



Invitation to review a funding application

Dear Alexander Shakeel Bates,

We're inviting you to review an application that's been submitted to UK Research and Innovation (UKRI) in response to a new funding Opportunity. We think your expertise would be invaluable in helping us assess it.

Opportunity

BBSRC Responsive Mode: 24RM1

Application

Population connectomics

Application summary

Animals integrate multiple sensory inputs, learn and remember past events, predict future ones, and combine current and past information to choose and coordinate appropriate motor responses. Underlying these capabilities is the nervous system, whose operational patterns depend on the synaptic-level structure of its neuronal wiring diagram, the connectome. While each individual is expected to have a unique connectome, a large fraction of its neural circuit architecture is shared across individuals. What fraction of an individual's connectome is conserved across individuals is unknown, as are the ways by which each individual differs from the common subset. Here, we propose to map the complete connectome of the whole nervous system of multiple individuals of the same species using electron microscopy and machine learning techniques, and then compare them to (1) identify the consensus connectome; (2) measure natural variability both across brain hemispheres and across individuals; and (3) identify hotspots of variability. This study will reveal a neural circuit basis for inter-individual differences and establish a baseline for cross-species comparisons of

Individual differences and establish a baseline for cross-species comparisons of connectomes.

Application team

- Albert Cardona, University of Cambridge - **Project lead**
- Ana Correia, University of Cambridge - **Research and innovation associate**
- Samia Mohinta, University of Cambridge - **Technician**

Let us know if you can review this application

We need to know whether or not you're able to review this application.

Respond now

If you accept the invite, we'll prompt you to sign in to your Funding Service account, or create a new one, so that you can view the application.

You're reminded that any intellectual property, innovations or research ideas within this application are protected by law under our [terms of use](#).

Declaring conflicts of interest

If you reject the invitation, we'll ask you for a reason. This may be that you have a conflict of interest. If you're not sure if you're conflicted, check our [declaration of interests policy](#).

Review deadline

You have 21 days from the point you accept this invitation to complete your review.

UKRI also sets an Opportunity deadline by which time all reviews must be completed. This deadline may reduce your personal time limit of 21 days, so contact the relevant council if you'll need more time to complete your review:

- AHRC: operations@ahrc.ukri.org
- BBSRC: peer.review@bbsrc.ukri.org
- EPSRC: grants@epsrc.ukri.org
- ESRC: ESRCpeerreview@esrc.ukri.org
- MRC: peer.review@mrc.ukri.org
- NERC: researchgrants@nerc.ukri.org
- STFC: grantspolicy@stfc.ukri.org

If you're not sure which council to contact, or the funding Opportunity is being led by UKRI central, use the UKRI contact details at the foot of this email.

About UKRI

UKRI is the largest public funder of research and innovation, supporting world-leading research that generates lasting economic, social, scientific and cultural benefit. For more information, visit '[Who we are](#)'.

The role of reviewers

UKRI uses feedback from reviewers to assess applications and inform its funding allocation decisions. For more information, visit '[How reviewers use the UKRI Funding Service](#)'.

The UKRI Funding Service is still relatively new and undergoing updates. You may receive more invitations than usual while we develop our processes for reviewers. Please accept our apologies for any inconvenience.

We value your continued support.

Yours sincerely

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Email: support@funding-service.ukri.org

Telephone: +44 (0)1793 547 490

This is an automated message – do not reply.

If the button does not work, use the link below or copy and paste it into your browser's address bar.

<https://ui.funding-service.ukri.org/review-invite/9d0f7fd0-1ffb-471a-9f53-8dba779a3635>