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) plus Gibbs Prize in Neuroscience (*ranked #1 in Finals*)

RESEARCH EXPERIENCE

2022–present   PhD candidate at Max Planck-UCL Centre for Computational Psychiatry supervised by Prof. Quentin Huys
- Working title: "Using theory to inform treatment: unravelling and dissociating computational mechanisms of existing therapies for mood disorders", including main projects:
    1. "Common psychiatric treatments alter affective dynamics" (contributed talk, *Computational Psychiatry Conference 2023)*
    2. "Components of psychological therapy may have distinct computational mechanisms" (contributed talk, *British Association for Psychopharmacology (*BAP*) Summer Meeting 2024*)
    3. "Minimal clinically important differences on the PHQ-9 and GAD-7: a naturalistic cohort study"

2021–2022   Research assistant in Dr Camilla Nord's lab, 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; presented posters (*RLDM 2022* & the *BAP Summer Meeting 2022*); and wrote the paper (published in *Psychological Medicine*)

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, primarily focused on post-COVID sequelae
- Contributed to articles in *PLoS Medicine*, *The Lancet Psychiatry*, and *Nature Medicine*

Jul-Oct 2020   MSc research project, supervised by Dr Jennifer Nicholas, investigating links between grip strength at ages 53 to 69 and brain health/cognition at age 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

PRIZES & AWARDS

Academic	Gibbs Prize in Neuroscience (2019), University of Oxford; St. Hugh's College Final Honour School Prize (2019)
Scholarships	Wellcome Trust 4-year PhD studentship (2022-2026); NIHR MSc Studentship in Medical Statistics (2019-2020)
Travel	*Multidisciplinary Conference on Reinforcement Learning & Decision Making* (RLDM) travel award (2022); *BAP Summer Meeting* travel bursary (2022); St. Hugh's College travel grant (2019; *for my U.S. internship*)

SKILLS & INTERESTS

Topics	Mechanisms of psychiatric treatment (non-)response; use of theory to explain data-driven prediction
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	† *denotes preferred*: R†, Python†, Stan†, Julia†, JavaScript, HTML/CSS, MATLAB

COURSES & LEARNING

Courses	Inaugural jsPsych Hackathon (2025); OIST Computational Neuroscience Course (2024); TNU Computational Psychiatry Course (2021 & 2022)
Master's modules	*2023:* Probabilistic & Unsupervised Learning; Approximate Inference & Learning; Theoretical Neuroscience *2022:* Bayesian Deep Learning; Deep Representations & Learning; Knowledge, Learning, and Inference

PUBLICATIONS (*contributions*)

Preprints

Q. Dercon, Q. J. M. Huys, R. B. Rutledge, C. L. Nord, Common psychiatric treatments alter affective dynamics. *PsyArXiv* (2025). *Coded the online task and collected all data, designed and completed all analyses, drafted the manuscript.*

Peer-reviewed papers (*reverse chronological order*)

A. Norbury, **Q. Dercon**, T. U. Hauser, R. J. Dolan, Q. J. M. Huys, Learning training as a cognitive restructuring intervention. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging,* (2025). *Contributed analyses and responses following review.*

M. Taquet, **Q. Dercon**, J. A. Todd, P. J. Harrison, The recombinant shingles vaccine is associated with lower risk of dementia. *Nature Medicine*, **30**, 2777–2781 (2024). *Contributed coding support and statistical methods for sensitivity analyses following review.*

A. Smith, J. Bisby, **Q. Dercon**, A. Bevan, T. Dalgleish, C. Hitchcock, C. L. Nord, Hot metacognition: poorer metacognitive efficiency following acute but not traumatic stress. *Translational Psychiatry*, **14**, 133 (2024). *Responsible for data collection (with first author); aided with statistical analysis and editing of the manuscript.*

M. Vainre, T. Dalgleish, P. Watson, C. Haag, **Q. Dercon**, J. Galante, C. Hitchcock, Work Engagement and Well- being Study (SWELL): a randomised controlled feasibility trial evaluating the effects of mindfulness versus light physical exercise at work. *BMJ Mental Health*. **27**, e300885 (2024). *Provided code and assistance with data extraction from online task.*

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.*

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).*

Conference abstracts & posters

Q. Dercon, A. Norbury, C. A. Chen, Q. J. M. Huys. Components of psychological therapy may have distinct computational mechanisms: a replication and extension. In: Proceedings of the 50th BAP Conference (University of Birmingham, 2024). *Selected as a Short Oral (fifteen-minute talk) in the 'Depression – treatments, perinatal considerations and early life stress' session.*

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 1st Computational Psychiatry Conference (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, The computational consequences of cognitive distancing. In: Proceedings of the 5th Multidisciplinary Conference on Reinforcement Learning and Decision-Making (Brown University, 2022). *Also presented at the *British Association for Psychopharmacology conference in 2022, and the UCL Institute of Mental Health conference in 2023.*

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. *Presented at the British Geriatrics Society Spring Meeting 2021 as part of the President Round.*