



## EDUCATION

### PhD in Pathology; Division of Immunology | University of Cambridge

OCT 2020 – OCT 2024

#### Research

- Lab-based, molecular biology researcher with supervisor, Dr Brian Ferguson. Produced novel insight into cell death mechanisms of oncolytic vaccinia virus.
- Engineered two genetically modified vaccinia virus strains that have enhanced anti-cancer properties.
- Managed 3 research aspects and workloads and coordinated between numerous collaborators, ensuring the timely completion of high-quality project deliverables.
- Completed comprehensive literature review, database searches and data analysis, producing a detailed analytical report for PhD thesis which received positive reviews by examiners.

#### Teaching

- Supervised research projects for four undergraduate students, providing project design, guidance on laboratory techniques, workflow optimisation and mentorship for thesis and report writing.
- Served as a lab demonstrator for two years of undergraduate practical classes, guiding groups of 15-20 students through experimental protocols and offering supplemental tuition.

#### Science Communication

- Served on the Outreach and Communications Committee for two years. Developed communication strategies and delivered activities which attracted over 2,000 members of the public to the Department.
- Speaker at the 2023 British Society of Immunology's conference and the 2022 European Workshop of Cell Death, presented research to 200 immunologists and cell biologists.
- Awarded best flash talk and poster presentation at the 2023 MRC-DTP student symposium and at 2022 Department of Pathology Research Symposium.
- Prize winner for presentation of research to a general, non-science audience at 2022 Murray Edwards Grad Symposium.
- Expertise creating professional content with Microsoft Word, PowerPoint and Excel.

### B.A. Natural Sciences (Mod); Molecular Medicine | Trinity College Dublin

SEPT 2015 – MAY 2019

- Graduated top of class with first class honors and a university Gold Medal for exceptional merit.
- Recipient of the annual M. Ciotti medal for best final year research project in School of Biochemistry and Immunology.
- Completed research internship at UMass Medical School, USA in 2018, awarded as top Junior Sophister practical student in School of Biochemistry and Immunology.
- Majored in life sciences: biochemistry and immunology, complemented by pharmacology, organic and inorganic chemistry, mathematics, and geology. Achieved first class grades throughout four-year degree course (SS 77, JS 76, SF 78, JF 74).



## EXPERIENCE

### Christmas Lectures Production Assistant | The Royal Institution, London, UK

SEPT 2022 – JAN 2023

- Co-ordinated the planning and filming of the BBC's Christmas Lectures, collaborating with the Ri production team, academic researchers, a TV production company, and multimedia developers.
- Administrated meetings and managed multidisciplinary teams across 4 departments, liaised with C-level executive stakeholders, and ensured overall alignment of tasks and delivery of outputs.
- Led the organisation of a symposium for 200 sixth-form students from underserved communities, overseeing content development, budget management, logistics, and event coordination.

### EnterpriseTECH Postgraduate Programme | Judge Business School, Cambridge

DEC 2021 - MAR 2022

- Developed business-related skills with a blend of intensive lectures and practical application of knowledge to a project, consulting on the business strategy of an early-stage biotechnology startup.
- Undertook market research and produced a written report for the client, analysing the commercial feasibility of the technology and providing a business development plan.
- Delivered a pitch presentation and video infomercial targeted at investors. Project received a certificate of distinction.

### Research Assistant | Trinity Biomedical Sciences Institute, Dublin

MAY 2019 - FEB 2020

- Led an independent research project focused on immunosuppression in the allergic lung, entailed culturing eosinophils from bone marrow, flow cytometry, RT-qPCR/genotyping, confocal microscopy, *in vivo* rodent work and histology.
- Implemented lab management: database updates, stock ordering, and equipment maintenance.

### Art Programming Director | Becket-Chimney Corners YMCA, MA, USA

JUN 2016 – AUG 2017

- Directed 4 creative art lessons programmes, managed 15-20 staff, administrated departmental budget, materials orders, and supervised staff and camper wellbeing.
- Designed engaging and advancing lesson plans and taught daily pottery lessons to 300 children aged 7-15.



## ADDITIONAL ROLES & INVOLVEMENTS

### Rugby | Shelford Rugby Club & Cambridge University R.U.F.C.

OCT 2021 – FEB 2024

- Played position of fly-half, number 10 utilising skills of strategy and communication.
- Recognised for teamwork and effective collaboration both on and off the field, awarded Player's Player 2022 by teammates in recognition of commitment and spirit.

### Social Secretary | Graduate Student Committee, Murray Edwards College

OCT 2021 – OCT 2023

- Executed group events that engaged and represented the needs of the grad community, advocated for student's interests to the college administration, and provided student support.
- Produced digital media for event promotion through social media and informatic design.
- Co-founder of a student-led art studio at college which involved organising space, budget management, acquiring materials, hosting workshops and promoting a collaborative environment.