

Tobias Long, ANutr

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EDUCATION

PhD Bioscience - University of Nottingham

Sep 2024 - Sep 2028

- Investigation of sweet taste sensing in relation to metabolic disorders.
- Sensory science and MRI methods.

MSc Nutritional Science - University of Nottingham

Sep 2023-Sep 2024

- Awarded Distinction (75%).
- Registered Associate Nutritionist (ANutr) status.
- Dissertation project investigating NHS Low-calorie diabetes remission programme outcomes and improvements.

MPhil Mechanical Engineering - University of Nottingham

Sep 2020-Mar 2023

- Thesis: "Development of the next generation of silent aerospace propulsion configurations".

MSc Mathematical Medicine and Biology – University of Nottingham

Sep 2018-Sep 2019

- Awarded Distinction (71%).
- Dissertation modelling a biochemical pathway in plants.

BSc (Hons) Physics with Theoretical Physics – University of Nottingham

Sep 2015- Jul 2018

- Awarded First Class (82%).
- Dissertation on computational modelling of Atomic Force Microscopy.

Boston Grammar School

Sep 2008-Jul 2015

- A2 Level: Physics (**A***), Mathematics (**A***), Further Mathematics (**A**).
 - AS Level: Chemistry (**A**).
 - GCSE: 7 A*s, 3 As, 1 B, OCR National ICT at Distinction.
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RESEARCH EXPERIENCE

PhD Researcher - University of Nottingham

Sep 2024 - Sep 2028

- BBSRC Doctoral Training Programme student.
- Rotations in sensory science and MRI related to sweet taste sensing.

MPhil Researcher - University of Nottingham

Sep 2020-Mar 2023

- Reduced Order Modelling of Distributed Electric Propulsion aircraft propeller layouts.
- Creating, running and analysing CFD calculations of propellers in OpenFOAM.
- Liaising with multiple different groups within academia and in industry to successfully complete project tasks to deadlines.

Quantitative Biology PhD Programme – University of Manchester

Sep 2019-Apr 2020

- Rotation year of the programme working within a developmental biology lab joint with an experimental condensed matter physics group.

- Project designing a sensitive thermocouple device to investigate the heat production from single frog embryos.
- Designing an electronic device, experimental set-up and measurements.

Condensed Matter Theory Group – University of Nottingham

Jul-Aug 2018

- Summer internship working within a research group and developing neural networks in Python to learn statistical data generated by the Ising model.
- Applying machine learning algorithms in the form of deep neural networks using PyTorch.
- Data processing using Python, NumPy and Pandas.

Sir Peter Mansfield Imaging Centre – University of Nottingham
2017

Jul-Sep

- Summer internship working on SAR heating from MRI, involving MATLAB modelling.
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TEACHING EXPERIENCE

- TBA
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PUBLICATIONS

- Long, Tobias, et al. "A novel reduced-order model for advection-dominated problems based on Radon-Cumulative-Distribution Transform." *arXiv preprint arXiv:2304.14883* (2023).
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CONFERENCES AND PRESENTATIONS

- Conference Presentation: 2022 Annual Conference of the UK Association for Computational Mechanics, 20-22 April 2022, University of Nottingham, Nottingham. "Application of the Radon-CDT to Reduced Order Methods in Modelling Distributed Electric Propulsion Layouts".
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AWARDS

- President's Doctoral Scholar Award (£1000 p/a, 4 years - University of Manchester) - "to recognise existing PhD offer holders that are both academically excellent and demonstrate potential to act as 'ambassadors' for the University during their PhD training".
 - Sir Peter Mansfield High-Achiever Scholarship (£1000 - University of Nottingham) - for academic achievement at A-Level.
 - Medlock Scholarship (£1000 p/a, 4 years - Boston Grammar School) - for academic achievement at A-Level.
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PROFESSIONAL ASSOCIATIONS

- Association for Nutrition - Registered Associate Nutritionist (ANutr), actively working towards Registered Nutritionist (RNutr) status.
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EMPLOYMENT AND WORK EXPERIENCE

Community Volunteer - Nottingham CityCare Partnership

Jan 2024 - Present

- Working alongside healthcare professionals within the Diabetes team.