, 11 pp. doi:10.1100/2012/340830
- **Deborah Gnana Selvam, A.**, Thatheyus, A. J. and Vidhya, R. (2013). Biodegradation of the Synthetic Pyrethroid, Fenvalerate by *Pseudomonas viridiflava*. *American Journal of Microbiological Research* 1: 32-38.
- Thatheyus, A. J. and **Deborah Gnana Selvam, A.** (2013). Synthetic Pyrethroids: Toxicity and Biodegradation. *Applied Ecology and Environmental Sciences* 1: 33-36.
- Ghosh, S., RingØ, E., **Deborah, G. S. A.**, Mujeeb Rahiman, K. M. and Hatha, A. A. M. (2011). *Enterobacter hormaechei* BAC 1010 from the gut of flathead grey mullet as probable aquaculture probiont. *Journal of Nature Science and Sustainable Technology* 5: 189-199.
- Silvester, R., **Deborah Alexander** and Mohamed Hatha Abdulla Ammanamveetil (2015). Prevalence, antibiotic resistance, virulence and plasmid profiles of *Vibrio parahaemolyticus* from a tropical estuary and adjoining traditional prawn farm along the southwest coast of India. *Annals of Microbiology*. 65: 2141–2149.
- Silvester, R., **Alexander, D.**, Santha, S. and Hatha, M. (2015). RAPD PCR discloses high genetic heterogeneity among *Vibrio parahaemolyticus* from various environments along the southwest coast of India. *Annals of Microbiology*. 66: 925-929.
- Ajin, A. M., Reshma Silvester, **Deborah Alexander**, Nashad, M. and Mohamed Hatha Abdulla (2016). Characterization of blooming algae and bloom-associated changes in the water quality parameters of traditional pokkali cum prawn fields along the South West coast of India. *Environmental Monitoring and Assessment*, 188: 145.
- Mujeeb Rahiman, K. M., Mohamed Hatha, A. A., **Deborah Gnana Selvam, A.** and Thomas, A. P. (2016). Relative Prevalence of Antibiotic Resistance among Heterotrophic Bacteria from natural and culture environments of freshwater prawn, *Macrobrachium rosenbergii* (De Man, 1887). *Journal of World Aquaculture Society* 47: 470-480.

- Ghosh, S., Einar RingØ, **Deborah Gnana Selvam, A.**, Mujeeb Rahiman, K. M., Naveen Sathyan, Nifty John, Hatha, A. A. M. (2014). Gut Associated Lactic Acid Bacteria Isolated from the Estuarine Fish *Mugil cephalus*: Molecular diversity and antibacterial activities against pathogens. *International Journal of Aquaculture* 4: 1-11.
- Lekshmi S, Vijayalakshmy KC, Reshma Silvester, GSA Deborah and AV Saramma (2016). Antibacterial activity of *Chroococcus minutus* (Kützing) Nägeli isolated from Cochin estuary against selected pathogens. *International Journal of Fisheries and Aquatic Studies* 4: 700-703
- Reshma Silvester, **Deborah Alexander**, Mohamed Hatha, A. A., Ally Antony. (2017). GroEL PCR-RFLP – an efficient tool to discriminate closely related pathogenic *Vibrio* species. *Microbial Pathogenesis* 105:196-200.

#### Articles published in National Journals:

- Ghosh, S., **Selvam, D. G. A.**, Neethu C. S, Saramma, A. V. and Hatha, A. A. M. (2013). Diversity and antimicrobial activity of Lactic Acid Bacteria from the gut of marine fish *Rastrelliger kanagurta* against fish, shrimp and human pathogens. *Journal of Marine Biological Association of India* 55: 22-27
- Reshma Silvester, **Deborah Alexander**, Maya George and A. A. M. Hatha. (2017). Prevalence and multiple antibiotic resistance of *Vibrio coralliilyticus*, along the southwest coast of India. *Current Science* 112: 1749-1755.

#### Conference / Seminar Presentations:

- Biodegradation of cypermethrin using *Enterobacter asburiae* presented in the National Conference on “Impacts of Pollution on Health and Restoration of Quality Environment Through Biotechnology Applications” organized by the PG & Research Department of Zoology & PG Department of Immunology and Microbiology, The American College, Madurai on 2<sup>nd</sup> & 3<sup>rd</sup> February 2018.
- Bhuvaneshwari, S., **Deborah Gnana Selvam, A.** and A. Joseph Thatheyus. “Biodegradation of the synthetic pyrethroid pesticide, deltamethrin by the soil bacterium, *Pseudomonas viridiflava*”. National conference on Recent trends in Life Science: Research, Practices and Application for sustainable development organized by Bharathiar University, Coimbatore on 7th and 8th September, 2017 in collaboration with National Academy of Biological Sciences, Chennai. ISBN: 978-93870-0007-0
- **Deborah Gnana Selvam**, Mujeeb Rahiman, K. M., Mohamed Hatha, A. A. (2012). Recurring algal blooms and resultant changes in water quality- a probable trigger for WSSV outbreak in seasonal paddy cum prawn fields. 24<sup>th</sup> Kerala Science Congress.

#### Lectures / Talks given:

1. Served as resource person for the workshop on “Haematological Techniques” held on 18<sup>th</sup> and 19<sup>th</sup> July, 2019 by the Research Centre for Home Science, Fatima College, Madurai.

#### Awards / Fellowships:

- UGC-Research Fellowship in Science for Meritorious Students (2009-2014).
- Passed the ICAR-National Eligibility Test for lectureship in October 2013.

- Student Project Scheme by TNSCST, Govt. of Tamil Nadu, India (2017-2018).

### Doctoral Students

#### Completed:

Name of the student	Title of the thesis
Nil	

#### Ongoing:

Name of the student	Title of the thesis
Nil	

#### UGC Sponsored Major Projects:

Title	Year of Award	Amount Awarded	Status of the project- Completed /Ongoing	Co-investigator, if any
NIL				

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**UGC Sponsored Minor Project**

Title	Year of Award	Amount Awarded	Status of the project- Completed /Ongoing	Co-investigator, if any
NIL				

**Overseas Academic Visits:**

NIL

**Other Activities / Academic Credentials:**