

Matthew Knowles

mattknowles314@gmail.com

EDUCATION

University of York

York, UK

PhD, Mathematics (Applied Statistics)

September 2025 – Present

- Supervised by Dr. Jessica Hargreaves and Prof. Marina Knight

University of Sheffield

Sheffield, UK

MSc, Statistics with Medical Applications, Grade: Merit

September 2022 – September 2024

- Modules in time series, bayesian statistics, medical statistics, machine learning and economic modelling
- Dissertation: A Network Meta-Analysis of Treatments of Locally Advanced/Metastatic Pancreatic Cancer (75%)

University of York

York, UK

MMath (Hons), Mathematics, Grade: 2:1

October 2018 – June 2022

- Key modules included statistical pattern recognition, applied data science in R, and bayesian statistics
- Third year project: On Differential Equations in in-host Viral Pathology (70%)
- Dissertation: Statistical Methods for Resetting Score Targets in Limited-Overs Cricket (72%)
- Recived full colours for representing the university at cricket

EXPERIENCE

Statistical Scientist

October 2024 – Present

Astellas Pharma

York, UK

- Co-lead a research group on indirect treatment-comparisons

Associate Biostatistics Manager

December 2024 – September 2025

Astellas Pharma

York, UK

- Trial statistician in the oncology group, working on two novel compounds
- Contribute to the development of statistical analysis plans and trial protocols
- Developed an automated R pipeline for creating weekly outputs of key trial endpoints

Senior Statistical Analyst

April 2024 – November 2024

OPEN Health Evidence and Access

London, UK

- Lead the survival analysis workstream update for a large clinical trial in chronic-lymphocytic leukemia
- Supported the delivery of a network meta analysis in crohn's disease
- Conducted a non-proportional-hazards network meta analysis in ulcerative colitis
- Lead an indirect treatment comparison in crohn's disease
- Implemented a novel survival modelling technique into a cost-effectiveness model
- Lead the development of in-house R packages for survival analysis and indirect treatment comparisons

Statistical Analyst

June 2022 – March 2024

OPEN Health Evidence and Access

York, UK

- Worked on building and maintaining in-house R packages for survival analysis
- Performed and reported on the survival analyses of four clinical trials for submissions to health technology assessment agencies
- Performed a network meta analysis in multiple myeloma
- Gave two internal talks about network meta analysis methodologies
- Wrote statistical analysis plans for trial analyses and network meta analyses

PUBLICATIONS

MSR48 Discrete-Event Simulation Model Projects Economic Outcomes Associated with Long-Term Clinical Remission in Patients with Severe Asthma Receiving Mepolizumab, Value in Health, Volume 28, Issue 6, S283 (July 2025)

Discrete Event-Simulation Model Projects Mepolizumab Treatment Outcomes Associated With Long-Term Clinical Remission in Severe Asthma, American Journal of Respiratory and Critical Care Medicine, Issue 211 (May 2025)

MSR213 Comparative Efficacy of Treatments in Advanced/Metastatic Pancreatic Cancer: Demonstrating the Power of Multi-Level Network Meta Regression, Value in Health, Volume 27, Issue 12, S2 (December 2024)

SKILLS

Programming Languages: R, Python, C/C++, Stan, SAS

Developer Tools: Git, Vim, VS Code, Rstudio Server, Rstudio Desktop

Communicative Languages: English, Norwegian

Presenting: Experienced at creating and giving talks/presentations in both Beamer and PowerPoint

Other: Excel, VBA, PowerBI, RShiny, R package development, \LaTeX

PROFESSIONAL MEMBERSHIPS

Associate Member, Institute for Mathematics and its Applications

Royal Statistical Society