

Peter Lord

Wellcome Trust PhD Candidate in Health, Economics and Decision Science at University of Sheffield

- +44 7785276512 • peterlord5020@yahoo.com • psjlord1@sheffield.ac.uk •
- www.linkedin.com/in/p-lord • <https://sarg-sheffield.ac.uk/> •

Education

Wellcome Trust PhD Candidate in Health, Economics and Decision Science - University of Sheffield

(September 2024–Present)

MEng General Engineering (Systems and Control) - University of Sheffield

First class

(September 2020–June 2024)

Royal Grammar School Newcastle

(September 2013 – June 2020)

A-levels • Mathematics A* • Further Mathematics A • Physics A **GCSEs** • 11 GCSEs • 10 grade A*/9 • 1 grade A

Research Experience and Professional activities

PhD Research: Modelling Social Interaction: Can Incorporating Empirical Social Network Data in Public Health Economic Models Better Inform Public Health Policy Decisions?

- The research is developing simulation frameworks of agent-based models (ABMs), to examine social network dynamics in non-communicable disease. Research looking out how social network effects can be investigated using simulation methods such as agent based models (ABMs), and using methods from social networks analysis research to incorporate. A particular focus on recreating synthetic network structure in regional or national sized populations, and reconstruct synthetic network structures within large-scale populations using real world data.

Smoking ABM: Part of a wider ABM project investigating smoking cessation in England with researchers from University of Sheffield and UCL. My work involved calibrating the network generation model to Smoking Toolkit Study ego centric data.

No and Low Alcohol (nolo) Research: Conducted time series analysis of nolo purchasing data to understand if the market effect of introducing nolo products had on the alcoholic beverage market.

Sheffield Addictions Research Group (SARG): I am a member of SARG through my aforementioned research work.

Other Research Project Experience:

- **Masters Dissertation:** Developed a microsimulation model to analyze the relationship between income and mental health, evaluating the projected impact of Universal Basic Income (UBI) policies.
- **Research Attachment:** Conducted systems mapping of pricing strategies on High Fat, Sugar, and Salt (HFSS) food consumption for integration into an agent-based model.
- **Research Attachment:** Contributed to development of a microsimulation model to conduct cost effective analysis for a novel bladder cancer screening test.

Skills

- **Programming:** Working knowledge of R, Stata, Python, and C++. Experienced in parallel programming methods. Proficient in version control software using GitHub.
- **Data Analysis:** Experienced in working with longitudinal and cross-sectional datasets, including data cleaning, manipulation, and statistical analysis.
- **Literature Review:** Experience of systematic literature review methods. Current work in progress conducting a systematic literature review of social network construction methods in public health models.
- **Health Simulation Modelling:** Proficient in developing and applying agent-based models, microsimulations, Markov models, and Health Technology Assessments (HTA).
- **Project Management:** Experience with agile project management common in software development using Jira software.
- **Statistical Analysis & Machine Learning:** Experience of building and analysing statistical models (e.g., linear regression, survival analysis) and machine learning techniques

Employment

Research Assistant

ACSE, University of Sheffield (*October 2024 - April 2025*)

- Developed R code for calibration of the social network in a smoking agent based model.
- Finalised and ran the history matching calibration workflow
- Produced population level statistics on smoking prevalence from the smoking toolkit study alongside researchers at UCL.
- Ensured code base repositories were maintained and documented

Administrative Assistant in Occupational Health

Newcastle upon Tyne Hospitals NHS Foundation Trust (*January - July 2020*)

- Managed the volunteer team of ten people and provided support implementing covid safety protocol and rota writing.
- Front of house support for the staff vaccination centre in the Freeman Hospital, Newcastle. Secretarial duties for consultants on the ward.
- Acting ward clerk for ward 38 IoT, Freeman Hospital: General receptionist duties.

Work Experience and Volunteering

President - University of Sheffield Music Players Society

Sheffield - Yorkshire (*2023 -2024*)

As the President of the society i am in charge of organising the operations of the society

- Organised events and concerts, including liaising with venues and creating publicity posts
- Managed the finances of the society and gained sponsorship from local businesses in the Sheffield area.
- Chaired meetings for the society committee, ensuring that the agenda was covered and everybody in attendance was given a chance to speak. I learnt to manage personalities in professional group setting

Hobbies and Interests

- I am a keen musician. I play bass guitar in several jazz, rock and big bands and productions and I play in the Mappin Street Collective: a Sheffield based jazz, funk and soul 12 piece band.
- I enjoy walking and I often visit the Lake District and Peak District national parks in time away from work.

References

References available upon request.