



BHF 4-year Multidisciplinary PhD Programme

Call for applications (1st programme)

British Heart Foundation (BHF) invites applications from universities in the UK for 4-year PhD studentship programmes in cardiovascular research.

Background information

BHF's 4-year PhD Programme was established in 2004/2005 as a way of providing awarded institutions with support for exceptional students, providing them not only with world class scientific projects of cardiovascular interest, but also with training and experiences generally not provided by a regular 3-year PhD.

The high quality, cohort-based doctoral education provided by the programme has been highly successful. Over the years, the number of participating institutions has grown from the initial two to a total of twelve in the most recent renewal, with a total intake of 36-48 students each year.

Strategy Review and Refresh

As part of a wider strategic review and refresh process that will be published later this year, BHF has enhanced its 4-year PhD programme. The aim of the new programme is to support scientists with outstanding potential and equip them with the diverse skill sets required to address the increasingly complex challenges faced by cardiovascular science. The enhanced 4-year PhD programme will train a cohort of exceptional non-clinical researchers across a wide range of cardiovascular disciplines and experimental approaches to seed the next generation of cardiovascular research leaders capable of driving advances towards patient benefit.

Awarded 4-year PhD programmes should encourage and foster cross-disciplinary research that may include but also go beyond bench based biomedical sciences to integrate fields such as engineering, physics, mathematics, behavioural science, genomics and data science among others to deepen our understanding and improve the prevention, diagnosis, and treatment of cardiovascular disease.

Additionally, we are committed to promoting collaboration between universities by encouraging partnerships. The new 4-year PhD programme encourages collaborative applications between UK Institutions where areas of common or complementary strength exist in order to promote scientific synergies and enhance the student training experience. In particular, collaborative applications that seek to enhance innovation by the inclusion of wide research disciplines or institutions are encouraged.

We are also committed to maximise the impact of our research funding by encouraging institutions to leverage and match funds when submitting applications to this programme. This approach will ensure that our resources extend further and produce the greatest possible opportunities for impact.

Partnering with commercial collaborators will open additional avenues for growth - not only enhancing funding opportunities, but also providing students invaluable exposure to cutting-edge technologies. Through these partnerships, students will gain hands-on experience and learn how to effectively translate their academic insights into clinically relevant applications.

Summary of Key Program Changes:

1. Applications are required to identify a relevant theme, such as an unmet cardiovascular need or an innovative approach to address a significant cardiovascular challenge. The selected theme should encourage and foster cross-disciplinary research that may include but also go beyond bench based biomedical sciences to integrate fields such as engineering, physics, mathematics, behavioural science, genomics and data science among others, to deepen our understanding and improve the prevention, diagnosis, and treatment of cardiovascular disease.

The key goals of the proposed theme and how progress towards these goals will be measured should be clearly defined. Themes may be chosen from the full spectrum of cardiovascular science and medicine including discovery, translational, prevention and implementation research, but they should be well defined and characterised.

2. Applications must be submitted from a consortium of universities and may also include collaborations between universities and industry partners. The intention of this approach is to create synergies from the unique strengths of each partner and enable them to collaboratively address research key questions related to their selected theme. Consortia may include up to four partners (although fewer partners are also welcome), adopting a principal applicant model with up to three co-applicants. Eligible applicants and co-applicants may include UK universities, industry partners, biotech, pharma and other commercial entities with a health focus, assembled in the optimal combination to deliver the proposed theme. Applying consortia will need to clearly explain not only the unique value of the collaboration in advancing cardiovascular research, but also the contribution of each participant to the overall student training programme. A lead institution may only submit one application to the new scheme. However, distinct groups from within a single institution may contribute to multiple consortia if individuals (including supervisors) named in one application are not included in any other consortium.

In exceptional circumstances, that will need to be fully articulated by the applicant, BHF might be prepared to consider an application from a single institution.

3. BHF will support the equivalent of 3-6 full studentships per application per year, but applicants are strongly encouraged to identify matched funding to support additional studentships up to, but not exceeding, the number requested from the BHF.

If additional support is offered by the applicants, this must be outlined in the application proposal, and funding commitments should be confirmed in a letter of support from the appropriate senior faculty members or, where relevant, external commercial partner/s. In kind contributions from partners can add significant value to applications and are welcome. However, when calculating the contribution of matched funding in an application, only direct contributions to studentships will be considered.

Further elements of the Programme

1. The Lead Applicant, who will act as the Programme Director for successful proposals, must hold a substantive appointment at an established UK academic institution, have demonstrable leadership experience in cardiovascular science and a strong track record of student training. Each of the other participating institutions should identify a Co-Director who will be responsible for oversight of the PhD programme in their institution and support the Programme Director to deliver the overall aims of the programme. Applying consortia will need to describe how the students (up to 12) will be allocated among the partners. Each partner should provide a list of available supervisors in their institution which must be updated annually. Applicants are encouraged to include emerging leaders in the pool of supervisors and to consider inclusivity and representation. Interdisciplinary PhD students should be co-supervised by supervisors from distinct disciplines to add synergistic value to the given research training project.
2. The training element of the programme, particularly in year one, should be structured to provide students with a truly unique opportunity for multidisciplinary growth and learning. The training that programmes provide should be flexible and designed to meet the particular needs of the students and the interdisciplinary theme that is being proposed.
3. Applications should include clear plans describing how any award would promote Equity and Diversity within the PhD training programme and more widely within the host institutions within the context of institutional strategies to help achieve a more inclusive and representative cardiovascular research community. Strategies that support opportunities for underrepresented groups are encouraged. Please refer to Igniting Change, [BHF's EDI strategy](#).

What is supported

In agreement with our ambition, awards will allow consortia to recruit **between 3 and 6 students per year fully BHF funded, or up to twice this number per year partially BHF funded with the remaining funds provided by the consortium (i.e. 12 students would be 50% BHF funded and 50% funded by the applicants, 9 students would be 75% BHF funded and 25% funded by the applicants and so on)**. The first intake is planned for Autumn 2026 and the last for Autumn 2029 (i.e. 4 intakes totalling up to 24 students fully funded or up to 48 partially funded). A lead institution may only submit one application to the new scheme. However, distinct groups from within a single institution may contribute to multiple consortia if individuals (including supervisors) named in one application are not included in any other consortium.

Applications should aim to attract, train, and support the development of future research leaders in cardiovascular science and nurture a diverse research workforce that is geared to maximise benefit from emerging new opportunities and technologies while addressing the full spectrum of cardiovascular conditions. Research teams should, wherever possible, be inclusive and foster cognitive diversity shaped by different lived experiences, values and identities including differences in sex/gender, ethnicity, socioeconomic background, neurodiversity and disability.

Applicants should demonstrate that they either already have in place, or can put in place, the resources to run a 4-year PhD programme.

The first year of study will typically include generic and specialist training courses and a number of practical projects before the students move on to a 3-year PhD project. Applicants will have the flexibility and opportunity to design their own programme of learning for year one, but this will need to be clearly outlined and described within the application, with details about who will be involved in the training, how it is going to be structured and subdivided between partners, the benefits for the students and how the training will position them to be successful. Emphasis should be placed on the multidisciplinary nature of the training that will be available. It is up to programmes to design training that best meets the needs of the students and theme proposed, since different interdisciplinary fields might have different requirements.

After award, students recruited by universities must be approved individually by BHF before entry into the programme. Individual 3-year PhD project outlines for each set of students must then be submitted approximately 9 months after their start, to be approved by BHF's Fellowships Committee.

Costing

For full costing details, please refer to [BHF Grant Costing Guide](#).

As part of the Programme, BHF will support:

- A student stipend at the [standard BHF rate](#)
- University PhD tuition fees (at the home rate only)
- Consumable costs up to £8,000 in year 1 and up to £18,000 per year thereafter
- A travel fund up to £2,000 per student to present research at or attend scientific meetings
- Budget to visit partners in the programme up to £1,000 per student

In all appropriate aspects of research supported by these awards, the principles of BHF equality, diversity and inclusion (EDI) strategy [‘Igniting Change’](#) should be considered.

This scheme is separate from and in addition to our existing individual [3-year PhD studentships](#), which remain open to applications.

Evaluation process

Applications will be peer reviewed by external national and international reviewers and ranked based on the scores received. BHF's Fellowships Committee will then be presented with blinded applications and scores received and confirm which ones are to be awarded. Applications will be assessed on the following criteria:

- Strength and value of the multidisciplinary theme proposed
- Strength of the partnership proposed
- Suitability of the Lead Applicant/Programme Director and the co-Applicant/co-Directors

- Strength of the programme structure and training element (in particular, but not limited to the content of year 1), including multidisciplinary research and training in contemporary techniques
- Strength of institutional commitment
- Suitability and diversity of supervisors
- Record of current postgraduate research training
- Quality of student supervision and support processes
- Research culture and commitment to equity, diversity and inclusion

Decisions will be communicated to applicants as per the below timeline. BHF will not enter into discussion with applicants about individual applications or their outcomes.

Submitting a preliminary expression of interest

An expression of interest must be submitted via our [Grants Management System](#) between the 13th of January and the 17th of March 2025. As part of the submission, you will be required to answer the following questions:

Q1. State the Programme Director (Lead Applicant) and Place of Research (Primary Academic Institution).

Q2. Applications must be submitted from a consortium of partners. Describe the members of the consortium (including academic, industrial and other partners as appropriate), and provide a brief description of the experience and capabilities that each partner brings to the consortium.

Q3. Programme Overview - in no more than 500 words, describe the theme and structure proposed for the programme. Multidisciplinary research programmes are strongly encouraged. Including disciplines that go beyond bench based biomedical sciences to integrate fields such as engineering, physics, mathematics, behavioural science, genomics, digitisation, nanotechnology, AI and data science among others is also encouraged. Themes may be chosen from the full spectrum of cardiovascular science and medicine including discovery, translational, prevention and implementation research, but they should be well defined and characterised.

Q4. How many students are intended to be admitted to the programme (minimum and maximum)? Also, provide the current number of 4-year PhD students hosted by each partner if applicable.

Q5: Will the Lead Institution or any partner involved contribute towards funding this programme? If so, explain in detail the number of additional students that will be supported and which partner(s) will be providing the support and in what capacity. In kind contributions from partners can add significant value to applications and are welcome. However, when calculating the contribution of matched funding in an application, only direct contributions to studentships will be considered.

Expressions of Interest must be submitted no later than Monday 17th March 2025.

Approval of eligible expression of interests will be communicated to applicants prior to the opening of the full application window (28th April 2025).

The window to submit a full application will open on Monday 28th April and close on Monday 7th July 2025.

Making an application

To complete an application, you will need to log in to our [Grants Management System](#). You will need to answer the following questions as part of the application process:

Q1. Multidisciplinary theme Overview – in no more than **1000 words**, address the following points:

- Describe the multidisciplinary theme that will be the focus of the programme and how/why the theme will benefit from existing areas of strength within the institutions applying.
- Describe the overall aims and objectives of the programme, including a rationale for the chosen theme. Explain the nature of the consortium and how partners will work together to deliver the proposed theme. Specify if any external commercial partners will be involved.
- Explain how the collaboration between the partners in the consortium will be structured and how the students will be subdivided between the partners.
- Explain how partners will collaborate to organise and deliver a competitive training program for the students. Describe how the multidisciplinary theme will be integrated into the training program and how the consortium will enhance the students' learning opportunities.
- Explain if any of the institutions/commercial partners involved in the application have access to any other PhD programme (e.g. Wellcome, EPSRC) and describe how this might enrich the experience/training opportunities of the students recruited.

Q2. Programme overview – in no more than **1000 words**, address the following points:

- What are the anticipated benefits of the programme to the universities, BHF and the national cardiovascular research enterprise?
- What structure is proposed for the programme (in particular, the content of year 1)?
- How will students be matched to their 3-year PhD projects and what input will they have in developing them? How will overlapping interest in projects be managed, should it arise?
- How will the programme provide excellent and unique research training above and beyond that which could be achieved through individually funded PhDs? Describe how the training element of the programme (in particular, but not limited to the content of year 1) will be designed to guarantee that the students will be able to benefit from the multidisciplinary theme proposed and explain which contemporary scientific techniques they would have access to.

Q3. Students – in no more than **1000 words**, address the following points:

- How will students be recruited to the programme? Describe how your plans will ensure diverse representation in line with [BHF's Igniting Change](#) strategy.
- How will progression of students be formally monitored?
- How will the programme deliver training in general research and transferrable skills to prepare students for their future careers, both inside and out of the traditional academic research environment? Has the Lead Institution considered any other training that could be provided to students to improve their professional development?
- What mentoring arrangements will be in place for individual students? What other independent pastoral care and support will be provided?
- How will student transitions at the end of their PhDs be managed?
- What outcome measures (e.g. recruitment, completion, next destinations) will be collected?

Q4. Research culture – the [Royal Society](#) defines research culture as encompassing the behaviours, values, expectations, attitudes and norms of research communities. These influence researchers' career paths and determine the way that research is conducted and communicated. Research culture includes issues such as research integrity, career paths, recognition and reward, diversity and support for collaboration. In no more than **500 words**, address the following points:

- How will a positive research culture be promoted? Outline any initiatives in place or planned.
- Describe the university's commitment to fostering a diverse and inclusive research environment. Please refer to Igniting Change, [BHF's EDI strategy](#).
- How will students be encouraged to interact and collaborate with each other as a cohort?
- How will supervisors be supported to maintain a healthy research culture?
- How will you ensure that students and supervisors adhere to BHF's policies on [bullying, harassment and research misconduct](#)?

Q5. Supervisory structure – in no more than **500 words**, address the following points:

- How will new supervisors be engaged and recruited to the programme during its lifetime?
- How will early career faculty members be engaged in and benefit from the programme? (noting that BHF encourages a diverse supervisory pool but that primary supervisors are required to have previous experience in supervising to completion PhD students).
- Explain how supervisors will be proportionally recruited from each partner and how this will strengthen the programme.
- How will you monitor and support supervisors throughout the lifetime of the programme?
- How will you ensure equitable allocation of students to supervisors participating in the programme?

Q6. Potential supervisors – provide a list of supervisors for the proposed programme and attach a combined single PDF providing the following information for each supervisor, **limited to one side of A4 per supervisor**:

- A one-line description of their research field and six most relevant research outputs.

- A concise summary of their current research group size and funding (which is expected to reflect the career stage of the proposed supervisor).
- The names of their current and recent PhD students as principal supervisor, with thesis title, time to completion or reasons for non-completion. Please restrict recent students to those whose studentships ended in the past 5 years. BHF 4-year PhD students should be clearly identified.
- A summary of the career progression of students finishing their PhDs in the past 5 years.

Please note that you will be asked to submit for approval an up-to-date list of supervisors, reflecting any changes, on an annual basis.

Q7. Intellectual property rights and publication

We expect the Lead Institution to agree intellectual property arrangements (i.e. collaboration agreements) with industrial collaborators (taking care to retain IP rights themselves). The collaboration agreement(s) will need to be submitted in the main application form and approved by BHF in line with the [BHF Standard Conditions of Grant](#).

PhD students must be able to publish their project outcomes without restriction in accordance with good research practice. The Lead Institution will need to agree and confirm that the data generated from the proposed research can be placed in the public domain within a reasonable timeframe prior to commencing the studentship.

Q8. University Statement – attach a signed letter from the appropriate senior faculty member of each partner in the consortium and external commercial partner if applicable, describing the institutional commitment to the programme and confirming that, if awarded, the universities/commercial partners would support its management and administration. The letter should address the following points (**in no more than two sides of A4**):

- Detail any financial support (e.g. funding for matched students, up to 6) that would be provided. (Please note that in kind contributions from partners can add significant value to applications and are welcome. However, when calculating the contribution of matched funding in an application, only direct contributions to studentships will be considered.)
- Describe how the 4-year PhD programme fits strategically within the university's overall plan for graduate training and the relationship that it has, or would have, with any other existing or proposed PhD programmes at the university.
- Explain how the consortium partners will share with BHF the progress of the programme and communicate any challenges or issues encountered.
- Confirm that the Programme Director/Co-Directors will be given dedicated workload time by the relevant organisations to enable their management of the programme.
- State that, despite the fact that only one Lead Institution will administer the award, the designated Co-Directors will share equal responsibilities in the programme. This aspect should be clearly articulated. Each participating HEI should include a letter from the appropriate senior faculty member confirming that their nominated Director/Co-Director will be responsible for the running of the programme within their Institution and that collectively the Director and Co-Directors share responsibility for delivery of the entire programme.

You will also have the opportunity to attach extra letters of support from collaborators and an additional appendix (maximum of 2 sides of A4) with any figures or illustrations you may wish to provide that are referred to in the text for **Q1 – Q6**.

Please note that the appropriate senior faculty member and the institutional Administrative Authority will also be required to approve the application on the GMS before it will be submitted to BHF.

Key Dates

Expression of interest submitted through BHF's Grants Management System	From 13 January 2025 till 17 March 2025
Applications opened through BHF's Grants Management System	28 April 2025
Closing date for applications	7 July 2025
Outcome decision communicated	Mid-February 2026
First intake of students	October 2026

Approval of eligible expression of interests will be communicated to applicants prior to the opening of the full application window.

Successful awards will be subject to [BHF's Standard Conditions of Grant](#).

Frequently asked questions:

1) Is it compulsory for multiple universities to apply together in a consortium to be eligible to apply to the programme?

Yes, it is compulsory for applicants to establish partnerships and a consortium model to be able to apply. Consortia may include up to four partners (although fewer partners are also welcome), adopting a principal applicant model with up to three co-applicants. Eligible applicants and co-applicants may include UK universities, industry partners, biotech, pharma and other commercial entities with a health focus, assembled in the best combination to deliver the proposed theme. **In exceptional circumstances, that will need to be fully articulated by the applicant, BHF might be prepared to consider an application from a single institution.**

A lead institution may only submit one application to the new scheme. However, distinct groups from within a single institution may contribute to multiple consortia if individuals (including supervisors) named in one application are not included in any other consortium.

2) Can one institution establish a cross-departmental partnerships and qualify to apply?

No, eligible partnerships should include multiple UK universities, or a mix of universities and industry partners, biotech, pharma and other commercial entities with a health focus, assembled in the best combination to deliver the proposed theme. **In exceptional circumstances, that will need to be fully articulated by the applicant, BHF might be prepared to consider an application from a single institution. A lead institution may only submit one application to the new scheme. However, distinct groups from within a single institution may contribute to multiple consortia.**

3) One of the aims of the programme is to bring a diverse range of scientific expertise together to address major challenges in cardiovascular research. Engineering, physics, mathematics, behavioural science, genomics and data science are mentioned in the introductory section of this document. Are these the only disciplines that can be selected?

No, the disciplines mentioned in this document are given as examples of how the programmes may wish to integrate diverse disciplines into CVD research. Applicants should select fields that are most highly relevant to their selected theme.

4) Is submitting an expression of interest compulsory?

Yes, applicants will need to submit an expression of interest via our [Grants Management System](#) in order to submit a full application.

5) Will match funded students also be considered BHF students, even if funded from other sources?

Yes, the intention is that all students funded by this programme will be considered BHF PhD students, and BHF funding will be structured accordingly to enable this (see below for detail).

6) How will BHF funding be structured to support all students on the programme? The guidance specifies that where match funded studentships are provided, all students will be partially BHF funded, what does this mean?

To build a cohesive community of PhD researchers, it is important to BHF that all students funded as part of these programmes are considered BHF 4-year PhD students. To avoid disparities in individual studentships that may arise from different sources of funding, where match funded studentships are proposed, BHF funding will be split accordingly so that all students are partially supported by BHF funds, up to 50%. For example, for a programme requesting funding for 6 students that is also contributing another 6 match funded studentships, BHF funding will be distributed such that 50% of all 12 studentships will be supported by BHF funds. The remaining 50% will be supported by match funding. The match funding will therefore include 50% of salary, 50% of consumables etc.

7) Are other kinds of in-kind contributions acceptable without provision of match-funded studentships? in kind contributions from partners can add significant value to applications and are welcome. However, when calculating the contribution of matched funding in an application, only direct contributions to studentships will be considered.

8) If a programme wishes to request funding from BHF for 6 students, will match funding be expected for a further 6 students or could we propose a fewer number of match funded studentships (e.g. 6+4)?

BHF wishes to maximise the amount of leveraged support that can be gained. We therefore strongly encourage applicants to consider 1:1 matched funding, or to justify the level of support proposed if fewer extra students are to be supported. The degree of match funding offered will be considered as part of the application assessment criteria.

Programmes can propose fewer match funded studentships where justified. However, strong justification and explanation of the rationale for the number of BHF funded studentships requested will need to be clearly articulated within the application form. Programme Directors should decide

how many studentships are requested from BHF (between 3 and 6 per year) and the committee will take into account the degree of matched funding provided when considering an award.

9) What kind of training should be provided to students in the first year of the PhD? Are there any examples?

It is up to the consortia to design and structure the training provision in the first year, but applicants must demonstrate in the application how the programme will deliver innovative gold standard training for students in line with the proposed multidisciplinary theme. Training could involve lectures introducing research themes, short term placements in research labs/industry partners, specific skills training such as statistics and data science courses, lab-based research methods skills training, research culture and EDI training, IP and commercialisation training. These are intended as examples rather than an exhaustive list.

10) If we have an external commercial partner, will we need to have an agreement with them to manage Intellectual Property in line with BHF T&Cs?

Yes, we expect the Lead Institution (to whom this grant is issued) to agree intellectual property arrangements (i.e. collaboration agreement(s)) with other institutions and/or industrial collaborators (taking care to retain IP rights themselves), before the relevant activity or project begins. The terms of the collaboration agreement(s) must not conflict with BHF's Grant [terms and conditions](#).

The collaboration agreement(s) will need to be submitted in the main application form and approved by BHF.

11) In a consortium application, who will be responsible for managing BHF funding if successful? Will this be split amongst multiple institutions?

One Lead Institution will act as the lead administering organisation, and will be responsible for final submission of the application via [BHF's Grants Management System](#). If awarded, the Lead Institution will ultimately be accountable to BHF for all grant activities and will be expected to manage and liaise accordingly with the partner organisations. The lead will be responsible for all financial management and reporting to BHF. BHF funds will only be paid to the Lead Institution, who will then be responsible for administering funds to other partners in the consortium. The lead applicant on the submission (i.e. the Programme Director) should be a permanent employee of the Lead Institution, and will be the primary contact with BHF for all aspects of the award.

12) Do you expect a programme management team to be proposed and will co-applicants from partner organisations be required as part of the application?

Yes, you should clearly articulate plans for how the programmes will be managed across partner organisations. Our expectation is that there will be at least one lead representative (Co-Director) from each partner in a consortium and that these leads will be included as co-applicants on the application.

13) Research reports and who is responsible?

Supervisors are responsible for submitting research final reports on BHF's Grants Management System. In addition, it is a condition of the award to complete the annual BHF Researchfish submission for the lifetime of the award and 5 years thereafter.

Contacts

For questions regarding the application process or other elements of the call, please contact:

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