Polly-Anne Jeffrey

Website: pollyjeffrey.github.io
Email: polly-anne10@hotmail.co.uk
LinkedIn: Polly-Anne-Jeffrey
GitHub: github.com/PollyJeffrey
ORCID: 0000-0001-6476-0402

RELEVANT EXPERIENCE

University of Leeds   Leeds, UK
Postdoctoral research fellow in Applied Mathematics   2021 - Present

- My research is in collaboration with the Defence Science and Technology Laboratory (DSTL). I am using computational mathematical modelling and data analysis to study the within-host spread of Anthrax infection. The model will be able to make predictions about the spread and severity of Anthrax infection, and will incorporate different drug treatments.

University of Leeds   Leeds, UK
Tutor in Applied Mathematics   2019 - 2020

- Throughout my PhD I tutored small groups of undergraduate students in applied mathematics and statistics. This role also involved giving feedback for regular assignments.

Labcorp drug development   Leeds, UK
Biostatistician   2015 - 2016

- I spent a year out from my undergraduate degree working for Labcorp as a student biostatistician. This role involved programming using the language SAS, to generate tables, figures and listings, as well as performing statistical analysis with clinical data and writing statistical documents. I was also involved with the training of new starters towards the end of my placement.

EDUCATION

University of Leeds   Leeds, UK
Ph.D. in Applied Mathematics   2017 - 2021

- Thesis title: Mathematical modelling of cellular receptor-ligand dynamics
- Industrial collaboration: AstraZeneca

University of Leeds   Leeds, UK
BSc Mathematics (Industrial): 1st Class Hons   2013 - 2017

King Edward VI high school   Morpeth, UK
A-levels: Mathematics (A), Chemistry (A), Biology (A)   2011 - 2013

TECHNICAL SKILLS

- **Languages:** Python, R, SQL, SAS, HTML/CSS.

- **Tools:** LaTeX, Git, GitHub, Mathematica.

- **Techniques:** Differential equation modelling, Markov chain modelling, Model simulation, Bayesian inference, Linear regression, ANOVA and post-hoc analyses, Principal component analysis, Data visualisation.

COMMUNICATION SKILLS

- **Scientific writing:** Peer-reviewed publications (see ORCID), PhD thesis, Conference presentations and posters.

- **Outreach:** Developed and delivered outreach activities for school children both at the university and in local schools and colleges.

- **Organisation and leadership:** Organised and ran a multi-disciplinary conference for PhD students.