KATIE ELIZABETH FLIGHT

CURRENT POSITION

London Interdisciplinary Bioscience Consortium PhD Student
University College London/ The Francis Crick Institute

EXPERIENCE

Research Assistant | Shattock Group, Imperial College London | Oct 2019-Sep 2021

My work centered around the development and application of self-amplifying RNA vaccine technology. I was part of both the academic group and GCLP laboratory group so had experience at every stage of vaccine clinical trials- including human trials. In addition, I gained experience using animal models of vaccination and disease.

MRes Student | Dawson Group- Peter MacCallum Cancer Centre | Apr 2019-Sep 2019

Using a range of molecular, cellular and chromatin biology techniques, I completed a project I designed investigating lineage switching in human leukemia. Using syngeneic mouse models, I dissected the lymphoid and myeloid compartments and used them to assess the efficacy of therapeutic strategies.

MRes Student | Huang Group- Institute of Cancer Research London | Oct 2018-April 2019

I conducted molecular profiling studies to examine downstream signaling dependencies of EGFR mutants in genetically engineered cell lines. This was to determine and inform potential synthetic lethal therapeutic strategies for cancer.

BSc Student | Cunningham Group- The University of Strathclyde | Oct 2017- Jan 2018

I designed and conducted a research project looking at the role of proteinase activated receptor four in cancer. This involved various molecular and cellular biology techniques.

AWARDS AND ACHIEVEMENTS

LIDo PhD Scholarship (University College London)

President's PhD Scholarship (Imperial College London)

MRes Distinction Cancer Biology (Imperial College London)

Graduated 1st in my year with 1st Class BSc Hons Immunology and Pharmacology (The University of Strathclyde)

Best Biomolecular Science Student 2018 (The Royal Society of Biology)

BSc Pharmacology Prize (The British Pharmacological Society)

Vacation Studentship Award (British Pharmacological Society)

Full Blues- Highest Non-Academic Honor at University (The University of Strathclyde)

PUBLICATIONS

https://doi.org/10.1111/cei.13517
https://www.nature.com/articles/s41577-021-00592-1

Vacation Studentship | Cunningham Group- The University of Strathclyde | May 2017- Sept 2017

I worked with my supervisor to craft a successful application for a competitive studentship. My work focused on target validation of a novel group of ligands and as a result of my work a large collaboration was fostered between two groups at Strathclyde.

Vacation Studentship | Kohl Group-MRC Glasgow Centre for Virus Research | May 2016- July 2016

I independently secured a summer research placement to investigate the function of the N protein of flaviviruses and functional redundancies between flavivirus family members. I gained experience in molecular biology and cloning.

EDUCATION

PhD | London Interdisciplinary Bioscience Consortium- University College London and The Francis Crick Institute | Oct 2021-2025.

MRes Cancer Biology | Imperial College London | Distinction

BSc Immunology and Pharmacology | The University of Strathclyde | 1st Class Joint Honors

OUTSIDE OF ACADEMIA

I represent Great Britain for Ultimate Frisbee

I love fitness and exercise- in particular running and yoga

I have a passion for making science accessible so have an Instagram and Tiktok platform I use for science communication

@katieflightscience

KEY SKILLS

Lab Techniques:

Extensive tissue culture (cell lines and organoids), western blotting, ELISA, ELISPOT, plasmid design and cloning, *in vitro* RNA synthesis, transient and stable transfection, lymphocyte isolation, MSD multiplex ELISA, luciferase reporter assay, CRISPR-CAS9 mutagenesis and screening, Immunohistochemical analysis of tissue, *In vivo* modelling of human diseases (infectious disease and cancer).

Other Competencies:

Scientific writing and communication, analysis and presentation of data, Microsoft Office, Basic Python.