



James Hogg

PHD STUDENT

School of Mathematical Sciences, Queensland University of Technology

0450592789 | james.hogg@hdr.qut.edu.au | [JamieHogg-depo](https://github.com/JamieHogg-depo) | [jamieahogg](https://www.linkedin.com/company/jamieahogg) | [JamieAHogg](https://twitter.com/JamieAHogg)

I am a current PhD student in the School of Mathematical Sciences at the Queensland University of Technology (QUT) under the supervision of Distinguished Professor Kerrie Mengersen, Dr Susanna Cramb, Professor Peter Baade and Dr Jessica Cameron. My PhD work is funded by the internationally-awarded Australian Cancer Atlas, where my role is to develop Bayesian methodology to generate small area level cancer risk factor estimates.

Research interests

R, tidyverse, Stan
Spatio/hierarchical modelling
Bayesian inference
Spatial variation in cancer outcomes
Visualisations/mapping

Education and qualifications

Bachelor of Music with Distinction

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- Minor in statistics (4 units)
- GPA: 6.5
- Dean's Award for Excellence (all 6 semesters)

Brisbane, Australia

2015-2017

Master of Biostatistics

UNIVERSITY OF QUEENSLAND (UQ)

- Provided by the Biostatistics Collaboration of Australia
- GPA 7.0
- Dean's Commendation for Academic Excellence (2018 & 2019)
- Thesis complete at Cancer Council Queensland

Virtual

2018-2020

Doctor of Philosophy, Statistics

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- PhD funded by the internationally-awarded Australian Cancer Atlas

Brisbane, Australia

2021 (ongoing)

Graduate Statistician (Gstat) Accreditation

STATISTICAL SOCIETY OF AUSTRALIA

2021 (ongoing)

Experience

Marking (casual)

UNIVERSITY OF QUEENSLAND (UQ)

- Course title: Categorical Data & Generalised Linear Models (STAT7608)
- Course title: Regression Modelling 2 (STAT7619)
- Course title: Applied Regression Analyses (PUBH7631)

Virtual

July 2021 - October 2022

Tutor (casual)

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- Course title: Quantitative Skills for Health Scientists (LQB286)

Brisbane, Australia

September - November 2021

Research assistant (part-time)

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- Project: Modifiable areal unit problem (MAUP) in disease mapping
- Co-investigators: Dr Susanna Cramb, Ass. Prof. Helen Thompson

Brisbane, Australia

October 2021 - March 2022

Organiser and host

STANCONNECT 2022: STAN THROUGH SPACE AND TIME

- <https://discourse.mc-stan.org/t/stanconnect-2022-through-space-and-time/29143/3>

Virtual

July - November 2022

Internship (full-time)

DEPARTMENT OF HEALTH, WESTERN AUSTRALIA (DOHWA)

- Project: Bayesian modelling
- Supervisors: Dr Susanna Cramb, Dr Alex Xiao
- Recommended spatio-temporal models for a wide range of health data
- Provided lengthy and detailed reports giving the details of spatio-temporal models
- Created detailed and large R code scripts to run a variety of models
- Created training materials for 3-days of intensive Bayesian spatio-temporal course

Virtual

August - November 2022

Co-chair of Bayesian Research & Applications (BRAG) group

QUEENSLAND UNIVERSITY OF TECHNOLOGY (QUT)

- Organiser of fortnightly internal talks on Bayesian research

Brisbane, Australia

June 2022 (ongoing)

Instructor/presenter of Bayesian training

DEPARTMENT OF HEALTH, WESTERN AUSTRALIA (DOHWA)

- Three days of intensive training on Bayesian spatial temporal analysis

Perth, Australia

November 2022

Research assistant (part-time)

DEPARTMENT OF HEALTH, WESTERN AUSTRALIA (DOHWA)

- Consulting on bayesian modelling

Virtual

November 2022 (ongoing)

Selected research presentations

Short talk

ACEMS FINAL RETREAT

- Title: Modelling cancer risk factors in Australia

Moreton Island, Australia

November 2021

Contributed talk

SMALL AREA ESTIMATION, SURVEYS AND DATA SCIENCE

- Title: Searching for stability: Introducing a method of small area estimation for proportions using severely sparse data

Virtual

May 2022

Short talk

QANZIAM CONFERENCE

- Title: Searching for stability in Bayesian small area estimation of proportions

QUT, Brisbane, Australia

June 2022

Poster presentation

THE BAYESIAN YOUNG STATISTICIANS MEETING

- Title: Introducing a Bayesian two-stage logistic-normal model for small area estimation of proportions

Montreal, Canada

June 2022

Poster presentation

INTERNATIONAL SOCIETY OF BAYESIAN ANALYSIS (ISBA) WORLD MEETING

- Title: Introducing a Bayesian two-stage logistic-normal model for small area estimation of proportions

Montreal, Canada

June 2022

Poster presentation

CENTRE FOR DATA SCIENCE SHOWCASE

- Title: Searching for stability in Bayesian small area estimation of proportions

QUT, Brisbane, Australia

September 2022

Short talk

SECOND EARLY CAREER RESEARCHER CANCER EPIDEMIOLOGY CONFERENCE

- Title: Risk factors and the Australian Cancer Atlas: the trepidation of instability and sparsity in small area estimation

Virtual

November 2022

Short talk

SPARSE SYMPOSIUM

- Title: Risk factors and the Australian Cancer Atlas: the trepidation of instability and sparsity in small area estimation

Virtual

November 2022

Invited talk

EPIDEMIOLOGY IN GOVERNMENT (EIG) SPECIAL INTEREST GROUP (SIG) MEETING

- Title: Mapping Cancer: The Australian Cancer Atlas

Virtual

December 2022

Awards

Star Graduate

MASTERS OF BIOSTATISTICS

December 2022

Honourable Mention for Best Student Presentation

QANZIAM CONFERENCE

June 2022

Best Oral Presentation Award

SECOND EARLY CAREER RESEARCHER CANCER EPIDEMIOLOGY CONFERENCE

November 2022

Professional memberships

Statistical Society of Australia (SSA)
International Society of Bayesian Analysis (ISBA)
Centre for Data Science (CDS)
Health Equity Research with Outcomes (HERO)

Software

R, Stata, Python
MS Office Suite, Latex, Endnote, Mendeley
Git Bash
Stan, WinBUGS, JAGS

Referees

Doctor Jessica Cameron

Cancer Council Queensland

RESEARCH FELLOW-SPATIAL MODELLING, DESCRIPTIVE EPIDEMIOLOGY

- Email: JessicaCameron@cancerqld.org.au
- Phone: +61 7 3634 5387

Professor Peter Baade

Cancer Council Queensland

SENIOR MANAGER, DESCRIPTIVE EPIDEMIOLOGY

- Email: PeterBaade@cancerqld.org.au
- Phone: +61 7 3634 5317

Doctor Michael Waller

University of Queensland

BCA PROGRAM COORDINATOR, SENIOR LECTURER

- Email: m.waller@uq.edu.au
- Phone: +61 7 3365 5552