

EDUCATION

- 2022–present PhD, UCL–Wellcome 4-year Programme in Mental Health Science
- 2019–2020 MSc Medical Statistics, London School of Hygiene & Tropical Medicine (LSHTM)
- Degree outcome: Distinction (4.6/5 GPA incl. 5/5 in both written exams & final project)
- 2016–2019 BA Neuroscience, St. Hugh's College, University of Oxford
- Degree outcome: First Class (overall weighted mean mark: 72.6)

RESEARCH EXPERIENCE

- 2021–2022 Research assistant, MRC Cognition and Brain Sciences Unit (CBU), University of Cambridge
- Work with Dr. Camilla Nord on a large online experiment, which combined a reinforcement learning (RL) task (probabilistic selection task; Frank *et al.*, 2007, *PNAS*) with momentary affect reports and a novel cognitive distancing manipulation in half the participants
 - Helped to design the study and coded it in JavaScript (+ HTML/CSS) using the jsPsych library, before running it on Prolific in over 1,000 participants
 - Conceptualised and implemented the full analysis pipeline in the form of an R package, Jupyter notebooks, and a Docker image; wrote first draft of paper (pre-printed on *PsyArXiv*), and presented poster versions at RLDM 2022 and the BAP Summer Meeting 2022
- 2020–2022 Honorary member (formally April 2021–), Department of Psychiatry, University of Oxford
- Work with Dr. Maxime Taquet, Professor Paul Harrison, and colleagues
 - Contributed to a (re)analysis of two large experience sampling studies (total $n=58,328$), published in *Psychological Science* in reply to a statistical critique of an earlier study
 - Contributed statistical analyses and methods to a number of large-scale electronic health records (EHR) studies into post-COVID sequelae up to two years post infection, including articles published in *PLoS Medicine*, *Brain Behavior & Immunity*, and *The Lancet Psychiatry*
- Jul–Oct 2020 MSc research project, supervised by Dr. Jennifer Nicholas, investigating links between grip strength at 53–69 and brain health/cognition at 70 in the MRC 1946 Birth Cohort
- Accepted to and presented at the Spring Meeting 2021 of the British Geriatrics Society (BGS), as part of the President's Round – conference abstract published as part of a supplement in *Age and Ageing*, and full paper published in *BMC Geriatrics*
- 2018–2019 Work in a circadian neuroscience lab headed by Dr. Aarti Jagannath, part of the Foster Group in the Nuffield Department of Clinical Neurosciences, University of Oxford
- Performed cell culture and mouse tissue experiments towards undergraduate research project (final mark: 81), aiming to characterise two novel clock genes
- Jul–Sep 2018 Summer intern (10 weeks) in Boston, USA at the Cardiovascular Research Center, part of Massachusetts General Hospital (MGH) and Harvard Medical School
- Learnt to use bioinformatic and machine learning approaches such as PCA and cluster analysis in R (genomics data), culminating in a presentation to the rest of the lab

PUBLICATIONS (*contributions*)

- Dercon Q**, Nicholas JM, James S-N, Schott JM, Richards M. Grip strength from midlife as an indicator of later-life brain health and cognition: evidence from a British birth cohort. *BMC Geriatr.* 2021; **21**: 475. *Responsible for all statistical analyses, drafted original manuscript, prepared figures/tables, and handled submission (i.e., cover letter, reviewer responses etc.).*
- Taquet M, **Dercon Q**, Harrison PJ. Six-month sequelae of post-vaccination SARS-CoV-2 infection: A retrospective cohort study of 10,024 breakthrough infections. *Brain Behav Immun.* 2022; **103**: 154–162. *Statistical analyses, supplementary methods/table preparation, editing of the manuscript.*
- Taquet M, **Dercon Q**, Luciano S, Geddes JR, Husain M, Harrison PJ. Incidence, co-occurrence, and evolution of long-COVID features: A 6-month retrospective cohort study of 273,618 survivors of COVID-19. *PLoS Med.* 2021; **18**: e1003773. *Responsible for statistical analyses and methodology, preparation of tables and supplementary information, plus reviewing/editing of the manuscript.*

Quoidbach J, **Dercon Q**, Taquet M, Desseilles M, de Montjoye YA, Gross JJ. Happiness and the Propensity to Interact With Other People: Reply to Elmer (2021). *Psychol. Sci.* 2021; **32**: 960–5. *Responsible for all statistical analyses, table preparation, and some writing (methods/results).*

Preprints

Dercon Q, Mehrhof, SZ, Sandhu, TR, Hitchcock, C, Lawson, RP, Pizzagalli, DA, Dalgleish, T, & Nord, CL. A core component of psychological therapy causes adaptive changes in computational learning mechanisms. *PsyArXiv* 2022. <https://doi.org/10.31234/osf.io/jmnek>. *Helped design experiment, coded online tasks, and handled data collection; designed the analysis pipeline, prepared figures, and wrote the first draft.*

Conference abstracts/posters

Dercon Q, Mehrhof, SZ, Sandhu, TR, Hitchcock, C, Lawson, RP, Pizzagalli, DA, Dalgleish, T, & Nord, CL. Computational psychotherapy: cognitive distancing alters reinforcement learning. In: Proceedings of the British Association of Psychopharmacology Summer Meeting (Imperial College, 2022).

Dercon Q, Mehrhof, SZ, Sandhu, TR, Hitchcock, C, Lawson, RP, Pizzagalli, DA, Dalgleish, T, & Nord, CL. The computational consequences of cognitive distancing. In: Proceedings of the 5th Multidisciplinary Conference on Reinforcement Learning and Decision-Making (Brown University, 2022).

Dercon Q, Nicholas J, James S-N, Schott J, Richards M. 488 - Grip strength from midlife as an indicator of later-life cognition and brain health: Evidence from a British birth cohort. In: Age and Ageing. Oxford Academic, 2021: ii5–7. *Wrote the conference abstract and presented at the BGS Spring Meeting 2021.*

ACADEMIC PRIZES

- Gibbs Prize in Neuroscience (2019), University of Oxford – *ranked #1 in neuroscience Finals*
- NIHR MSc Studentship in Medical Statistics (2019–2020) – *full scholarship for my MSc at LSHTM*
- St. Hugh's College Travel Grant (2018; *for my US internship*) & Final Honour School Prize (2019)

SKILLS AND INTERESTS

Programming: In order of experience/preference: R (*4+ years; multiple complete projects + package writing*); Python (*2+ years; Google ML courses/Leetcode*); JavaScript (+ some HTML/CSS) (*~1 year; multiple online tasks*); Stan (*1+ years, Bayesian models of various types*); MatLab (*occasional*)

Academic: - Attended University of Zurich computational psychiatry course (CPC) in 2020 and 2021; in-depth tutorials in RL models, hierarchical Gaussian filter, and model inversion
- Attended meetings of the transcontinental computational psychiatry workgroup (TCPW) and UCL FIL's brain meetings throughout 2020–2021

Music: - Played drums in (2016–2019) and ran (2018–2019) a large, 14-piece university funk band – in charge of bookings and rehearsals
- Help run an electronic record label and club night ([Vāsuki Sound](#)), focused on upcoming (particularly minority ethnic) artists, initially funded by an Arts Council grant