



Gayathri Jaikumar

EDUCATION

- 2019 - Now PhD, Environmental Toxicology at Utox, *Eawag (ETH domain, Switzerland)*.
- 2016 - 2018 Master of Science, Biology (Evolution, Conservation and Biodiversity), *Leiden University, The Netherlands*, GPA: 9.0/10 (Graduated with honors, *summa cum laude*).
- 2013 - 2016 Bachelor of Science, Zoology, *Madras Christian College (University of Madras, India)*, GPA: 9.48/10.
- 2012 - 2013 Higher Secondary Education, CBSE Board, Biology, *Modern Senior Secondary School, India*, GPA: 10/10 - 96% (Top 1% in India).
- 2010 - 2011 High School, CBSE Board, *PSBB Millenium, India*, GPA: 10/10.

RESEARCH INTERESTS

- Ecotoxicology
- PBTK modelling
- Toxicodynamics
- Cell biology
- Toxicokinetics

RELEVANT COURSEWORK

- Fundamental ecology
- Statistics
- Biochemistry
- Biodiversity
- Genomic architecture
- Animal cognition
- Classical taxonomy
- Cell biology

TECHNICAL SKILLS

- Basic R and Matlab programming
- Laboratory methods in ecotoxicology: Cell line based assays, Cladoceran based acute and chronic assays, Fluorescence microscopy.
- Molecular biology techniques: PCR, RT-qPCR, Gel-Electrophoresis, ELISA.
- Animal Behaviour techniques: Use of animal tracking software Danio vision and Etho-vision for various behavioural assays.

PUBLICATIONS

- In preparation Jaikumar, G., Brun, N., Vijver, M., Bosker, T. Trophic transfer and potential maternal transfer of microplastics in lower levels of freshwater ecosystems (in preparation)
- Published Jaikumar, G., Brun, N., Vijver, M., Bosker, T. Reproductive toxicity of primary and secondary microplastics to three Cladocerans during chronic exposure

Published Jaikumar, G., Brun, N., Baas, J., Vijver, M., Bosker, T., 2018. Acute sensitivity of three Cladoceran species to different types of microplastics in combination with thermal stress. *Environmental Pollution*

RESEARCH EXPERIENCE - INTERNSHIPS

- Dec 2017 - July 2018 Research Intern, *Institute of Biology*, Leiden.
- Investigated the link between stress coping styles and clock gene expression in zebrafish (*Danio rerio*) larvae.
 - Compared the effect of stress and oscillation of clock gene expression on glucocorticoid receptor (GR) deficient strains of zebrafish and healthy wildtypes.
- Jan 2017 - Aug 2017 Research Intern, *CML Institute of Environmental Sciences*, Leiden, Grade: 9.
- Worked on the effect of different kinds of microplastics on organisms at the lower levels of aquatic food webs.
 - Compared sensitivity to primary and secondary microplastics across different species of Cladocerans.
 - Performed acute and chronic toxicity tests to evaluate the potency of microplastics as a toxicant.
 - Presented as a poster at the SETAC conference, Rome in May 2018.
- May 2015 Research Intern, *Kalinga Centre for Rainforest Ecology*, Agumbe, India.
- Assisted on-going 4 year flagship research project – “Study of Species richness and Abundance of snakes in Agumbe.”
 - Performed visual and transect survey, identification and documentation of snakes in Agumbe Rainforest. (Within study area)
 - Lead interested non biologist groups on nature trails and camps as a part of awareness creation.

AWARDS AND SCHOLARSHIPS

- Masters
- Recipient - Leiden Excellence Scholarship (2016-2018)
 - Recipient - Leiden University thesis prize for the best Masters thesis (2018)
 - Recipient - Dopfer foundations’s Change Maker Prize (Research grant funding master’s thesis) (2017)
 - Recipient - SETAC Rome conference participation grant (2018)
- Undergrad
- Recipient - George T Subramaniam gold medal for best outgoing student (2016)
 - Recipient - Ethel Baskaran award for excellent performance and participation in co-curricular activities (2016)
 - Recipient - Joshua medal for scoring highest grades in all semesters (2016)
 - Recipient - Chellamal endowment prize for best performance in Animal physiology and behaviour (2016)
 - Recipient - Macintosh scholarship for academic excellence (2013-2015)
- Highschool
- Was the National topper (Top 0.1%) in Biology – CBSE Board examinations (2013)
 - Recipient - SHE scholarship under INSPIRE scheme for being among top 1% in CBSE Board Examinations, funding undergraduate studies. (2013)

RESPONSIBILITIES

- Masters
- Member of organisation committee: Leiden University Green Office
 - Member and country representative: Leiden Cultural Festival
- Undergrad
- General Secretary of Department of Zoology – Madras Christian College
 - Core member of College Union Society (CUS)

OTHER RELEVANT EXPERIENCE

- Core member of Scrub Society at Madras Christian College
 - Organised and coordinated regular clean-up activities , bird walks , tree census and awareness creation programmes.
- Volunteer with Student Sea Turtle Conservation Network [SSTCN]
 - Undertook regular Turtle walks along the Marina coast during Olive Ridley nesting season – to identify and relocate eggs to hatchery and subsequently released hatchlings into sea to ensure better rates of survival in species.
- Member of Bombay Natural History Society [BNHS]
 - Undertook field study trips to forests such as Gir National Park , Amboli , Coorg .
- Volunteer with Animal Welfare Protection Trust
 - Rescued and rehabilitated injured stray and urban wild animals .

EXTRA CURRICULAR ACTIVITIES

- Organiser and Co-ordinator of College cultural events – Go Wild and Deep Woods
- Trained in Indian classical dance forms – Bharatnatyam and Kathak.
- Volunteer at Nilacharal (NGO).