Dr Nathan Green **RSS Fellow, AFHEA**

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Employment History/ Work Experience

Sept 2013 - Present **Imperial College London, St Mary's Campus, Paddington, London, W2 1PG**

Data analyst and modeller, Department of Infectious Disease Epidemiology, School of Medicine

- Active and latent UK TB prevalence and diagnostic pathway analyses for improved understanding and decision making using complex statistical analyses and noisy unstructured data
- Interfacing and cross-functioning with multidisciplinary teams, including medical professionals and health economists
- Lead technical expert in chlamydia small-area estimation MRC methodology grant proposal, joint with University College London
- Use of multiple, large, complex data sets from aggregate population census, administrative and individuals surveys, using SQL, Access, STATA, Excel and R
- Involved with the HPRU Models and Methods, Economics and Behaviour, and Respiratory Medicine themes
- Module Lead for Introduction to Bayesian Statistics in MSc in Epidemiology at ICL

Oct 2012 - Sept 2013 **Public Health England (formerly Health Protection Agency), 61 Colindale, Ave, London, Greater London, NW9 5EQ**

Mathematical Modeller in *Modelling and Health Economics Evaluation Unit*

- Health Care Acquired Infection (HCAI) excess length of stay analysis using novel survival analysis and causal inference methods
- Solely responsible for large NHS dataset and computer analysis in *R* statistical software and presentation of results, including at international conference ECCMID, Berlin April 2013

Feb 2010 - Dec 2011 **University of Manchester, Room 1.309, Jean McFarlane Building, Oxford Road**

Biostatistician Research Associate in North West Institute for BioHealth Informatics (NIBHI)

- Statistics Lead for the Systems Implementation theme within the national Collaboration for Leadership in Applied Health Research and Care (CLAHRC) project
- Responsible for the development of prognostic and predictive mathematical models for cardio-vascular disease (CVD) in the UK populations, employing, amongst others, survival analysis and discrete event simulation methods
- Prototyped models in R before overseeing full F# implementation by software team
- Performed statistics for the award winning *IGT Care Call* Diabetes support CLAHRC project
- Worked closely within a multi-disciplinary team to develop and validate these models against real world data and implement into open source software to distribute throughout the NHS
- Collaborated with model users, domain experts and health professionals, including clinicians at Salford Royal Foundation Trust (SRFT) Hospital
- Science journalist and public outreach lead: British Science Association Media Fellow Award and University of Manchester Widening Participation Award Holder

May 2007 - Jan 2010 **Defence Science and Technology Laboratory (Dstl), MoD, Porton Down, Bldg 5**

Mathematical Modeller in *Hazard Assessment, Simulation and Prediction Group*

- Mathematical areas of work included Bayesian inference and Markov Chain Monte Carlo (MCMC) and sequential Monte Carlo (SMC)/Particle Filter used to obtain complex posterior distributions. Applied in the context of the chemical & biological problem domain, including on-line source term estimation and sensor data fusion.
- Significant promotion, August 2008 to technical and project lead for 2 key MoD projects
- Responsible for tasking, monitoring and guiding team members
- Demonstrating team working, leadership skills, negotiating and assertiveness
- Responsible for determining and planning direction of projects, both day-to-day and strategically within the context of department and MoD's Capability Plan
- Networked with MoD, government, industry and academia (nationally and internationally) to identify and collaborate on new work
- Technical expert and consultant for Dstl and MoD

May 2006 - April 2007 **Dstl, MoD, Farnborough, Bldg A3, Rm 1001**
Analyst in *Policy and Capabilities Studies (PCS) Department*

- Mathematical areas of work included Design of Experiments and optimization methods (linear/dynamic programming)

Summer - Autumn 2005 **Leonardo Da Vinci Practical Training Program, Seville, Spain**
Summer Camp Monitor (children aged 7-14)

Education and Qualifications

2001-2005 University of Liverpool **PhD in Mathematics and Statistics (EPSRC funded)**
Supervisor: Dr Damian Clancy, Mathematician
Title: *Optimal Intervention for an Epidemic Model under Uncertainty*

- Formulated, developed and investigated the effect of different types and levels of model parameter uncertainty on certain isolation and immunisation policies for stochastic epidemic models, namely the spread of infectious diseases.
- Emphasis of the work on dynamic programming, Bayesian analysis and decision theory, and simulation.

1997-2001 University of Newcastle Upon Tyne **MMATH Masters Degree in Mathematics and Statistics, Upper Second Class**
Dissertation project title: *Markov Chains and Applications*
Received an equivalent first class grade

Taught topics included optimization, differential equations, real analysis, game theory, knots, rings and fields, group and number theory, projective geometry, calculus, complex analysis, classical/Bayesian statistical methods.

1995-1997 The King's School Chester **'A' levels in Mathematics (B); Economics (B); Physics (C); General Studies (B)**
'AS' level in Art History (B)

1990-1995 The King's School Chester **GCSEs: 2 Grade A*, 5 Grade A, 2 Grade B**
Including French and Spanish

Activities, Interests and Skills

Outreach At Dstl, I was the Site Representative for the Statistics Interest Group, a mathematics

Chartership mentor, presented at the Maths Interest Group Forum, organised a Design of Experiments and an introduction to Bayesian statistics workshop. Established a Dstl annual final year mathematics project award at Oxford University. I visited universities, primary and secondary schools to promote sciences and jobs in government. I prepared and presented a workshop at the SAMSI summer school 2009. Regular voluntary Ambassador for STEMNET e.g. school visits, Manchester Science Festival at Manchester Museum of Science and Industry (2010), science day at Anfield football stadium through Liverpool University (2004). Panel guest at the Manchester University Pathways postgraduate careers event 2010 and 2011.
Widening Participation Award Holder for the University of Manchester 2011; organised Manchester University National Science and Engineering Week workshops for ~1000 secondary school pupils. Manchester University Flagship Manchester Access Programme (MAP) tutor. British Science Association Media Fellow 2011 at the Guardian newspaper, writing articles, blog posts and recording podcasts. On-going Guardian contributor online with my own statistics series. I give general public science talks, including to the SciBar (Dec 2011) and Bright Club (July 2011).). Statistical reviewer for the Before The Headlines initiative by the Science Media Centre (SMC). "I'm a Scientist Get Me Out Of Here" participant March 2013.. Imperial Festival volunteer 2015-present.

Reaching Further Imperial College London Reach-Out Lab (Regents High School, Camden; Watford Grammer School; Bacons College, London)
Imperial Summer School
Mentoring through Career Academy program at Paddington Academy 2015.

Sport Sixth form football first XI vice-captain and won county and district cups. Gym member, run half marathons and a marathon 2010. I have been canoeing in Scotland and Wales. Also enjoy Yoga and meditation classes. Cycled the Camino de Santiago de Compostela in summer 2010.

Computing Expert programmer in R (/Splus) and previous knowledge of C/C++, Fortran 95, Visual Basic 6 and MATLAB (/Scilab). Advanced user of Microsoft Word, Excel, Powerpoint, and Outlook and LaTeX.

Languages GCSE French and Spanish followed by evening classes in Spanish during PhD. Summer 2005 studies and worked for 5 months in Seville, Spain including 4 weeks intensive course at Insula Sevilla language school. Established Dstl lunch time Spanish club and attend group and individual conversation meet-ups. Travelled independently and solo through South America Jan-July 2012 including 3 weeks Spanish lessons in La Paz, Bolivia and volunteering in Madidi National Park, Amazon Basin. Preparing for the DELE Spanish exam.

Societies Member of the London Mathematical Society, Chartered Statistician (CSTAT) with the Royal Statistical Society (RSS), Chartered Mathematician and Scientist (CMATH and CSCI) with the Institute for Mathematics and its Applications (IMA). Mathematics book review printed in Mathematics Today magazine (2008)

Driving Licence Full clean driving licence

REFERENCES AVAILABLE ON REQUEST

Technical Reports

The reports are currently unavailable to the public because of security restrictions.

- *Investigating Alternative Methods of Characterising Model Outcome Spaces for Analytical Assessment*, Dstl Report, August 2006, N. Green

- *Equipment Requirements for Post-Conflict Stabilisation*, Dstl Report, March 2007, N. Green

- *DIAMOND Model Parametric Testing*, Dstl Report, June 2006, K. Chaplin, S. Croom-Johnson, C. Davis, N. Green, T. Oliver, J. Williams

- *Outputs of the DIAMOND Logical Influences Workshop*, Dstl Report, November 2006, S. Croom-Johnson, N. Green, Maj K. Cradden

- *Dstl Recommendations for the Source Term Estimation Model (STEM) Requirements*, Dstl Report, January 2009, N. Green

- *Hazard Calculator for the Source Term Estimation Model (STEM) Output*, Dstl Report, February 2009, N. Green

- *C/B Weapon Environment Prediction: Fusion Of Sensor Model Data Feasibility Study*, Dstl Report, March 2008, N. Green

- *Fusion of Sensor and Model Data: Final Report*, Dstl Report, June 2008, N. Green

- *A Review of Bayesian Methods in High-Level Modelling*, Dstl Report, August 2009, N. Green

- i-sense EPSRC Annual Report 2016/17, The value of rapid influenza testing in a pandemic, i-sense exploratory project, Nathan Green, Peter J White

Publications

- PhD Thesis, *Optimal Intervention for an Epidemic Model under Uncertainty*, June 2004, N. Green

- *Optimal Intervention for an Epidemic Model under Uncertainty,* D. Clancy and N. Green, Mathematical Biosciences 205 (2007), pp 297–314

- *Real-Time Sequential Inference of Static Parameters with Expensive Likelihood Calculations,* Journal of the Royal Statistical Society (JRSS), Applied Statistics, Series C, 58, P. Robins, V. Rapley, N. Green, pp. 641-662.

- *IMPACT: A generic tool for modelling and simulating public health policy,* Methods of Information in Medicine, J.D. Ainsworth, E. Carruthers, P. Couch, N. Green, M. O'Flaherty, M. Sperrin, R. Williams, Z. Asghar, S. Capewell, I.E. Buchan, (2011) (Vol. 50): Issue 5, pp. 454-463

- *ABC for Coronary Heart Disease Modelling,* N. Green, The 30th Leeds Annual Statistical Research Workshop (LASR) 5th-7th July 2011

- *Quantifying the burden of hospital-acquired bloodstream infection in children in England, estimating excess length of hospital stay and mortality using a multistate analysis of linked routinely collected data,* Green N, Johnson AP, Henderson KL,

Muller-Pebody B, Thelwall S, Robotham JV, Sharland M, Wolkewitz M, Deeny SR (submitted to the Journal of the Peadiatric Infectious Diseases Society)

- Dangerfield CE, Sherrard-Smith E, Green N, Lowndes CM, Choi Y, White PJ. The Potential Impact of Point-of-Care Tests for Chlamydia in England: How the impact may vary by location and implementation strategy. (in preparation)

- Sherrard-Smith E, Dangerfield C, Green N, Choi Y, Harb A, Hughes G, Woodhall S, Talebi A, Mohammed H, Chandra N, Lowndes CM, White PJ. A history of Chlamydia trachomatis surveillance in England since 2000. (in preparation)

- Green N, Whitworth H, Badhan A, Boakye A, Kon OM, Lalvani A, White PJ. A direct comparison of active pulmonary TB diagnostic clinical pathways in English hospitals against a typical idealised decision tree protocol with respect to decision to treat and final diagnosis. (in preparation)

- Sherrard-Smith E, Dangerfield CE, Green N, Choi YH, Mohammed H, Talebi A, Hollis E, Hughes G, White PJ, Lowndes CM. Trends in Chlamydia testing in sexual health clinics: older ages matter. (in preparation)

- Lowndes CM, Sherrard-Smith E, Dangerfield C, Choi YH, Green N, Jit M, Marshall RD, Mercer C, Harding-Esch E, Nardone A, Howell-Jones R, Bason J, Johnson OA, Price CP, Gaydos CA, Sadiq ST, White PJ. Point-of-care vs. Standard Practice for Chlamydia: A new approach to assessing the public health effect of rapid testing and treatment at local level. Lancet 2014; 384: S47.

- van Kleef E, Green N, Goldenberg SD, Robotham JV, Cookson B, Jit M, Edmunds WJ, Deeny SR. Excess length of stay and mortality due to Clostridium difficile infection: a multi-state modelling approach. Journal of Hospital Infection 2014; 88(4): 213–217.

- Green N, Johnson AP, Henderson KL, Muller-Pebody B, Thelwall S, Robotham JV, Sharland M, Wolkewitz M, Deeny SR. Quantifying the burden of hospital-acquired bloodstream infection in children in England, estimating excess length of hospital stay and mortality using a multistate analysis of linked routinely collected data. Journal of the Peadiatric Infectious Diseases Society 2014; online first: doi:10.1093/jpids/piu073

- Catherine Wloch, Albert Jan van Hoek, Nathan Green, Joanna Connelly, Pauline Harrington, Elizabeth Sheridan, Jennie Wilson, Theresa Lamagni.
Cost-benefit analysis of surveillance for surgical site infection following caesarean section, BMJ (in submission)

- Drobniewski F, Cooke M, Jordan J, Casali N, Mugwagwa T, Broda A, Townsend C, Sivaramakrishnan A, Green N, Jit M, Lipman M, Lord J, White PJ, Abubakar I, 2015, Systematic review, meta-analysis and economic modelling of molecular diagnostic tests for antibiotic resistance in tuberculosis, Health Technology

Assessment, Vol:19, ISSN:1366-527

- Interferon-gamma release assays for diagnostic evaluation of active tuberculosis (IDEA): test accuracy study and economic evaluation, Yemisi Takwoingi, Hilary Whitworth,Amarjit Badhan, Christopher Partlett, Melanie Rees-Roberts, Nathan Green, Aime Boakye, Mark Jit, Peter White, Jonathan Deeks, Onn Min Kon, and Ajit Lalvani on behalf of the IGRAs for Diagnostic Evaluation of Active TB (IDEA) Study Group, Health Technology Assessment, 2016

- Manabu Hayama, Nathan Green, Marie O'Donoghue, Suranjith Seneviratne, Nicholas Drey, Onn Min Kon, Latent tuberculosis infection screening of adult close contacts: a cost-utility analysis. The International Journal of Tuberculosis and Lung Disease (IJTLD) (in submission)

- Nathan Green, Ellie Sherrard-Smith, Clare Tanton, Pam Sonnenberg, Catherine H Mercer, and Peter J White, Assessing local chlamydia screening performance by combining survey and administrative data to account for differences in local population characteristics Scientific Reports (in submission)

- Naylor NR, Pouwels KB, Hope R, Green N, Henderson KL, Knight GM, Atun R, Robotham J, Deeny SR, A National Estimate of the Health and Cost Burden of Escherichia coli Bacteraemia in the Hospital Setting: The Importance of Antibiotic Resistance, BMC ID (in submission)

- The HALT Latent Tuberculosis study report Lara Gosce, Nathan Green Ibrahim Abubakar (in press)

- Validation of New Technologies for Diagnostic Evaluation of Tuberculosis (VANTDET), Alice Halliday, Pooja Jain, Long Hoang, Robert Parker, Mica Tolosa-Wright, Tereza Masonou, Nathan Green, Aime Boakye, Yemisi Takwoingi, Shea Hamilton, Vinay Mandagare, Anastasia Fries, Lachlan Coin, Jon Deeks, Peter White, Michael Levin, Peter Beverley, Onn Min Kon, Ajit Lalvani, NIHR Journals (in press)

- PREDICT: ACE Latent Tuberculosis Infection Study, Lara Gosce, Nathan Green Ibrahim Abubakar (in press)

Bids & Proposals

MoD:

- *Epidemic Modelling in Military Context*, internal Dstl bid, 2008

- *Rumour Modelling Applied to the Spread of Insurgency and Peace Support Operations*, internal Dstl bid, 2007

- *Bayesian Decision Making for Warning and Reporting using Probabilistic Source Term Estimation Output*, internal Dstl bid, 2009

- *Eliciting Expert Military Information*, internal Dstl bid, 2009

- *A Review and Assessment of the Capabilities Provided by the SimLab Software with Regards to Rapid Characterisation of Model Outcome Spaces,* internal Dstl bid, 2006

Non-MoD:

- MRC Methodology Grant, *Developing methods to make better use of existing data to understand health inequalities at the local level and to inform health service commissioning,* 2015
- Wellcome Trust Societal Engagement, EpiApp: An epidemic modelling teaching smart phone app.
- Imperial MIT-Seed Fund 2017: Health Economics in R hackathon and collaborations
- MRC GIDA Pump-Prime Fund 2018: Health Economics hackathons

Awarded

- *Refinement of the AEP-45 Correlation Algorithm,* bid to US DoD, April 2009

- *Knowledge Management Capability (KMC) Source Term Estimation Project,* DTIC MoD renewal bid, 2008

- *Investigating Alternative Methods of Characterising Model Outcome Spaces for Analytical Assessment,* internal Dstl bid, 2006

- *BRC PPI, LOL-lab outreach project 2017*

Posters

- *Real-Time Source Term Estimation Using LIDAR Data,* Statistics and Applied Mathematical Sciences Institute (SAMSI), North Carolina, Program on Sequential Monte Carlo Methods, Workshop, 7-10 September, 2008, N. Green and P. Robins

- *Real-Time Sequential Inference of Static Parameters with Expensive Likelihood Calculations,* Chemical and Biological Defence Physical Science and Technology Conference, New Orleans, 17-21 November 2008, N. Green and P. Robins

- *Epidemic Modelling and Control*, The Royal Statistical Society (RSS) Young Statistician Meeting, MRC Biostatistics Unit and the Statistical Laboratory, Cambridge University, 2003, N. Green

- *Optimal Intervention of an Epidemic Model Under Uncertainty*, The Research Students Conference, University of Sheffield*,* 2004, N. Green

- *An Interactive Coronary Heart Disease Policy Model*, J.D. Ainsworth, E. Carruthers, P. Couch, N. Green, M. O'Flaherty, M. Sperrin, R. Williams, Z. Asghar, S. Capewell, I.E. Buchan, Public Health Workshop, University of Manchester, 2010

- *Quantifying the burden of hospital-acquired bloodstream infection in children in England, estimating excess length of hospital stay and mortality using a multistate analysis of linked routinely collected data,* Green N, Johnson AP, Henderson KL, Muller-Pebody B, Thelwall S, Robotham JV, Sharland M, Wolkewitz M, Deeny SR, European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Berlin, Germany, 27-30 April 2013

- Visualising uncertainty in hospital excess length of stay, Uncertainty conference, London 27-28 January 2015

- LTBI screening of recent immigrants tot he UK: A cost-effectiveness study, Epidemics Conference 2017 Spain

Presentations

MoD:

- *Optimal Intervention of an Epidemic Model under Uncertainty*, The 26th Research Students' Conference in Probability and Statistics – The University of Surrey, Guildford, 2003

- *Epidemic Modelling and Dynamic Bayesian Estimation,* The Royal Statistical Society (RSS) Young Statistician Conference, University of Bristol, 2004

- *Optimal Intervention of an Epidemic Model under Uncertainty*, PhD Viva, February 2005

- *Introduction to Optimal Intervention Policies for Epidemic Models under Uncertainty*, invited talk to the Institute of Mathematics and its Applications (IMA) Hampshire branch meeting, 2007

- *Mathematical Epidemic Modelling*, Mathematics Interest Group, Dstl, Porton Down, 2005

- *Source Term Estimation and Complex Environments*, George Mason University, Transport and Dispersion Modelling Conference, Fairfax, USA, 2007

- *Source Term Estimation and Approximate Bayesian Computation*, The Joint Statistical Meeting (JSM) 2009, Washington DC, US

- *Hazard Assessment and Source Term Estimation*, The University of Sheffield, Department of Probability and Statistics, invited seminar, October 2009

Non-MoD:

- *IMPACT2: A Policy Model for Chronic Disease*, The Royal Statistical Society Conference, Brighton, 16th September, 2010

- *IMPACT2: A Chronic Disease Policy Model*, CLAHRC South Yorkshire conference, Sheffield Hallam University, June 2011

- Imperial College London Health Economics group seminar, *A health economic evaluation of an enhanced suspected active pulmonary TB diagnostic pathway*

- PHE conference March 2016, *A health economic evaluation of an enhanced suspected active pulmonary TB diagnostic pathway*, Warwick

- IDEA final celebration meeting 2015

- *Estimating and evaluating localised chlamydia testing coverage in England, by combining sexual health survey, administrative and national surveillance data*, Health surveys user conference 2016, UCL (invited talk) 29th June 2016

- *Societal Engagement Conference (invited), Imperial College London 2018*

- Delivered workshop at Engage Conference, Bristol (NCCPE) 2017 on science communication.

Meetings

Organised:

- RSS emerging global infections event, 2017
- Health economics in R: scoping workshop, November 30th 2018
- LOL-lab science comedy night, Canal Cafe Theatre, 2017

Attendance:

- *The 25th Research Students' Conference in Probability and Statistics*, Warwick University, 2002
- *Target Tracking and Data Fusion: Algorithms and Applications*, The IET, Austin Court, Birmingham, UK, 15-16 April 2008
- *Program on Sequential Monte Carlo Methods- Kick-off Tutorials and Workshop*, Statistics and Applied Mathematical Sciences Institute (SAMSI), North Carolina, 7-10 September, 2008
- *MoD Broad Capability Assessment Workshop*, Shrivenham, 2006
- *Peace Support Model Logical Influences Workshop*, Dstl, 2006
- Health surveys user conference, UCL, 2015

Awards & Grants

- *Statistics and Applied Mathematical Sciences Institute* (SAMSI), North Carolina, USA: Research grant, Sept – Dec 2008
- NCRM training bursary 2016, 2017
- AFHEA (Associate Fellow of the Higher Education Academy)
- ATHENA SWAN 2018 Public Engagement award winner
- Imperial College London Annual Awards Honourable Mention for Societal Engagement 2018

Collaborations

Previous:

- *Cambridge University:* Established and matured collaboration through the MoD/academia initiative, Data Information Fusion Defence Technology Centres (DIF DTC)
- *Southampton University:* Co-supervisor of a joint grant project between MoD and EPSRC
- *US Department of Defense (Joint Science Technology Office/Defense Threat Reduction Agency):* Including source term estimation model integration and field trial planning and analysis
- *Statistics and Applied Mathematical Sciences Institute (SAMSI)*: Tracking and source term estimation novel research with workshop members including at QinetiQ and University of New South Wales, Australia
- *Risk Aware, Software and Modelling Consultants, Bristol*: Including Intelligent agent architecture implementation of hazard assessment tools

Current:

- *UCL Institute for Global Health*
- *Public Health England (PHE)*
- Imperial College Healthcare NHS Trust

Teaching Experience

- *Introduction to Probability and Statistics Tutor:* 1st Year mathematics degree, University of Liverpool, 2001-2002, 2002-2003, 2004-2005
- *Calculus Tutor* - 2nd Year engineering degree, University of Liverpool, 2002-2003
- *Private A-level Mathematics Tutor* of 2 students, 2008-2009
- *Schools Mathematics Voluntary Teaching Assistant*, SETPOINT and Liverpool University, 2004
- *Tutor at the SAMSI Graduate Workshop*: Presented on applications of SMC; supplied computer code and ran practical session, November 2008
- *Primary and secondary schools volunteer,* through Dstl and the Ambassador Scheme at Manchester Museum of Science and Industry (MOSI) to promote sciences, including 'Active Science Council' involvement, mentor at careers fair in Westminster 2007
- *Manchester Access Programme Award Holder*, mentor to five 6th form student mathematics projects, 2011
- *Manchester University Widening Participation Award Holder*, produced and presented introduction to probability, how to present data and study skills workshops to wide range of student age groups, 2010-2011
- *Provided drop-in sessions of statistical support and advice*, Manchester University Medicine degree 4th year projects, 2010
- *London School of Hygeine and Tropical Medicine Iinfectious disease modelling summer school*, July 2013, 2014, 2015
- Imperial Summer School workshop lead, 2015-present
- Reaching Further program, Imperial schools outreach programme
- *Further R programming skills workshops*, designed and presented, MSc in Public Health, Imperial, 2016
- *UCL* MSc in Health Economics and Decision Science *invited lecturer 2017, 2018*
- MPH/MSc in Epidemiology practical Lead (Flu & TB practicals, principles and methods in epi, Principles of Global Epidemiology), Imperial College London 2015
- *Module Lead and Lecturer for Introduction to Bayesian Statistics in MSc in Epidemiology 2019*
- Lecturer on ICL 4th year Medicine students Computational Medicine Module
- Computational Medicine Module project supervisor
- MSc in Epidemiology Dissertation presentation marker 2018
- Invited lecture for 3rd year BSc Epidemiology, Imperial College London, 2016
- Write and mark exam for 3rd year BSc Epidemiology

Training/Courses

- *The UKGRAD school for postgraduate students*, Derby, 1 week 2002

- *EPSRC Graduate Training Programme in Mathematical Statistics and Applied Probability*, University of Nottingham, 1 week 2003

- *EPSRC Graduate Training Programme in Mathematical Statistics and Applied Probability*, Nuffield College, University of Oxford, 1 week 2004

- *War Gaming and Combat Modelling*, Cranfield University, Shrivenham, 1 week Nov 2006

- *Bootstrap Methods,* on-line course with Statistics.com, September 21st -October 19th 2007

- *Missing Data Methods*, The Royal Statistical Society Continued Professional Development (CPD), London Mathematical Society, London, 26th-27th May 2009

- *Principles of Statistical Design*, The Royal Statistical Society pre-conference workshop, George Casella, 13th September 2010

- Multilevel small area synthetic estimation, University of Southampton, 4 Dec 2014

- Modelling with latent Guassian models using R-INLA, Imperial College London, 30 May - 1 June 2015

- Developing, maintaining and employing large computational frameworks for ecological studies, Statistics and Applied Mathematical Sciences Institute (SAMSI), North Carolina, US, 13-17 April 2015

- Bayesian hierarchical models with applications, NCRM training Course, Manchester, January 14-15 2016

Professional Affiliations & Accreditation

- Current Fellow of the Royal Statistical Society (RSS), formerly Chartered Statistician (CSTAT)
- Previous London Mathematical Society (LMS)
- Previous Chartered Mathematician (CMATH) with the Institute for Mathematics and its Applications (IMA)
- Previous Chartered Scientist (CSCI)
- Royal Statistical Society Medical Section Committee Member April 2016-present

Book Reviews

- *Nonplussed - Mathematical Proof of Implausible Ideas, J. Havil,* Mathematics Today magazine, June 2008, N. Green

- *Statistics for People Who (Think They) Hate Statistics, N. J. Salkind,* Royal Statistical Society, 2015, N Green

Statistics Articles

- *Gas! Gas! Gas! Hazard Management of a Covert Chemical Release on the Battlefield*, Significance online (Royal Statistical Society), N. Green, September 26, 2012
- *Statistics Series Introduction,* N. Green, The Guardian 2011/dec/2
- *Biased Sample Statistics,* N. Green, The Guardian 2011/dec/2
- *Average Means Medians Modes,* N. Green, The Guardian 2011/dec/09
- *Moon Full p-value Statistics*, N. Green, The Guardian 2011/dec/23
- *Correlation is not Causation*, N. Green, The Guardian 2012/jan/06
- *How Good Model*, N. Green, The Guardian 2012/jan/27
- *Boost Your Sample Size Meta-Analysis*, N. Green, The Guardian 2012/feb/11
- *Statistics Confidence Interval Level*, N. Green, The Guardian 2012/jun/22
- *Climate Change Pascal's Wager*, N. Green, The Guardian 2012/jul/03

Other Articles

- *Pierre De Fermat Theorem Google Doodle*, N. Green, The Guardian 2011/aug/17
- *A-level Rresults Science Mathematics*, N. Green, The Guardian 2011/aug/18
- *Speed Cameras Accidents Maths*, N. Green, The Guardian 2011/aug/25
- *Richard Dawkins Evolution Children Five*, N. Green, The Guardian 2011/sep/01
- *Technology Metals*, N. Green, The Guardian 2011/sep/12
- *Forensic Science Content Transference*, N. Green, The Guardian 2011/sep/13
- *Dark Matter of the Genome*, N. Green, The Guardian 2011/sep/14
- *Sports Data*, N. Green, The Guardian 2011/sep/16
- *School of Hard Sums*, Significance online (Royal Statistical Society), N. Green, September 12, 2012
- *`They' know where you live, work, eat, shop...-Terrible truths about 21st century privacy,* N Green, Guru Magazine, April/May 2013

Miscellaneous

- Personal tutoring/mentoring students from MPH/MSc in Epidemology, Imperial College London, 2015-16
- Marking of final and summative work, including dissertations.
- Contributing author to *Making Sense of Uncertainty: Why Uncertainty is Part of Science*, Sense about Science guide, 2013
- In collaboration with Patient Experience Research Centre (PERC), established School of Public Health podcast, including a Public Engagement Summer Masters student placement.
- Data Dive problem setter with the Department of Mathematics, Imperial, 2018
- Societal Engagement Champion fort he School of Public Health 2017-present
- Invited speaker at the Research Software Engineer (RSE) Meeting, 2018

Peer Review

Journals:

- BMJ
- Sensors
- Medical Decision Making (MDM)
- Journal of the Royal Society- Interface
- International Journal of Environmental Research and Public Health

Grants:

- NIHR Health Assessment Programme 2017-present