REGINA H REYNOLDS

Molecular biologist turned bioinformatician, with a passion for systems-level biology, statistics and data visualisation and the application of these to answer biological questions. My current work explores the role of different cell types in neurodegeneration, making use of large-scale genomic and transcriptomic datasets.

View this resume online with links at https://rhreynolds.github.io/cv

EDUCATION

2021 | 2016

PhD, Bioinformatics

University College London — London, UK

- Thesis: Exploring the importance of cell-type-specific gene expression regulation and splicing in Parkinson's disease[1]
- Integrated bulk-tissue and single-cell transcriptomic data with summary-level genetic association data to investigate the role of cell-type-specific gene expression regulation and splicing in Parkinson's disease.
- Published 3 first/co-first author research articles and 1 first author review.
- Successfully secured £10,000 from Signe og Peter Gregersens Mindefond to undertake transcriptional profiling of Parkinson's disease brain tissue.

2016 | 2014

MSc, Molecular Biomedicine

University of Copenhagen — Copenhagen, Denmark

- Thesis: Changes in the miR-34a-SIRT1 axis in Huntington's disease
- Grade: A (92.5%)

2013 | 2010

BSc, Molecular Biomedicine

University of Copenhagen — Copenhagen, Denmark

- Thesis: Pro-apoptotic factors in Huntington's disease: a study in the R6/2 transgenic mouse model
- Grade: A (96.7%)

WORK EXPERIENCE

Present | 2022

Principal Bioinformatician

CoSyne Therapeutics — London, UK

2022 | 2021

Research Fellow

University College London — London, UK

- Lead analyst involved in processing and analysing transcriptomic data generated with the aim of identifying molecular signatures of Parkinson's disease progression. Work done primarily using R, nextflow and docker.
- Co-lead of Code and Pipeline Alignment Working Group in the Aligning Sciences Across Parkinson's[2] initiative. This group aims to maximize the value of data generated from finite post-mortem brain tissues through code alignment, which will enable eventual meta-analysis.

CONTACT

- rhreynolds@hotmail.co.uk
- GitHub
- LinkedIn
- ResearchGate

PROGRAMMING LANGUAGES

- R
- Git/GitHub
- Bash
- Nextflow
- docker
- Python

The long-form version of my CV, with a list of publications, conferences attended and voluntary work is available here.

Made with the R packages datadrivencv and pagedown.

The source code is available GitHub.

Last updated on 2022-10-24.

2016 | 2016

Research Assistant

University of Copenhagen — Copenhagen, Denmark

- Led project exploring the interactions between miR-34a, Sirt1 and p53 in a Huntington's disease mouse model, which culminated in a first author publication[3].

2015 | 2013

Housing Assistant

DIS, Study Abroad in Scandinavia, Denmark — Copenhagen, Denmark

- Student assistant involved in general administrative tasks; organisation of bi-annual orientation meeting for hosts/students; and conflict mediation between hosts and students.

TEACHING EXPERIENCE

Present | 2021

Subsidiary PhD Supervisor

University College London — London, UK

- Involved in top-level project planning and provide a second opinion/additional areas of expertise where appropriate.

2022 | 2019

R fundamentals with Clinician Coders[4]

University College London — London, UK

- Developed materials[5] and led workshops teaching basic R and tidy data principles to clinical academics.

2019 | 2017

Omics Techniques

King's College London — London, UK

- Lectured graduate level students on the principles of genome-wide association studies and led a workshop on how/why to use the Genotype-Tissue Expression portal.

LINKS

1: https://discovery.ucl.ac.uk/id/eprint/10119171/
2: https://parkinsonsroadmap.org/research-network/pd-functional-genomics/
3: https://pubmed.ncbi.nlm.nih.gov/29289683/
4: https://www.ucl.ac.uk/school-life-medical-sciences/about-slms/office-vice-provost-health/academic-careers-office/career-schemes/clinician-coders
5: https://github.com/ClinicianCoders/ClinicianCoders