An Open Letter to Research Funders:

The Urgent Need to Safeguard the Future of Preclinical Neuroscience

The recently published report by the British Neuroscience Association (BNA) has laid bare a critical moment for preclinical neuroscience in the UK. We are at a crossroads, where the future of this essential field is being threatened by an array of challenges including **insufficient funding, career insecurity,** and **burdensome bureaucracy**. The consequences of failing to act decisively now could jeopardize the UK's position as a global leader in neuroscience research and hamper our collective ability to address some of the most pressing health crises of our time.

The urgency of addressing mental health disorders, neurodegenerative diseases, and other neurological conditions is undeniable, with conditions like dementia expected to affect 1 in 3 people born today. However, as the BNA's report emphasizes, ***breakthroughs in therapeutic development are often born from fundamental preclinical research***—research driven by curiosity, not by immediate applications. The COVID-19 vaccines, rooted in decades of curiosity-driven virology and mRNA research, stand as a prime example of the long-term, far-reaching benefits that come from fundamental investigation. In neuroscience, foundational work in understanding neuronal activity patterns has paved the way for today's neuroprosthetic devices, offering life-changing hope to individuals suffering from paralysis.

Preclinical neuroscience is the bedrock upon which future therapeutic advances will be built, yet it is being steadily eroded by a lack of long-term support. The findings of the BNA's survey of our members should sound alarm bells. While these researchers are deeply committed to their field, many fear they will be unable to continue due to a lack of funding and career prospects. This sentiment is echoed across the UK's preclinical neuroscience community, and without urgent action, we risk losing a generation of talented researchers whose work could lead to the next major scientific breakthroughs.

The report outlines critical actions to ensure the sustainability and growth of preclinical neuroscience in the UK. **Chief among these is the need for research funders to prioritize and target funding for research focused on understanding fundamental mechanisms relevant to diseases, yet for which the clinical benefit may be many years away.** Such research often falls between funding categories – not sufficiently clinical to be 'medical' research yet too disease-oriented to be classified as purely fundamental. These issues are exacerbated by escalating costs of preclinical

neuroscience research, particularly for *in vivo* animal work, and the administrative burden of grant applications.

One key issue is to ensure there are viable, long-term career pathways for preclinical neuroscientists. This means offering more stable funding opportunities, not just at the early career level but also beyond, whether for research leaders or highly skilled research staff. ensuring these scientists have the resources to carry out their work without the constant threat of financial insecurity.

In addition, the review of stipends for postgraduate researchers—led by UKRI—must be expedited. Postgraduate researchers are the future of our scientific workforce, and their contributions to UK science deserve recognition in the form of appropriate financial support. The current stipend levels often do not reflect the invaluable work these young researchers perform, and addressing this imbalance is a crucial step in ensuring the future vitality of the research community.

We, therefore, encourage you to consider the findings of the BNA's report and take timely steps to support and strengthen preclinical neuroscience research in the UK. Many of today's and tomorrow's health challenges will likely be addressed by advancements in this field, but this can only happen if we invest in it now.

The BNA is committed to advocating for this essential research area, working with policymakers, fostering partnerships between preclinical researchers with clinicians and industry, and promoting best practices in neuroscience. We recognise that solving many of these issues will require concerted action not just from research funders but also from institutions and government. However, your support is crucial to making these efforts truly effective. By prioritizing preclinical neuroscience, you can help ensure that the UK remains at the forefront of scientific discovery and continues to build a strong foundation for future innovation.

We find ourselves at an important moment. The choices we make now will influence the future of neuroscience research, with long-term benefits for public health and well-being. Thoughtful and strategic investment today will foster the discoveries of tomorrow.

Yours sincerely,

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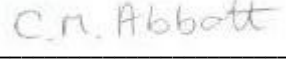

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