

PROFESSOR JENNIFER KAYE ROGERS, B.SC. (HONS), M.SC., PH.D., CSTAT, AFHEA

Unit 2
2A Bollo Lane
London
W4 5LE

Email address: jennifer.rogers@phastar.com
LinkedIn: www.linkedin.com/in/jkrogers
Twitter: @StatsJen
Website: www.jenniferrogers.co.uk

EMPLOYMENT HISTORY

Head of Statistical Research, PHASTAR, August 2019 – Present

- Liaising with current and potential clients, delivering statistical consultancy as and when required
- Working alongside business development staff, providing technical expertise, representing the company at client meetings, inputting into bids, bid strategies and bid/no-bid decisions, and responding to requests-for-information
- Providing technical leadership, guidance and direction to statistical consultants at PHASTAR
- Leading statistical research activities, resulting in published papers, as well as presentations and posters at conferences
- Communicating externally with the media

Director of Statistical Consultancy Services and Associate Professor of Statistics, University of Oxford, Department of Statistics, July 2016 – August 2019

- Directing and managing end-to-end provision of the Department's consultancy activities, including client liaison, contract negotiations, statistical analysis, delivery of results, and offering training courses in statistics
- Managing the strategic direction of statistical consultancy services
- Undertaking statistical research leading to publications in peer reviewed journals and presentations at conferences
- Teaching undergraduate and postgraduate degree modules

Post-Doctoral Research Fellow, University of Oxford, Department of Statistics, September 2015 – July 2016

- Held a NIHR Post-Doctoral Fellowship titled "Analysis of Recurrent Events in Clinical Trials"
- Total value of award approximately £250,000
- Carried out teaching of tutorial classes to undergraduate and postgraduate students

Lecturer, London School of Hygiene and Tropical Medicine, Department of Medical Statistics, October 2013 – September 2015

- Held a NIHR Post-Doctoral Fellowship titled "Analysis of Recurrent Events in Clinical Trials"
- Total value of award approximately £250,000
- Teaching postgraduate degree modules

Research Fellow, London School of Hygiene and Tropical Medicine, Department of Medical Statistics, May 2011 – October 2013

- Undertaking statistical research leading to publications in peer reviewed journals and presentations at conferences
- Teaching postgraduate degree modules

HIGHER EDUCATION AND PROFESSIONAL QUALIFICATIONS

Ph.D. Statistics: Statistical Models for Censored Point Processes with Cure Fractions, University of Warwick (supervised by Professor Jane Hutton), 2011

M.Sc. Statistics (Distinction), Lancaster University, 2007

B.Sc. (Hons) Mathematics with Statistics (First Class), Lancaster University, 2006

CStat, Chartered Statistician, Royal Statistical Society, 2017

AFHEA, Associate Fellow of the Higher Education Academy, 2016

GradStat, Graduate Statistician, Royal Statistical Society, 2006

CONSULTANCY ROLES

My consultancy roles to date have been wide reaching but have predominantly focussed on clinical trial research. I have been involved in the design of several clinical trials, advising pharmaceutical companies on the choice of primary endpoint and analysis method. I have also carried out sample size calculations and simulation studies to aid in trial design, as well as economic analyses of trial data to assist in the approval of interventions. Other work that I have carried out includes looking at claimants for a legal case, developing a global predictor for dengue fever, carrying out a financial forecasting analysis and examining the current prevalence and treatment of the disease amyloidosis.

MEMBERSHIP OF SOCIETIES

Royal Statistical Society

International Biometrics Society

John Snow Society

RESEARCH

My research is generally focussed on statistical methodology, with applications of statistics to health care. My main area of research to date has been on the development and application of novel statistical methods for the analysis of large-scale clinical trials. My work often requires multi-disciplinary collaboration and I have a number of joint publications. My principal theoretical interests are survival analysis and the analysis of recurrent events with a particular interest in joint modelling strategies that combine the two. I have national and international research networks and have consulted for pharmaceutical companies in the design of a number of major clinical trials. My major medical collaborations have been in cardiovascular disease and in epilepsy.

RESEARCH FUNDING

MRC Biomedical Catalyst: Developmental Pathway Funding Scheme (DPFS), “Validating the PredicTR treatment response classifier for oropharyngeal cancer (PredicTR 2)”, 1 November 2018 – 2020. Total value of award approximately £800,000

NIHR Post-Doctoral Fellowship, “Analysis of Recurrent Events in Clinical Trials”, 1 September 2013 – 2016. Total value of award approximately £250,000.

EPSRC Doctoral Training Award, 2007 – 2011, covering Ph.D. tuition fees and maintenance. Total value of award approximately £65,000.

EPSRC Studentship, 2006, covering M.Sc. tuition fees and maintenance. Total value of studentship approximately £15,500.

NOTABLE APPOINTMENTS

Vice President (External Affairs), Royal Statistical Society, 2017-2021

Royal Statistical Society Council member, 2015-2021

President, British Science Association Mathematical Sciences Section, 2018

Popular Lecturer, London Mathematical Society, 2018

Honorary Officer for Meetings and Conferences, Royal Statistical Society, 2015-2017

Guy Lecturer, Royal Statistical Society, 2014

SELECTED INVITED CONFERENCES

Workshop on Statistical Modelling of Multivariate Longitudinal and Survival Data in Medical Research, University of Cape Town, 2019

CEN-ISBS Conference, 2017

PSI Conference, 2016

9th Annual AdvaMed/FDA Medical Device and Diagnostics Statistical Issues, 2016

Joint Statistical Meeting, 2015

PSI Conference, 2014

50th Gregynog Statistical Conference, 2014

European Society of Cardiology Congress, 2012

FDA/Industry Statistics Conference, 2011

TECHNICAL SKILLS

I am highly computer and Internet literate, and adept with programs such as Word, Excel and PowerPoint. I am proficient in using mathematically oriented analytical programs such as R and Latex and have experience of Python, STATA and SAS.

MEDIA INTERACTIONS AND PUBLIC ENGAGEMENT

I regularly appear on TV and radio talking about statistics and its role in Society and responding to news stories in the press. Some of my more notable appearances include BBC Radio 4’s More or Less, BBC Watchdog, Curious Cases of Rutherford and Fry, as well as the Today Programme, BBC Radio 5 Live and BBC World at One. I have also been an expert statistician for the Channel 4 Dispatches programmes: ‘How the Rich Get Richer’, and ‘Is Britain Full?’, ITV’s ‘Mystery Map’, and the BBC’s ‘Long Live Britain’.

I can also be regularly found presenting in schools, pubs and on stage. My presentations focus on statistical significance, uncertainty and chance, communicating risk, and issues surrounding correlation versus causation. I am a regular speaker for Maths Inspiration, one of the biggest maths enrichment programmes for teenagers in the UK. My involvement with Maths Inspiration has also taken me to Sydney, Melbourne and New York, including joining the National Theatre’s Curious Incident of the Dog in the Nighttime world tour. I am also regularly invited to present at festivals and conferences with the Advanced Mathematics Support Programme, Maths in Action and the Institute of Mathematics and its Applications. I have also appeared in Robin Ince’s Cosmic Shambles.

PUBLICATIONS

Peer Reviewed Articles in Journals

1. K.V. Bunting, R.P. Steeds, L.T. Slater, **J.K. Rogers**, G.V. Gkoutos, and D. Kotecha. Assessing and improving the reproducibility of echocardiography: a practical guide. *Accepted to Journal of the American Society of Echocardiography*
2. K.D. Lynch, R.W. Chapman, S. Keshav, A.J. Montano-Loza, A.L. Mason, A.E. Kremer, M. Vetter, M. Krijger, C.Y. Ponsioen, P. Trivedi, G. Hirschfield, C. Schramm, C. Heng Liu, C.L. Bowlus, D.J. Estes, D. Pratt, C. Hedin, A. Bergquist, A.C. Vries, C.J. Woude, L. Yu, D.N. Assis, J. Boyer, H. Ytting, E. Hallibasic, M. Trauner, H. Marschall, L.M. Daretti, M. Marzioni, K.K. Yimam, N. Perin, A. Floreani, B. Beretta-Piccoli, **J.K. Rogers**, International Primary Sclerosing Cholangitis Study Group (IPSCSG), and C. Levy. Effects of Vedolizumab in Patients with Primary Sclerosing Cholangitis and Inflammatory Bowel Diseases. *Clinical Gastroenterology and Hepatology* 2019; DOI: 10.1016/j.cgh.2019.05.013.
3. P. Royston, B Choodari-Oskoei, M.K.B. Parmar, and **J.K. Rogers**. Combined test versus logrank/Cox test in 50 randomised trials. *Trials* 2019; 20(1): 172. DOI: 10.1186/s13063-019-3251-5.
4. B.R.H. Sturrock, **J.K. Rogers**, R. Sadler, B. Ferry, C.A. Roberts, R.W. Chapman, and K.D. Williamson. Anti-gp210 and anti-sp100 antibody status and ursodeoxycholic acid response in primary biliary cholangitis. *Journal of Gastroenterology and Hepatology Research* 2018; 7(6): 2741-2747. DOI: 10.17554/j.issn.2224-3992.2018.07.797.
5. L. Shen, P.S. Jhund, U.M. Mogensen, L. Køber, B. Claggett, **J.K. Rogers**, and J.J.V. McMurray. Re-Examination of the BEST Trial Using Composite Outcomes, Including Emergency Department Visits. *JACC: Heart Failure* 2017; 5(8): 591-599. DOI: 10.1016/j.jchf.2017.04.005.
6. **J.K. Rogers**, A.Yaroshinsk, S.J. Pocock, D. Stokar, and J. Pogoda. Analysis of recurrent events with in the presence of informative censoring: Application of the joint frailty model. *Statistics in Medicine* 2016; 35(13):2195-2205. DOI: 10.1002/sim.6853.
7. **J.K. Rogers**, A. Kielhorn, J.S. Borer I. Ford, and S.J. Pocock. Effect of ivabradine on numbers needed to treat for the prevention of recurrent hospitalizations in heart failure patients. *Current Medical Research & Opinion* 2015; 31(10):1903-1909. DOI: 10.1185/03007995.2015.1080155.
8. **J.K. Rogers**, P.S. Jhund, A.C. Perez M. Böhm, J.G. Cleland, L. Gullestad, J. Kjekshus, D.J. Veldhuisen, J. Wikstrand, H. Wedel, J.J.V. McMurray, and S.J. Pocock. Effect of Rosuvastatin on Repeat Heart Failure Hospitalizations: The CORONA Trial (Controlled Rosuvastatin Multinational Trial in Heart Failure). *Journal of the American College of Cardiology: Heart Failure* 2014; 2(3):289-297. DOI: 10.1016/j.jchf.2013.12.007.
9. **J.K. Rogers**, S.J. Pocock, J.J.V. McMurray, C.B. Granger, E.L. Michelson, J. Östergren, M.A. Pfeffer, S.D. Solomon, K. Swedberg, and S. Yusuf. Analysing recurrent hospitalisations in heart failure: a review of statistical methodology, with application to CHARM-Preserved. *European Journal of Heart Failure* 2014; 16:33-40. DOI: 10.1002/ehf.29.
10. **J.K. Rogers** and J.L. Hutton. Comparing treatment policies in early epilepsy through the joint modelling of pre-randomisation event rates and multiple post-randomisation survival times. *Journal of Applied Statistics* 2013; 40(3):546-562. DOI: 10.1080/02664763.2012.748720.
11. **J.K. Rogers**, J.J.V. McMurray, S.J. Pocock F. Zannad, H. Krum, D.J. Veldhuisen, K. Swedberg, H. Shi, J. Vincent, and B. Pitt. Eplerenone in Patients with Systolic Heart Failure and Mild Symptoms: Analysis of the Repeat Hospitalizations. *Circulation* 2012; 126(19):2317-2323. DOI: 10.1161/CIRCULATIONAHA.112.110536.
12. **J.K. Rogers**, J.L. Hutton, A.G. Marson, and D.W. Chadwick. Assessing the risk of subsequent tonic-clonic seizures in patients with a history of minor seizures. *Journal of Neurology Neurosurgery and Psychiatry* 2012; 83:803-809. DOI: 10.1136/jnnp-2011-300917.

Working Papers; Under Review

13. T Hadfield, M.S. Ali, **J.K. Rogers**, S. Khalid, and D Prieto-Alhambra. Machine learning in propensity score analysis. *In preperation*.

Other Published Output

J.K. Rogers. Just what is out problem with numbers? Oxford Science Blog. (Available from: <http://www.ox.ac.uk/news/science-blog/just-what-our-problem-numbers>).

J.K. Rogers. How "random" is Ryanair's seating allocation? Significance. (Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1740-9713.2017.01069.x/full>).

J.K. Rogers. Luck of the withdrawal. Significance. (Available from: <http://onlinelibrary.wiley.com/doi/10.1111/j.1740-9713.2016.00957.x/pdf>).

J.K. Rogers. Is my bacon sandwich going to give me cancer? Statistics Views (Available from: <http://www.statisticsviews.com/details/feature/8704781/Is-my-bacon-sandwich-going-to-give-me-cancer.html>).

J.K. Rogers. Statistics and Biology - a match made in heaven? Royal Society of Biology Blog (Available from: <http://blog.rsb.org.uk/statistics-and-biology/>).

J.K. Rogers. How can we remedy the gender imbalance in maths and stats? StatsLife (Available from: <http://www.statlife.org.uk/opinion/2389-how-can-we-remedy-the-gender-imbalance-in-maths-and-stats>).

J.K. Rogers. Number Needed to Treat for Recurrent Events – Event- or Patient-Based? Statistics Views, Wiley (Available from: <http://www.statisticsviews.com/details/feature/8092601/Number-Needed-to-Treat-for-Recurrent-Events--Event--or-Patient-Based.html>).

J.K. Rogers. Speed cameras, causality and chance. Statistics Views, Wiley (Available from: <http://www.statisticsviews.com/details/feature/7497691/Speed-Cameras-Causality-and-Chance.html>).

J.K. Rogers. Will Ebola change the future of clinical trials? Statistics Views (Available from: <http://www.statisticsviews.com/details/feature/7089401/Will-Ebola-change-the-future-of-clinical-trials.html>).

J.K. Rogers. Does evidence matter? Statistics Views, Wiley (Available from: <http://www.statisticsviews.com/details/feature/6236051/Does-evidence-matter.html>).

J.K. Rogers. Open data should also be about cutting red tape for research. StatsLife (Available from: <http://www.statslife.org.uk/opinion/1255-open-data-should-also-be-about-cutting-red-tape-research>). **J.K. Rogers.** Recurrent events analysis, not so straightforward! Statistics Views, Wiley (Available from: <http://www.statisticsviews.com/details/feature/5786631/Recurrent-events-analysis-not-so-straightforward.html>).

J.K. Rogers. Statisticians Essential to Success of Clinical Trials. International Year of Statistics (Available from: www.statistics2013.org/2013/05/27/statisticians-essential-to-success-of-clinical-trials/).

J.K. Rogers, J.L. Hutton and K. Hemming. Joint modelling of event counts and survival times. Centre for Research in Statistical Methodology, University of Warwick (Available from: <http://www2.warwick.ac.uk/fac/sci/statistics/crism/research/paper09-44>).