EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

Curriculum Vitae

Personal information

Elias Brandorff

Work experience

Start date: September 2023
End date: Present
Position held: Clinical Assessor and Protocol Coordinator
Employer's name: Central Committee involving Human Subjects (CCMO)
Country of employment: The Netherlands
Main activities:
Assessment of clinical trial applications involving human participants under the European Clinical Trial Regulation (CTR), with special focus on First-In-Human (FIH) trials, early stage trials, and trials involving Advanced Therapy Medicinal Products (ATMPs). Assessment of clinical trial applications under the Medical Research Involving Human Subjects Act (Wet Medisch-Wetenschappelijk onderzoek met mensen, WMO). Assessment of research applications involving embryos and gametes creating embryos, subject to the Dutch Embryo Act (Embryowet). Participation in advisory committees within CCMO and partner organizations for development of review reports. Member of the CCMO Scientific Advice committee for clinical trial applicants.

Start date: January 2017
End date: August 2023
Position held: Doctoral Researcher
Employer's name: University of Amsterdam
Country of employment: The Netherlands
Main activities:
Led experimental investigation of potential pharmacological interventions targeting DNA-quadruplex structures in a rare genetic neurodegenerative disease. Co-developed a streamlined analysis and visualization pipeline for luciferase assays using the R programming language. Customized NGS analysis pipelines employing R, Python, and Bash programming languages. Conducted genome-wide mapping of secondary DNA structures in multiple cell types using antibodies specific to Quadruplex DNA. Performed bidirectional translation between nucleotide and protein sequences to investigate evolutionary mutations' impact on gene and protein structure, including functional laboratory assessments. Applied gene editing techniques in human embryonic stem cells using CRISPR-Cas9, followed by DNA/RNA extraction, library preparation, sequencing, and comparative genomics analysis.

Education and training

Start date: September 2017
End date: August 2024
Degree or qualification: PhD in Evolutionary Neurogenomics
Institution: SILS, University of Amsterdam
Country: The Netherlands
Subjects/Skills: Thesis titled “Quadruplex structures in mobile DNA.” Co-promoter: Dr. F.M.J. Jacobs, Promoter: Prof. Dr. M.P. Smidt.

Start date: September 2016
End date: August 2017
Degree or qualification: Master’s Degree in Neuroscience & Cognition
Institution: Utrecht University
Country: The Netherlands
Subjects/Skills: Research direction: Developmental Neurobiology. Elective courses included extended research abroad and Lab Animal Science (Article 9).

Start date: February 2016
End date: June 2016
Degree or qualification: Master Thesis Research
Institution: Department of Translational Neuroscience, University Medical Centre Utrecht
Country: The Netherlands
Subjects/Skills: Conducted a literature review of over 50 research articles on oxygen availability in the developing brain. Thesis titled “Oxygen and Neural Fate Progression in Cortical Development.”

Start date: June 2015
End date: August 2015
Degree or qualification: Research Internship
Institution: Wilhelmina Children’s Hospital, Utrecht
Country: The Netherlands
Subjects/Skills: Measured brain development of approximately 100 preterm infants using MRI imaging to generate clinical profiles of early human cortical development.

Start date: June 2013
End date: August 2013
Degree or qualification: Research Internship
Institution: Department of Neuroscience and Sophia Children’s Hospital, Erasmus Medical Centre, Rotterdam
Country: The Netherlands
Subjects/Skills: Investigated the influence of chorioamnionitis on cortical subplate zone development in preterm birth using a mouse model. Completed MSc course in immunohistochemistry.

Start date: September 2010

End date: June 2013
Degree or qualification: Bachelor's Degree in Psychobiology
Institution: University of Amsterdam
Country: The Netherlands
Subjects/Skills: Track: Biology of the Cell.

Additional information

Publications

- Brandorff, J.E. (2025). Quadruplex structures in mobile DNA: Next-level regulation of transposable elements in the human genome. Universiteit van Amsterdam. ISBN 9789464736687.
- Rosenkrantz, J.L., Brandorff, J.E., Raghib, S., Kapadia, A., Vaine, C.A., Bragg, D.C., Farmiloe, G., Jacobs, F.M. (2024). ZNF91 is an endogenous repressor of the molecular phenotype associated with X-linked dystonia–parkinsonism (XDP). Proceedings of the National Academy of Sciences, 121(33), e2401217121. DOI: https://doi.org/10.1101/2023.10.20.563263.
- Brandorff, J.E., Galland, M., & Goedhart, J. (2021). PlotXpress, a webtool for normalization and visualization of reporter expression data. F1000Research, 10. DOI: 10.12688/f1000research.73641.

Projects

Memberships

Other Relevant Information