

Project grant application guidelines

Thank you for your interest in our project grant funding scheme.

If you have any queries, please email us at grants_admin@breastcancernow.org

Contents

	Remit	2
2.	Eligibility	2
3.	Application process	3
	Section 1: Details summary	3
	Section 2: Lead Applicant	. 5
	Section 3: Co-Applicants	. 5
	Section 4: Collaborators	. 6
	Section 5: Recommended/Excluded reviewers	7
	Section 6: Head of Department	7
	Section 7: Finance Officer	7
	Section 8: Costs	. 8
	Section 9: Research proposal	12
	Section 10: Additional Details	13
	Section 11: Lay Overview	15
	Section 12: Data Sharing Plan	18
	Section 13: Declaration	18
	Section 14: Attachments	19
	Section 15: Validation	19
١.	Submitting your Application	19

1. Remit

Our Project grants are available to established researchers working in an institution in the UK or Ireland. Awards can be from one to three years and can cover staff salary, research expenses and essential equipment. Co-Applicants and Collaborators may be based elsewhere. Project grants are available up to the value of £230,000 – costs requested must not exceed this cap.

Collaborative applications from within UK and Ireland are welcome, although the contracted grant (and associated funding arrangements) will be with the Lead Applicant's institution. Named academic/clinical Collaborators are permitted from outside the UK or Ireland. Applicants must have a strong track record in their field.

The aim of our project grant funding scheme is to support scientific excellence and innovative research into breast cancer. Our Grants Committee (GC) will assess your application based on:

- The research plan.
- Clear relevance to breast cancer research.
- The perceived outcomes that will lead to a significant advance in understanding of breast cancer and its impact.

It is the expectation that the awards will enrich scientific understanding and expertise in breast cancer research. Applicants should have conducted independent research in the field of breast cancer or be an experienced researcher in a related field, and wish to build on their history and reputation in the breast cancer area, deepening their knowledge and experience.

We are committed to supporting young investigators in breast cancer research and encourage applications from talented new postdoctoral researchers.

2. Eligibility

Please note the following:

- The applicant must be based within the UK or Ireland in a recognised academic institution.
- Lead Applicants must be a permanent salaried member of staff at a recognised academic institution.
- However, Lead Applicants with a fixed-term position may apply as long as the grant falls fully within the period covered by their tenure, but cannot request costs for their salary.
- Applicants should have a strong academic track record in the field of breast cancer.
- Principal Investigators may not apply for more than one grant as lead PI but may be apply as a Co-Applicant or Collaborator on more than one application.

The following are not eligible and will not be accepted:

- Research into conditions other than breast cancer.
- Applications for equipment only. We will accept requests for equipment as part of a larger grant, but you must include a clear justification for the equipment in your research proposal.
- Applications which request funding for consumables or running costs only.
- Applications from a commercial entity.
- Applications from an individual who is NOT employed by an eligible institution i.e. a university or research institute.
- Requests to cover salary costs of tenured Co-Applicants.
- Project applications that request PhD studentship stipend costs or MD training costs (Breast Cancer Now offers a PhD grant funding scheme).
- Applications for methods or service development.

We will consider applications for research that will take place within the NHS. Should the research become part of a clinical trial, we will fund the research but will **not** act as a sponsor. Please also refer to **– NHS Costs in Section 8.**

If you are unsure about the eligibility and remit of your project, please contact the Research Funding team (grants_admin@breastcancernow.org) before you submit your application. Once the deadline has passed there will be no opportunity to consider individual circumstances and applications not meeting the requirements will be rejected without peer review.

3. Application process

Applications should be made using our online <u>Grant Tracker system</u>. You must complete **all sections of the application form** (notes below) and **yourself**, **any Co-Applicants**, the **Head of Department** and the **University/Institution Research Grants office** (or finance office if not applicable) must complete the declarations online in order to submit your application.

Co-applicants are required to complete two steps. They must first 'confirm' their involvement in the project once you've added them to the application form. They will also need to provide a full CV online.

Each Collaborator must also 'confirm' their involvement in the project online and provide a letter detailing their role in the project.

The following notes provide a step-by-step guide to help you complete your application form. Please use these guidance notes to ensure that you complete each section as required. This will help to avoid any delays in submitting your application.

Section 1: Details summary

Title of the Project

The title of the project should be succinct and should accurately reflect the content of the research.

Please note that it is mandatory to complete this field to be allowed to navigate away from this section of the application form.

Abstract of research

This should be a maximum of **300** words and should provide a succinct summary of the proposal. The abstract will be used by potential reviewers to judge whether or not they should review the application.

If your application is successful your abstract may be published on our website and other web based directories of research (e.g. National Cancer Research Institution, Association of Medical Research Charities). Therefore, commercially sensitive or confidential information should not be included in your abstract. If you believe your abstract should not be published as it is highly confidential please contact the Research Funding Team at grants_admin@breastcancernow.org. We will allow you to provide us with a revised abstract that is publishable on our communications.

The abstract should be laid out as follows (headings are included in wordcount):

- Background
- Aims
- Techniques and methodology
- Impact on breast cancer research

Keywords

Please provide five or six key words that best describe this project. This will be used by the Research Funding team to help them select the most relevant peer reviewers for your project.

Supporting our strategy (200 words)

Breast Cancer Now's new <u>strategy</u> will take us towards our vision where by 2050, we want everyone who develops breast cancer to live – and live well. All proposals must align with our strategy and must clearly demonstrate how the research will lead to improved health and wellbeing of women affected by, or at high risk of, breast cancer. Using the text box provided, please detail how your proposal meets our strategic aims. This will form a critical part of the assessment process.

Proposed duration

This should be entered in months for a maximum three years (36 months).

Proposed start date

Projects must start within **nine months of the award letter being received**. Please include the most **accurate start date** when completing your application form. This is important as it is required for Breast Cancer Now's finance planning. Applicants will be informed of the outcome of their applications by August 2019 - Please include the most accurate start date when completing your application form.

Other Support

Is this research supported by any other outside bodies? If yes, please indicate the name of the funding source, amount and duration of support. Please note that we will not consider part-funding of Projects funded elsewhere.

Submitted Elsewhere

Is this application being submitted elsewhere? If yes give details of where the application has been submitted, and when a decision is expected.

Type of application

- New application
- Follow on from a successful Breast Cancer Now grant
- Uninvited resubmission

Applications for 'follow on' funding

This type of application arises when a grant holder applies for a new grant where the work is a direct follow-on from a successful current grant that is due to end. These will fall into the following categories:

- Where a successful pilot grant may lead to a proposal for a project grant.
- Where a successful pilot grant may lead to a proposal for a PhD studentship.
- Where a successful project grant may lead to a proposal for a project grant.
- Where a successful project grant may lead to a proposal for a PhD studentship.

Please select the type of grant that this follows on from in the application form.

Applications for follow-on funding will be reviewed in competition with all other grant applications submitted in that funding round. This type of application will be subject to the usual peer review process.

Uninvited resubmissions

If the application was rejected without an invitation to re-submit, we will not consider a resubmission of the same application for the same award. However, applications which are significantly different in terms of objectives and scope and that go beyond addressing the reviewers' concerns of the previous application will be considered, in competition with other applications. You must declare it as a revised application and must submit a covering letter along with the application, which should detail the modifications which merit its reconsideration. Please select 'Uninvited Resubmission' in the 'Details' section of the online application form and upload your covering letter using the function provided. The final decision on whether the application will continue in the process is at the discretion of the Chair and Deputy Chair of the GC. We advise all applicants considering an uninvited resubmission to contact the office in advance of submission to check your eligibility. (grants admin@breastcancernow.org).

If the application was rejected without an invitation to re-submit and you plan to submit the research proposal for a different award (for example, a rejected fellowship resubmitted as a project grant), you must include a covering letter acknowledging the rejected grant, detailing the modifications which merit its re-consideration and giving the reasons for applying for a different award. This type of application will be subject to the usual peer review process.

Previously held grants from Breast Cancer Now

If you have previously held a grant from Breast Cancer Now or either of its predecessor organisations (Breast Cancer Campaign and/or Breakthrough Breast Cancer), please provide further information in this section.

Section 2: Lead Applicant

The Lead Applicant is the Fellow who will lead the research and be responsible for delivering the project.

Applicant's details and CV

This section displays the Lead Applicant's details and CV (contact address, qualifications, post held, current grant held) as entered by the Lead Applicant during the registration. These details can be updated at any time by visiting the "Manage My Details" section on your portal account.

Other Breast Cancer Now applications under consideration

Where applicable, list grants by reference number (if known) and title, stating your role on the grant (e.g. Lead Applicant, Co-Applicant, etc.).

Total number of publications

Enter your total number of publications to date.

Number of first author publications

Enter the number of first author publications to date.

Number of last author publications

Enter the number of last author publications to date.

Most relevant publications to date

This will show your ten most important publications as entered in the "Manage My Details" section of your portal account. To edit, go to the "Manage My Details".

Section 3: Co-Applicants

Co-Applicants will have intellectual input into, and part ownership of, the research if the application is successful; he/she is expected to be actively involved in the project.

- To add Co-Applicant(s) press "Add a Co-Applicant", enter the surname, and press "Find contact". If they are not in the system, you can add a new contact. If the contact appears twice, please contact the office at grants_admin@breastcancernow.org as this means they have two accounts. Selecting the wrong account may result in the invite not being seen. We can determine which account is the correct one to send it to, in order to get sign off in good time.
- If the Co-Applicants name is in our database (correct name, surname, institution and department), select it by clicking on the correct name and follow the instructions.
- If the Co-Applicants name is not in our database, click on "Contact not found? Click to add" and follow the instructions.
- Important note: Co-Applicants based in the NHS may experience difficulties receiving these invites, possibly due to the introduction of stricter GDPR rules in the NHS. As such, we advise that you follow up with Co-Applicants that you've added to the application to ensure they've received the email with instructions on how to enter their details. If an email has not been received, please contact the office and we will help to rectify the issue.

Once you have added the contact, a message will then appear asking you to confirm your selection. 'Saving' will generate an email to each Collaborator added to the grant.

Each Co-Applicant must do the following before the submission deadline:

- Register with Online Grant application system and update their CV by visiting the "Manage My Details" section.
- "Confirm" to agree to participate as Co-Applicant for this application, to be allowed to view the application.
- "Approve" the content of the application before the application can be submitted.

Co-Applicants can view, but not edit, the application.

Section 4: Collaborators

Collaborators do not have access to grant funds. They will be expected to contribute to the overall intellectual direction of the research project or programme of research and bring their own resources to the collaboration but will not be involved in the day-to-day execution of the project.

- To add Collaborator(s), press "Add a Collaborator", enter the surname, and press "Find contact". If they are not in the system, you can add a new contact. If the contact appears twice, please contact the office at grants_admin@breastcancernow.org as this means they have two accounts. Selecting the wrong account may result in the invite not being seen. We can determine which account is the correct one to send it to in order to get sign off in good time.
- If the Collaborators name is in our database (correct name, surname, institution and department), select it by clicking on the correct name and follow the instructions.
- If the Collaborators name is not in our database, click on "Contact not found? Click to add" and follow the instructions.
- Important note: Collaborators based in the NHS may experience difficulties receiving these invites, possibly due to the introduction of stricter GDPR rules in the NHS. As such, we advise that you follow up with collaborators that you've added to the application to ensure they've received the email with instructions on how to enter their details. If an email has not been received, please contact the office and we will help to rectify the issue.

Once you have added the contact, a message will then appear asking you to confirm your selection. 'Saving' will generate an email to each Collaborator added to the grant.

Each Collaborator must do the following before the submission deadline:

• "Confirm" they are a Collaborator for this project to be allowed to view the application.

- "Approve" the content of the application before the application can be submitted.
- The lead applicant will fill in the reasons for Collaboration (200 words max) and obtain a letter of collaboration (1-page max) from each Collaborator to attach.

Collaborators are able to view, but not edit, the application.

Section 5: Recommended/Excluded reviewers

Please note: this section will not appear in the final pdf version of your application form or any document sent to reviewers. The Research Funding Team may use this information to assist with the peer review process of your application.

Recommended reviewers

Up to four reviewers may be recommended here. Do not include individuals who may present a conflict of interest with your application (e.g. same institution, close/recent Collaborator, co-authorship in the last five years). To add recommended reviewers, click on "Add a Recommended Reviewer..." and follow the instructions.

Excluded reviewers

Up to four excluded reviewers may be listed. To add inappropriate reviewers, click on "Add an Excluded Reviewer" and follow the instructions. Please provide a short explanation for excluded reviewers.

Please note: while we will take your suggestions/excluded reviewers into consideration, any decisions on who is approached will be at the discretion of the office.

Section 6: Head of Department

Please note: if you are adding a Head of Department as a Co-Applicant or Collaborator, please add the Dean of your school or faculty as a Head of Department instead and ask them to approve the application.

Before submission, the Head of Department must confirm the participation of the host institution. The Head of Department will receive an automated email requesting confirmation of participation and approval of the application.

- To add your Head of Department, click on "Add Head of Department", enter surname, and press "Find contact".
- If the Head of Department is in our database (correct name, surname, institution and department), select it by clicking on the correct name and follow the instructions.
- If the Head of Department is not in our database, click on "Contact not found? Click to add" and follow the instructions.

Before the submission deadline, the Head of Department must:

- "Confirm" participation as Head of Department to be allowed to view the application
- "Approve" the content of the application before the application can be submitted

The Head of Department is able to view, but not edit, the application.

Section 7: Finance Officer

Before submission, the Finance Office must confirm their participation.

- To add a Finance Officer, click "Add Finance Officer", enter as surname, and press "Find contact".
- If the Finance Officer is in our database (correct name, surname, institution and department), select it by clicking on the correct name and follow the instructions.
- If the Finance Officer is not in our database, click on "Contact not found? Click to add" and follow the instructions.

The Finance officer added to the grant will receive an email asking to confirm their participation.

- The Finance Officer will act as the **FINAL SIGNATORY** of the application.
- Once the Lead Applicant has selected "submit", the Finance Officer will receive a request for FINAL APPROVAL.
- Due to high volumes of traffic on our system on deadline days, we
 occasionally experience a time lag in the system. Please allow your finance
 office at least two days to approve the application AFTER you have submitted
 the application.

Before the submission deadline, the Finance Officer must:

- "Confirm" participation as the Finance Officer for this application to be allowed to view and edit the application. This step is required to validate the application form and submit the application for the final approval for from the Finance Officer.
- "Approve" the application. This step is the final approval required for the application to be fully submitted. The Finance Officer will receive a request for a final approval by email once the applicant has pressed "submit".

The Finance Officer is able to view and edit the application.

Section 8: Costs

Applications for funding should be based on estimated expenditure and all figures should be entered in **GBP** (£ Sterling). Invoices will be paid quarterly in arrears in sterling and converted to the currency of request by the bank at their exchange rate on the day the transfer or draft is actioned. We are not responsible for losses incurred through fluctuations in exchange rates.

Project grants are awarded for up to three years. Costs covered are salary, consumables and small pieces of equipment. Applications for consumables or equipment only will not be accepted.

Overheads

Project grants will be funded on the understanding that the host institution meets the overhead and infrastructure costs. Infrastructure costs include items such as lighting, heating, telephones, use of library facilities, general laboratory equipment, general office expenses, core laboratory services (wash up and waste disposal), maintenance and running costs of laboratory equipment, estates costs.

We will only fund directly incurred costs and not the full economic costs of research (FECs) or a proportion of these.

The following list of allowed and disallowed costs indicates what is likely to be permissible on a Project Grant application but should not be considered exhaustive. The Research Funding team may query and/or remove any costs that are deemed to be outside of our funding remit. For any queries, please email us at grants_admin@breastcancernow.org.

Allowed costs:

- Salary for a research support post.
- Laboratory materials and consumables directly attributable to the project.
- Microarray or sequencing costs.
- Animal costs (purchase, housing, husbandry, animal licence costs etc.).
- Home office licenses.
- Small pieces of equipment (including PC) if essential for the project.
- Computer software license (if required specifically for the project, for example image analysis).

- Access charges for shared equipment (for example hourly charge to use microscopy or mass spectrometry equipment).
- Pathology service costs.
- Statistician advice/consultancy costs
- Costs associated with authentication/validation of cell lines.
- Travel related to the research proposal (for example participant expenses to travel to focus group meetings/interviews/assessments).

Disallowed costs:

- General office expenses (photocopying, postage etc.). An exception may be made for secretarial assistance and printing costs for epidemiological/questionnaire based studies
- A proportion of central support staff salaries (e.g. secretarial support).
- A proportion of general technician salaries (for e.g. wash up, waste disposal etc.).
- Equipment maintenance and running costs.
- Staff recruitment costs.
- Publication or printing costs.
- Purchase of books.
- Training courses (including Home Office animal license courses).
- Open access charges.

Please **do not** include requests for open access publication charges in your application. For more information on Breast Cancer Now's position on open access, please see our <u>open access policy</u>.

Personnel costs

We will cover the salary of the person who will directly work on the research proposed. At least one personnel cost must be added for project grant. A proportion of PI or Col salary for supervision/consultancy time is **not** allowed.

Please also upload a one page document showing the salary scales for your institution in PDF format.

Adding personnel costs

To add personnel costs, click on "Add Personnel Costs" and complete the table:

- **Staff member details**: Enter the details of each staff member, including a brief description of their role and job title.
- Qualification: Please note here the highest qualification achieved by the researcher.
- Role: Please enter the role that the named researcher will have in the project.
- Grade and Scale point: The grade and scale point at which appointment is expected should be noted here. A copy of the grade/scale system used must be uploaded with the application.
- Increment date Please estimate the date that university has your annual pay increases
- Annual inflation rate (%) Applications should include any salary increases expected to take place during the period of the grant, including annual increments based on the host institution's salary scale and potential inflationary increases.
- Justification: Please provide justification of the personnel costs applied for.
- **Basic salary**: Enter staff costs at the full-time rate per annum (100% FTE). Salaries should be included from the proposed start date of the project not the date of the application. Contact your finance department for advice on potential salary increases.
- **Employer contributions**: These costs are superannuation/graduated pension and National Insurance contributions and should be included in the salary for all staff.

Employer's national insurance contributions and pension contributions cannot be higher than the rate used by the USS or NHS scheme. The oncosts must not be used to offset any prior underfunding of the pension scheme.

- **FTE**: Enter the whole time equivalent that the researcher will spend on the project. You must add this as a decimal between 0.1-1 (e.g. if 100%, enter 1. If 50%, enter 0.5).
- The total salary for each year will be automatically calculated from the Basic salary, employer contributions and the FTE.

Materials and consumables

A detailed breakdown and justification for all minor equipment and materials and consumables is requested should be provided here. Microarray/sequencing and animal costs should be listed separately. Applications for consumables only will not be accepted.

Microarray or sequencing cost

You can add a microarray and/or sequencing costs as required here. Please justify the costs requested.

Minor equipment

We assume a basic level of equipment provision by the host institution. The items requested here must be required specifically for the research proposed. New requests for equipment will not be considered once the project has started.

We will **not** fund a large piece of equipment, unless the project cannot proceed without it being in place. Full justification for the equipment requested is required and must be included in the research proposal. Maintenance costs should be included under "Other Expenses". Applications for equipment only will not be accepted.

Animal costs

In the following section, please detail the animal costs required for this research, including purchase, housing, husbandry, home office project licence costs and then any other animal costs. In the "Additional Details" section of the form, you will be asked to provide further information on the number of animals requires and types procedures to be used. Please also refer to our policy on the use of animals in scientific research.

Other expenses

Any other costs not listed above should be included here.

Conference travel costs

We will cover costs for travel to conferences where work funded by Breast Cancer Now is being presented. We will add a supplementary conference travel budget of £1900 to the grant application. If your application is successful, you will need to inform us prior to attending a conference in order to access this budget. Please click "add conference travel costs" and then click save, in order to validate the form and allow you to submit. These costs cannot be edited. We will pay costs only on receipt of an invoice and the abstract submitted to the conference.

Travel related to the research proposal (for example participant expenses to travel to focus group meetings/interviews/assessments or travel between collaborating centres) is permissible if fully justified. This must be added in the "Other Expenses" section. Please refer to our conference travel guidelines for more information.

NHS costs

We accept applications for research costs associated with NHS studies. Breast Cancer Now is a non-commercial partner of the National Institute for Health Research (NIHR) which

means the studies we fund may be eligible to access NIHR Clinical Research Network (CRN) support.

In partnership with your local R&D office, we encourage you to involve your local CRN team in discussions as early as possible when planning your study to fully benefit from the support the NIHR CRN offers as outlined in their Study Support Service. To find out more about how you can apply for this additional support to help deliver your study, please visit www.supportmystudy.nihr.ac.uk

If your study involves NHS sites in England, you will need to apply for Health Research Authority Approval. For guidance on submitting an application, please visit: www.hra.nhs.uk

The NIHR also provides the support and facilities the NHS needs for first-class research by funding a range of infrastructure facilities. You can find a list of these support networks here.

Breast Cancer Now will only fund costs which fall under the heading of 'Research costs'. The research award does not include NHS support and/or treatment costs, although our review committee will take NHS support and treatment costs into account when considering the value for money of the research.

We will <u>not</u> fund NHS 'support costs': These are the additional patient care costs associated with the research, which would end once the research and development activity in question has stopped, even if the patient care service involved continues to be provided. These might cover items such as extra patient tests, extra in-patient days and extra nursing attention. Researchers should contact their local NHS research and development department initially. If they are unable to help directly or if there is no local NHS research and development department, contact the local Comprehensive Local Research Network (CLRN) Senior Manager.

We will <u>not</u> fund NHS 'treatment costs': These are the patient care costs that would continue to be incurred if the patient care service in question continued to be provided after the research and development activity has stopped. In determining NHS treatment costs the applicant must assume that the patient care service being assessed will continue even though there may be no plans for it to do so. Where patient care is being provided, which differs from the normal, standard treatment for that condition (either an experimental treatment or a service in a different location from where it would normally be given), the difference between the total treatment costs and the costs of the 'usual standard care' (if any) constitutes excess treatment cost/saving, but is nonetheless part of the treatment cost, not an NHS support or research cost. These costs should be determined in conjunction with your NHS trust partner(s) and their commissioners.

If applying for NHS support costs or treatment costs, applicants should complete a SoECAT form, which is available to download from the NIHR's website **here**.

Once this form is complete, please convert the completed template to a PDF and upload it to the Cost section of your application form using the 'Please upload SoECAT form' function available. Please detail the file's description as 'NHS support and treatment costs'.

A 'Letter of Support' must also be included with the application from the lead NHS provider acknowledging the amount requested and confirming that these are the likely costs. Please upload the letter of support using the 'NHS Letter of support function'

For further information, you should refer to the Department of Health <u>guidelines</u> for attributing the costs of health and social care research (AcoRD) when completing the cost

section of your application form. AcoRD is a mechanism for the Department of Health to meet some of the costs of charity-funded research in the NHS, for charities that are members of Association of Medical Research Charities (AMRC). Please ensure your application is correctly costed and takes these costs into account. If you are unsure about how to cost your application so that it adheres to the AcoRD guidelines, you should contact the NIHR CRN Study Support Service. Please follow this link for a list of AcoRD costs.

<u>Useful contacts and information sources for clinical projects</u>

You may also find the following sources of information and advice useful when completing your application:

- UKCRC Registered Clinical Trial Units
- NCRI Cancer Clinical Trial Units Group
- NCRI Molecular Biomarkers Advisory Group
- Breast Cancer Now Tissue Bank
- NIHR Clinical Trials Toolkit
- UKCRC Tissue Directory and Coordination Centre
- MRC Guidelines on Human Tissue and Biological Samples for Use in Research
- NCRI Clinical Trial Pathology Advisory Group

For **clinical applicants based in the UK**, it is recommended that your study is reviewed by the National Cancer Research Institute Clinical Studies Group (CSG).

Section 9: Research proposal

The core text of your research proposal must address the points listed below (4000 words). Failure to do so will result in your application being removed from consideration.

1. Aims and purpose of proposed investigation

Outline the objectives of the research proposal, the significance of any results that may be obtained, and their relevance to breast cancer.

2. Background to the project

Briefly outline the background to this project, as well as the need for the current proposal.

3. Plan of investigation and methodology

Detail the experimental methods, techniques and analyses that will be used to test the proposed hypotheses.

4. Potential risks/challenges

Outline any potential problems or challenges you anticipate with your proposed investigation, as well as how you plan to address these.

5. Timescale

Please provide a table to indicate milestones and time-scales for each part of the plan.

Figures

You can add up to 4 pages of figures, including preliminary data and a Gantt chart/timeline to support your research proposal. Please upload in PDF format.

Integration with ongoing research (150 words)

Please describe how the proposal fits into the on-going work of the laboratory where the project is taking place.

Expected value (150 words)

Outline the expected value of this research to both the academic community and breast cancer patients. This should include expectations for both long and short-term objectives for the results of the project.

References

You can add an additional two-page document containing references for your proposal (including any relevant publication from your group) here. [Important note – If you have used 'Endnote' to format the references, please remove the formatting]. Please upload in PDF format.

Abstracts of unpublished papers

An additional one-page document containing abstracts of unpublished papers only may be uploaded here. Please upload in PDF format.

Note: If you wish to include confidential unpublished data in your application which you **do not** wish to be seen by external reviewers, this should be submitted by email to grants_admin@breastcancernow.org in a separate document to the application form. This information will be treated as confidential; it will be held in the office and will only be seen by two members of our Grants Committee (GC).

Section 10: Additional Details

Power calculations

Please provide an outline of your experimental design and power calculations where relevant. Where details of specific experiments are not known, you may provide and illustrative example. This should include:

- An overview of the experimental approach summarising; primary and secondary experimental outcomes, number of experimental and control groups, the number of experimental units in each experimental group, the total number of experimental units to be measured and the number of times each unit will be measured, number of independent replications of each experiment and how you plan to minimize experimental bias (e.g. randomisation and blinding) or an explanation of why this would not be appropriate.
- An explanation of how effect sizes have been calculated and justification of their biological relevance.
- The power calculations used to determine your sample size (or a principled explanation of an alternative basis for calculations, justifying why you haven't used statistical calculations). Explanations based solely in terms of 'usual practice' or previously published data will not be considered adequate.
- Details of breeding strategies that will be implemented (if applicable).
- A brief description of your planned statistical analyses in relation to the sample size, and list any statistical advice available.
- You may present this information in the text box provided or upload a table or diagram as appropriate.

Please note that the NC3R's website includes a number of experimental design resources including the Experimental Design Assistant (EDA), a free online tool to help optimise experimental design. The EDA can be used to create a visual map of your planned experiments (or a few of them) that may be useful in discussions with your team and statistical advisors.

A one-page document including details about power calculations only may be uploaded in PDF format here.

Note: If you wish to include confidential unpublished data in your application which you **do not** wish to be seen by external reviewers, this should be submitted by email to grants_admin@breastcancernow.org in a separate document to the application form. This

information will be treated as confidential; it will be held in the office and will only be seen by two members of our Grants Committee (GC).

Technology Transfer Office

Please provide the name of your host institution's Technology Transfer Office. For more information on Breast Cancer Now's position on Intellectual Property, please see our Terms and Conditions here.

Patentable results

Please outline if the results of this research are likely to have commercial potential. Please provide further details if there has previously been any patent filed or commercial interest expressed in the research related to this application.

Experiments involving animals

If the Project involves the use of animals, you **must**: detail whether any of the animal work will take place abroad; justify the number and species of animal to be used; detail whether the animals will be genetically modified (and will these animals express, or be bred to express, harmful mutations - if yes, our committee will look at whether there is input from a pathologist to validate the model); explain why an animal model is necessary and why this specific model was chosen. Please also describe how the project plan has been refined to adhere to the 3Rs by using the minimum number of animals possible and causing the least suffering (please refer to www.nc3rs.org.uk for further details).

Please provide detail on the following

- Will any of the animal experiments take place abroad? For any animal studies to be
 performed outside of the UK, we require a letter to be uploaded from the relevant CoInvestigator leading this work, to confirm that the research proposed will adhere to all
 relevant local regulatory systems, and that the welfare standards will be consistent
 with those of the UK.
- Justification for the use of the animals proposed as against any available alternative models
- Full details and justification for the numbers of animals to be used.
- Details and justification for the species to be used.
- A description of the procedures to be used and action proposed to refine the techniques and whether they are described as MILD/MODERATE/SEVERE.
- A brief justification on why alternatives cannot be used.
- An indication of whether you will be using genetically modified animals and, if so, whether they will be bred to express harmful mutations. If yes, our committee will look at whether there is input from a pathologist to validate the model.

Please upload a copy of the relevant pages of the animal licence including details of the licence holder and number (if available). Please upload in PDF format and refer to our policy on the use of animals in scientific research here.

Ethical approval

If this study requires Ethics Committee approval, please indicate here and upload the relevant Ethical Approval letter with the application. If ethical approval is pending, or to be sought once funding is confirmed please indicate here.

We require that patients are treated according to the <u>World Medical Association Declaration</u> of Helsinki and the Guidelines for Good Clinical Practice.

Stem cells

Please indicate whether the research involves the use of human stem cells and provide further justification if embryonic stem cells are to be used. As a member of the <u>Association of Medical Research Charities</u>, we support of the use of human embryonic stem cells when the research has the potential to make significant medical advances. Please see their <u>Statement supporting funding for stem cell research in Horizon 2020</u>.

Human Clinical material and the Breast Cancer Now Tissue Bank

Please state whether this research will involve the use of tissue samples, blood samples or derivatives (e.g. plasma, serum) and/or primary cells. If yes, please indicate whether you plan to obtain this material from the Breast Cancer Now Tissue Bank. If so, please give details. If not, please indicate why you will not use the Breast Cancer Now Tissue Bank. For information about what is available in the Breast Cancer Now Tissue Bank, please visit the website at www.breastcancertissuebank.org. The site also provides information on the Tissue Access Policy. If you intend to access samples from the Breast Cancer Now Tissue Bank, please check that the Bank has the samples you require before submitting the application.

If your grant application is successful, then you may apply to the Tissue Bank for the materials you require. This will not include a repeat of the peer review already undertaken on your grant application, but it will involve our Tissue Access Committee checking the material you require is suitable for your aims.

Please do not request funding to cover the costs of the materials; we will cover these costs for you upon application to the Tissue Bank.

If you require more information or wish to speak to us about what is available from the Tissue Bank, please see our website for relevant contact details http://www.breastcancertissuebank.org/get-touch

When working with human tissue, you should consider if you need expert input from a pathologist. If this is the case, a named pathologist is required as a Collaborator. The Tissue Bank may be able to provide pathology support on a collaborative basis; please indicate in your grant application if you plan to ask for this when you apply to the Tissue Bank for material.

Cell lines

State whether this research will involve the use of cell lines, and if so, please provide further information about the types of cells to be used. If you plan to obtain new cell lines please give details of where they will be sourced from and how they will be authenticated on receipt.

All researchers using cell culture must incorporate a specific cell line authentication protocol into their experimental framework, following the general principles of <u>Good Research</u> <u>Practice (MRC, 2000)</u> as well as best practice for cell culture procedures (<u>UKCCCR</u> Guidelines for the Use of Cell Lines in Cancer Research, 1999).

Details on what procedures will be undertaken to validate/authenticate the cell lines, to ensure they are free from cross contamination, microbial contamination and phenotypic drift must be given. Plans to validate cell lines at the start of the project and throughout the research must be given.

Section 11: Lay Overview

Non-disclosure issues

Please state here if there are any IP, confidentiality or patient recruitment issues that would be compromised as a result of external communication of your research to our stakeholders. You should consider details included in your proposal as well as in this lay summary.

Lay Summary

Breast Cancer Now as a charity relies on the generosity of its supporters and has a responsibility of reporting back to them, as well as to the general public on what research projects we are funding and how they are progressing. For this reason, the lay overview section of a research project in a grant application form and progress report forms is extremely important.

A good lay overview helps the wider public to understand what you are doing as a researcher, and helps us as a charity raise funds to ensure we continue funding research into causes, prevention and treatment of breast cancer.

We ask researchers to write these sections in plain English to be understandable to a non-scientific audience. When filling in a grant application form or progress report form, applicants or team leaders should not cut and paste sections from the main proposal to the lay overview section. It is worthwhile asking someone without a scientific background to read your lay section before you submit the application. Please refer to the tips below on writing a lay overview and see our website here for examples of lay summaries of the research we fund. To write this section, it might help you to think of it as an abstract for a non-scientific audience; do not use your scientific summary.

Tips for writing about your research in lay language

The lay overview should be able to demonstrate the relevance and importance of your research to people with or at risk of breast cancer, as well as its potential impact. It is also useful to include a timescale on how long until the results from your work could reach breast cancer patients or people at risk of developing the disease. The lay overview section needs to be understandable and relatable to a person without a scientific background, such as a Breast Cancer Now supporter or member of the general public.

A good lay overview should broadly cover these areas:

- Why are you doing the research? What is the motivation behind the research application? Why is this research needed?
- State clearly the aims and objectives of the research project for a lay audience. What do you hope to find?
- Describe clearly what you are going to do throughout the project to achieve your aims. Scientific detail isn't necessary, but the major steps in your research project should be mentioned. You should also mention the timescale for your project.
- Explain how achieving your project aims could benefit people with or at risk of breast cancer. You should clearly demonstrate how your research relates to breast cancer and to Breast Cancer Now's strategic aims.

A good lay overview should use:

- Simple and clear language
- Short sentences with a clear structure
- Active phrases rather than passive voice
- Language that is mindful of people affected by breast cancer

A good lay summary should avoid:

• Unnecessary jargon, abbreviations and technical terms wherever possible. If you have to use them, please provide a clear explanation.

• Using the scientific abstract or other parts of the application intended for scientific audience with a few word changes. Lay summaries are a separate section in a grant application or progress report and should be treated as such.

Example of a good lay summary

The spread of breast cancer to other organs, known as metastasis, is the leading cause of patient death. Just 15% of patients with metastatic disease will survive for five years after their diagnosis. Recently, the importance of the immune system in cancer treatments has been highlighted, but we don't yet fully understand these processes. The bacteria that live in our gut play an important role in educating our immune defences and if this community is harmed, it also affects the immune response. Many breast cancer patients will receive antibiotics during their treatment, but we don't know how this affects their disease. We have shown in mice that the use of antibiotics accelerates tumour growth through disruption of the proper immune response. But, it may also prevent the spread of cancer cells. After antibiotics, the cancer cells are less able to spread to one of the most common points of metastasis, the lung. Our data suggests this is because the cells are less able to adapt to their new location. The spread of cancer cells is reliant not just on the 'seed' (the cancer cell), but also the 'soil' (the lung). The soil is prepared by the tumour, convincing the immune cells to support the growth of cancer cells in the new location. However, it appears that disruption of the gut bacteria by antibiotics does not allow this to happen. In this project, we will assess how the use of antibiotics prevents breast cancer spreading to other parts of the body in laboratory models of the disease. We will also test how the use of probiotics affects this process. Additionally, we will determine what effects these treatments have on the immune system and how these in turn affect the spread of cancer cells. Hence this project will address gaps in our knowledge that may help us translate this new information to the clinic by improving antibiotic regimens for patients. This will ideally translate into recommendations for clinical best practice.

Other helpful resources:

- INVOLVE 'Make it Clear' campaign gives guidance on how to write a research summary in clear and concise plain English.
- Access to <u>Understanding</u> gives guidance for anyone writing about biomedical or health research for a non-specialist audience.
- Readability calculator is a computer based text analysis highlighting language features, such as long sentences and hard words and calculates a readability score. You need to enter your email address to use the tool for free.

Need for the project

Please outline why there is a need to support this particular avenue of research in lay terms. What problem is this research proposal trying to solve?

For example: "Radiotherapy is a very effective treatment for breast cancer but a small minority of patients develop unpleasant side effects. At the end of treatment some women develop marked redness and peeling of the skin, which usually rapidly heals. A few later develop unsightly red blood vessels or thickening beneath the skin, often associated with chronic pain. These late effects are life-long. At present it is impossible to identify which patients are susceptible to the side effects before they receive treatment."

Aim of the project

Please outline what the project aims to achieve in lay terms.

Patient benefit

Please indicate what the relevance of the outcome of the research is to patients with breast cancer or those who are at risk. Give the reader a reason to engage with what you do by

explaining how your work will help people affected by breast cancer, even if this is a long way off.

Section 12: Data Sharing Plan

We are interested in finding out how researchers are sharing their research data, in addition to publishing in peer review journals and presenting at conferences. Please complete this section with details of your data sharing plans.

This data sharing plan will not be reviewed as part of the funding decision, and will be used for data gathering and monitoring purposes only.

Completing the data sharing plan

In some disciplines, for example bioinformatics and proteomics it is common practice to make large data sets available in public access databases. If your project will generate large data sets please describe how these will be shared. Descriptions may include:

- Data quality and standards data should be released in a format that conforms to agreed community standards, especially where this allows interoperability with other relevant datasets.
- Methods for data sharing for example through deposition in existing public databases or on request, including access mechanisms where appropriate.
- Standards and metadata the standards and methodologies that will be adopted for data collection and management.
- Relationship to other data available in public repositories.
- Further intended and/or foreseeable research uses for the completed dataset(s).
- Proprietary data any restrictions on data sharing due to the need to protect proprietary or patentable data.
- Timeframes for public release of data.

We are keen to encourage data sharing in all scientific disciplines (in addition to those detailed above). Applications in other areas should describe here any mechanisms or databases currently used to share data, or indicate any issues and barriers that exist to hinder data sharing.

Our position on data sharing

As a member of the National Cancer Research Institution (NCRI), we endorse the NCRI data sharing policy and ask that researchers share the data generated from publicly funded research, in order to maximise value to the research community and ultimately for patient benefit. We have contributed to the costs of the NCRI Informatics Initiative, which supports the development of data standards and promotes a culture of data sharing. We encourage applicants to detail their data sharing plans in their application form.

Applicants who do not currently share their data will be encouraged to indicate what issues and barriers exist that hinder them from making their data available to the wider research community

Section 13: Declaration

You will be asked to agree to the following statement:

I understand that Breast Cancer Now will not edit any section of the application form once it is submitted. Failure to provide all required information may result in the application being rejected from consideration. I understand that submission of an application indicates full acceptance of the terms and conditions of award as detailed in the grant terms and conditions.

Please tick the box to confirm that you have read and agree to the above declaration.

Section 14: Attachments

This section simply lists all the documents that have been uploaded/attached to your application. Please note that upon submission, all attachments will be at the end of your application. As such, please ensure that each attachment is clearly labelled for reviewers.

Section 15: Validation

This section will list any incomplete sections and fields in **red** that require correction before you can validate your application form and submit it. If none of the application form sections are listed, this means your application form has passed all the validation checks and can be submitted for final approval to your finance office.

4. Submitting your Application

Please follow the next steps to assist you in completing the application process:

1. Press "Save & Close"

Once your application form has passed the validation stage (including approvals from Co-Applicant(s) and Head of Department and Collaborator(s)), click "Save and Close". You will be taken to the details page of your application. The submit application button on the right-hand side of the page should be available.

2. Click "Submit"

At this stage, an automated email will be sent to your Finance Office to "Approve" your application. This is only upon your **Finance Department final approval** that the application is fully submitted to the Grants Administration office. This must be completed before the deadline for submission.

3. Submission notification

All participants will receive a confirmation email that the application has been fully submitted to Breast Cancer Now, once the final approval from the Finance Office has been obtained.

If you have any queries regarding your application or have any difficulties submitting your application, please contact the Research Funding Team at grants admin@breastcancernow.org or phone us on 020 7749 4121.