

Thomas OATES BSc MB BS PhD FRCP

PERSONAL INFORMATION

PLACE OF BIRTH: UK
CITIZENSHIP: British
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 toates19

CURRENT POSITIONS

Consultant Physician (Nephrology & General Internal Medicine)

Royal London Hospital
Whitechapel Road
Barts Health NHS Trust
London E1 1BB

I am a Consultant Physician at the Royal London Hospital. I see patients with a wide range of nephrological and general medical problems and specialise in nephrotic syndrome, genetic kidney disease, haemodialysis, kidney transplantation, and acute kidney injury.

I have a strong commitment to innovation in healthcare both in genomics (see below) and the use of data. I deliver a transformative virtual chronic kidney disease clinic as part of the [East London Community Kidney Service](#). Additionally, I use diverse methods to investigate whether patients at risk of progressive CKD can be predicted from routinely collected data in the primary care electronic health record. This work is supported by competitively awarded grant funding from Barts Charity. Furthermore, I sit on both the national UKKA work group for implementing the Kidney Failure Risk Equation into routine clinical practice, and the UK Renal Health Data Research Network convened by Kidney Research UK.

Clinical Lead for Nephrology

North Thames Genomic Laboratory Hub

The aim of this role is to move genomic medicine into mainstream medical practice. I provide expertise and guidance to shape clinical genomic testing in Nephrology in the North Thames region, and facilitate necessary education to achieve this goal.

EDUCATION

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| SEPT 2010-SEPT 2013 | PhD INTEGRATED GENOMICS & MEDICINE, MRC London Institute of Medical Sciences , London, UK
Thesis: "Single Base Resolution Analysis of DNA Methylation in a Rat Model of Crescentic Glomerulonephritis" Advisor: Dr Enrico Petretto |
| SEPT 1998-JUN 2004 | MB BS MEDICINE
University College London , London, UK
Graduated with Merit in final examinations |
| SEPT 2000-JUN 2001 | Intercalated BSc PHARMACOLOGY
University College London , London, UK
Graduated with First Class Honours |

PREVIOUS PROFESSIONAL APPOINTMENTS

Sept 2015-Nov 2017	NIHR Clinical Lecturer in Nephrology & Transplantation 50% split between GIM posts at North Middlesex Hospital and research post at UCL Centre for Nephrology Academic activities in this period included trust wide quality and service improvement project on acute kidney injury at Royal Free London, award of Kidney Research UK grant (see below), and publication of articles 7-12 and abstracts 19-21 in lists below
Sept 2013-Sept 2015	Specialist Registrar in Nephrology & Transplantation and General Internal Medicine Sept 2013-Sept 2015: Hammersmith Hospital, London, UK Specialist Nephrology and Transplantation post including inpatient and outpatient cover for AKI, vasculitis, SLE, nephrotic syndrome, haemo- and peritoneal dialysis, kidney and kidney-pancreas transplantation
Sept 2010-Sept 2013	Chain-Florey Fellow of the Medical Research Council MRC London Institute of Medical Sciences, London, UK Fully funded doctoral studies leading to award of PhD by Imperial College London in 2014. Significant experience gained in whole genome sequencing & computational biology
August 2008-Sept 2010	Specialist Registrar in Nephrology & Transplantation and General Internal Medicine Sept 2009-Sept 2010: Royal Free Hospital, London, UK Specialist Nephrology and Transplantation post including inpatient and outpatient cover for AKI, vasculitis, SLE, nephrotic syndrome, haemo- and peritoneal dialysis, kidney and pancreatic islet cell transplantation Aug 2008-Sept 2009: North Middlesex Hospital, London, UK Predominantly GIM post with Nephrological commitment
Aug 2005-Aug 2008	Senior House Officer Rotation positions held at Guy's & St Thomas', Hammersmith, Charing Cross and Kingston Hospitals. All in London, UK. Full list of positions available on request.
Aug 2004-Aug 2005	Pre-Registration House Officer 6 month positions in Surgery and Medicine at the Conquest Hospital, Hastings, UK and the Queen Elizabeth II Hospital, Welwyn Garden City, UK

MEDICAL CERTIFICATION

2021	Fellowship of the Royal College of Physicians (FRCP)
2018	Certificates of Completion of Specialist Training in Nephrology & Transplantation and General Internal Medicine
2015	Royal College of Physicians Specialty Certificate Examination in Nephrology & Transplantation
2007	Member of the Royal College of Physicians (MRCP)
2005	General Medical Council UK Full Registration GMC no: 6105196

HONOURS & AWARDS

- 2004 Certificate of Merit in final MB BS examinations, University College London
- 2004 John Briffa Prize for Outstanding Academic & Extracurricular Activities, University College London
- 2004 Prankerd Jones Elective Bursary, University College London
- 2003 Chick, Constantine & Atchinson Prize, University College London
- 2001-2003 Certificates of Merit for Medical Studies
- 2000 Middlesex Hospital Club Travel Bursary

EXAMINING, REVIEW & MODERATING ACTIVITIES

- Grant Reviewer British Renal Society/Kidney Care UK
Kidney Research UK
- PhD Thesis Examined S. Dufek-Kamperis
"Genome wide association study in steroid sensitive nephrotic syndrome"
Supervisor: Prof Robert Kleta, UCL
- Abstract Reviewer American Society of Nephrology Kidney Week 2017 | Topic: Fellows and Residents Case Reports
UK Kidney Weeks 2017-2021 | Topics: Acute Kidney Injury, Haemodialysis & Case Reports
- Scientific Reviewer British Medical Journal
BMC Endocrine Disorders
BMJ Open Quality
Clinical Journal of the American Society of Nephrology
Clinical Kidney Journal
Clinical Medicine (Lond.)
Future Healthcare Journal
International Urology and Nephrology
Journal of the American Society of Nephrology
Nephrology Dialysis Transplantation
PLOS ONE

INVITED LECTURES & PRESENTATIONS

International

- Feb 2021 **COVID-19: Successes, Challenges and Lessons Learnt**
Ahvaz Jundishapur University of Medical Sciences, Iran
- Sept 2017 **Using Information Technology to Improve Patient Care:
The Power of Social Media**
European Society of Paediatric Nephrology

National

- October 2021 **Kidney Transplantation for Acute Medicine**
Society for Acute Medicine Annual Meeting
- November 2018 **Social Media: Empowering Patients & Engaging Professionals**
Kidney Research UK IgA Nephropathy Patient Information Day
- September 2018 **Nephrology, Dialysis & Transplantation Outside the Renal Unit**
Society for Acute Medicine Annual Meeting
- June 2018 **Machine Learning, Artificial Intelligence and Healthcare:
Where the Field is Now and Where it Might be Soon**
UK Kidney Week 2018
- May 2018 **Update in Nephrology**
BMJ Masterclasses: Physicians General Update
- Feb 2018 **Social Media: Engaging Professionals, Empowering Patients**
Paediatric Innovation Education & Research Network
- Nov 2017 **Social Media and New Channels of Communication**
Association of Renal Industries Annual Meeting
- June 2017 **Clinical Trial and Research Communication in the 21st Century:
A Strategy in Partnership with Kidney Research UK**
UK Kidney Week 2017
- Feb 2017 **Using Social Media to Build a Research Network and a Personal Brand**
NIHR Leading to Impact Meeting
- Dec 2016 **Harnessing Social Media for Continuing Professional Development**
Royal Society of Medicine
- June 2016 **Can Social Media Become Scholarship?**
UK Kidney Week 2016

Local

- October 2019 **Future or Fugazi: The Promise of Technology in Healthcare**
Barts Health, UK
- May 2019 **Machine Learning in Medicine: Hype & Reality**
Oxford Kidney Unit, UK
- April 2019 **Machine Learning in Medicine: Hype & Reality**
LDNephroTx, London, UK
- November 2018 **Staying Ahead of the Hype Cycle: Medicine in the Era of Big Data**
Greater Manchester Area Nephrology Network Symposium
- June 2018 **The Role and Challenges of a Hospital Consultant**
Barts Health SpR Leadership & Management Course
- June 2017 **Big Data in Biomedicine**
John Walls Renal Unit, Leicester, UK

GRANTS AWARDED

- Sept 2020 “Predicting Chronic Kidney Disease Outcomes From Primary Care Records Using Machine Learning” | Primary Investigator
Barts Charity Small Project Grant
Ref: MRC0259 £48,955.93
- Jan 2017 “Responding to the Needs of Patients with IgA Nephropathy: A Social Media Approach” | Co-Investigator
Kidney Research UK John Feehally-Stonegate Award
Ref: JFS_IN_006_20160916 £38,322.80
- Sept 2010-Sept 2013 “The Epigenetic Regulation of Gene Expression in Macrophages and its Relevance to a Model of Glomerulonephritis” | PhD Studentship
Medical Research Council Chain-Florey Fellowship
Calculated as 12.5% of Integrative Genomics & Medicine group annual laboratory costs paid retrospectively

ARTICLES

1. Oates, T. More on Pneumonia: “Surviving Sepsis” Campaign May Contradict CURB Score. *BMJ* 2006;332:1333–1334.
2. Oates, T, Afzali, B, and Goldsmith, D. Chronic Allograft Nephropathy (CAN) – An Update. *Trends in Transplantation* 2008;2:3–11.
3. Oates, T, Pinney, JH, and Davenport, A. Haemodiafiltration versus High-Flux Haemodialysis: Effects on Phosphate Control and Erythropoietin Response. *American Journal of Nephrology* 2011;33:70–75.
4. Pinney, JH, Oates, T, and Davenport, A. Haemodiafiltration Does Not Reduce the Frequency of Intradialytic Hypotensive Episodes When Compared to Cooled High-Flux Haemodialysis. *Nephron: Clinical Practice* 2011;119:c138–144.
5. Oates, T, Cross, J, and Davenport, A. Cost Comparison of Online Haemodiafiltration With High-Flux Haemodialysis. *Journal of Nephrology* 2012;25:192–197.
6. Topf, JM, Sparks, MA, Iannuzzella, F, et al. Twitter-Based Journal Clubs: Additional Facts and Clarifications. *Journal of Medical Internet Research* 2015;17:e216.
7. Rackham, OJL, Langley, SR, Oates, T, et al. A Bayesian Approach for Analysis of Whole-Genome Bisulphite Sequencing Data Identifies Disease-Associated Changes in DNA Methylation. *Genetics* 2017;205:1443–1458.
8. Oates, T and Salama, AD. Epigenetic Modifications in ANCA-Associated Vasculitis: Potential for Insights into Disease Pathogenesis and Prediction of Outcome? *Journal of the American Society of Nephrology* 2017;28:1011–1013.
9. Topf, JM, Sparks, MA, Phelan, PJ, et al. The Evolution of the Journal Club: From Osler to Twitter. *American Journal of Kidney Diseases* 2017;69:827–836.
10. Oates, T and Mochhala, S. Recognition and Management of Acute Kidney Injury. *Prescriber* 2017;28:17–21.
11. Oates, T. How is health information technology changing the way we deliver NHS hospital care? *Future Healthcare Journal* 2017;4:222.
12. Graham-Brown, M and Oates, T. Social Media in Medicine: a Game Changer? *Nephrology, Dialysis and Transplantation* 2017;32:1806–1808.
13. Colbert, G, Topf, JM, Jhaveri, KD, et al. The Social Media Revolution in Nephrology Education. *Kidney International Reports* 2018;3:519–529.
14. Graham-Brown, M, Vasilica, C, Oates, T, et al. Study Protocol: Responding to the Needs of Patients with IgA Nephropathy, a Social Media Approach. *Clinical Kidney Journal* 2018;11:474–478.

15. Dritsoula, A, Kislikova, M, Oomatia, A, et al. Epigenome-wide methylation profile of chronic kidney disease-derived arterial DNA uncovers novel pathways in disease-associated cardiovascular pathology. *Epigenetics* 2020;1–11.
16. Leveson, J and Oates, TM. Exome sequencing as a diagnostic tool in chronic kidney disease: ready for clinical application? *Curr Opin Nephrol Hypertens* 2020;29:608–612.
17. Vasilica, C, Oates, T, Clausner, C, Ormandy, P, Barratt, J, and Graham-Brown, M. Identifying Information Needs of Patients With IgA Nephropathy Using an Innovative Social Media-stepped Analytical Approach. *Kidney Int Rep* 2021;6:1317–1325.
18. Oates, T, Hull, S, Ashman, N, and Collins, G. How to appraise a clinical prediction model. *Clinical Journal of the American Society of Nephrology* 2022;In preparation.

ABSTRACTS

19. Oates, T, Desai, M, Jayasena, D, Onwubalili, J, and Dupont, P. Impact of a Novel Dietician-led Phosphate Control Initiative in a Haemodialysis Satellite Unit. In: *UK Renal Association Annual Congress*. 2009.
20. Oates, T, McAdoo, S, D'Souza, Z, et al. The Effect of 5-Aza-2-Deoxycytidine on Nephrotoxic Nephritis and DNA Cytosine Methylation in Macrophages. In: *UK Renal Association Annual Congress*. 2014.
21. Oates, T, Mueller, M, Pusey, C, Cook, T, and Petretto, E. The Role of DNA Methylation in a Rat Model of Crescentic Glomerulonephritis. In: *American Society of Nephrology Kidney Week*. 2014.
22. Oates, T, Hull, R, Mueller, M, Pusey, C, Cook, T, and Petretto, E. DNA Methylation Differences at Gene Regulatory Elements are Associated with Disease Susceptibility in a Rat Model of Crescentic Glomerulonephritis. In: *17th International Vasculitis & ANCA Workshop*. 2015.
23. Oates, T and Ashby, D. Diagnostic Reference Values for Cerebrospinal Fluid May Not be Useful in Haemodialysis Patients Suspected of Having Central Nervous System Infection. In: *American Society of Nephrology Kidney Week*. 2015.
24. Oates, T, McAdoo, S, Pusey, C, Cook, T, and Petretto, E. 5-Aza-2-Deoxycytidine Reduces Nephrotoxic Nephritis and DNA Cytosine Methylation in Nephritic Glomeruli and Macrophages in Vitro. In: *American Society of Nephrology Kidney Week*. 2015.
25. Oates, T, Rackham, O, Langley, S, Behmoaras, J, and Petretto, E. Whole Genome Transcriptome, Methylome, and Transcription Factor Binding in Nephrotoxic Nephritis. In: *American Society of Nephrology Kidney Week*. 2016.
26. Oates, T, Flores-Barros, F, Min, Z, et al. Re-establishment of Immune Tolerance in ANCA-Associated Vasculitis: Defining a cohort with sustained ANCA negativity and drug free clinical remission. In: *American Society of Nephrology Kidney Week*. 2016.
27. Oates, T and Salama, A. Integrative Analysis of Genome-Wide Transcriptome Data Sets Reveals Shared Biology Between Lupus and its Co-Morbidities. In: *American Society of Nephrology Kidney Week*. 2017.
28. Oates, T, Gleeson, S, Gupta, S, et al. Strategies for Reduction of Cardiovascular Risk: Effect of Time and Different Treatments on Lipids in Membranous Nephropathy. In: *UK Renal Association Annual Congress*. 2020.
29. Oates, T, Mathur, R, Hull, S, and Ashman, N. Predicting Progression of Chronic Kidney Disease Using Machine Learning. In: *UK Renal Association Annual Congress*. 2020.
30. Hornby, C, Tariq, U, Charrot, S, Burke, S, White, W, and Oates, T. "Some Fava Beans and a Nice Blood Gas". In: *Society of Acute Medicine Annual Meeting*. 2021.

BOOK CHAPTERS

31. Oates, T, Chan, G, and Goldsmith, D. Iron Deficiency in Renal Transplantation. In: *Anaemia in Transplantation*. Permanyer Publications, 2009:25–29.

32. Oates, T and Masson, P. Information Technology and Data in Nephrology. In: Practical Nephrology. Springer, In Press.
33. Oates, T. Acute Kidney Injury. In: Oxford Handbook of Nephrology and Hypertension. Oxford University Press, In Preparation.