

Project Title: SOPHIE: School-age Outcome Prediction using radiomic imaging algorithm in Hypoxic Ischaemic Encephalopathy

Post Duration: 24 months, Fixed, Term, whole-time Post

Appointment may be made on the IUA PD1 Salary Scale: €47, 273 - €53, 925 p.a.

Full details with a link to apply can be found at <https://www.irishjobs.ie/job/post-doctoral-researcher/university-college-cork-ucc-job107440148>

INFANT Research Centre is now accepting applications for a Postdoctoral Researcher to work on the Sophie project (School-age Outcome Prediction using radiomic imaging algorithm in Hypoxic Ischaemic Encephalopathy). The Sophie project aims to develop a Neonatal MRI Biomarker for newborns with Hypoxic Ischaemic encephalopathy that is predictive of altered brain development and cognitive school-age outcomes.

To achieve this, we are performing school-age MRIs and neurocognitive testing on a cohort of children who had HIE as newborns, and matched controls. The children with a background of HIE during the newborn period also had a neonatal MRI performed. Quantitative analysis of the school age MRIs will be performed, and MR features associated with school-age neurocognitive outcomes will be identified. These significant features will be used to determine regions of interest (ROIs). The ROIs on the School age scans will be projected onto the neonatal MRIs (available in HIE cases) and radiomic features predictive of school-age MRI extracted. Machine learning algorithms of radiomic features predictive of future brain development will be developed.

Furthermore, a novel predictive algorithm of School-age neuropsychological outcome will be developed combining radiomic model of brain development, with qualitative neonatal MRI findings.

Achievement of the expected progression within Post Doc and Senior Post Doc is transferable between the Irish HEI's. This can be reflected in the starting pay of a PD researcher. Similarly,

as the PD scheme is an intergenerational training scheme completion of PD1 or PD 2 levels in one HEI will normally render that researcher ineligible for appointment at a similar level in another Irish HEI Researcher Career Development Framework | Irish Universities Association. Please note that Garda vetting and/or an international police clearance check may form part of the selection process.

For an information package including full details of the post, selection criteria and application process see The University, at its discretion, may undertake to make an additional appointment(s) from this competition following the conclusion of the process.

Informal enquiries can be made in confidence to Prof Brian Walsh. Email: brianhenry.walsh@ucc.ie

For further information on the Department: INFANT - A research centre focused entirely on pregnancy, birth and early childhood University College Cork is committed to being a fully inclusive global university which actively recruits, supports and retains colleagues from all sectors of society. Equality, Diversity and Inclusion (EDI) are core values under our UCC Strategic Plan 2023-2028. UCC holds a Silver Athena SWAN award in recognition of our commitment to advancing equality in higher education. We value diversity as well as celebrate, support and thrive on the contributions of all our employees and the communities they represent. We are proud to be an equal opportunities employer and encourage applications from everybody, regardless of age, care-giving status, disability, ethnicity, gender and/or gender identity or expression status, nationality, marital status/civil partnership, pregnancy and maternity, race, religion/creed, and/or sexual orientation. We are committed to supporting all staff through flexible working schemes, family-friendly policies, training and development, and staff networks. We value the enrichment that comes from a diverse community and seek to promote equality, prevent discrimination and protect the human rights of each individual in line with equality legislation. We encourage applicants to consult our Dignity and Respect Policy and learn more about our EDI related initiatives.

Salary placement on appointment will be in accordance with public sector pay policy.

We encourage you to reach out to us directly should you require assistance or reasonable accommodation during the recruitment process.

Please note interviews will be conducted either online via Microsoft Teams or in person in the first instance. Candidates may also be required to attend interviews in person if an interview takes place online. Candidates will be notified as appropriate.

Applications must be submitted online via the University College Cork vacancy portal. Queries relating to the online application process should be referred to quoting the job-title. Candidates should apply, in confidence, **before 12 noon (Irish Local Time) on Friday 26th June 2026.**

No late applications will be accepted.

UNIVERSITY COLLEGE CORK IS AN EQUAL OPPORTUNITIES EMPLOYER

Please note that an appointment to posts advertised will be dependent on University approval, together with the terms of the employment control framework for the higher education sector