

Neuroimaging Theme Maudsley Biomedical Research Centre

The South London and Maudsley NHS Foundation Trust and the Institute of Psychiatry, King's College London

'Reaching out' Funding Call Description

Date of issue: 30th July 2021

Deadline for submission of application: 30th September 2021 Decisions expected to be announced by 15th October 2021

About the NIHR Maudsley BRC:

The National Institute for Health Research (NIHR) Maudsley Biomedical Research Centre (BRC) is a partnership between South London and Maudsley NHS Foundation Trust, the UK's largest mental health trust, and the Institute of Psychiatry, Psychology & Neuroscience at King's College London, Europe's leading academic centre for mental health research.

The NIHR Maudsley BRC focuses on researching novel tests, treatments and technologies to understand and treat mental disorders. Our aim is to accelerate the translation of the latest scientific discoveries into first-in-man clinical trials and other well-designed studies. The findings from these studies can then be developed and implemented to produce new tests and treatments for people with mental and neurological disorders.

Our research priorities are focused around:

- novel treatments
- precision medicine
- translational informatics
- and mental-physical health

For more information please see: https://www.maudsleybrc.nihr.ac.uk/about-us

About the Neuroimaging Theme:

The Neuroimaging Theme is one of 21 themes supported by the NIHR Maudsley BRC and sits within the Precision Psychiatry Cluster (see Appendix A for organisation chart). The theme supports work across other clusters as well as commissioning neuroimaging method specific research. Between March 2018 to November 2022 the Neuroimaging Theme aims to:

• Develop assays which improve early diagnosis, predict treatment response and inform clinical management

- Make neuroimaging a core clinical procedure in precision psychiatry in the next 5 years
- Expand our current suite of analytical tools

About this call:

Aims

This funding call has been designed to give the opportunity to explore important questions related to the impact of the COVID-19 pandemic on cognition and mental health in healthy and patient populations through the lens of neuroimaging.

This call challenges research teams to reach out, possibly beyond more 'well-trodden paths' and consider underrepresented patient groups and / or populations when addressing these questions. For example.

- The Maudsley Hospital serves a large and diverse patient population; the impact
 of the COVID-19 pandemic has focused initially, primarily on the general public,
 and not yet fully explored the disease natural history for individuals who with
 severe and complex mental health co-morbidity.
- Additionally, in some neurological disorders, cognitive deficits and mental health challenges are commonly experienced, yet little attention has been given to how respiratory illnesses such as COVID-19 might interact with these pre-existing conditions, particularly conditions that share an inflammatory and dysregulated immune response such as Multiple Sclerosis.
- Research groups may also be interested in exploring demographic risk factors such as age and ethnicity in addressing these scientific questions.
- It has recently been suggested that a number of population groups (frontline healthcare
 professionals for example), may have experienced an increase in incidence of PTSD
 and related conditions such as Moral Injury during the Pandemic. Research teams
 could harness knowledge of neuroimaging biomarkers to further understand the
 pathophysiology and/or predict treatment response of these conditions.

Call duration: 12.5 months

- Successful applications will be notified 15th October 2021.
- Funding will be made available until 30th October 2022.

Eligibility: The call is open to all King's staff and students and King's Health Partner employees.

Budget

This funding call will be in launched in parallel with its sister call 'Asking new questions of old data'. Between the two calls, the total budget for this call is approximately £100,000. There is no cap on the number of projects we can award, however for guidance, based on previous, similar funding calls it is expected that projects including collection of new neuroimaging data (MRI) may cost between £20,000 - 35,000.

To calculate the cost of acquiring new neuroimaging data, please use the latest Centre for Neuroimaging Sciences Scanning Costing Tool (spreadsheet) provided as part of the call documentation.

What the funding covers:

- MRI scanning hours
- Supporting laboratory, clinical or behavioural measure costs
- Participant expenses
- Staff training and support costs
- PPI workshop/ collaborative workshop activities

This call cannot provide staffing costs.

Study outcomes

Expected outcomes are that funded studies will support future work that could lead to one or both of the following:

- direct patient benefit (for example, improved clinical guidance or care resulting in earlier diagnosis; improved treatment choice; reduced misdiagnosis; improved quality of life; reduced referrals to hospitals or cost savings and / or
- specific outcomes such as securing follow up funding, enhanced capability of neuroimaging in a clinical setting, initiation of new collaborations, new product or service approval or accreditation, raised awareness among patients and the public.

Reports sharing outcomes from these studies in both academic and PPI friendly formats will be requested at the end each project and may be translated into a NIHR Maudsley BRC case study to be showcased on appropriate digital platforms.

Equality, Diversity & Inclusion Statement

The Neuroimaging Theme aims to promote equality, diversity, and inclusion in all its activities. One way of doing this is to prompt and support its research teams to take more time and effort in reflecting how they may contribute to these aims themselves through the design, implementation and evaluation of their own research studies. For this call, we would like applicants to consider race equality as intrinsic to their study design and will be asked to provide a brief race equality impact statement (Smith et al., 2020) within their funding application form.

Examples of ways to promote equality, diversity and inclusion more generally into the research process that applicants may also like to consider are as follows:

1. Complete an equality analysis review of the new work planned (for more information see: https://www.kcl.ac.uk/hr/diversity/guidance-and-resources/equality-analysis).

2. Trial innovative approaches to reduce recruitment bias and encourage a truer representation of the local community in their participant sample (if appropriate).

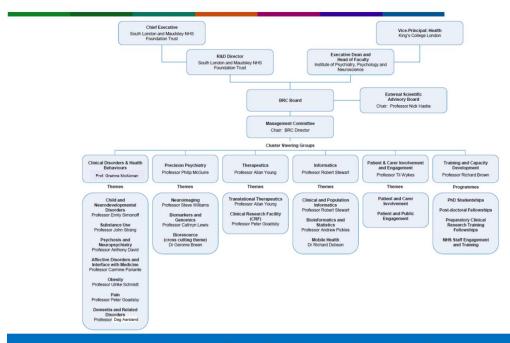
References:

Smith, S., Gilbert, S., Ariyo, K., Arundell, L.-L., Bhui, K., Das-Munshi, J., Hatch, S., & Lamb, N. (2020). Multidisciplinary research priorities for the COVID-19 pandemic. *The Lancet Psychiatry*, *7*(7), e40. https://doi.org/10.1016/S2215-0366(20)30250-9

Appendix A: NIHR Maudsley BRC Organisation Chart

NHS National Institute for Health Research

BRC STRUCTURE



Maudsley Biomedical Research Centre (BRC)

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