Waleed K. Almutiry
wkmtierie@qu.edu.sa
https://waleedalmutiry.github.io/WaleedAlmutiry/
+(966) 562244433

Address
Department of Mathematics
College of Science and Arts,
Qassim University
Ar Rass, Qassim
Saudi Arabia

Waleed Almutiry

Biostatistician and Epidemiologist

Education

2014 - 2018, Guelph University, Canada

PhD in applied Statistics

- **Supervisor**: Dr. Zeny Feng & Dr. Rob Deardon
- **Thesis**: Incorporating Contact Network Uncertainty in Individual Level Models of Infectious Disease within a Bayesian Framework.

2008 - 2009, Lancaster University, England

M.Sc. (Statistics; Medical statistics pathway)

- **Supervisor**: Dr. Debbie Costain
- **Dissertation**: modelling the nasal carriage of Staphylococcus aurues in mothers and their infants over time.

1998 - 2002, Qassim University, Saudi Arabia

B.Sc. (Mathematics)

Research Interests

- Infectious Disease Epidemiology for humans, animals, and plants.
- Spatial and network-based disease systems.
- Clinical trial epidemiology.
- Bayesian and Computational Statistics.
- Statistical and machine learning.
- Longitudinal Data Analysis.

Research Papers

Sumbitted & Published

- **Almutiry, W.** and Deardon, R., (2019). Incorporating contact network uncertainty in individual level models of infectious disease using approximate Bayesian computation. *The International Journal of Biostatistics*, 16(1), 20170092. doi: https://doi.org/10.1515/ijb-2017-0092.
- Otmani, S., Boulaaras, S., and **Almutiry, W.**, (2020). The maximum norm analysis of a nonmatching grids method for a class of parabolic biharmonic equation with mixed boundary condition. *Journal of Intelligent & Fuzzy Systems*, 38(3), 2551-2560, DOI: 10.3233/JIFS-179542.
- **Almutiry, W.**, Warriyar, K. V., and Deardon, R (2020). Continuous Time Individual-Level Models of Infectious Disease: a Package EpiILMCT. *arXiv preprint*, arXiv:2006.00135, **accepted and in print (*Journal of Statistical Software*)**.
- Warriyar, K. V., **Almutiry, W.**, and Deardon, R (2020). Individual-Level Modelling of Infectious Disease Data: EpiILM. *arXiv preprint*, arXiv:2003.04963, **accepted and in print (*The R Journal*)**.
- **Almutiry, W.** and Deardon, R., (2020). Spatial contact network uncertainty in individual level models of infectious disease transmission. **accepted and in print (*Statistical Communication in Infectious Diseases*)**.

Under Submission

- **Almutiry, W.** and Deardon, R. Contact network uncertainty in individual level models of infectious disease transmission using within cluster likelihood approximations. submitted soon.
- Mahsin, M., **Almutiry, W.**, and Deardon, R. Real-time modelling of infectious disease transmission using geographically-dependent individual-level models. submitted soon.

Collaborative Research

- Collaborating with Dr. Rob Deardon and Md Mahsin (a PhD candidate in Dr. Rob Deardon research group), Calgary University, Canada. We are working on developing continuous time geographically-dependent individual-level models for studying the spread of infectious disease.
- Collaborating with a research group from the National Healthcare Group (NHG) in Singapore for using a dynamic contact network to study the spread of COVID-19 within and between communities in small areas.
- Collaborating with Dr. Sultanah Alshammari (King Abdulaziz University, Jeddah, Saudi Arabia), Dr. Harsha Gwalani (University of North Texas,Texas, US), and Dr. Saeed Alqarni (Saudi Center for Disease Prevention and Control, Jeddah, Saudi Arabia) for evaluation of Global Mass Gatherings Suspension in Saudi Arabia during the COVID-19 Pandemic.
- Collaborating with Dr. Muteb Alharthi and Dr. Maha Althobaiti, Taif University, Saudi Arabia. We are working on using deep learning and stochastic modelling for estimating epidemiological characteristics of COVID-19 and predicting its future trend in Saudi Arabia.
- Collaborating with Dr. Muteb Alharthi (Taif University, Saudi Arabia) and Dr. Sultanah Alshammari (King Abdulaziz University, Jeddah, Saudi Arabia). We are working on modelling the spread of Middle East Respiratory Syndrome Coronavirus (MERS-Cov) in Saudi Arabia.

R Packages

- **Almutiry, W.**, Warriyar, K. V., Deardon R (2020). EpiILMCT*: Continuous Time Distance- Based and Network-Based Individual Level Models for Epidemics*. R package version 1.1.6, URL `https://CRAN.R-project.org/package=EpiILMCT`.
- Warriyar, K. V., **Almutiry, W.**, and Deardon, R (2020). *Individual-Level Modelling of Infectious Disease Data:* EpiILM. R package version 1.5.1, URL `https://CRAN.R-project.org/package=EpiILM`.

Conference Presentations

- Incorporating contact network uncertainty in individual level models of infectious disease using approximate Bayesian computation, Statistical Society of Canada Annual Meeting 2017, University of Manitoba, Winnipeg, Canada.
- Incorporating contact network uncertainty in individual level models of infectious disease using approximate Bayesian computation, Canadian Society for Epidemiology and Biostatistics (CSEB), Biennial Conference 2017, Banff, Alberta, Canada.

Experience

Sep 2018 - present, *Assistant professor*, Mathematics department, College of Science and Arts in Ar Rass, Qassim Unversity

- Director of the scientific committee in the department.
- Director of the quality committee in the department.
- Teaching different Mathematics and Statistics courses.

Jan 2011 - Aug 2012, *Director of preparatory year program*, Applied Health Science College, Qassim University, Saudi Arabia

Oct 2009 - Aug 2012, *A lecturer of statistics*, Applied Health Science College, Qassim University, Saudi Arabia

Jan 2004 - Dec 2006, *Director of information and statistics centre*, Applied Health Science College, Qassim University, Saudi Arabia

Dec 2003 - Dec 2006, *An assistant lecturer of Mathematics and statistics*, Applied Health Science College, Qassim University, Saudi Arabia

Sep 2002 - Dec 2003, *A teacher of Mathematics*, Technical College, Al-Kharj, Saudi Arabia

Skills

- Good interpersonal and communication skills, team oriented.
- Able to work in diverse situations, groups, and surroundings.
- Excellent time-management skills.
- Ability to multitask in a fast paced environment, self-motivated, and adaptable.

Software Development Skills

Programming

- expert in Fortran
- professional in R
- OpenMP, MPI
- SAS
- Python
- Matlab

Computer Software

- Windows
- LaTeX
- iOS
- Microsoft Office
- Android

Professional Memberships

- American Statistical Association.
- Statistical Society of Canada.

Languages

- Arabic: mother tongue
- English: fluency

Awards

Aug 2015, *Academic Excellence Award*, Saudi Cultural Bureau in Canada
Awarded for being excellent in the second academic year 2015 of a PhD degree.