Gabriel-Mateus **Bernardo Harrington**

Research Associate

School of Medicine, Dementia Research Institue

gmbernardoharrington.netlify.app | 0000-0001-6075-3619 | H-Mateus | gmb-harrington

Experienced and motivated scientist with a strong publication track record. My multidisciplinary skills in both informatics and bench work gives me a unique perspective and has made me highly adaptable.

Professional Overview

Experienced bioinformtician with a strong track record in the field of spinal cord injury and Alzheimer's disease. Extremely adaptable with a highly interdisciplinary background of bench work, proteomics, genomics and bioinformatics. Accomplished in working with diverse teams, including clinical and patient-facing settings. My leadership with informatic colleagues in working more cohesively and reproducibly by promoting the use of version control, containerisation and continuous integrations has streamlined our projects, reduced errors and improved quality. Related experience in training colleagues in the use of tools such as Git, GitHub/GitLab, R Markdown/Quarto and Docker.

Education

Keele University — *Keele*

PhD in Biomedical Engineering — *2018 - 2021*

Lancaster University — *Lancaster*

BSc (Hons) - Biological Sciences - 2:1 — *2013 - 2016*

Awards

DEMON network — *London*

Neurohack 2022 - Winning team — *2022*

Race Against Dementia — *Cranfield University*

Dementia research meets motorsports Innovation Accelerator - Winning team — *2021*

Funding

EPSRC Centre for Doctoral Training in Regenerative Medicine — *Loughborough*

CDT Consumable grant — *2021*

- £5000 awarded

Talks

ISCoS 2021 — *Oswestry*

Proteomic and bioinformatics analyses of plasma from SCI neurological improvers and non-improvers — *2021*

Centre for Doctoral Training Conference, 2021 — *Virtual*

Reproducible data analysis — *2021*

Centre for Doctoral Training Conference, 2019 — *Manchester*

Reproducible Research — *2019*

Skills

Bioinformatics

Proteomics, Genomics, High performance cluster computing, SLURM, Electronic Health data

Programming Languages

R, BASH, Python, SQL, Nextflow

Wet Lab work

3D Tissue Culture, Microscopy, Animal handling, Histology

Markup Languages

Markdown, RMarkdown/Quarto, YAML, CSS, HTML, LaTeX

Version Control

Git, GitHub, GitLab

Language

Portuguese

Microsoft Office

Excel, Outlook, OneNote, PowerPoint, Word

Publications

1. Bernardo Harrington, G. M., Cool, P., Hulme, C., Fisher-Stokes, J., Peffers, M., El Masri, W., Osman, A., Chowdhury, J. R., Kumar, N., Budithi, S., & Wright, K. (2022). *A comprehensive proteomic and bioinformatics analysis of human spinal cord injury plasma identifies proteins associated with the complement cascade and liver function as potential prognostic indicators of neurological outcome* [Preprint]. Bioinformatics. https://doi.org/10.1101/2022.07.12.499696
2. Bernardo Harrington, G. M., Cool, P., Hulme, C., Osman, A., Chowdhury, J., Kumar, N., Budithi, S., & Wright, K. (2020). Routinely measured haematological markers can help to predict AIS scores following spinal cord injury. *Journal of Neurotrauma*. https://doi.org/10.1089/neu.2020.7144
3. Brown, S. J., Harrington, G. M. B., Hulme, C. H., Morris, R., Bennett, A., Tsang, W.-H., Osman, A., Chowdhury, J., Kumar, N., & Wright, K. T. (2019). A preliminary cohort study assessing routine blood analyte levels and neurological outcome after spinal cord injury. *Journal of Neurotrauma*. https://doi.org/10.1089/neu.2019.6495
4. Hulme, C. H., Peffers, M. J., Harrington, G. M. B., Wilson, E., Perry, J., Roberts, S., Gallacher, P., Jermin, P., & Wright, K. T. (2021). Identification of Candidate Synovial Fluid Biomarkers for the Prediction of Patient Outcome After Microfracture or Osteotomy. *The American Journal of Sports Medicine*, *49*(6), 1512–1523. https://doi.org/10.1177/0363546521995565