



Recent Publications – Dr Mark Preston

Conjunctival fibrosis and the innate barriers to *Chlamydia trachomatis* intracellular infection: a genome wide association study

C.h. Roberts, C. S. Franklin, P. Makalo, H. Joof, I. Sarr, O.S. Mahdi, A. Sillah, M. Bah, F. Payne, A.E. Jeffreys, W. Bottomley, A. Natividad, S. Molina-Gonzalez, S.E. Burr, M.D. Preston, D. Kwiatkowski, K.A. Rockett, T.G. Clark, M.J. Burton, D.C.W. Mabey, R. Bailey, I.s Barros,& . J. Holland
2015 Nature Scientific Reports [10.1038/srep17447](https://doi.org/10.1038/srep17447)

Population genomic structure and adaptation in the zoonotic malaria parasite *Plasmodium knowlesi*

S.A. Assefa, C. Lim, M.D. Preston, C.W. Duffy, M.B. Nair, S.A. Adroub, K.A. Kadir, J.M. Goldberg, D.E. Neafsey, P. Divis, T.G. Clark, M.T. Duraisingh, D.J. Conway, A. Pain, B. Singh
2015 Proceedings of the National Academy of Sciences [10.1073/pnas.1509534112](https://doi.org/10.1073/pnas.1509534112)

Impact of individual movement and changing resource availability on male-female encounter rates in an herbivorous insect

M.D. Preston, M.L. Forister, J.W. Pitchford, P.A. Armsworth
2015 Ecological Complexity [10.1016/j.ecocom.2015.07.004](https://doi.org/10.1016/j.ecocom.2015.07.004)

Genomic epidemiology of a protracted hospital outbreak caused by a toxin A negative, *Clostridium difficile* sublineage PCR Ribotype 017 strain in London, England.

M.D. Cairns, M.D. Preston, T.D. Lawley, T.G. Clark, R.A. Stabler, B.W. Wren
2015 J. Clinical Microbiology [10.1128/JCM.00648-15](https://doi.org/10.1128/JCM.00648-15)

Rapid determination of anti-tuberculosis drug resistance from whole-genome sequences

F. Coll, R. McNerney, M.D. Preston, J.A. Guerra-Assuncao, A. Warry, G. Hill-Cawthorne, K. Mallard, M. Nair, A. Miranda, A. Alves, J. Perdigao, M. Voveoros, I. Portugal, Z. Hasan, R. Hasan, J.R. Glynn, N. Martin, A. Pain, T.G. Clark
2015 Genome Medicine [10.1186/s13073-015-0164-0](https://doi.org/10.1186/s13073-015-0164-0)

Imputation-based population genetics analysis of *Plasmodium falciparum* malaria parasites

H. Samad, F. Coll, M.D. Preston, H. Ocholla, R.M. Fairhurst, T.G. Clark
2015 PLoS Genetic [10.1371/journal.pgen.1005131](https://doi.org/10.1371/journal.pgen.1005131)

On a singular initial-value problem for the Navier-Stokes equations

L.E. Fraenkel, M.D. Preston
2015 Mathematika [10.1112/S0025579314000333](https://doi.org/10.1112/S0025579314000333)

Whole-genome scans provide evidence of adaptive evolution in Malawian *Plasmodium falciparum* isolates

H. Ocholla, M.D. Preston, M. Mipando, A.T. Jensen, S. Campino, B. MacInnis, D. Alcock, A. Terlouw, I. Zongo, J-B. Oudraogo, A. Djimda, S.A. Assefa, O. Doumbo, S. Borrmann, A. Nzila, K. Marsh, R.M. Fairhurst, F. Nosten, T.J. Anderson, D.P. Kwiatkowski, A. Craig, T.G. Clark, J. Montgomery
2014 J. Infectious Diseases [10.1093/infdis/jiu349](https://doi.org/10.1093/infdis/jiu349)

A barcode of organellar genome polymorphisms identifies the geographic origin of *Plasmodium falciparum* strains

M.D. Preston, S. Campino, S.A. Assefa, D. Echeverry, H. Ocholla, A. Amambua-Ngwa, L.B. Stewart, D.J. Conway, S. Borrmann, P. Michon, I. Zongo, J-B. Ouedraogo, A. Djimda, O. Doumbo, F. Nosten, A. Pain, T. Bousema, C.J. Drakeley, R.M. Fairhurst, C.J. Sutherland, C. Roper T.G. Clark

2014 Nature Communications [10.1038/ncomms5052](https://doi.org/10.1038/ncomms5052)

SVAMP: Sequence variation analysis, maps and phylogeny

R. Naeem, L. Hidayah, M.D. Preston, T.G. Clark, A. Pain

2014 Bioinformatics [10.1093/bioinformatics/btu176](https://doi.org/10.1093/bioinformatics/btu176)

PolyTB: A genomic variation map for *Mycobacterium tuberculosis*

F. Coll, M.D. Preston, J.A. Guerra-Assuncao, G. Hill-Cawthorn, D. Harris, J. Perdigao, M. Viveiros, I.

Portugal, F. Drobniewski, S. Gagneux, J.R. Glynn, A. Pain, J. Parkhill, R. McNerney, N. Martin, T.G. Clark

2014 Tuberculosis [10.1016/j.tube.2014.02.005](https://doi.org/10.1016/j.tube.2014.02.005)

PlasmoView: A web-based resource to visualise global *Plasmodium falciparum* genomic variation

M.D. Preston, S.A. Assefa, H. Ocholla, C.J. Sutherland, S. Borrmann, A. Nzila, P. Michon, TT Hien, T

Bousema, C.J. Drakeley, I. Zongo, J.B. Ouedraogo, A.A. Djimde, O.K. Doumbo, F. Nosten, R.M. Fairhurst, D.J. Conway, C. Roper, T.G. Clark

2013 J. Infectious Diseases [10.1093/infdis/jit812](https://doi.org/10.1093/infdis/jit812)

Using family-based designs for detecting rare variant disease associations

M.D. Preston, F. Dudbridge

2013 Annals of Human Genetics [10.1111/ahg.12051](https://doi.org/10.1111/ahg.12051)

EstMoi: Estimating multiplicity of infection using parasite deep sequencing data

S.A. Assefa, M.D. Preston, S. Campino, H. Ocholla, C.J. Sutherland, T.G. Clark

2013 Bioinformatics [10.1093/bioinformatics/btu005](https://doi.org/10.1093/bioinformatics/btu005)

Elucidating Emergence and Transmission of Multidrug-Resistant Tuberculosis in Treatment Experienced Patients by Whole Genome Sequencing

T.G. Clark, K. Mallard, F. Coll, M.D. Preston, S.A. Assefa, D. Harris, S. Ogowang, F. Mumbowa, B. Kirenga, D.M. O'Sullivan, A. Okwera, K.D. Eisenach, M. Joloba, S.D. Bentley, J.J. Ellner, J. Parkhill, E.C. Jones-Lopez, R. McNerney

2013 Plos One [10.1371/journal.pone.0083012](https://doi.org/10.1371/journal.pone.0083012)

Dystromirs as serum biomarkers for monitoring the disease severity in Duchenne Muscular Dystrophy

I.T. Zaharieva, M. Calissano, M. Scoto, M.D. Preston, S. Cirak, L. Feng, J. Collins, R. Kole, M. Guglieri, V. Straub, K. Bushby, A. Ferlini, J.E. Morgan, F. Muntoni

2013 Plos One [10.1371/journal.pone.0080263](https://doi.org/10.1371/journal.pone.0080263)

SpolPred: Rapid and accurate prediction of *Mycobacterium tuberculosis* spoligotypes from short genomic sequences

F. Coll, K. Mallard, M.D. Preston, S. Bentley, J. Parkhill, R. McNerney, N. Martin, T.G. Clark

2012 Bioinformatics [10.1093/bioinformatics/bts544](https://doi.org/10.1093/bioinformatics/bts544)

VarB: A variation browsing tool for polymorphisms derived from next-generation sequence data

M.D. Preston, H.M. Manske *et al.*

2012 Bioinformatics [10.1093/bioinformatics/bts557](https://doi.org/10.1093/bioinformatics/bts557)

A Nyström method for a boundary value problem arising in unsteady water wave problems

M.D. Preston, S.N. Chandler-Wilde, P.G. Chamberlain

2011 IMA: J. Numerical Analysis [10.1093/imanum/drq009](https://doi.org/10.1093/imanum/drq009)

Evolutionary optimality in stochastic search problems

M.D. Preston, J.W. Pitchford, A.J. Wood

2010 J. Royal Society Interface [10.1098/rsif.2010.0090](https://doi.org/10.1098/rsif.2010.0090)

An integral equation method for a boundary value problem arising in unsteady water wave problems

M.D. Preston, S.N. Chandler-Wilde, P.G. Chamberlain

2008 J. Integral Equations and Applications [10.1216/JIE-2008-20-1-121](https://doi.org/10.1216/JIE-2008-20-1-121)