

Quick Reference

Please note that you must read this full call document for guidance before submitting your proposal

Turing Artificial Intelligence World-Leading Researcher Fellowships

Call type: Invitation for full proposals

Key Information

Funding available or Maximum/Minimum amount available	Up to £18 million
Type of funding	Fellowships
UKRI funder(s) Lead council listed first	This is a UKRI call being delivered by EPSRC
Co-funder(s) External agencies	Office for Artificial Intelligence, Department for Business, Energy & Industrial Strategy

Overview

This Turing AI World-Leading Researcher Fellowship programme, part of a broader UK government investment in Turing Artificial Intelligence (AI) Fellowships, will invest in the retention and international recruitment of a small number of world-leading AI researchers to enable the building of centres of excellence in key areas of AI research.

This call for full proposals is only open to invited applicants who were successful at the outline stage of this call, all other proposals will be rejected prior to peer review.

Assessment Process: Outline proposals were considered by an expert panel on 11 November 2020. This document provides details for successful outline applicants invited to submit a full proposal. Full proposals will undergo postal peer review, followed by an expert interview panel.

Key Dates:

Activity	Date
Call published	14 November 2019
Outline proposals deadline	17 September 2020
Outline panel	11 November 2020
Full proposal call opens in Je-S	3 December 2020
Deadline for Full Proposals	16 February 2021
Interview Panel	May 2021
Funding decision	May 2021
Latest grant start date	1 October 2021

Contacts: General enquiries should be sent to Al.Robotics@epsrc.ukri.org. Specific enquiries should be sent to:

- Primary: Vivienne Blackstone, Senior Portfolio Manager. Email: Vivienne.Blackstone@epsrc.ukri.org: 01793 44 4557
- Secondary: Robert Hicks, Portfolio Manager. Email: robert.hicks@epsrc.ukri.org or telephone: 07547 655 680

For help and advice on costings and writing your proposal please contact your Research Office in the first instance, allowing sufficient time for your Organisation's submission process.

Any queries regarding the submission of proposals through Je-S should be directed to the Je-S helpdesk (JeSHelp@je-s.ukri.org – 01793 444164, Monday to Thursday 8.30am to 5pm and Fridays 8.30am to 4.30pm).



Turing Artificial Intelligence World-Leading Researcher Fellowships

Call type: Invitation for full proposals

Closing date: 16.00 on 16 February 2021

Contents of this call document

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Opportunity Summary

Full proposals are invited for Turing AI World-Leading Researcher Fellowships, only those who were successful at the outline stage of this call are eligible. Up to £18 million is available to fund a small number of fellows for up to five years starting by 1 October 2021. EPSRC, on behalf of UK Research and Innovation (UKRI), is delivering this substantive phase of the Turing Artificial Intelligence (AI) Fellowships, working in partnership with the Alan Turing Institute, Department for Business, Energy and Industrial Strategy (BEIS) and the Office for Artificial Intelligence.

This programme will invest in the retention and international recruitment of a small number of world-leading AI researchers to build new capability and capacity in the UK, contributing to the development of a diverse and sustainable UK AI research ecosystem. Turing AI World-Leading Researcher Fellowships will enable enhanced engagement between academia, business and other sectors through flexible career paths that encourage inter-sector mobility.

Through this strategic investment we are seeking to support world-leading researchers who will undertake ambitious and novel research with a primary focus on tackling the methodological and theoretical challenges in AI, which may be driven by real world applications. This research should show significant novelty in the development of AI technologies and should go beyond applying established AI approaches within applications.

Alongside undertaking world-leading research, fellows will be expected to actively seek to develop their position of leadership in their host organisation, in the national and international research community, and engage with and influence the strategic direction of UK AI research. Fellows should initiate, grow, and maintain strong relationships and collaborations with stakeholders in the UK and internationally.

Outline proposals were considered by an expert panel on 11 November 2020. This document provides details for successful outline applicants invited to submit a full proposal. Full proposals will undergo postal peer review, followed by an expert interview panel.

This call is only open to invited applicants who were successful at the outline stage of this call, all other proposals will be rejected prior to peer review.

Applicants should read the guidance for Fellowships on the EPSRC website: http://www.epsrc.ac.uk/skills/fellows/

Submissions to this call will not count towards the EPSRC Repeatedly Unsuccessful Applicants Policy.

Who can apply

It is expected that fellows will have demonstrable international standing in their area, with the potential to add value to the UK AI leadership landscape and build new capability and capacity within the UK. Diverse career paths in AI mean that no standardised eligibility criteria will be set.

We are seeking to support a cohort of fellows which includes international recruits, but potentially also researchers currently based in the UK. For UK-based applicants the case should be made for how the fellowship will retain them in the UK, and how it will be used to build new capability and capacity.

Applications are encouraged from people currently employed in all sectors (e.g. academia, business, government and the third sector) and are welcomed from both UK-based and international researchers. However, the time dedicated to the fellowship should be hosted by an eligible organisation within the UK (see below). Applications from those who have taken a non-standard career path after their primary degree are encouraged.

One of the objectives of the Turing AI World-Leading Researcher Fellowships is to enable mixed positions and flexible movement across sectors, as such crosssector working is encouraged. However, fellows must be employed by the Host Organisation for the time committed to the fellowship. In addition, the Turing AI World-Leading Researcher Fellowship should be the applicant's main identity (see page 9 for minimum time commitment expectations).

If applicants are employed part-time then they can apply for the fellowship to be held part-time. However, these fellowships have a maximum duration of five years and cannot be extended pro-rata.

EPSRC is leading this call on behalf of UKRI, therefore the standard EPSRC eligibility of organisations applies. Businesses are not eligible to be host organisations but may be Project Partners on the application. For further

information please see the EPSRC Funding Guide: https://epsrc.ukri.org/funding/applicationprocess/fundingguide/

A list of eligible organisations is provided at: https://www.ukri.org/funding/howto-apply/eligibility/

The EPSRC restriction on the number of fellowship applications in a 12 month period does not apply to this UKRI call. Therefore if you submit to this call you will be permitted to submit a fellowship proposal to EPSRC in the following 12 months. Conversely if you have previously applied for a fellowship (whether through EPSRC or any other funder) you would not be restricted to the 12 month wait to apply to this call. However, please note that you cannot apply in parallel to any UKRI fellowship scheme and any EPSRC fellowship schemes. As such, you would need to wait until the outcome of one application is known before submitting to the other scheme.

Please also note that if you apply to this call and are unsuccessful, this would be classed as a first submission under the EPSRC resubmissions policy and therefore you would not be able to subsequently submit that same fellowship proposal to the EPSRC Fellowship scheme. Similarly proposals previously submitted to other fellowship schemes will be counted as a resubmission and office rejected. Further information can be found at:

https://epsrc.ukri.org/funding/applicationprocess/basics/resubpol/

Submissions to this call will not count towards the EPSRC Repeatedly Unsuccessful Applicants Policy. Further information can be found at: https://epsrc.ukri.org/funding/applicationprocess/basics/resubpol/rua/

What we're looking for

Synopsis

This investment in Turing AI Fellowships is a direct response to the Government commissioned review of the AI sector, which recommended that an international fellowship programme for AI should be created. Following the Government's AI Sector Deal in early 2018 'up to £50 million in new Turing AI Fellowships to bring the best global researchers in AI to the UK' was committed to in the 2018 Budget.

Turing AI Fellowships

The first Turing AI Fellowships call was led by the Alan Turing Institute in early 2019. This next, substantive phase is being led by UKRI, working in partnership with the Alan Turing Institute, BEIS and the Office for AI. It consists of two separate programmes:

1. Turing AI Acceleration Fellowships intended to accelerate the careers of high potential researchers towards a world-leading position by the end of their fellowship.

2. Turing AI World-Leading Researcher Fellowships focused on building capacity and capability in the UK.

Further objectives of this overall investment in Turing AI Fellowships are:

- To support a diverse AI research community by developing capability and capacity thereby creating a sustainable AI research and innovation ecosystem.
- To enable new models of collaboration and career paths across sectors in AI, encouraging mixed positions and flexible movement between them.
- To integrate consideration of AI adoption into AI research activities, and embed Responsible Research and Innovation (RRI) in AI alongside consideration of how AI can be designed to be safe, ethical and usable.

Scope

This Turing AI World-Leading Researcher Fellowship programme will invest in the strategic retention and international recruitment of a small number of world-leading AI researchers, with significant packages of support to enable the building of centres of excellence in key areas of AI research. It will enable international leaders in addressing the methodological and theoretical challenges of AI to move to, or remain in, the UK whilst maintaining the momentum of their research programmes.

It is expected that fellows will:

- Establish a world leading centre of excellence, building new capability and capacity in a strategically important area of AI research;
- Lead a major programme of AI research, translation and innovation;
- Build strong relationships and collaborations with academia, business and broader stakeholders in the UK and internationally;
- Act as a leader in the community and as an ambassador and advocate for it, driving forward the UK and international AI research agenda;
- Develop the skills and careers of their teams, developing the independent researchers and innovators of the future;
- Actively engage with the design of AI for use, seeking to address challenges in areas such as ethics, robustness, fairness, security, auditability, and resilience throughout their research in any context, building on the principles of Responsible Research and Innovation (RRI) throughout their activities;
- Deliver research with a high likelihood of impact on UK society and the economy;
- Build a broader portfolio of funding and activities beyond the fellowship, moving towards a position of sustainability at the end of the fellowship.

Equality, Diversity and Inclusion

Equality, diversity and inclusion enriches diversity of thought, builds stronger perspectives and performance within organisations and communities and

fosters more innovative and creative approaches. This is particularly pertinent in AI as the quality of the output from algorithms depends on assurances that the inherent biases of those involved in their development do not transfer into their design. AI is increasingly being used in ways that can directly impact lives, and it is commonly agreed that a diverse AI community and workforce is likely to reduce bias and positively impact the development of fair, ethical, and inclusive AI technologies. Furthermore, investing in a diverse array of fellows of different genders, ethnicities, backgrounds and career paths will enable greater diversity of thought and of approach in AI that is key to the development of a sustainable UK AI ecosystem, and the development of creative new AI technologies.

One of the primary aims of this programme is to invest in the most creative, innovative researchers, with the most diverse and exciting new approaches to AI. Fellows will be expected to actively consider diversity and use an inclusive approach in the recruitment of their teams. UKRI expects that diversity is considered broadly to include backgrounds, career paths, thought and approach as well as protected characteristics.

The long-term strength of the UK research base depends on harnessing all the available talent. EPSRC expects that equality and diversity is embedded at all levels and in all aspects of research practice and funding policy. We are committed to supporting the research community, offering a range of flexible options which allow applicants to design a package that fits their research goals, career and personal circumstances. This includes career breaks, support for people with caring responsibilities, flexible working and alternative working patterns. With this in mind, we welcome applications from researchers who job share, have a part-time contract, or need flexible working arrangements.

Peer review is central to EPSRC funding decisions, we require expert advice and robust decision-making processes for all EPSRC funding initiatives. We are committed to ensuring that fairness is fully reflected in all our funding processes by advancing policy which supports equality, diversity and inclusion. Please see our Equality and Diversity webpages https://epsrc.ukri.org/funding/equalitydiversity/ for further information.

Stakeholder collaboration

Due to the scale and prestige of these awards, significant collaboration and leverage (cash or in-kind) will be expected from Project Partners (e.g. business, public sector, third sector). This may include models such as endowing Chairs or adding to academic salaries.

It is expected that collaborations will build a mutually beneficial two-way relationship based on expertise, secondments in both directions, products and infrastructures. However, to ensure the awards are inclusive of a variety of approaches and research fields, no specific leverage expectations are being set for eligibility to this programme.

It is recognised that the impact of the COVID-19 pandemic may make it more challenging for Project Partners to be confirmed at the time the proposal is written. Clear plans for engaging with new and existing collaborators over the duration of the fellowship should be detailed in the case for support.

Responsible Innovation

EPSRC is fully committed to develop and promote responsible innovation.

Research has the ability to not only produce understanding, knowledge and value, but also unintended consequences, questions, ethical dilemmas and, at times, unexpected social transformations. We recognise that we have a duty of care to promote approaches to responsible innovation that will initiate ongoing reflection about the potential ethical and societal implications of the research that we sponsor and to encourage our research community to do likewise.

Responsible innovation creates spaces and processes to explore innovation and its consequences in an open, inclusive and timely way, going beyond consideration of ethics, public engagement, risk and regulation. Innovation is a collective responsibility, where funders, researchers, interested and affected parties, including the public, all have an important role to play. Applicants are expected to work within the EPSRC Framework for Responsible Innovation given on the EPSRC website

(https://epsrc.ukri.org/research/framework/).

Funding Available

Up to £18 million is available to fund a small number of sizable awards (£3-5 million) for up to 5 years. Awards will be required to start by the 1 October 2021.

Applicants are expected to request a significant package of resource, designed in partnership with their host organisation and collaborative partners to provide the best support for their research agenda. This might include relocation costs, attractive packages for staff, access to data and infrastructure and other standard research grant costs.

Fellows are expected to build interdisciplinary teams including post-doctoral research assistants, research software engineers and data scientists. Resources may be used for research expenses including travel, equipment, research technical support including research software engineers, PDRA and fellow salaries, training, and other standard expenses. Relocation costs are also permitted. For international recruits up to £100,000 may be requested to set up their research activity in the UK. Resources may be used for activities to initiate, grow and maintain collaborations with stakeholders (e.g. academia, business, government, third sector) such as secondments, staff exchanges and regular travel.

Support for studentships is exceptionally permitted through this investment where this can be clearly justified, see below for further details. Student engagement may also be realised through institutional or stakeholder support, or collaboration with the UKRI AI CDTs. For further information on allowable costs please see our website:

https://epsrc.ukri.org/funding/applicationprocess/fundingguide/resources/

It is expected that resources will be used flexibly to deliver the outcomes of the programme. Detailed resourcing estimations will therefore only be required for the first two years of the investment, with a decision making methodology for subsequent planning. Due to the scale and prestige of these awards, significant collaboration and leverage (cash or in-kind) will be expected from Project Partners (e.g. business, public sector, third sector). This may include models such as endowing Chairs or adding to academic salaries to increase the attractiveness of the award. However, to ensure the awards are inclusive of a variety of approaches and research fields, no specific leverage expectations are being set for eligibility to this programme.

It is not expected that fellows will commit 100% of their contracted time (FTE) to this activity throughout its duration. However, on average a minimum 50% commitment is expected over the lifetime of the award as this fellowship should be the fellow's main identity. Fellows may start their award with less than 50% FTE but should ramp up their commitment to a minimum of 50% FTE within 6 months of the award start date. By the final year of the award it is expected that fellows will have developed their portfolio beyond the fellowship and should therefore have a maximum of 50% FTE to enable broader portfolio development. With this in mind fellows should design an appropriate time commitment over the duration of the award to deliver their research vision.

Where appropriate, fellows may benefit from a range of opportunities and support from the Alan Turing Institute, for example access to the Institute's university partner network or the Research Engineering Group (REG). Applicants should to liaise with the Institute (AIFellowships@turing.ac.uk) if they wish to request specific Institute resource, for example REG time, events support etc., as part of their application and to ensure appropriate costings are included. The Alan Turing Institute is a delivery partner in the Turing AI Fellowships and therefore the Institute's policy is to take a neutral stance towards all applicants as they intend to work openly and proactively with all successful Turing AI Fellows. This means they will not be offering specific support to individual candidates, for example acting as project partners on any Turing AI Fellowship application, and they will not offer letters of support to any candidates.

The fellowship must start by 1 October 2021 and no extensions will be given for delays in the appointment of staff. Therefore, when putting together the proposal, the recruitment time for staff required should be taken into consideration i.e. if it is estimated that it will take six months to recruit a PDRA then only 54 months of PDRA time should be requested. Only if there is a PDRA/staff member ready by the grant start date should you apply for the full five years (60 months) of time.

Costs should be based on the 2020/21 academic year with no account for inflation. UKRI will index the grant as appropriate to account for cost changes over the grant lifetime.

Please note: Due to the nature of this funding, grant extensions will only be considered under exceptional circumstances (in line with the Equality Act 2010) and will require UK Research and Innovation agreement on a case-by-case basis. The Research Organisation remains responsible for compliance with the terms of the Equality Act 2010, including any subsequent amendments introduced while work is in progress, and for ensuring that the expectations set out in the UK Research and Innovation statement of expectations for equality and diversity are met.

Doctoral studentships

Funds for doctoral students may exceptionally be applied for as part of this call. This exception recognises that studentships supported through UKRI's main routes may have been committed before the fellowships are awarded, and that these fellowships represent an exciting opportunity for these students to train and acquire skills through working with eminent researchers they wouldn't have otherwise had access to. The students will also benefit from the drawing together of vibrant, balanced teams which combine doctoral and post-doctoral research and build leadership for the future in key areas of AI.

The inclusion of doctoral studentships must add value to the proposed research, and to the student compared to UKRI's existing training grant routes. Students must be provided with a clear opportunity for a distinct and independent course of enquiry from the fellowship objectives and receive training that is not available through existing programmes. The fellowship must be viable without the studentship with distinctive objectives that are not reliant upon the studentship(s). Applicants should clearly explain the benefit to the student(s) of being part of the research team.

The host organisation should have a track record of training engineering and physical sciences (EPS) doctoral students and it is expected that there are EPS doctoral students training concurrently with students supported by the fellowship. The fellow is expected to have completed any supervisor training required to be familiar with supervising within a UK HEI, before students start their studies. Where the fellow has been recruited from abroad the student should be assigned a co-supervisor with experience of training UK-based EPS doctoral students.

Doctoral students supported through the fellowship must be provided with the opportunity to develop their substantive research skills as well as with broader professional development opportunities. Evidence of an appropriate training environment that meets the UKRI expectations for doctoral training should be provided (https://www.ukri.org/about-us/policies-standards-anddata/good-research-resource-hub/supporting-skills-and-talent/).

UKRI also expects that other doctoral students aligned with the fellowship research programme, but funded from other sources, would have the same training conditions and opportunities as those students funded by fellowship.

Studentships should be four years in duration and must start in the 2021/22 academic year. Careful consideration should be given to the overall staff resource on the fellowship and the balance between the different types of staff resource available. In order to ensure that postdoctoral researchers have sufficient time to support and train students alongside their research funding should be requested for a minimum of 2.0 FTE PDRAs per studentship. Fellows should ensure that they have sufficient time to supervise students but this time should not be charged to the grant.

In recognition that EPSRC is delivering these fellowships on behalf of UKRI EPSRC rules on international students will apply. International students recruited as part of the fellowship will count towards the 30% of new EPSRC studentships in any one year with open eligibility. For more information see https://epsrc.ukri.org/skills/students/help/flexibility/.

Studentship costings

As a minimum, the UKRI stipend and indicative fees must be met; enhanced stipends are permitted where this has been justified in the application. Student fees and stipends and Research Training Support costs related directly to the training of the student may be funded by UKRI. Research Training Support costs specifically relate to the research project of the student, and related additional technical training needs above those covered by the tuition fee. Such costs include travel and subsistence, conference costs and consumables. Indirect and Estate costs are not applicable to studentships and supervisor costs are ineligible.

For further details on funding for studentships see Appendix 1 and https://www.ukri.org/skills/funding-for-research-training/.

Funding associated with studentships will be issued to the fellow as a separate training grant with training grant terms and conditions, see https://www.ukri.org/funding/information-for-award-holders/grant-terms-and-conditions/.

Equipment

Individual items of equipment between £10,000 and £400,000 can be included on proposals for individual research projects if the equipment is essential to the proposed research and if no appropriate alternative provision can be accessed. However, a 50% contribution to the cost of the equipment from other sources is required. Additional justification of the requirement for individual items of equipment between £10,000 and £400,000, and details of the proposed contribution to the cost of the equipment, must be provided in the Justification of Resources (JoR). For any items or combined assets with a value above £138,000 (including value added tax [VAT]) a two-page Equipment Business Case must also be included in the proposal documentation.

Any items of equipment with a value in excess of £138,000 (including value added tax [VAT]) that are funded on research will need to be reported on annually as part of the University's Equipment Portfolio Annual Reports. This will be communicated via an additional grant condition on the research grant. Smaller items of equipment (individually under £10,000) and consumables should be in the Directly Incurred - Other Costs heading.

For further details on equipment funding, see https://epsrc.ukri.org/research/facilities/equipment/.

Post Award Expectations

A key feature of this strategic investment will be the management of the cohort of fellows as a group, in collaboration with other Turing AI Fellows. Cohort activities will be led by UKRI in partnership with the Office for AI and the Alan Turing Institute. Fellows will be expected to engage with cohort activities.

Fellows and host organisations will be expected to periodically report against host organisation and Project Partner leverage, engagement and other support committed to in the full proposal. EPSRC will take appropriate action where this has not been realised. Please note that due to the nature of this funding, additional requirements on spending profile, reporting, monitoring and evaluation and extension will apply. This will be reflected in specific grant conditions and those funded will need to comply with them.

Expectations of the host organisation

Turing AI World-Leading Researcher Fellowships are a strategic investment intended to build capability and capacity in the UK in the development of novel AI technologies. Host organisations should be able to clearly describe their long term strategy for AI, how it complements the UK landscape, and how they anticipate the fellow will enable them to deliver their strategy.

The host organisation will play a key role in the retention and recruitment of global talent in AI. They should demonstrate clear support for the proposed fellow and articulate the fellow's anticipated role in delivering the organisation's AI strategy. It is expected that significant tangible support will be offered to the fellow, notably above and beyond that of a standard fellowship, and commensurate with the national strategic need to invest in that individual.

It is expected that career mobility between the fellow's team and collaborative partners will be explicitly enabled, including secondments in both directions.

Where fellows have been recruited from outside the UK the host organisation should provide support to integrate the fellow and their team into the UK research ecosystem and AI community. Additionally, host organisations will be expected to outline how they plan to facilitate interaction between Turing AI Fellows nationally.

At the end of this five year investment it is expected that each of the fellows supported and their wider groups and activities will be in a sustainable position. In part, this will be due to the support of their host organisation and a key expectation of the host organisational support will be that the organisation commits to longitudinal strategic support for the fellows, their group and activities beyond the term of the fellowship.

The Host Organisation Statement is an important feature of this award which should draw on the discussions between the proposed fellow and Head of Department or other senior recruiting colleague. The host organisation and the applicant should co-create a work plan for the investment, outlining the institutional and partner support that will be required to ensure the anticipated outcomes of the fellowship are delivered, and the full potential of the UK investment in the individual is realised. This plan should be monitored and adapted as required to enable a flexible fellowship pathway.

How to apply

Only proposals that were successful at the outline stage of this call are eligible to apply. No other proposals will be accepted. Any unsolicited proposals will be rejected.

The full proposal should be prepared and submitted using the Research Councils' Joint electronic Submission (Je-S) System (https://je-s.rcuk.ac.uk/).

When adding a new proposal select:

- Create a new document
- Council 'EPSRC'
- Document type 'Fellowship Proposal'
- Scheme 'EPSRC Fellowship'
- On the Project Details page you should select the 'Turing AI World-Leading Researcher Fellowship Full Proposal' call.
- The Project title should begin 'Turing AI Fellowship:...'

The full proposal should be led by the proposed fellow (they should be input in to the 'Fellow' Section in Je-S.

Full proposals invited following a successful outline stage must have the 'Related Grant' field completed in Je-S. Please use the option 'Successful Outline'.

Note that clicking 'submit document' on the proposal form in Je-S initially submits the proposal to the host organisation's administration, not to EPSRC. Please allow sufficient time for the organisation's submission process between submitting the proposal to them and the call closing date. EPSRC must receive the application by **16:00** on **16 February 2021**.

Guidance on the types of support that may be sought and advice on the completion of the research proposal forms are given on the EPSRC website (https://epsrc.ukri.org/funding/applicationprocess/) which should be consulted when preparing all proposals.

As well as the Joint Electronic Submission (Je-S) Application Form, the following documents must be submitted

Attachment Type	Maximum Page length	Extra Guidance	
Case for Support	Twelve pages	Comprising up to two A4 sides for a track record, and ten A4 sides describing proposed research, its context and routes to potential impact.	
Workplan	One page	Should be illustrated with a simple diagrammatic work plan, such as a Programme Evaluation and Review Technique (PERT) or Gantt chart.	
Justification for Resources	Two pages	Detailed resourcing estimations are required for the first two years of the investment.	
Justification of doctoral studentships	Two pages	Where applicable submitted as document type 'Justification of Resources'	
CVs	Two pages each	For fellow, named researchers, and visiting researchers only.	

Project Partner Letters of Support	No page limits	Must be included from all named project partners. Must be on headed paper, and be signed and dated within six months of the full proposal call deadline.	
Equipment Quotes	No page limits	For equipment above £25,000.	
Equipment Business Case	Two pages each	Required for any items or combined assets with a value above £138,000.	
Technical assessment	No page limit		
Host Organisation Letter of Support	Two pages	Written on headed paper and signed by an appropriate senior representative of the organisation within 3 months of full proposal call deadline.	
Proposal Cover Letter	No page limit	The cover letter can be used to highlight any important information to EPSRC. This attachment type is not seen by reviewers or panel members.	

You should attach your documents as pdfs to avoid errors. They should be completed in single-spaced Arial 11 font or similar-sized sans serif typeface.

For advice on writing proposals see https://epsrc.ukri.org/funding/applicationprocess/preparing/

EPSRC will not fund a project if it believes that there are ethical concerns that have been overlooked or not appropriately accounted for. All relevant parts of the Ethical Information section must be completed. Further guidance on completing the Je-S form can be found at https://je-

s.rcuk.ac.uk/Handbook/pages/GuidanceonCompletingaStandardG/EthicalInformation.htm. EPSRC guidance can be found under Additional Information.

Guidance on writing a full proposal

The full proposal should be **led by the proposed fellow**, prepared in collaboration with the host organisation and any key partners from other sectors.

The full proposal should consist of the following completed documents. Applicants are advised to consider the strategic drivers of the call, the expectations of Turing AI World-Leading Researcher Fellows (page 6) and the assessment criteria (page 20) and to ensure that these are addressed in the proposal.

Case for support (up to twelve sides of A4):

A statement on how the proposed research programme will develop novel AI technologies implementing diversity of thought and approach enabled through career mobility and cross-sector collaborations. Applicants are advised to use the following headings:

• Track record of applicant (up to two sides of A4): The applicant should demonstrate a broad knowledge of the area of interest and their leadership qualities through a tailored track record which highlights their

skills, expertise and experience. They should demonstrate the suitability of the proposed research environment(s) for enabling their research or innovation and its impact.

- **Description of proposed research and its context:** The case for support should offer a compelling vision for a creative and adventurous research agenda with a clear plan of how this will be achieved.
- **National importance**: Demonstrate how the proposed research has the potential to grow new capability and capacity in AI in the UK, while enabling enhanced cross-sector engagement.

Further guidance on how to address National Importance within your proposal is also available on the EPSRC website http://www.epsrc.ac.uk/funding/howtoapply/preparing/includingnationalim portance/

• Impact (up to two sides of A4): The applicant should demonstrate how their programme of research will have a transformative effect on the AI research and innovation landscape, describing how stakeholders in other sectors will be engaged to ensure those in the field and related disciplines will benefit.

The applicant should describe how they intend to manage the type of impact envisaged to ensure it reaches the intended beneficiaries as quickly as possible.

A description should be included of how the fellow will act as a leader in the community and an ambassador for AI, advocating for the research area to a range of audiences including the public.

• Equality, Diversity and Inclusion: How equality, diversity and inclusion will be embedded in the applicant's plans to build collaborations, recruit members of their team, and how the diverse range of perspectives in the community will be reflected and encouraged. Diversity should be considered broadly to include backgrounds, career paths, thought and approach as well as protected characteristics.

As a signatory of the Concordat to Support the Career Development of Researchers, UKRI asks all applicants to consider the principles of the concordat in the development of their teams in the case for support. For more information see: https://www.vitae.ac.uk/policy/concordat

• **Responsible AI research:** How the applicant will consider the needs of the users of their AI research through to the impact these technologies could have on society. Seeking to address challenges in areas such as ethics, robustness, fairness, security, auditability, and resilience throughout their research in any context, building on the principles of Responsible Research and Innovation (RRI) throughout their activities;

Further information on EPSRC's Framework for Responsible Innovation and the AREA framework is available at https://epsrc.ukri.org/research/framework/

For more details please read the general Case for Support guidance http://www.epsrc.ac.uk/funding/howtoapply/preparing/writing/caseforsupport

Justification of resources requested (up to two sides of A4)

Please ensure that all applicable costs requested on the Je-S form are justified in the JoR. Explain why the resources requested are required to undertake your research project, establish a centre of excellence and implement plans to deliver impact as described in the case for support.

If resources are requested for doctoral studentships these should be clearly justified, including why additional UKRI investment is needed on top of existing UKRI studentship funding. Justification should be provided for why additional UKRI investment in AI students represents value for money in the context of the £100 million already invested in UKRI AI Centres for Doctoral Training. Full details should be provided in the Justification of Doctoral Studentships document.

It is expected that resources will be used flexibly to deliver the outcomes of the programme. Detailed resourcing estimations will therefore only be required for the first two years of the investment, with a decision making methodology for subsequent planning.

It is recommended to follow the 'cost to the proposal' headings used in the application form. For more information please see: http://www.epsrc.ac.uk/funding/howtoapply/preparing/writing/jor/

Work plan (up to one side of A4)

Normally a schematic Gantt chart, but any technique may be used to show how the elements of the fellowship will flow together. Depending on the nature of the research proposed, this is not expected to be a detailed and fixed work plan for the full duration of the project.

Applicant's CV (up to two sides of A4)

The applicant's CV should specifically cover the following:

- Ability to choose, build and manage appropriate collaborations and networks nationally, internationally and across sectors.
- Ability to lead and develop a team, take a leading role in the field, and show an ability to identify and maximise potential in others.
- Employment history listed in reverse order. Please start with current employment and make sure that the title of their current post is clear.
- Research history listed in reverse order. The dates of any degrees obtained should be stated or equivalent experience explained.
- Track record of research and/or innovation funding or research positions.
- Any current teaching commitments.
- Any current administrative activities: examples may include editorial responsibilities, committee membership, team leadership etc.

• Other: examples may include invited talks, awards, prizes, memberships of professional bodies, membership and leadership of collaborations etc.

Justification of doctoral studentships (two sides of A4)

This document is only necessary if resources have been requested for doctoral studentships. This should include:

- Justification of why studentship resources are requested, including why additional UKRI investment is needed on top of existing UKRI studentship funding;
- Added value to student(s) of being associated with the fellow;
- Description of the training environment in the fellow's research group, the department, and host organisation.
- How the student experience will differ from that which would have been offered by the host organisation to standard doctoral students in the area;
- Brief outline of proposed research project(s);
- How the students' engagement in the investment will play a notable role in establishing a sustainable AI ecosystem.

Host organisation statement (two sides of A4)

Host organisation support is an important feature of this award, it is expected that they will lend significant support to fellows in order to enable them to maintain their international profile, research activity, and career. The host organisation statement should draw on the discussions between the proposed fellow and Head of Department or senior recruiting colleague and should cover the following:

- Details of the tailored and flexible support for the proposed fellow and how this will be managed and adapted to aid them in realising the objectives of the Turing AI World-Leading Researcher Fellowship.
- How the host organisation and proposed fellow have engaged to develop a research work plan that will allow the proposed fellow to follow a flexible pathway throughout the fellowship.
- Training and development opportunities that are available to meet the proposed fellow's aspirations for themselves and their team over the duration of the proposal.
- Support in familiarising and integrating the proposed fellow into the UK research ecosystem if they will be relocating from abroad, including the supervision of UK doctoral students.
- How the host organisation will facilitate the interaction between Turing Al Fellows nationally.
- Where equipment is requested, the statement should confirm any institutional contribution.

This statement should be on headed paper and be dated within three months of the full proposal deadline.

For details of what should be included in the Host Organisation Statement, please see:

http://www.epsrc.ac.uk/skills/fellows/hostorganisationobligations/.

Proposal cover letter (up to two pages)

This letter will only be seen by EPSRC (or another relevant council if it falls into an interface area) and will not be sent to peer review. The cover letter gives applicants the opportunity to express any other information they feel is relevant to their application or, if applicable, highlight anything that has been discussed with EPSRC staff beforehand, relevant to the application.

Technical assessment (no page limit)

If you plan to use a major facility in your research, such as those funded centrally by EPSRC or a European facility, contact the facility before applying to EPSRC to check if your proposed research is feasible, and obtain a Technical Assessment if Je-S marks it as required.

Project partner letter of support (no page limit)

http://www.epsrc.ac.uk/funding/howtoapply/preparing/writing/

Quotes/business case for equipment (no page limit)

http://www.epsrc.ac.uk/research/facilities/equipment/

Additional information

Applicants should use the Ethical Information section on the Je-S form to demonstrate to peer reviewers that they have fully considered any ethical issues concerning the material they intend to use, the nature and choice, current public perceptions and attitudes towards the subject matter or research area. EPSRC will not fund a project if it believes that there are ethical concerns that have been overlooked or not appropriately accounted for. All relevant parts of the Ethical Information section must be completed. If the research will involve human participation or the use of animals covered by the Animals (Scientific Procedures) Act 1986 it is recommended that applicants pay particular attention to the guidance highlighted below. EPSRC reserves the right to reject applications prior to peer review if the Ethical Information sections are not completed correctly.

Further guidance on completing the Je-S form can be found at https://jes.rcuk.ac.uk/Handbook/pages/GuidanceonCompletingaStandardG/EthicalInforma tion.htm. Other relevant guidance includes: EPSRC's policy on animal use in research (https://www.epsrc.ukri.org/about/standards/animalresearchpolicy/) and the Responsible Innovation Framework (https://epsrc.ukri.org/research/framework/).

Please note that on submission to EPSRC **all** non-PDF documents uploaded onto Je-S are converted to PDF, the use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document.

For advice on writing proposals see:

https://epsrc.ukri.org/funding/howtoapply/preparing/ Page **18** of **26**

Guidance on Journal-based metrics

As part of our commitment to support the recommendations and principles set out by the San Francisco Declaration on Research Assessment (DORA; https://sfdora.org/read/), UKRI reviewers and panel members are advised not to use journal-based metrics, such as journal impact factors, as a surrogate measure of the quality of individual research articles, to assess an investigator's contributions, or to make funding decisions.

The content of a paper is more important than publication metrics, or the identity of the journal, in which it was published, especially for early-stage researchers. Reviewers and panel members are encouraged to consider the value and impact of all research outputs (including datasets, software, inventions, patents, preprints, other commercial activities, etc.) in addition to research publications. We advise our peer reviewers and panel members to consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.

How we will assess your application

Assessment Process

This call involves a three-stage assessment process.

Stage 1: Outline Proposals (completed)

Outline proposals led by the host organisation were considered by an external panel against the **fit to call**, **quality of the proposed research**, **applicant** (the proposed fellow), and **research environment** assessment criteria.

Successful applicants have been invited to submit a full proposal led by the fellow.

Stage 2: Invited Full Proposals

Full proposals will be sent out for postal peer review. Postal peer review will consider the assessment criteria detailed below.

Any proposals without sufficiently supportive reviews will be rejected at this stage without PI response. Applicants that receive sufficiently supportive reviews will have the opportunity to reply to comments made by the reviewers in a PI response document.

Stage 3: Interview Panel

Proposals with sufficiently supportive postal peer review will be invited to interview in order to select the final successful applicants.

All criteria detailed below will be assessed in determining the final rank ordered list taking into consideration the peer review comments, PI response and interview.

Assessment Criteria

Standard Criteria:

Quality (Primary)

The research excellence, making reference to:

- Degree of novelty in the development of methodological and theoretical AI, relationship to the broader context of the current AI research area internationally, timeliness and relevance to identified stakeholders;
- The ambition and adventure of the proposed programme and the potential for its outcomes to have a transformative effect on the AI research and innovation landscape;
- The suitability of the proposed methodology and the appropriateness of the approach to achieving impacts across sectors and timescales;
- Plans to embed the principles of Responsible Research and Innovation.

National Importance (Secondary Major)

How the research programme:

- Meets national needs by establishing/maintaining a unique world leading activity in AI technologies;
- Complements other UK research funded in the area, including any relationship to the EPSRC portfolio;
- Contributes to addressing key UK societal challenges and/or contributes to future UK economic success and development of emerging industry(s);
- Engages with the ethical, equality, diversity and inclusion considerations of AI research in relation to both the research programme outputs, and in the community;
- Engages with the public on the AI research agenda.

Applicant (Primary)

The ability to deliver the proposed fellowship programme, making reference to:

- International recognition of scientific contribution to addressing global AI technology research challenges as evidenced by their track record;
- Ability to build and lead a world-leading research group, and develop the skills and careers of their team;
- Ability to successfully build and manage collaborations across sectors;
- Ability to act as a leader in the AI community, make a strategic contribution to the AI landscape, act as an ambassador and advocate for AI both in the UK and internationally.

Resources and Management (Secondary)

The effectiveness of the proposed planning and management and whether the requested resources are appropriate and have been fully justified, making reference to:

- Any equipment requested, or the viability of the arrangements described to access equipment needed for this project, and particularly on any university or third-party contribution;
- Any resources requested for activities to either increase impact, for public engagement or to support responsible innovation;
- Management of any staff requested and a demonstration of the approach to embedding equality, diversity and inclusion into recruitment;
- Any doctoral studentship(s) requested, and the added value to them of being associated with the applicant's planned programme;
- Appropriateness of the risk mitigation strategy.

Call Specific Criteria:

Research Environment (Secondary)

- Strategic intent and level of tailored and flexible support from the host organisation during and beyond the lifetime of the fellowship;
- Justification of choice of host organisation and collaborators, and how they will aid the applicant in realising their research vision and the aims of this call;
- Training environment for doctoral students (where resources have been requested for studentships).

Feedback

Feedback will be provided in the form of the postal peer review comments. Further feedback will only be provided in exceptional cases if specifically requested by the interview panel.

Nominating Reviewers

As part of the application process you will be invited to nominate up to three potential reviewers who you feel have the expertise to assess your proposal. Please consider nominating non-academic reviewers and those from abroad where appropriate. Please ensure that any nominations meet the EPSRC Policy on conflicts of interest.

For more information about the reviewer selection process please see the related content links.

Guidance for reviewers

Reviewers should assess proposals within the context of the aims, objectives and the specific assessment criteria outlined in this call document (page 20). For postal peer review of these proposals the

Standard calls reviewer form will be used. The Specific Call Criteria section of the reviewer form should be used to comment on the Research Environment.

Guidance on this can be found here:

https://epsrc.ukri.org/funding/assessmentprocess/review/formsandguidan cenote s/standardcalls/. Additionally, the Applicant assessment criteria should be considered a primary criteria for this call.

Information about the EPSRC peer review process and guidance for reviewers can be found at:

https://epsrc.ukri.org/funding/assessmentprocess/review/

Guidance for reviewing standard grants can be found here:

https://epsrc.ukri.org/funding/assessmentprocess/review/formsandguidan cenotes/standardgrants/

Additional Information

Background

Due to the huge global opportunity AI presents, the UK government outlined 'AI and the Data Economy' as one of the Industrial Strategy Grand Challenges and set the aspiration that we will 'put the UK at the forefront of the AI and data revolution'. The UK is already in a world leading position in AI, with the building blocks to make significant advances to maximise the potential of AI.

This investment is a direct response to the Government commissioned review of the AI sector, which recommended that an international fellowship programme for AI should be created. Following the Government's AI Sector Deal in early 2018 'up to £50 million in new Turing AI Fellowships to bring the best global researchers in AI to the UK' was committed to in the 2018 Budget.

Global Talent Visa

UKRI is an endorsed funder for UK Global Talent Visas, successful applicants who require a visa to work in the UK should apply through this route subject to eligibility. For further information see https://www.ukri.org/our-work/collaborating-internationally/get-funding-and-visas-to-do-research-in-the-uk/

Grant additional conditions

Grants will be subject to the standard UK Research and Innovation grant conditions however the following additional grant conditions will be added to this call:

GAC 1 – Start date of the grant

Notwithstanding RGC 5.2 Starting Procedures, this grant must start by 01 October 2021 – no slippage of start date beyond 01 October 2021 will be permitted. Expenditure may be incurred prior to the start of the grant and be subsequently charged to the grant, provided that it does not precede the date of the offer letter.

GAC 2 – Grant extensions

No slippage or grant extensions (beyond exceptional circumstances in line with the Equality Act 2010) will be allowed. EPSRC will not be responsible for any cost overrun incurred during the course of this grant. The Research Organisation(s) will be required to make up any shortfall from alternative sources.

GAC 3 – Equality, diversity and inclusion

In addition to RGC 3.4, the Grant Holder is expected to prepare a full equality diversity and inclusion plan for the duration of this grant to demonstrate best practice in equality, diversity and inclusion throughout the lifetime of this funding award. This must be received by the Project Officer within 3 months of the grant start date.

GAC 4 – Naming and branding

Fellowship titles must be prefixed with "Turing AI Fellowship:...". In addition to RGC 12.4 Publication and Acknowledgement of Support, the Fellow must make reference to the "Turing AI World-Leading Researcher Fellowship" or "Turing AI Fellowship" title. Additionally, UKRI funding, the UKRI logo and relevant branding must be referenced on all online or printed materials (including press releases, posters, exhibition materials and other publications) related to activities funded by this grant.

GAC 5 – Engagement

In addition to the terms of RGC 19 and RGC 21 the Grant Holder may be required to attend meetings, events and other joint activities at the reasonable request of the Research Council, where such activities are held across the cohort of individuals awarded fellowships funded under this scheme in order to share experiences, best practice, wider public engagement activities, research impacts and outputs etc.

GAC 6 - Governance

EPSRC will nominate a member of UKRI staff (the Project Officer) who will be the Grant Holder's primary point of contact. The Project Officer will ensure that the project is being run in accordance with the terms and conditions and in line with financial due diligence. As funding administrators, all UKRI staff have agreed to maintain the confidentiality required by all parties involved in EPSRC funded research.

GAC 7 - Monitoring and reporting

In addition to the requirements set out in the standard UKRI grant condition RGC 7.4.3, the Grant Holder is responsible for providing regular progress reports and monitoring data (financial and non-financial) when requested by UKRI. UKRI expects that the frequency of financial returns will be bi-annual but reserves the right to request returns more or less often as appropriate to respond to changes in business needs. A template and guidance to complete this will be provided by UKRI in due course.

EPSRC reserves the right to suspend the grant and withhold further payments if the performance metrics requested are not provided by the stated deadlines or are determined to be of an unacceptable standard by the EPSRC.

GAC 8 – Programme and Project Review

In addition to the requirements set out in standard UKRI grant conditions RGC 7.4 Research Monitoring and Evaluation and 7.5 Disclosure and Inspection, EPSRC reserves the right to instigate a review of all or part of the grant at any stage during the lifetime of the award as well as after the grant has finished.

A mid-term review of the Turing AI World-Leading Researcher Fellowships programme will be undertaken to assess progress against the objectives. A final review of the broader Turing AI Fellowships programme will be undertaken after the end of the grant. Grant Holders will be required to submit documentation and engage with those conducting both of these reviews. EPSRC will give the Grant Holder due notice of the date of any review and will provide details of the Terms of Reference and documentation required.

The mid-term review will be conducted by an expert panel. This will include assessment of the performance of individual grants against the programme assessment criteria and objectives. An unsatisfactory outcome of the grant review may result in a reduction or termination of the grant funding.

GAC 9 – Expenditure

At the start of the grant the financial spend profile will be agreed by UKRI. In addition to any reporting requirements set out in GAC 7, the Grant Holder must immediately notify the UKRI Project Officer(s) in writing of any accumulation, slippage or variation in expenditure greater than 5% of the annual profiled funding. Any such changes must be approved in writing by UKRI; approval should not be assumed and will be dependent on spend across all associated grants. We reserve the right to re-profile the grant if required. Any deviation from the agreed allocation of funding and profiled costs must be negotiated and approved through written consent by UKRI. The approval of profile changes should not be assumed and will be dependent on spend across all associated grants. At the end of the grant period a breakdown of the expenditure should be submitted along with the final expenditure statement.

Studentship costs

Fees and Stipends

Research Councils publish their national minimum doctoral stipend and indicative fee level on an annual basis. Details can be found on the UKRI website: https://www.ukri.org/our-work/developing-people-and-skills/findstudentships-and-doctoral-training/get-a-studentship-to-fund-yourdoctorate/#contents-list

Research Councils UK Doctoral Stipend Levels and Indicative Fees for 2020/21

• National Minimum Doctoral Stipend for 2020/21 is £15,285

• Research Councils UK Indicative Fee Level for 2020/21 is £4,407

An uplift to this minimum stipend may be requested if there is clear justification for doing so. A top up may be achieved through using business leverage rather than requesting further UKRI funding.

Research Training Support Grant (RTSG)

This is a contribution towards costs incurred in training research students, for example the provision of consumables, equipment, travel, etc. The RTSG is not intended to relieve a Research Organisation of any part of its normal expenditure. A typical value for a student in STEM (Science, Technology, Engineering, and Mathematics) is £4000 per annum (this follows existing UKRI costings) but you should justify the level of RTSG requested.

How to apply on Je-S

Under "Studentship costs" there are two boxes:

Stipends – enter stipend level as one figure

Fees – enter fees amount AND Research Training Support Grant.

Justification of Resources

The justification of resources section of the proposal should clearly outline the costs requested for studentships, with both a breakdown and justification of the appropriate costings.

Supporting Documentation

Related Content

- Resubmissions
- Repeatedly unsuccessful applications
- Equipment
- Use of animals
- Responsible research and innovation
- Ethical considerations
- Equality, Diversity and Inclusion
- Reviewer selection
- Conflicts of interest
- DORA
- Fellowships obligations of the host organisation
- Global Talent Visa
- UKRI terms and conditions for funding
- Equality Impact Assessment

Change log

Name	Date	Version	Change
Vivienne Blackstone	18 November 2020	1	N/A
Vivienne Blackstone	03 December 2020	2	Start date of grant corrected in grant additional conditions
Vivienne Blackstone	07 January 2021	3	Deadline for full proposals changed from 21 January 2021 to 16 February 2021.