David Joseph Pattinson — BA MRes

https://github.com/davipatti University of Cambridge dob: 19th Sep 1989 Cambridge, CB2 3EJ, UK

Education University of Cambridge, Cambridge, UK

PhD Infectious disease. Department of Zoology, September 2014 Ongoing BA Natural Science. Queens' College, 2009–2012 1st class

Imperial College London, London, UK

MRes Biosystematics. Natural History Museum, 2012–2013 Distinction

Alyesbury Grammar School, Aylesbury, UK

A level Maths, Further Maths, Biology, Chemistry, Physics. 2000–2008 5×A

Computational skills

I have used **Python** daily for 5 years; I write (e.g. https://pymds.readthedocs.io) and use packages for scientific research (e.g. numpy, scipy, sci-kit learn, matplotlib, pandas.) I have done some app development in dash. — I am familiar with **R** and **Javascript**. — I use the unix command line daily. — Scientific software I have used includes: **MrBayes**, **RAxML** and **mafft** for phylogenetics and **gromacs** and **amber** for structural biology.

Research projects

Analysis of the antigenic evolution of seasonal influenza viruses: Quantifying the relationship between VE and mismatch — Applying linear mixed models for association testing and genotype to phenotype mapping with antigneic phenotypes — A framework to rank substitutions by risk of causing major antigenic change.

PhD Supervised by Prof. Derek Smith Ongoing

Endogenous retrovirus screening in catarrhine primates

MRes Supervised by Dr. Michael Tristem Distinction

Novel methods in mitochondrial DNA enrichment

MRes Supervised by Dr. Martijn Timmermans Distinction

A morphometric assessment of species delimitation in Canarian Pericallis

MRes Supervised by Dr. Mark Carine Distinction

This contributed to a publication: https://doi.org/10.1186/s12862-016-0766-1.

Combining molecular and morphological data in phylogenetic analyses

BA Supervised by Dr. Robert Asher 1st class. For this project I won the Palaeontological Association Undergraduate Prize and John

Ray Trust Science Prize.

This project resulted in the following publication: https://doi.org/10.1093/sysbio/syu077.

Additional experience

Research assistant Oct 2013 - Apr 2014 Nautral History Museum London, UK

Compiled information for and helped develop Hypericum online: http://hypericum.myspecies.info/.

Research internships Jun-Aug 2011 and 2012 University Museum of Zoology Cambridge, UK

Phylogenetic analyses using combined morphological and molecular data. — Artificial extinction experiments. — Characterised prenatal dental eruption sequences using μ CT imagery. — Funded by the Weis-Fogh and the J. Arthur Ramsay funds. — Contributed to this publication: https://doi.org/10.1080/02724634.2017.1317638.