RESPECT 4 Neurodevelopment: Call for 2024 Pump Prime Feasibility Projects

Guidance Notes

The RESPECT 4 Neurodevelopment network invites applications for our second round of innovative pump-prime feasibility studies. We will fund up to four multi-disciplinary projects focused on neurotechnologies and neurodevelopmental diversity in infants and young children (up to £50,000 per project).

The goal of this seed funding is to demonstrate the feasibility or proof-of-concept of innovative ideas that may then underpin and strengthen subsequent larger grant applications.

Our priority areas for the 2024 round of applications are:

- **Ethics and responsibility:** One of the critical pillars of the network is to ensure that neurotechnologies are ethical, desired, acceptable, and user-friendly for neurodivergent children and families. Participatory involvement is central to making those decisions. We invite applications focused on the views of neurodivergent people and their families with lived experience in determining research priorities and objectives and how research related to neurotechnologies and neurodevelopmental diversity in infancy and childhood is conducted. For example, what are the cost-benefits of different methods and approaches, including potential concerns, or how can we ensure that research will be implemented ethically for clinical or educational applications?

- **Under-served communities:** A significant limitation of research on neurotechnologies for developmental populations is the under-representation of marginalized communities. We invite applications focusing on increasing diversity in research on neurotechnologies and neurodevelopment and reducing barriers for young people and their families in under-served communities to participate. In this funding call, we have agreed on the following description of an under-served community:

  A group that is less well-represented in research on neurotechnologies and neurodevelopment than would be desirable based on population prevalence and community needs (adapted from NIHR, 2024).

  This may include infants and children from (i) lower socioeconomic backgrounds, (ii) historically marginalized ethnic and racial backgrounds, (iii) low-and-middle-income countries, and (iv) with intellectual disability or high support needs.

We also invite applications for innovative investigator-led projects focusing on neurotechnologies for neurodivergent infants and children.

Successful applications require developing **multi-disciplinary collaborations** between:

- Parents, family members, and people with lived experience of neurodevelopmental conditions;
- Bioengineers or physicists (including partners from Industry or SMEs);
- Researchers or clinicians focused on child development (e.g., psychologists, psychiatrists, paediatricians or neuroscientists, and allied health or educational professionals);
- Collaborations with further "stakeholders" are strongly encouraged, including policymakers or health professionals.

Please note, the requirement of multi-disciplinary collaborations applies to all projects.

Applications from neurodivergent researchers or research teams are particularly welcomed.

How do we develop multi-disciplinary collaborations?

The R4N network was created to stimulate and foster multidisciplinary collaborations between professionals involved in the design and development of next-generation neurotechnologies, researchers, and health professionals who are using these methods in hospitals or natural environments for research and clinical purposes, and end-users—families of (potentially) neurodivergent infants and children. It was motivated by the recognition that these communities often had little direct access to one another in the past. Hence, we appreciate that prospective applicants may not have access to relevant collaborators outside their area of research.

To address this issue, lead applicant(s) are invited to directly contact R4N members who were permitted to share their contact details on the R4N internal website and explore potential collaborations while preparing proposals. Please email R4N@kcl.ac.uk if you would like to be added to the list of network members permitted to be contacted by others or if you would like to find out about network members you could contact. Please note this list is only accessible to R4N network members. To become a network member, please complete this: Membership form.

Project timeline and budget

The expected duration of each project is three to nine months. The project could be stand-alone or part of a larger programme; in the latter case, a clear demonstration of the added value of the feasibility project itself is essential.

Results from these feasibility projects are expected to support larger separate grant applications.

Indicated maximum budget per pilot project is £50,000

Costs will cover personnel, i.e., Research Assistant or postdoc time, MRI scanning time, ad hoc renumeration for PPI work, modest equipment, and consumables, including travel to enable lab-visits between Co-Is.

The award will not cover: Admin costs, Industrial partner costs, PhD studentships, continuation of normal research grants, costs related to the protection of IP, or staff exchange into a spin-out company.

Eligibility

This call is open to Principal Investigators who are resident in the UK and meet at least one of the eligibility criteria below:

- Lecturers or above at a UK Higher Education institution or NHS bodies with research capacity;
- Postdocs holding a fixed-term contract that extends beyond the duration of the proposed project at a UK Higher Education institution or NHS bodies with research capacity, provided the host research organisation is prepared to give the applicant all the support generally provided for a permanent employee.

Collaborations with Co-investigators (Co-Is), including industry partners, academic researchers outside the UK, neurodivergent people, organisations and communities collaborating in their role as representing first- or second-person lived experience, and other stakeholders, are highly encouraged. Funding must be distributed according to UKRI rules.

Successful applicants (Principal Investigators) from the 2023 round of Pump Prime Feasibility Projects are not eligible to apply.

Unsuccessful applicants from the 2023 funding round are eligible to re-apply.

The project should fall under the remit of the RESPECT 4 Neurodevelopment Network: https://respect4neurodevelopment.com/

Timeline and Application Process

- 8 April 2024, the Call opens
- 7 June 2024, Closing date
- 21 June 2024, Shortlisting completed
- First two weeks of July 2024, Interviews
- Mid to End of July 2024, Decisions announced
- Start date from September 2024

Applications should be submitted using the R4N application form to R4N@kcl.ac.uk by **5pm on Friday 7th June 2024**. Applications submitted after this date will not be considered.

The Application Review panel will include members of the Scientific Advisory Board, members of the Neurodiversity and Participatory Research Committee, and external Reviewers.