

CURRICULUM VITAE

ALISTAIR BAILEY

October 4, 2016

PERSONAL DETAILS

Address: Flat 17, 115 Regents Park Road, Southampton, SO15 8AH

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EDUCATION

December 2014 to present - Johns Hopkins University Coursera Data Science Specialization

October 2004 to September 2013 – University of Southampton

September 1992 – June 1994 Bournemouth & Poole College of Art & Design

September 1989 – June 1991 Strode's College, Egham, Surrey.

September 1984 – July 1989 Ranelagh School, Bracknell, Berkshire.

QUALIFICATIONS

PhD in Cancer Sciences at the University of Southampton

BEng with First Class Honours in Civil Engineering, University of Southampton

Degree Foundation Year, Faculty of Engineering, Science and Mathematics, University of Southampton

Open University Mathematics MU120 and MST121

GCSE: Maths, English Language, English Literature, Physics, Chemistry, Economics, Geography, Art.

A-level: Chemistry, Economics, Sociology.

BTEC ND: Audio-Visual Production.

BBC Training & Development: Satellites in Communication, SDI Practice & Troubleshooting.

Coursera Data Science Specialization: Data Scientists Toolbox, R programming, Getting and Cleaning Data, Exploratory Data Analysis, Reproducible Research.

EMPLOYMENT

January 2014 to present: Post-doctoral Research Fellow, Elliott Lab, University of Southampton

January 2013 to January 2014: MRC Centenary Award Research Fellow

March 2012 to June 2012: Internship, Microsoft Research, Cambridge.

October 2004 to September 2012 : Freelance Satellite Communications Engineer

March 2001 to October 2004: Satellite Master Control Room Engineer, Globecast, 200 Gray's Inn Road, London W1

May 1995 – November 1999: Master Control Room Engineer Telecine, 48 Charlotte Street, London W1

July 1994 – September 1994: Sound Recordist, Wrightstuff Productions, Wells, Somerset

ON-LINE PRESENCE

[Google Scholar Profile](#)

[University of Southampton Computational Modelling Group](#)

[GitHub](#)

[GitHub Project Pages](#)

PUBLICATIONS

Selector function of MHC I molecules is determined by protein plasticity, *A Bailey*, N Dalchau, R Carter, S Emmott, A Phillips, JM Werner and T Elliott Scientific Reports, 2015.

Plasticity of empty major histocompatibility complex class I molecules determines peptide-selector function, A van Hateren, *A Bailey*, JM Werner, T Elliott - Molecular immunology, 2015

Two polymorphisms facilitate differences in plasticity between two chicken major histocompatibility complex class I proteins *A Bailey*, A van Hateren, T Elliott, JM Werner - PloS one, 2014

A mechanistic basis for the co-evolution of chicken tapasin and major histocompatibility complex class I (MHC I) proteins, A van Hateren, R Carter, *A Bailey*, N Kontouli, Williams, A. P. Kaufman, J. Elliott, T. - Journal of Biological Chemistry, 2013

The cell biology of major histocompatibility complex class I assembly: towards a molecular understanding, A Van Hateren, E James, *A Bailey*, A Phillips, Dalchau, N. Elliott, T. - Tissue antigens, 2010

EXPERIENCE

My experience whilst at the University of Southampton has been working on interdisciplinary projects with our collaborators at Microsoft Research Cambridge. My principal contributions have been computational, in terms of molecular dynamics simulations, data management, project organisation and integration of experimental and modelling data. I also have experimental experience of fluorescent spectroscopy of kinetic measurements such as stopped flow. I have recently begun to develop protocols for hydrogen/deuterium exchange mass spectrometry with our collaborators in the Centre for Proteomics Research in Southampton.

17 years experience working in satellite communications and control room operations. This involves the operation of a large variety of broadcast related equipment, communicating with customers and working as part of a team to deliver television transmissions worldwide. Projects I have worked on in 2012 include the London Olympics Projects I have worked on in 2011 include the Royal Wedding, Premiership and Champions League Football, Wimbledon and the Rugby World Cup.

REFEREES

Professor Tim Elliott, Cancer Sciences Division, MP824 200, Southampton General Hospital, Tremona Road, Southampton SO16 6YD

Jonathon Morley, Chief Technology Officer, Globecast Americas, 10525 Washington Blvd Culver City CA 90232