

**Faculty Talk: Insightful Seminar Series**  
**Faculty of Livestock, Fisheries, and Nutrition**  
**Wayamba University of Sri Lanka**

**Topic**

**Using Environmental DNA (eDNA) as a monitoring tool in conservation.**

**Overview**

Environmental DNA sampling involves collecting and sequencing genetic material shed by organisms (e.g., skin, hair, mucus) from their environment to identify which species have been, or are, present in that area. It is increasingly popular as a monitoring tool in biodiversity studies. Its ability to rapidly and non-invasively detect cryptic and rare species makes it an invaluable method for informing conservation management and policy. During this talk, I will break down the steps of eDNA sampling, from sample collection to sequencing, discuss its pros and cons, outline its many applications in the field, and expand further on how I'm using eDNA in my own research.

**Speaker**

**Laura Elizabeth McBride, MSc., PhD Researcher**

Zoology Department, School of Biological Sciences, University of Aberdeen, United Kingdom (UK).



Laura McBride graduated from Edinburgh Napier University, UK, in 2018, earning a B.Sc. 1<sup>st</sup> Class Honours in Animal Biology. She later pursued her postgraduate studies at the Rijksuniversiteit Groningen, The Netherlands, earning an MSc in Ecology and Evolution (2020). Between finishing her Master's and starting her PhD in 2024, she worked in a Next Generation Sequencing (NGS) and Sanger sequencing laboratory at Merck, Glasgow, UK.

Laura's research focuses on using eDNA to understand which local habitat types and surrounding oceanographic characteristics support fish biodiversity in essential fish habitats (EFH), specifically seagrass, in the west of Scotland.

**Moderator**

**Prof. W.A. Harindra Champa, PhD, Chairperson, Research Development and Publication Committee, Faculty of Livestock, Fisheries and Nutrition, Wayamba University of Sri Lanka.**

**Date & Time**

**11:30 AM - 12:00 Noon on 05<sup>th</sup> February 2025**

**Venue**

**Aquaculture & Fisheries Lecture Room, Faculty of Livestock, Fisheries and Nutrition**

**Contact**

**For inquiries, please contact Prof. W.A. Harindra Champa, Chairman, RDPC, FLFN, WUSL. Email: [harindra.bsu@wyb.ac.lk](mailto:harindra.bsu@wyb.ac.lk)**

**Organized by: Research, Development and Publication Committee**  
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