Mental Health Award: Advancing target validation for novel mental health drug discovery

This call will provide funding for validation activities for novel targets with a clear therapeutic concept and strong biological rationale related to early intervention in anxiety, depression and/or psychosis. Funded proposals will generate data supporting the target's therapeutic potential in the development of new and improved pharmacological treatments.

This call has been designed in collaboration with the Psychiatry Consortium to help enable early and robust target validation research.

Scheme at a glance

Administering organisation location:

Anywhere in the world (apart from mainland China)

Frequency:

One-off

Funding amount:

Up to £700,000 per project

Funding duration:

Up to 2 years

Coapplicants:

Accepted

Next deadline

Funding webinar: 25 February 2025, 13:00 GMT

Application process timeline

Who can apply

You can apply to this call if you are a team of researchers:

- from disciplines relevant to drug discovery and mental health science, including but not limited to genomics, neuroscience, computational psychiatry, molecular biology in psychiatry, medicinal chemistry, neuropharmacology, in-vitro/vivo/silico pharmacology and drug discovery
- from an eligible organisation
- based anywhere in the world (**apart from mainland China**)

We encourage applications from teams that:

- are diverse and interdisciplinary, within one or across multiple institutions and with collaborations covering multiple areas of expertise
- include researchers at any stage of their career

The team

The team must:

- Include the necessary expertise, technical skills and organisational support to deliver the proposed research, including any consultants or service providers. The team must include at least one person with knowledge on the biological mechanisms of the relevant mental health condition(s).

- Consider consulting people with lived experience of mental health problems as appropriate in the development and sharing of the project. Refer to our guidance for further information on what we mean by 'people with lived experience'.
- Be of an appropriate size for the proposed research. Teams must consist of at least two applicants and not exceed five applicants (team size requirement includes the lead applicant and coapplicants but excludes collaborators and consultants).
- Include either a lead applicant or coapplicant(s) based in each country where the research will take place.
- Actively foster a diverse, inclusive and supportive research environment.
- Where applicable, consider how they will ensure ethical and equal partnerships, including any partnerships between low- or middle-income country and high-income country researchers.

Lead applicant

The lead applicant must:

- Have relevant experience in one or more areas of expertise that is required to deliver the proposal.
- Have the experience needed to drive and lead a collaborative research project and the necessary support structures in place to enable this.
- Have a permanent, open-ended or long-term rolling contract or the guarantee of one for the duration of the award. The contract cannot be conditional on receiving this award.
- Be able to contribute at least 20% of their research time to this project.

Read more about when lead applicants can request salary costs, and what other costs can be covered.

Coapplicants

Consultants

Time spent away from research and part-time working

You can apply for this award if you have spent time away from research (for example, for a career break, parental leave or long-term sick leave). We will take this into consideration during the review of your application.

Retirement

If you have retired, you must contact us before applying. You must have a guarantee of space from your administering organisation for the duration of the award.

Working part-time

Lead and coapplicants can be part-time, but part-time applicants should still be able to contribute at least 20% of their research time to the project. Their part-time work should be compatible with delivering the project successfully.

Who can't apply

You should not apply for this call if:

- You intend to carry out activities which involve the transfer of funds into mainland China.
- You cannot demonstrate that you can dedicate enough time and resources to the project, if funded.
- You are already an applicant on two applications for this funding call:
    - you can only be a lead applicant on one application and a coapplicant on one other application
    - you can be a coapplicant on two applications
- You must demonstrate that you have sufficient capacity for both projects if funded. The applications should be for different projects with no overlap of activities.

- You already have applied for, or hold, the maximum number of Wellcome awards for your career stage. **Find out how many Wellcome awards you can apply for, or hold, at one time depending on your career stage.**
- Your project is not within the remit of this call. **Check what kinds of research projects are not in scope for this funding call**.

Is your organisation right for this call?

The administering organisation is where the lead applicant is based. It is responsible for submitting your final application to Wellcome and managing the finances of the grant if it is awarded.

The administering organisation can be based anywhere in the world apart from mainland China. It must be able to sign up to **Wellcome's grant conditions**.

Your organisation can be a:

- higher education institution
- research institute
- non-academic healthcare organisation
- not-for-profit or non-governmental research organisation

Commercial organisations are not eligible to apply as administering organisations or coapplicants for this call. However, commercial organisations can be added as consultants (service providers) or collaborators.

What is expected of lead applicant and coapplicant organisations

Any eligible organisation must sign up to **Wellcome's grant conditions and grant funding policies**. We expect organisations based in the UK to meet the responsibilities required by the **Concordat to Support the Career Development of Researchers** for institutions, managers and researchers. Any organisation with Wellcome funding that is based outside the UK is expected, as a minimum, to follow the principles of the Concordat.

We also expect organisations to:

- Guarantee that the space and resources you need have been agreed and will be made available to you from the start date through to the end date of the award.
- Explain how your research fits with the strategic aims of the organisation.
- Give you, and any staff employed on the grant, 10 days a year (pro rata if part-time) to undertake training and continuous professional development (CPD) in line with the Concordat. This should include the responsible conduct of research, research leadership, people management, diversity and inclusion, and promotion of a health research culture.
- Provide a system of onboarding, embedding and planning for you when you join the organisation and/or start the award.

Collaboration agreements

If your application involves a collaboration or partnership between multiple organisations, the partners must enter into a suitable collaboration agreement, including provisions that cover:

- confidentiality
- publication rights

If there is potential for foreground intellectual property, the collaboration agreement must include provisions on:

- access to background intellectual property
- ownership of foreground intellectual property
- arrangements for the protection, management and exploitation of foreground intellectual property

The lead applicant's administering organisation is required under our **grant conditions** to own all the foreground intellectual property arising from the project and to take the lead in any commercialisation activity. For guidance, applicants are advised to read **Wellcome's intellectual property policy**.

Your research environment

Wellcome believes that excellent research happens in environments where people from all backgrounds are treated with respect, supported and enabled to thrive. It requires attention to ethical, social and cultural considerations, and engagement with the needs and perspectives of relevant communities. We believe that creative and high-quality ideas must be open and accessible to everyone to drive innovation and achieve the most significant impact.

Our definition of a research environment is not restricted to the quality of the infrastructure but also considers the culture, practices, behaviours and ecosystems that foster excellent research to produce better evidence and meaningful impacts. This includes research that is inclusive in design and practice, attentive to relevant ethical considerations, engaged with relevant stakeholders, as well as open and transparent.

Read more about **how to address research environment and culture in your application.**

Is your research right for this call?

This call aims to support research activities to validate novel targets that have a clear therapeutic concept, a strong biological rationale and relevance to early intervention in anxiety, depression and/or psychosis. Successful projects will generate data demonstrating that modulation of the target has potential to lead to a clinical benefit, including toxicity considerations, and will develop the potential for a drug discovery campaign. Early elimination of non-viable targets is also important to better inform future research hypotheses and experimental designs.

We define a 'target' as a biochemical entity in the body that a drug can bind to, including but not limited to:

- receptors
- proteins
- enzymes
- biomolecules (for example, DNA, RNA, peptides)
- gut microbiome

Target validation activities must demonstrate that a target is directly involved in a pathophysiological process that leads to the emergence of symptoms and that the modulation of the target can produce a change in the biological pathway and possible clinical efficacy.

Mental health conditions in-scope for this funding call

This funding call is focused on proposals that target anxiety, depression and psychosis or associated symptoms. This includes:

- all types of anxiety and depressive disorders (including obsessive-compulsive disorder, postpartum depression and post-traumatic stress disorder)
- all forms of psychotic disorders (including schizophrenia, postpartum psychosis and bipolar disorder)

While we do not specify any particular diagnostic or classification system, we expect applicants to use a framework and measurement approach that fits their research aim and to provide a clear rationale for doing so.

What your proposal must include

Please also refer to the assessment criteria to inform what your proposal must include.

- **Novelty:** A clear explanation as to the target's novelty with supporting evidence.
    - By 'novel targets' we mean those that are not currently the subject of ongoing drug discovery and development programmes for any of the in-scope conditions, based on currently available public information. For instance, if there is an existing phase I drug candidate for target A in depression, proposals on target A would not be considered novel in this funding call.
    - Alternatively, we will consider target novelty in other ways. For example, a novel binding site on a non-novel target; a new approach to a target that has been investigated previously but where resulting drug development has been unsuccessful; or other innovative target approaches.
    - Proposals adopting a precision-psychiatry approach alone would not be considered novel. Instead, this should be considered on top of target novelty.

- **Rationale and evidence:** A clear rationale supporting the target including the therapeutic concept (for example, detailing the mechanism of how target modulation would lead to clinical efficacy). The applicant should consider the latest converging lines of evidence and the latest relevant knowledge on the target.
- **Patient impact:** A clear description of the potential patient population with appropriate justifications as to why the symptom(s) are a priority focus for people with lived experience. There must also be a description of how the proposal has the potential to create a step-change in early intervention.
- **Proposal plan:** A feasible plan to generate a robust validation data package supporting the target's therapeutic potential.
    - The plan should include experiments to demonstrate:
        - the target's potential for modulation by a drug,
        - target modulation leading to clinical efficacy,
        - and target-based safety
    - We encourage applicants to consider how their data package would encourage the inclusion of under-researched populations in future drug development programmes. The plan should have appropriately justified go/no-go milestones and cover the development of/access to necessary tools.
- **Expertise and skills**: Clear evidence to show that the team and any consultants is comprised of necessary expertise. The team must include at least one person with knowledge relating to the biological mechanisms of the relevant mental health condition(s). Proposals should clearly describe and justify the role of each team member and any consultants.

Relevant research activities include, but are not limited to, the use of:

- in-vitro models/assays including cells, iPSCs and organoids
- in-vivo mechanistic animal models/studies including knockouts
- in-silico target modelling and structural biology
- ex-vivo animal models, such as animal brain culture slices
- computational neuroscience, including neural circuit and network analysis

- electrophysiology
- imaging
- bio- and chemo- informatics and structural biology
- genomics, including CRISPR technology
- proteomics and transcriptomics including mRNA interference, if focused on validating a specific target
- optogenetics and chemogenetics
- in-vivo human studies if focused on novel target validation
- development and/or use of molecular tools for the purposes of target validation
- drug repurposing with a novel target and a focus on target validation

If you are conducting studies with human participants or animals, refer to our relevant policies:

- Research Involving Human Participants
- Use of Animals in Research
- Clinical Trials Policy

Research that is not right for this call includes:

- Validating targets for mental health problems outside of the in-scope conditions. For example, eating disorders, attention-deficit hyperactivity disorder or substance use disorders.
- Research on non-pharmacological interventions.
- Research on target identification (genetics/genomics data) or research that is focused on generating hypotheses for target validation. Target identification research should be completed prior to this award.
- Research exploring or developing new animal or cellular models with no validation of novel targets.
- Hit screening campaigns or similar drug discovery projects.
- Drug repurposing without a novel target.
- Research using holistic animal disease models that have limited/no mechanistic understanding.

Research costs we will cover

- staff
- materials and consumables
- access charges
- equipment
- animals
- contract research organisations
- clinical research costs
- fieldwork expenses
- travel and subsistence
- overseas allowances
- public engagement and patient involvement costs
- lived experience involvement
- overheads
- continuing professional development and training
- open access charges
- inflation allowance

other costs

How to apply

1. Before you apply

- Make sure you read everything on this page.
- You do not need to contact us before your write and submit your application.
- Register for our funding webinar at 13:00 GMT on 25 February 2025. A recording of the webinar will be uploaded to this page after the event. You can submit questions for our team ahead of and during the webinar on Slido using #TargetValidation.

2. Prepare and submit your preliminary application

- View the preliminary application form.
- Applications must be submitted in English.

- Complete your preliminary application on the Wellcome Funding Platform.
    - As a resource for developing your validation plans, we recommend you review the report 'Guiding Principles for Robust Target Validation in Psychiatry' created by the Psychiatry Consortium in partnership with the British Neuroscience Association.
    - Complete the 'Lead applicant' and the 'Other participants' section to describe the team and any consultants. There should be at least one person with knowledge relating to the biological mechanisms of the relevant mental health condition(s). Additional information demonstrating the necessary expertise of the team and any consultants should come under the 'Additional Information' section.
    - In the 'Proposal summary' section, highlight key information on the target novelty, rationale, evidence and potential patient population (including the potential impact in early intervention).
    - In the 'Details of the Proposal' section, outline your project in further detail using the following headings. Refer to the preliminary assessment criteria to inform your application content.
        - Novelty
        - Rationale and evidence
        - Patient impact
    - In the 'Additional Information' section, you should cover the following in under 1000 words:
        - overarching plan and timeline
        - additional information to demonstrate the necessary expertise of the wider team (including any consultants)
- Your preliminary application must be submitted by 17:00 BST on the deadline day, 15 April 2025.

3. Shortlisting

- When we receive your preliminary application, we will check your eligibility and that your proposal is within the scope of this call.
- Preliminary applications will be reviewed by Wellcome staff, Wellcome's lived experience advisors and industry experts.

- You will be informed of the decision on your preliminary application approximately one month after the preliminary application deadline.
- We are unable to provide feedback on applications that are not invited to submit a full application.

4. Invitations to full application

- If shortlisted, you will be invited to submit a full application. You will complete your full application on the Wellcome Funding platform. Once notified, shortlisted applicants will have approximately two months to prepare and submit their full applications.

5. Prepare your full application

- If invited to submit a full application, you will be matched with an industry expert who can offer advice on your proposal.
- Wellcome will cover the consultation costs with your assigned industry expert.
- There is no obligation for you to take up this consultation offer and it is at your discretion to accept or incorporate your industry expert's input.
- Advice from industry experts are independent from Wellcome and the industry experts are not accountable for any assessment outcomes.

6. Submit your full application to your administering organisation for approval

- Complete your application form on Wellcome Funding platform.
- Submit it to the 'authorised approver' at your administering organisation for approval. **Make sure you leave enough time for the approver at your organisation to review and submit your application before the deadline, as the approver may ask you to make changes to your application.**
- If this is your organsation's first time applying for Wellcome Funding, they will need to contact us to request an organisation account. Email fundingsupport@wellcome.org with your Organisation's:
    - Name
    - Address
    - Country
    - Team email address for the people who will approve and submit your application (this is usually a research management team)

- We will create the organisation account and provide access to the approvers. Review our guidance for research offices.

7. Administering organisation approves and submits it to Wellcome

- Your application must be submitted by your administering organisation by 17:00 (BST) on the deadline day, 31 July 2025.

8. Committee review

- A committee will review proposals and make funding recommendations to Wellcome.
- Committee members will be chosen based on their expertise within the relevant research field. Committee membership will be comprised of a diverse range of international members and will take into account Wellcome's diversity and inclusion priorities.
- Industry experts involved in the shortlisting of preliminary applications or full application support will not be a part of the committee.
- Once the committee has been appointed, we will update this page to include its details.

9. Funding decision

- Final funding decisions will be made by Wellcome.
- You will receive an email notification of the funding decision soon after the decision has been made in September 2025.
- The reasons for a decision will be provided to unsuccessful applicants in writing.

Where to apply

Apply for this funding call on the **Wellcome Funding Platform**. You can save your application and return to it any time. **Get more tips to help you write your grant application.**

Download application questions.

Start your application

Timing considerations for your application

You should leave enough time to read everything on this page before applying.

If invited to submit a full application, you should:

- Ensure that you and your coapplicant(s) have time to complete the application.
- Consider the time required for consultations with your industry expert if you take up the opportunity, leaving sufficient time for discussions and to consider the feedback.
- Leave enough time for your administering organisation to review, offer feedback and for you to apply any suggested amendments.
- Ensure that your authorised organisational approver at your administering organisation has time to approve and submit your application to Wellcome by 17:00 BST on 31 July 2025.

Getting support with your application

We offer disability-related support for applicants. **Read the disability-related support guidance** if you:

- are disaled or have a long-term health condition and you need help applying for funding
- need help completing your project, for example, asking for costs for assistive technology

If you need further support with completing your application or need to request an extension to the deadline, please contact us.

How applications are assessed

The application process consists of two stages:

- a preliminary application stage, where proposals will be shortlisted
- a full application stage, where shortlisted applicants are invited to submit full applications for review by a committee of experts

Preliminary applications

All preliminary applications will be assessed on:

- **Novelty:** The target novelty and whether the proposed research is in scope of this funding call.
- **Rationale and evidence:** The clarity and strength of the rationale for the target, including the therapeutic concept (for instance, mechanism of how modulating the target would lead to clinical efficacy). The rationale should be supported by the latest converging lines of evidence and consider the latest relevant knowledge on the target. There should be insufficient evidence to rule out the target from further development.
- **Patient impact:** Whether the proposal has identified a potential patient population, with appropriate justifications as to why the symptom(s) are a priority focus for people with lived experience. The proposal should describe its potential for impact in early intervention.
- **Overarching plan:** Whether the overarching plan is appropriate within the proposed timeline and costs.
- **The team:** Whether the wider team (including consultants) has the necessary expertise and technical skills for the proposed research, including at least one person with knowledge relating to the biological mechanisms of the relevant mental health condition(s).

In making shortlisting decisions, we will consider the diversity of targets and mental health conditions to achieve a breadth across our funding portfolio.

Full applications

All full applications will be evaluated using the same weighted assessment criteria. There are four weighted assessment criteria for full applications:

1. Potential for impact in psychiatric drug discovery (30%)

- The target is novel with a clear summary to show that there are no currently ongoing drug discovery and development programmes on the target for any in-scope conditions. Alternatively, if the proposal claims target novelty in other ways (read **is your research right for this call?**), it provides a clear explanation and strong evidence to support it.
- The proposal identifies a potential patient population with appropriate justifications as to why the symptom(s) are a priority focus for people with lived experience.
- The proposal has the potential to create a step change in early intervention for anxiety, depression and psychosis, supported by evidence from the literature or consultations with people with lived experience.

2. Rationale, evidence and proposal plan (30%)

- The proposal has a clear rationale underpinning the therapeutic concept (for instance, how modulation of the target would lead to clinical efficacy).
- The proposal is supported by the latest converging lines of evidence on the target, such as mechanistic, genetic and back-translation research in humans. Any evidence from animal models is supported by up-stream evidence demonstrating that the pathway/circuit in the animal model is translatable to humans.
- The proposal clearly explains the latest relevant knowledge on the target structure, distribution, potential for modulation by a drug, and target-based safety, showing that there is insufficient evidence to rule out the target from further development.

- The proposal plan and methodology have sufficient scope so that, if successful, the project will generate a robust validation data package (for example, showing that the target modulation has the potential to lead to clinical efficacy, the target's potential for modulation by a drug and target-based safety) sufficient to justify the initiation of a drug discovery programme with future funding. The proposal includes additional considerations to make the data package more inclusive of under-researched populations.
- The plan has a feasible and efficient approach to develop and/or access tools required, considering both in-house and external collaboration options with clear justifications.
- Timelines and budget are feasible.
- The plan has included appropriately justified go/no-go milestone(s) that will support assessment of the target's therapeutic value during the project.

3. Expertise and suitability of the team (20%)

- The wider team (including any consultants) have the necessary expertise and technical skills to deliver the proposed research, and there is at least one person with knowledge relating to the biological mechanisms of the relevant mental health condition(s).
- The lead applicant has experience of people and research management and training, as appropriate for their career stage.
- Each team member (lead applicant and coapplicants) has research experience relevant to the proposal, evidenced through research outputs and/or preliminary data (as appropriate for their career stage).
- The role of each of the lead applicant, coapplicants (and consultants if involved) is clearly described with clear justifications as to why each role is necessary.
- Teams must consist of at least two applicants and not exceed five applicants (team size requirement includes the lead applicant and coapplicants but excludes collaborators and consultants).
- Consultants, if involved, have relevant expertise to deliver the assigned work, evidenced through past outputs. The proposal must also show commitment of appropriate resources from consultants to deliver the work, evidenced through letter(s) of support.

4. Suitability of research environment, culture and sharing of outputs (20%)

Research location:

- The administering organisation is supportive of the proposal, evidenced through letter(s) of support signed by an individual with appropriate organisational seniority. For example, it aligns with the organisation's strategy, and it provides in-kind or financial support including but not limited to administrative or technical support and training opportunities.
- The wider team (including any consultants) have access to the necessary research infrastructure.

Research environment:

- The proposal includes a detailed description of how the team will foster a positive and inclusive research culture. This could include, but is not limited to, information about career development, research practices, leadership, team composition and partnerships, appropriate safeguarding measures for team members, consultants, collaborators and people with lived experience.
- The proposal demonstrates a commitment to equity, diversity and inclusion. For example, the team's approach to recruiting a diverse team and how they will promote inclusion of members in the research and outputs produced, representativeness of the data used to identify targets, or how the focus of the proposal addresses existing mental health disparities with regard to unmet treatment needs. The proposal has made an additional effort to acknowledge representation or bias issues within the data that was used to identify the target.
- The proposal includes a description of any relevant ethical questions and complexities pertaining to the methods, study populations, samples and data, with appropriate reference to ethics frameworks, guidance, and approaches to tend to relevant issues.
- The proposal includes plans to engage with lived experience experts and relevant stakeholders for the dissemination of research findings to the community. This could include:
    - contributing to or co-authoring publications (for example, checking the sensitivity and appropriateness of language)
    - co-developing outputs such as papers, presentations and blogs
    - identifying dissemination routes and methods

In making final decisions, we will consider the diversity of targets and mental health conditions to achieve a breadth across our funding portfolio.

Application process timeline

week commencing 10 February 2025
Full details of the award are published and the call opens to applicants

25 February 2025, 13:00 GMT
Funding webinar
Register for our webinar

15 April 2025
Preliminary application deadline

May 2025
Shortlisting and invitations to full application

31 July 2025
Full application deadline

Contact us

If you have a question about eligibility, what we offer or completing the application form, contact our funding information advisers:

Send us a message

(0)20 7611 5757

Psychiatry Consortium

This call has been designed in collaboration with the Psychiatry Consortium.

What we do and don't fund in mental health

Find out what we fund through our mental health programme and our principles of funding. See a list of mental health funding opportunities launching in the next couple of years.