EDUCATION

2022-present	PhD, UCL-Wellcome 4-year Programme in Mental Health Science
2019-2020	MSc Medical Statistics, London School of Hygiene & Tropical Medicine

- Degree outcome: Distinction (4.6/5 GPA including 5.0 in both written exams and thesis)

2016-2019	BA Neuroscience, St. Hugh's College, University of Oxford

- Degree outcome: First Class (weighted mean = 72.6) and Gibbs Prize in Neuroscience

RESEARCH EXPERIENCE

2022–present   PhD student in mental health science, University College London (currently in rotation year)

- Developed patient-centred models of change in symptom scores in relation to subjective benefits of therapy in IAPT data (with Professor Glyn Lewis), and investigated the effect of SSRI vs. placebo on longitudinal performance & learning parameters in a smartphone game (with Dr. Liam Mason)
- Attended neuroAI-related courses including Bayesian deep learning and theoretical neuroscience
- Aiding with pilot task and model development for an RCT aiming to identify the effects on RL of serotonergic and dopaminergic antidepressants (with Professor Quentin Huys; ongoing)

2021–2022   Research assistant supervised by Dr. Camilla Nord, MRC Cognition and Brain Sciences Unit, University of Cambridge

- Coded and ran an online RL task with a psychotherapeutic intervention and affect ratings (n=1000)
- Designed the analysis pipeline and open-sourced it as an R package; wrote the paper (accepted at *Psychological Medicine*); and presented posters (*RLDM 2022* & the *BAP Summer Meeting 2022*)
- Selected to present follow-up work on momentary affect ratings during learning at the *Computational Psychiatry Conference 2023* (Trinity College Dublin) as a contributed talk

2020–2022   Honorary member (formally April 2021–) of the Department of Psychiatry, University of Oxford, working with Dr. Maxime Taquet and Professor Paul Harrison

- Provided statistical analyses, methods, and coding assistance towards several large-scale electronic health records studies into post-COVID sequelae up to two years post infection
- Contributed to articles 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

- Presented at BGS Spring Meeting 2021; peer-reviewed version published in *BMC Geriatrics*

2018-2019   Undergraduate project in circadian neuroscience with Dr. Aarti Jagannath, University of Oxford

- Investigated the role of two clock genes using cell culture and mouse tissue experiments

Jul-Sep 2018   Summer intern (10 weeks) at the Cardiovascular Research Center in Massachusetts General Hospital, part of Harvard Medical School

- Applied bioinformatic approaches (PCA and cluster analysis) to genomics data

SKILLS & INTERESTS

Topics	Mechanisms of psychiatric treatment (non-)response; use of cognitive theory to inform and explain data-driven prediction; uncertainty estimation in clinical predictive modelling
Expertise	Bayesian modelling and data analysis, theoretical models of learning and cognition, medical statistics (e.g., hierarchical models, causal inference, survival analysis), electronic health records research
Programming	IN ORDER OF PROFICIENCY (DESC.): R, Python, Stan, Julia, JavaScript, HTML/CSS, MATLAB

ACADEMIC PRIZES

- Wellcome Trust 4-year PhD studentship (2022-2026)
- Multidisciplinary Conference on Reinforcement Learning and Decision-Making (RLDM) travel award (2022)
- British Association of Psychopharmacology (BAP) Summer Meeting travel bursary (2022)
- NIHR MSc Studentship in Medical Statistics (2019-2020) – *full scholarship for my MSc*
- Gibbs Prize in Neuroscience (2019), University of Oxford – *ranked #1 in neuroscience Finals*
- St. Hugh's College travel grant (2019; *for my U.S. internship*) and Final Honour School Prize (2019)

PUBLICATIONS (*contributions*)

Peer-reviewed papers

Q. Dercon, S. Z. Mehrhof, T. R. Sandhu, C. Hitchcock, R. P. Lawson, D. A. Pizzagalli, T. Dalgleish, C. L. Nord, A core component of psychological therapy causes adaptive changes in computational learning mechanisms. *Psychological Medicine*, 1–11 (2023). *Helped design experiment, coded online tasks, and handled data collection; designed the analysis pipeline, prepared figures, and wrote the first draft.*

C. L. Nord, B. Longley, **Q. Dercon**, V. Phillips, J. Funk, S. Gormley, R. Knight, A. J. Smith, T. Dalgleish, A transdiagnostic meta-analysis of acute augmentations to psychological therapy. *Nature Mental Health*, 1–13 (2023). *Aided with screening of studies, responsible for all statistical analysis in response to peer reviews.*

M. Taquet, R. Sillett, L. Zhu, J. Mendel, I. Camplisson, **Q. Dercon**, P. J. Harrison, Neurological and psychiatric risk trajectories after SARS-CoV-2 infection: an analysis of 2-year retrospective cohort studies including 1 284 437 patients. *The Lancet Psychiatry*. **9**, 815–827 (2022). *Provided code and supervisory support for statistical analyses completed by other authors.*

M. Taquet, **Q. Dercon**, P. J. Harrison, Six-month sequelae of post-vaccination SARS-CoV-2 infection: A retrospective cohort study of 10,024 breakthrough infections. *Brain, Behavior, and Immunity*. **103**, 154–162 (2022). *Responsible for statistical analyses, supplementary methods/table preparation, and editing of the manuscript.*

M. Taquet, **Q. Dercon**, S. Luciano, J. R. Geddes, M. Husain, P. J. Harrison, Incidence, co-occurrence, and evolution of long-COVID features: A 6-month retrospective cohort study of 273,618 survivors of COVID-19. *PLoS Medicine*. **18**, e1003773 (2021). *Responsible for statistical analyses and methodology, preparation of tables and supplementary information, plus reviewing/editing of the manuscript*

Q. Dercon, J. M. Nicholas, S.-N. James, J. M. Schott, M. Richards, Grip strength from midlife as an indicator of later-life brain health and cognition: evidence from a British birth cohort. *BMC Geriatrics*. **21**, 475 (2021). *Responsible for all statistical analyses, drafted original manuscript, prepared figures/tables, and handled submission.*

J. Quoidbach, **Q. Dercon**, M. Taquet, M. Desseilles, Y. A. de Montjoye, J. J. Gross, Happiness and the Propensity to Interact With Other People: Reply to Elmer (2021). *Psychological Science*. **32**, 960–965 (2021). *Responsible for all statistical analyses, table preparation, and some writing (methods/results).*

Preprints

A. Smith, J. Bisby, **Q. Dercon**, A. Bevan, T. Dalgleish, C. Hitchcock, C. Nord, Hot metacognition: poorer metacognitive efficiency following acute but not traumatic stress (2023). *PsyArXiv*. doi:10.31234/osf.io/hdv3k. *Responsible for data collection (with first author), aided with statistical analysis and editing of the manuscript.*

Conference abstracts & posters

Q. Dercon, R. B. Rutledge, C. L. Nord. Antidepressant use and a component of psychological therapy alter affective dynamics during learning. In: Proceedings of the Computational Psychiatry Conference 2023 (Trinity College Dublin, 2023). *Selected as a contributed twenty-minute talk in the 'Treatments and Causality' session.*

Q. Dercon, S. Z. Mehrhof, T. R. Sandhu, C. Hitchcock, R. P. Lawson, D. A. Pizzagalli, T. Dalgleish, C. L. Nord, Computational psychotherapy: cognitive distancing alters reinforcement learning. In: Proceedings of the British Association of Psychopharmacology Summer Meeting (Imperial College, 2022).

Q. Dercon, S. Z. Mehrhof, T. R. Sandhu, C. Hitchcock, R. P. Lawson, D. A. Pizzagalli, T. Dalgleish, C. L. Nord, The computational consequences of cognitive distancing. In: Proceedings of the 5th Multidisciplinary Conference on Reinforcement Learning and Decision-Making (Brown University, 2022).

Q. Dercon, J. M. Nicholas, S.-N. James, J. M. Schott, M. Richards, 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.