

**Guidelines for preparing an
Application to the
Biomarkers and Imaging Discovery and
Development Committee**

Guidelines for Application

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GA1 INTRODUCTION

GA1.1 Cancer Research UK's vision is to conquer cancer through world-class research. Cancer Research UK will work alone and in partnership with others to achieve the following research objectives:

- i) **To carry out world-class research into the biology and causes of cancer**
Cancer is a highly complex disease that is still only partly understood. Only through a better understanding of the disease will the improved treatments, diagnostics and prevention strategies of the future be developed.
- ii) **To develop effective treatments and improve the quality of life for cancer patients**
Research will be carried out to accelerate cancer cure rates, aiming to translate our understanding of the disease into effective treatments. Research will also be directed at improving diagnosis of cancer, and at prolonging the life and improving the quality of life of those patients whose disease cannot be cured.
- iii) **To reduce the number of people getting cancer**
Research will be carried out into the influence of lifestyle, individual risk, environment and interventions such as vaccination on cancer, and into how people can change their behaviours to reduce their risk of the disease.

Cancer Research UK only considers research proposals that are cancer-related and that contain a definite research aspect.

GA1.2 The types of award available from Cancer Research UK are listed on our website (<http://science.cancerresearchuk.org/gapp/>). Please note that Cancer Research UK **does not** provide support for applications that fall into the following categories:

- i) *Capital grants for Buildings.* Cancer Research UK will not accept applications for building work, other than from the director of a designated Cancer Research UK Research Group, Department, Unit or Centre or from a Cancer Research UK-supported Research Institute.
- ii) *Travel.* Support for travel to scientific meetings is available only for Cancer Research UK grant holders or staff employed by Cancer Research UK.
- iii) *Undergraduate studies.* Although undergraduate courses are not supported, a small number of Vacation Studentships are available through the Core Skills and Training Bursaries Fund. These are only available to Cancer Research UK Programme, Fellowship or Institute funded group leaders. Direct applications from students are not accepted.
- iv) *MSc course fees.* Support is available for a limited number of MSc course bursaries in cancer relevant or transdisciplinary areas. This funding can only be obtained through the Core Skills and Training Bursaries Fund and there are restrictions on eligibility. Please see the Cancer Research UK website for further information.
- v) *Electives for medical students* are only available on an annual basis in response to a call. Up to 2 applications are accepted per UK medical school and applications will not be accepted directly from medical students.
- v) *Retrospective funding* of work already completed or for support while writing up work.

GA1.3 These Guidelines are designed to help you prepare a biomarker project grant and to explain the procedures for processing the application. Please ensure you complete your application in conjunction with these Guidelines and with our "Terms and Conditions and Administrative Guidelines for Research Grants and Awards" (hereafter Terms and Conditions), which set out the standard Terms and Conditions and Administration Information applicable to all research grants funded by Cancer Research UK. Please note that all applicants must also comply with Cancer Research UK's Funding Policies.

GA2 INFORMATION ABOUT FUNDING SCHEMES, ELIGIBILITY AND SCHEME ADMINISTRATORS**GA2.1 Biomarkers and Imaging Discovery and Development Committee (BIDD) Project Grant funding****GA2.1.2 Information about BIDD Project Grant funding scheme**

The Science Plan Review in Biomarkers recommended in 2008 that project grant funding for biomarker and imaging discovery, development and evaluation should be the responsibility of the Biomarkers and Imaging Discovery and Development Committee (BIDD). The BIDD Committee is replacing the Translational Research in Clinical Trials Committee (TRICC).

BIDD project grants provide support for a defined piece of work with objectives that can be achieved in the time specified. There are 4 categories for funding under this scheme: (1) category 1: Biomarker discovery projects using human samples, (2) category 2: Biomarker assay development projects, (3) category 3: Biomarker qualification projects, and (4) category 4: Imaging discovery and evaluation projects

BIDD is responsible for reviewing proposals as outline applications before deciding whether a full proposal should be invited. Detailed feedback is provided at this stage to assist in refining and improving the final (full) proposal and increase the chances of funding. Projects that are less than 9 months in length can be submitted straight as full applications.

BIDD grants are awarded for an average of 2 years. Applications for shorter or longer time periods will be considered if this is more appropriate to the particular project. Applications for extensions or renewed periods of funding are also considered by BIDD.

Potential applicants who are unsure of the suitability of their proposal for BIDD full and outline project grant funding should contact Dr Maria Lioumi in the Clinical and Translational Operations Funding directorate for assistance (maria.lioumi@cancer.org.uk).

GA2.1.3 BIDD Project Grant Eligibility

Applications will be accepted from scientists, clinicians or health care workers in UK universities, medical schools, hospitals and some research institutions. Cancer Research UK does not limit the number of project grants that may be held concurrently.

Applicants are strongly advised to contact Professor Doug Altman, Director of Medical Statistics, Institute of Health Sciences, Oxford, for advice on biostatistics when preparing their full application, if they do not have biostatistical support available.

Any proposal which might involve joint support from different funding bodies must be discussed before submission.

Please note that Cancer Research UK operates a policy on post-retirement support with which all principal applicants approaching or beyond the normal retirement date of their host institution must comply. If you have already passed this date or if you will reach it during the period of the grant for which you are applying, please read the policy (available at http://science.cancerresearchuk.org/reps/pdfs/post_retirement.pdf) and discuss your application with the scheme administrator.

GA 2.1.4 Scheme Administrator

The scheme administrator for BIDD Project grant funding is:

Dr Maria Lioumi
 Senior Research Manager
 CTOF
 Cancer Research UK
 61 Lincoln's Inn Fields
 London WC2A 3PX

T: 020 7438 5383
 F: 020 7438 5450
 E: maria.lioumi@cancer.org.uk

GA3 COMPLETING THE APPLICATION FORM

The following guidance relate to the completion of the **Full Proposal Forms** for BIDD. The Outline Proposal Forms for BIDD are in the main briefer versions of the full proposal forms; please use the relevant sections below for guidance when completing an outline application, along with the notes given on the Outline Proposal Forms themselves.

Please note that for applications **of less than 9 months duration** there is **no outline application stage** i.e. applicants should proceed straight to a full application.

There is a checklist on the front of the Full Proposal Forms that summarises the documentation required when submitting an application for funding; you should refer to this when starting to write your proposal and check the boxes once the application is complete.

In the case of proposals associated with a clinical trial:

- (1) applicants should submit a copy of the most up to date or final version of the associated trial protocols at the full application stage.
- (2) full applications to BIDD will only be considered once the associated trial has been funded by CR UK (or another organisation).

Applications must be printed and not hand-written and should be submitted in both paper and electronic form (see guidelines section GA5.1). Please take time to read the notes below and ensure that the appropriate sections of the form and any necessary supplementary forms have been completed.

Checklist and Undertakings Form

Please complete the checklist on the first page of the application form and the Undertakings (Application) form (section 10 of the application form) once all other sections of the form have been filled in. Please ensure that printed and signed copies are returned with your application to the named scheme administrator. Please note that full applications require original signatures for PI's and co investigators. Photocopied or faxed signatures will not be sufficient. A Grant award letter will not be issued until we have received all undertaking signatures.

Publication on the internet

The checklist asks for your permission for some sections of your application to be published on the internet if the application is successful. To increase the awareness of Cancer Research UK-funded research and to stimulate interactions between CR-UK scientists, CR-UK maintains a Directory of Research, which is published on its web site. Periodically these publishable details are submitted to the National Cancer Research Institute (NCRI) accompanied, in confidence, by outline financial data relating to the application. The NCRI provides publishable information to the web-based International Cancer Research Portfolio. It is a condition of award that the host institution and principal investigator consent to the use and disclosure of this information in this way.

Please note that the application forms allow you to prevent the publication of confidential information contained in your research abstract and, if you wish, your professional contact details.

Section 1 - Application summary

Please complete this section of summary details **after** filling out sections 2 to 8.

1.4 - Duration

The full duration of the project should be noted in months.

1.4 - Proposed start date

The proposed start date of a new grant must be the first day of any given month. Where possible CR-UK will comply with requests for a specific start date for an award but adequate time must be allowed for the necessary review and award procedures to be completed. Generally the proposed start date should be within 4 to 12 months of the submission date.

Section 2 - Research proposal

2.1 - Research Project Title

The title should accurately reflect the content of the proposal but must not be longer than 185 characters (including spaces). Applications received with longer titles will be shortened.

2.2 - Research goals

If your application is successful this statement will be published on the CR-UK website and in other web-based directories of research. For this reason you should not include information that you do not wish to be made public such as commercially sensitive data.

2.3 - Research Abstract

If your application is successful then your abstract will be published on the Cancer Research UK website and other web-based directories of research. For this reason you should avoid the unnecessary inclusion of commercially sensitive or confidential information in your abstract. However please be aware that the primary purpose of your application abstract is to aid the peer review process and that it may, for example, be used by potential reviewers to judge whether or not they should take the time to review your application. You should not therefore exclude any information that you feel would reduce the clarity of the abstract for expert reviewers. If you have indicated that your abstract should not be published, then unless your application is highly confidential you will be required to submit a publishable abstract at a later date. If the confidentiality box is not signed we will assume this abstract is publishable.

The following advice relates to the full application stage, but the information contained is equally relevant to the briefer outline application forms.

Please take account of the advice given on the forms when completing the answers.

BIDD QUESTIONS 2.4 TO 2.9

Please do not exceed 5 sides of A4 in total for section 2.7 (font 10 point), excluding appendices; for the outline application please do not exceed 3 sides for section 2.3.

2.4.1 Type of Funding Requested

The Biomarkers and Imaging Discovery and Development Committee reviews and funds biomarker and imaging research of the following types:

1. Biomarker discovery projects using human samples. (Preclinical assay development using cell lines and/or animal models will be considered for pharmacological biomarkers.) In broad terms, these include:
 - a. Discovery of biomarkers using hypothesis or non hypothesis (i.e. –omic) driven approaches. The work should be focused on discovery/development of the biomarker(s) for application on clinical material and not on understanding the biology of genes/proteins/metabolites. A clear rationale should be provided for the need to discover 'additional biomarkers' instead of concentrating on already

- existing, not fully qualified, biomarkers. In addition, an appropriate clinical trial for retrospective correlation of the biomarker with clinical outcome should have been identified from the outset.
- b. Definition of biomarker distribution in a limited number of specimens
 - c. Retrospective study of the relationship between the biomarker and clinical outcome.
2. Biomarker assay development projects. These might be performed at different stages from the original assay set-up at discovery stage to the validation of the assay for use on clinical material. Cell lines could be used at initial stages but it is expected that the assay will be transferred to human samples during the life of the project.
 3. Biomarker qualification projects. These include the prospective study of the correlation between the biomarker and clinical outcome.
 4. Imaging discovery and evaluation projects. These include all imaging biomarker studies used in whole body imaging, development of imaging agents, and imaging technologies. Research in this area might be expected to include screening, diagnostic, prognostic, predictive and pharmacological biomarker research.

Please refer to the roadmaps on the website in order to complete the stage.

2.4.2 Specification of types of samples for development of invasive biomarkers.

2.4.3 Specification of the types of technology to be used for the development of biomarkers

2.4.4 Biomarker analysis

Please give any details of biomarker analysis to be undertaken within your study

2.5 Sections 2.5.1 and 2.5.2 could be left blank if this project (you are applying funding for) is not associated with a clinical trial. Section 2.5.3 should be completed for all applications with the exception of pharmacological biomarkers.

2.6 The Sample Collection

Please provide details in this section of the size, quality and governance of the samples. Please include SOPs associated with collection, storage and processing of samples as an appendix for full applications. For imaging applications please provide information on the number, type of scans.

Support note that support for sample collection from or outside a clinical trial could be requested from BIDD, but only as part of a biomarker discovery/qualification application. Sample collection only applications to BIDD will **not** be accepted. Support for sample collection associated with clinical trials should be requested from CTAAC at the time of the clinical trial application. Support should also be requested from CTAAC for sample collections associated with ongoing clinical trials, from the NIHR portfolio. Please contact Julie Hearn: Julie.hearn@cancer.org.uk prior to application.

2.7 The Biomarker Study.

Please provide sufficient detail of the study design to facilitate the review of the proposal. Please use the notes under each question to guide you. The notes overleaf should guide you in how your application will be judged, and the information that you will need to provide on the application form in order to be successful in your application.

In judging an application's worth CR UK expects the following:

- that the processing and handling of biological samples conforms with prevailing regulatory standards

- that definition of the sample types and preparation/handling/shipping SOPs are provided for development of invasive biomarkers
- that a biostatistician is involved in all biomarker projects from the outset
- that a pathologist is involved in biomarker projects that are collecting/handling human samples.
- that data is provided on assay [specificity, sensitivity, accuracy and precision](#) to ensure that the assay is fit for purpose. Although the level of data will vary significantly depending on the stage of the biomarker discovery/development, this information is required for all stages except for BIDD Assay Development Stage 1 projects where a description of how these requirements will be addressed, is required.

Specifically, the following information should be provided for assays (imaging and non imaging):

- Performance characteristics, including sensitivity, specificity and accuracy.
- Information on whether the assay is quantitative, semi-quantitative, or qualitative.
- Information on the statistical design used to establish the correlation with the clinical parameter of interest during development of the assay.
- Description of the assay (platform, what is to be measured, controls, scoring procedures, interpretation, etc.)
- Data from preliminary testing of assay – [analytic](#) performance

For biomarker qualification projects (including retrospective correlation of the biomarker to the clinical outcome) the following info should be provided:

- Available data on clinical performance and/or [clinical](#) utility including relevant data on false positivity or false negativity
- Clear statistical design to assure that the hypothesis aligns with the underlying trial and the sample size is adequate to address the hypothesis
- Measurement of precision and reproducibility (within lab and between labs if more than one lab is going to be performing the assay/imaging test).
- Data to support proposed [cut off -point\(s\)](#) if assay/imaging results are not reported as a continuous variable.

2.8 Biomarker Study Management

Please provide details of all those who will be involved in conducting the study, as requested under each question.

2.9 Study Development and Management Team

Please provide summary details from sections 2.13.1 to 2.13.2 of the team who have developed and will be running the study, i.e. excluding collaborators, TSC members etc (see question 4.1 later).

Section 3 - Financial details

Overheads

Cancer Research UK does not pay overheads on research awards. Awards are provided on the understanding that the host institution will meet overhead costs. Overhead costs include lighting, heating, central support staff salaries, costs of equipment maintenance (unless the

equipment has been purchased by Cancer Research UK), telephones, photocopying, postage etc. (except in special cases where the volume of paperwork and mailings are considerable, e.g. epidemiological or behavioural studies), use of library facilities and general laboratory equipment. Cancer Research UK will consider requests for a contribution to the maintenance costs of the equipment, purchased through a Cancer Research UK award. Where institutions operate a policy of access charges to equipment, Cancer Research UK will consider payment of an access charge in lieu of consideration of maintenance costs. However, having paid for the equipment, in whole or in part, Cancer Research UK will not pay for access under full economic costing.

If you are in any doubt as to what might constitute an overhead, please contact the appropriate scheme administrator before submitting your application.

3.1 - Financial details - staff

Grant applications may include salaries for staff at post-doctoral, clinical or technical level, or administrative scales. Postdoctoral research assistants are not generally expected to be involved with collection of samples and should be clearly justified if proposed for such activities. Where appropriate consultant pathologist review time should be included in the application to ensure sample quality. Please note CR-UK does not generally support salaries for Principal Investigators, or other senior researchers or for staff based outside of the UK.

If it is anticipated that staffing requirements will change during the grant the financial implications of this should be summarised in section 3.8 and a detailed explanation and justification for any changes should be given in the "Justification for support requested" section of your research proposal (see guidelines section GA4.1.6). If a staff member will only be required for the first year of the grant, please note this next to their surname on the form. If additional staff members are required in subsequent years of the grant, please do not include the salary in section 3.1 of the application form. This section is for year one only.

All staff details must be agreed with the personnel office of the institution where the worker will be employed. Contact your personnel or administrative representative for full details on up-to-date salaries, London weighting, other supplements and the percentage to be used for calculating oncosts (superannuation and National Insurance contributions).

Many institutions operate nationally agreed pay models but increasingly local models are being developed. Cancer Research UK will provide salary costs within a recognised pay model, but must be advised of the applicable pay model in the grant application. Where a local pay model is to be applied a copy of the appropriate scale(s) must be sent to Cancer Research UK with the application.

Please note that the anticipated staff costs should be entered for the first year of the grant only. Funding is provided for salary, the employer's national insurance contribution and an employer's pension contribution which will be no higher than the rate used by the USS or NHS scheme and may not be used to offset any prior under funding of the pension scheme. If the grant is awarded, the amount provided to fund each post will be stated in the GAL and this amount will include an adjustment (determined by Cancer Research UK) to provide towards cost of living and incremental rises that may occur during the first instalment. Subsequent instalments will be subject to a single fixed indexation rate for the remaining duration of the award. Apart from this adjustment no additional money will be made available for increases to staff costs. Cancer Research UK does not meet the cost of NHS merit awards or clinical excellence awards or any other supplement or enhancement earned in the course of providing patient care to NHS patients.

- i) *Last name / First name:* If the name of a worker is not known at the time of application, then enter "to be appointed".
- ii) *Most recent qualification:* Include the highest degree or qualification obtained.
- iii) *Years of past CR-UK support:* The total number of years during which the worker has been paid from Cancer Research UK (including Cancer Research Campaign or Imperial Cancer Research Fund) funding should be noted.
- iv) *CR-UK Job category:* Please identify one of the following codes for each of the proposed posts which best describes the work of that staff member:

- **TC** Trial Coordinator
 - **DMC** Data manager & computing roles
 - **STAT** Statistician
 - **NURSE** Nursing staff
 - **OMP** Other Professional Allied to Medicine—e.g. psychologists, radiologists
 - **ADMIN** Clerical & administration role
 - **STU** Student
 - **OTHER** Staff members that cannot be classified by these descriptors
- v) *Pay grade*: The grade quoted should be that at which an appointment is required e.g. RA1A, Research Associate (Cambridge), Technician D, Scientific Officer, Nurse etc.
- vi) *Pay scale*: This should be described as ‘University’, ‘MRC’, ‘Whitley Council’, etc.
- vii) *Scale point*: Enter the number of the scale point at which an appointment is required.
- viii) *Full time equivalent (%)*: If a worker is to be employed part-time, the appropriate percentage must be included.
- ix) *First incremental date*: If a worker has an existing salary increment date e.g. from the university or previous grant support, the incremental date should be entered.
- x) *Basic Salary*: The first basic salary (100% fte) which will be paid at the scale point indicated should be entered. Please contact Cancer Research UK for current PhD stipend rates. Do not enter composite salary costs, *i.e.* estimating pay awards or incremental increases. The figures should be taken from the scale operating at the time of application and should not include provision for anticipated pay awards.
- xi) *Location allowance*: London weighting, or other location allowances.
- xii) *Additional allowances*: Any additional allowances entered in the application form must be explained and fully justified in the “justification for support” section in your research proposal.
- xiii) *Type of Merit award/Supplement*: Indicate the title of any merit award or salary supplement entitlement.
- xiv) *Value of Merit awards or supplements*: Enter the costs of any described merit awards, supplements included. Please note that Cancer Research UK does not meet the cost of NHS merit awards.
- xv) *Studentship fees*: Standard university consolidated fees for post-graduate students, plus college fees for students undertaking research at the Universities of Oxford and Cambridge, will be met.
- xvi) *Oncosts used (%) / Value of oncosts*: Employer’s oncosts, *i.e.* superannuation and National Insurance contributions, must be included for all staff except PhD students. Please note that the employer’s pension contribution must be no higher than the rate used by the USS or NHS schemes.

3.3 - Financial administration contact details

Basic contact information should be provided for the staffing administrator responsible for supplying the salary costing information. This will enable faster processing of any staffing issues should an award be made. This should be a named individual(s), who will be contactable throughout the duration of the grant. Any changes in financial contacts should be included within the annual reporting process

3.4 - Running expenses

Detailed running expenses **for the first year only** should be included here. This will form the basis for allocation of running expenses in subsequent years of the grant. If the level of running expenses required will vary in subsequent years of the grant, please summarise these changes in projected costs in section 3.8 and provide further details and an explanation in the “Justification for support requested” section of the research proposal but do not include the amount in the running total for the first year.

A detailed breakdown of the running costs is required for the purposes of reviewing the application and considering the justification for the running expenses. The level of running expenses provided to successful applicants will be assessed by the awarding committee in light of expenses normally required for similar work. Please note that **all Running Expenses should be itemised down to per sample level where appropriate**. Running Expenses cannot be listed as one lump sum as ‘Laboratory Expenses’ or equivalent.

Running expenses may include contributions to the use of central facilities or charges for use of specialised equipment where these are required for the research project. Maintenance costs for equipment purchased through a CR-UK grant are permissible while the equipment is being used for approved CR-UK work. Requests for travel expenses to attend meetings should not form part of the grant application, although the cost of travel that forms an integral part of the proposed study (such as travel between collaborating centres or reimbursement of trial-participant expenses) can be included under 'Travel related to research proposal'. If there is underspend on the award this may be used to pay for costs of attendance and travel (standard class only) to conferences related to the research. Please refer to Section 7.7 of the Terms and Conditions for further information.

Applications will be accepted for running expenses only (e.g. for a visiting scientist who will undertake a particular research project in the UK and whose salary is met from other sources).

3.5 - Total Running Expenses

Please calculate the total running expenses for year one only.

3.6 - Equipment

CR-UK assumes a basic level of equipment provision by the host institution and applications should be limited to items required specifically for the research proposed. A full justification for the equipment request must be included in the "Justification for support requested" section of your research proposal.

3.8 - Projected costs

For applications to BIDD, please provide the costings for the sample collection phase of the application separately from the analysis phase on the application form – there are separate tables provided. Please be advised that BIDD is able to provide funding in the order of approximately £100,000 per annum for the analysis phase of the study, although there is some degree of flexibility. Please contact the BIDD administrator if you wish to discuss this in detail before submitting an application.

If you are applying for more than one year's funding, please provide approximate total costs under the given headings.

Except when the grantee is informed otherwise, awards will be provided on the following basis: After Cancer Research UK has established the level of award for the first instalment (or for awards existing as at February 2009, the 2009/10 instalment) a single, fixed indexation rate will be applied to all subsequent instalments of the award for both salaries and running expenses, with the exception of fellowship and studentship salaries. The indexation rate set will apply for the remaining duration of the award. Once the award value has been set no additional money will be available for any increases to salaries or running expenses (unless changes in the level of award in subsequent years were approved at time of funding). Please refer to section 7.7 of the Terms and Conditions.

Please ensure that you discuss any planned increases in costs with your research administrator before submitting your application to ensure eligibility for funding. If present, all such increases must be fully justified in the research proposal.

Section 4 - Additional Research Information

4.1 - Collaborations

A Collaborator is an individual who is named in the application and has agreed to supply research materials, specific expertise or access to patients, but will not be involved in the day to day running of the project.

Written confirmation from your collaborator should be included with your application in the form of an original signed letter that states their willingness to participate in the project. If these letters are delayed then they should be sent to the office separately, noting your application reference number, which will be given to you when your application is acknowledged.

4.2 - Animal studies

Please see guidelines section GA4.2.5 for the procedure for submission of ethical approval details.

4.3 - Human studies

Clinical studies represent a very sensitive area where the consequences of mismanagement could result in harm to patients and, for CR-UK, litigation and/or adverse publicity. Please see guidelines section GA4.2.4 for details of the ethical approval details that should be submitted as part of your application.

4.5 - Commercial outputs

Cancer Research UK, as a UK medical research charity, is obliged to ensure that the fruits of Cancer Research UK-funded research are used and disseminated so that the understanding, diagnosis and treatment of cancer is maximised for the benefit of the cancer patient and the general population. Please refer to section 9 of the Terms and Conditions for details of how Cancer Research UK meets these obligations through its wholly owned subsidiary Cancer Research Technology Limited (CRT).

To contact Cancer Research Technology please visit the CRT website at <http://www.cancertechnology.co.uk>, email enquiries@cancertechnology.com, or phone 020 7269 3640.

4.6 - Other Cancer Research UK Support

Do you or any of the co-investigators on this application already hold Cancer Research UK funding or support?

If the principal investigator or any co-investigators already hold Cancer Research UK awards, please list them in the first box. For each award you should list the grant reference, principal investigator, title, duration, level of support and type of award. All grant reference numbers should be in the format C### / A### (where '###' is equal to a numerical value).

A statement should then also be given that explains how the new application fits in with any of the identified existing Cancer Research UK support. Applications that overlap significantly with existing grants are unlikely to be supported. In the event that an overlap is identified between current and proposed work, the office may contact you for clarification.

4.7 - Awards from Other Organisations

Details should be given of any other awards from other research organisations currently awaiting decision or already held by both yourself and any co-investigators.

Has a similar application been submitted to other organisations for consideration?

If this application or a similar application has been submitted to another organisation please enter details here. An application will not be accepted that is essentially the same as one currently under consideration for funding by another CR-UK committee or any other funding body. The only exception to this policy is for applications for personal fellowships. CR-UK may share pertinent information about your application with other funding bodies to ensure that you have not made a parallel application.

CR-UK welcomes applications proposing joint support for research with other funding bodies, but all such proposals **MUST** be discussed with CR-UK staff prior to submission.

Section 5 - Applicant Details

5.1 – Applicant

CR-UK requires a single person to be listed as the primary contact regarding any proposals and this person should be identified as the Applicant. It is realised that the work involved in a research proposal is often split between several people and when completing a proposal form a chance is given to fully specify the different roles of individuals in the application. In exceptional circumstances where there is genuinely joint leadership of a research group or

project this can be recognised (see 7.1 – Co-investigator), but in all cases a single Applicant must be nominated.

For applications to BIDD, the applicant will be referred to by CR-UK as the principal investigator (PI).

ROLE IN APPLICATION	DESCRIPTION
Principal Investigator	This is the person who will be awarded the funding and is the only person who can co-ordinate and submit an application to Cancer Research UK.

5.2 - Contact details

Please note the full address of the host department and institution where the grant will be held and administered. If a project is to be based at two or more institutions, one institution must be designated as the host institution. If support is awarded, the grant will be paid to a single institution that will be responsible for transfer of funds to the other centres and will administer the grant. In some cases CR-UK may consider support for a collaborating overseas institution but applicants are advised to consult the application scheme administrator, before submission, to discuss the proposal.

5.3 - Alternative contact details

If you are applying for a grant to be held at host institution other than the one at which you currently work, please enter your current contact details in this section. You can also use this section to enter your direct contact details if you *do not* wish these to be published on our website. Please enter departmental telephone and email details in section 5.2.

Section 6 – Curriculum Vitae - Applicant

An up-to-date CV and recent publication list for the applicant must be provided. Please note that only the information requested on the Form is required; separate CVs or extensive publication lists will be returned to the applicant for amendment, which may result in a delay in processing your application.

6.1 Name of applicant

Applicants applying for their own salary on a project grant must complete supplementary form CR-UK CAF providing additional career details. Please ensure that you list the source of funding for your post. For source of funding, please enter the funding body and the type of support, e.g. Senior Clinical Fellowship, University Chair etc. If you are not applying for personal support as part of this application, your position must be secure for the duration of the proposed award period.

6.2 Qualifications

Enter the date of award, the title (e.g. PhD, Biochemistry) and the awarding body (e.g. University of Manchester, UK) of up to 6 qualifications. Please list your most recent qualification first.

6.3 Current post

Please ensure that you list your current position and full job title.

6.4 Previous positions held

Please list all previous positions held, with your job title, location and the name of the group leader you worked for where the position involved a research component.

6.5 Publications

Please provide the number of your peer-reviewed publications broken down into the number

of first author, last author and total publications, then list your publications during the last 5 years *that are of relevance to the application*. If you have an extensive publication record, then a selection of publications should be chosen for inclusion on the form. The list should not exceed one page and longer publication lists will be truncated after the first page. Please note publications in the following format, underlining the name of the investigator: e.g. Andrews A, Brown B & Charles C (1999) Title of paper Nature **217**, 199-201.

Section 7 – Co-investigator Details

7.1 - Co-investigator

A Co-investigator is a researcher who will provide significant intellectual input into the research and will be responsible for the day to day running of some aspects of the work. Cancer Research UK recognises the significance of co-investigator status by naming co-investigators on Grant Award Letters and by requiring co-investigators to sign the Undertakings Form accepting the Terms and Conditions under which Cancer Research UK awards are made.

The application form lists a number of categories of co-investigator that define the relationship to the Principal Investigator in more detail.

- i) *Standard co-investigator*: This category is appropriate for most co-investigators who have significant input into a research project as outlined above, but do not have any other specific leadership role.
- ii) *Joint Principal Investigator*: There are rare circumstances in which a research project may require joint leadership. CR-UK wishes to recognise this arrangement where it exists, but sees this as exceptional. In all such cases a single *Applicant* must still be identified. If you feel that Joint PI status is appropriate for your application please consult the application scheme administrator to discuss this further.
- iii) *Main PhD Supervisor*: In most cases, it is anticipated that students associated with an application will be supervised by the Principal applicant. Where this is not the case, the main Supervisor should complete a co-investigator form.
- iv) *Laboratory Supervisor / Day to Day Supervisor*: If a student's main Supervisor has more than 3 other PhD students under their supervision, or where the main supervisor is not able to spend sufficient time with the student on a day to day basis, a separate Laboratory Supervisor should be identified and should complete this form.
- v) *Post-Doctoral Advisor*: Applicants for certain Fellowships are required to identify a post-doctoral Advisor. This category is for use in these situations only.

Section 8 – Curriculum Vitae - Co-investigator/Co-applicant

An up-to-date CV and recent publication list must be provided for any co-investigators or co-applicants (for each additional co-investigator, please complete supplementary form CR-UK CICV available online at http://science.cancerresearchuk.org/reps/worddocs/apps_cicv.doc). Please note that only the information requested on the Form is required; separate CVs or extensive publication lists will be returned to the applicant for amendment, which may result in a delay in processing your application.

8.2 Qualifications

8.3 Current post

8.4 Previous positions held

8.5 Publications

Please refer to the guidance notes for sections 6.2 to 6.5 for information on how to fill out these sections.

Section 9 – Curriculum Vitae - Named Research Staff

An up-to-date CV and recent publication list must be provided for any senior (post-doctoral or clinical) staff to be appointed, if these are known at the time of the application.

For each member of staff, please complete supplementary form CR-UK NRSCV available at http://science.cancerresearchuk.org/reps/worddocs/apps_nrscv.doc. Please note that only the information requested on the Form is required; separate CVs or extensive publication lists will be returned to the applicant for amendment, which may result in a delay in processing your application.

9.2 Qualifications

9.3 Current post

9.4 Previous positions held

9.5 Publications

Please refer to the guidance notes for sections 6.2 to 6.5 for information on how to fill out these sections.

Section 10 – Undertakings

This form must be signed by the applicant and co-investigators, Head(s) of Department and the appropriate administrative authority for the host institution. These individuals must have taken note of Cancer Research UK's Terms and Conditions and Administrative Guidelines for Research Grants and Awards (<http://science.cancerresearchuk.org/gapp/terms/>).

If a small grant, project or programme is to be based at two or more institutions, one institution must be designated as the host institution, but each institution must complete a separate Undertakings form as part of the application. Additional Undertakings (application) forms are available to download from <http://science.cancerresearchuk.org/gapp/terms>.

Section 11 – Peer Review

For BIDD applications for funding, at the outline stage applicants are asked to nominate up to 5 reviewers and supply as much contact information as possible for each reviewer. You are also welcome to provide additional referees to those already provided if you wish to do so. See guidelines section GA7 for details of how Cancer Research UK uses peer review to inform its funding decisions.

Section 12 – Research classification

This section will be detached from your application before it is sent to reviewers. If successful, outline details of your award will be published on Cancer Research UK and other national and international research web sites.

Use of keywords will ensure your work is highlighted when people search for research in your field. Applications without keywords will not be accepted.

12.3 – Type of Research

The Common Scientific Outline (CSO) is a classification system used by UK and US funding bodies to help lay the framework for better coordination among cancer research organisations by making it easier to compare public, private, national, and international cancer research efforts. For example, the International Cancer Research Portfolio (<http://www.cancerportfolio.org>) is organised around the CSO categories and details of Cancer Research UK funded awards are automatically uploaded to this database.

If you need further definitions of the categories of research, please refer to the Common Scientific Outline at <http://www.cancerportfolio.org/cso.jsp>

GA4.1 Format

Please use the outline and full applications forms provided for the relevant funding scheme. The proposal should be printed on A4 paper and text should be single line spaced in a font size no smaller than Arial point 11 in black.

For BIDD outline proposals, a full protocol for the associated trial(s), where applicable, should be submitted electronically. This will be used for reference by the external peer reviewers and Committee members when assessing an application. If a full proposal is invited, a revised trial protocol should be submitted only if the trial(s) has changed substantially since the time of the outline submission.

GA4.2 Supporting documents**GA4.2.1 Photographs and colour figures**

Only where completely unavoidable, should photographs or colour figures that cannot be photocopied successfully in black and white be submitted. All pictures and figures must be on A4 paper: please do not send loose or unmounted photographs. If possible, colour images or photographs should be presented on separate pages and not included in the body of the text. If requested Cancer Research UK will make every effort to return some of the photographs to you but this cannot be guaranteed.

Where possible, electronic copies of images should be submitted. Images should be inserted into a word document and a figure legend attached; the document should also contain the applicant's full name and the date in the header or footer.

GA4.2.2 Supporting letters

Please include signed original copies of any supporting letters.

GA4.2.3 Preprints and unpublished papers

Preprints and reprints are not required for an application and **should not be sent** unless the data or the methodology is directly applicable to the proposal and has not been published previously by the applicant. For this purpose preprint refers exclusively to papers which have been refereed and accepted for publication. Details of the journal and publication date are required.

Non-peer reviewed papers should not be submitted with an application and any such papers sent will not be forwarded to referees. Research that has not been accepted for publication should not be cited in the reference list (e.g. 'manuscript in preparation', 'submitted for publication' etc.).

GA4.2.4 Ethics Committee approval (for studies involving patients)

In all studies involving patients, patient tissue or patient information the necessary ethics approval must be applied for. It is the responsibility of the applicant and the host institution to ensure compliance with all legal requirements and ethics approval. Please forward the letter of approval as soon as it is available.

GA4.2.5 Ethics approval (for studies involving animals)

A Local Animal Research Ethics Committee must approve research proposals involving the use of animals and the appropriate documentation should be submitted with the application. Where ethical approval can only be considered after funding is approved, the final outcome of the approval process must be submitted as soon as it is known.

It is the responsibility of the host institution to ensure that all ethical and legal requirements and Home Office regulations are met.

GA4.2.6 Final report (for applications for Project Extensions)

Cancer Research UK grantees who wish to apply for a further period of funding to follow on from their current project grant should prepare an application as normal but, in addition, Cancer Research UK requires a full report on the current project to be submitted with the full proposal form. This applies whether the application is a logical progression of the existing work or just for continuation of the existing project.

The final report should include the following information:

- The name of the principal applicant
- The reference number of the grant
- The title of the grant (as shown on the Grant Award letter)
- Background: giving the aims of the project as stated in the original application
- Research report: summarising the work conducted during the funding period and the progress towards achieving the aims
- A full list of publications arising from the research, with the names of authors supported by the award shown in bold type

Text should be double line spaced and printed in black. You should use a font no smaller than Arial point 11. It is recommended that the report does not exceed 1250 words in length.

GA5 SUBMISSION OF THE APPLICATION

GA5.1 Paper Copies

Please submit 1 top copy of the application form and 1 top copy of the trial protocol for BIDD proposals, as well as all supplementary forms and supporting documents. The top copies must be single sided, unbound and of a quality suitable for photocopying. The pages of the proposal must be in the requested order, with supplementary forms attached at the end. Supporting documents should be placed at the end.

Bound copies should not be submitted. Failure to submit the required number of copies in the correct format may delay the processing of your application.

GA5.2 Electronic Copies

The main application form, all supplementary forms and your trial protocol should be submitted by email. Electronic submission of applications is required in addition to postal submission and your application will not be considered formally submitted until the office receives the paper copies.

GA5.3 Submission

Please ensure that you access the application forms from the CR-UK website. This will ensure that the form you are completing is the latest revision and avoid any delays in processing your application.

Please email your application to the address shown on the front page of the application form and post the paper copy to the scheme administrator who is also named on the front page of the application form at the following address:

Clinical and Translational Operations and Funding Directorate,
Cancer Research UK,
61 Lincoln's Inn Fields,
London WC2A 3PX.

Dates of deadlines for receipt of grant applications are listed under the respective funding Committees on Cancer Research UK's website at:

http://science.cancerresearchuk.org/qapp/translational_funding/biomarker_imaging_grants/

Cancer Research UK takes no responsibility for deadlines missed due to consultation of sources other than the correct Cancer Research UK funding Committee's webpage for deadline dates.

Please note that BOTH electronic and hard copies of the application should be submitted before the deadline

GA6 RECEIPT AND PROCESSING OF APPLICATIONS

GA6.1 Numbers of applications considered at meeting

Please note that although currently BIDD does not limit the number of applications that can be considered at a single meeting, this might be necessary in the future. Applications will be processed in the order they are received. If the quota is reached, **subsequent applications will be deferred to the next committee meeting.** If an application cannot be processed immediately, because it is incomplete or for any other reason, it is very likely that consideration of the application will be deferred.

GA6.2 Acknowledgement of applications

Receipt of the application will be acknowledged in writing (email, fax or letter) within 2 weeks of the closing date for submission.

GA6.3 Deferral of applications

Cancer Research UK reserves the right to defer consideration of applications without prior reference to the applicant and accepts no responsibility for the consequences of any delay in considering an application.

GA6.4 Processing of applications

If there is a problem with the application or any of the required attachments are missing the application may be returned to you, in which case consideration of the application may be deferred to a later meeting. If certain documents are not available at the time of submission it is strongly recommended that you indicate when these will be available and forwarded to Cancer Research UK. No grant will be awarded until all the required conditions have been met and the necessary documentation received and approved by Cancer Research UK.

GA7 REVIEW PROCEDURES

GA7.1 Peer Review

Cancer Research UK is rigorous in the application of peer review in the assessment of its research. All applications will be reviewed by experts in the field. In-house expertise, represented by the membership of the funding Committee, is supplemented by written assessments by external peer reviewers. These reports will be made available to the applicant to provide the applicant with an opportunity to respond to the comments – the applicant's response will be circulated or tabled for the Committee to take account of during its deliberations (see Section GA10 - Feedback).

Applications for funding are accepted on the understanding that Cancer Research UK will select appropriate peer reviewers to review the proposal without reference to the applicant. External referees' reports will be taken into account when considering applications but other factors relating to Cancer Research UK's portfolio and priorities will also influence the committee's decisions. In all cases the committee's decisions are final.

GA7.2 Scoring system

Cancer Research UK uses five main rating categories, which are, in descending order: Outstanding, Forefront, Competitive, Good and Not Competitive. The Outstanding rating is reserved for truly exceptional applications. Applications rated as Good or above are potentially fundable, although in most cases the funding cut-off will fall in a higher category. The Not Competitive rating is given to applications which, for whatever reason, are not recommended for funding.

A sixth rating category, Preliminary, is reserved for applications which are considered to be unfundable in their current form but that may be fundable with further work and this rating may be used by a funding Committee if it wishes to consider a reapplication.

The funding Committees may associate a numerical score with the rating categories so that all the proposals can be ranked to establish a funding cut-off. Numerical scores, if used, are for use **within the committees only** but applicants will be advised of the rating category that their proposal received.

GA7.3 Funding cut-off

Cancer Research funding Committees are not always able to fund all of the 'Competitive' rated proposals that they receive. In this circumstance, 'Competitive' rated applications that fall below but close to the funding cut-off may be carried forward to the next meeting at the sole discretion of the Committee. The application will not normally be discussed or re-scored at the second meeting and no revision of the proposal or additional justification for support can be considered unless specifically requested by the Committee. If the score remains below the funding cut-off at the second meeting the application will not be considered further.

GA7.4 BIDD project grant approval steps

BIDD project grant applications are considered in a two-stage process, with the first step being the submission of an outline proposal. If the Committee decides to shortlist an application following its consideration of the outline, the next stage is the submission of a full proposal. The exception to this are applications of less than 9 months in duration.

GA8 CONFIDENTIALITY

GA8.1 Cancer Research UK requests its peer reviewers to consider all applications in confidence but if an applicant has any concerns regarding commercial confidentiality of the data or proposals this should be indicated clearly in a covering letter. If necessary, Cancer Research UK will contact the applicant to discuss any steps that need to be taken to preserve the confidentiality of the application.

GA9 NOTIFICATION OF OUTCOME

Applicants who submit proposals to BIDD will be informed if their proposal has been shortlisted (for outline applications) or funded (for full applications) as soon as possible after the meeting, usually within the next two working days. Verbal feedback can also be provided to all applicants 2-5 days following the Committee meeting. A full feedback letter will be forwarded to applicants once the Chair has provided approval, usually within 2 weeks of the meeting.

A formal grant award letter detailing the level of the award will only be issued once any concerns raised by the relevant Committee have been addressed.

GA10 FEEDBACK

- GA10.1 Cancer Research UK always aims to provide feedback on applications. Please note that if an application was not considered to be fundable, or the external referees' comments were not submitted with the intention of them being seen by the applicant, it may not be possible to provide feedback.
- GA10.2 Applicants are asked to note that feedback on an application or the application process will only be provided by Cancer Research UK's Clinical and Translational Operations and Funding Directorate. Members of Cancer Research UK Funding Committees adhere to the Code of Practice for Funding Committees, which exists to ensure the protection of applicants, committee members and external reviewers and to ensure the impartiality of the review process. Committee members cannot discuss committee decisions with applicants and applicants must not approach committee members directly. The peer review process is of the highest importance and Cancer Research UK reserves the right not to consider applications from individuals who compromise its integrity.

GA11 REVISION / RESUBMISSION OF AN APPLICATION

Cancer Research UK will only accept resubmission of a revised proposal if this is recommended by a Committee.

GA12 AWARD OF A RESEARCH GRANT

- GA12.1 Once an application for financial support has been approved a grant will only be awarded when Cancer Research UK is satisfied that all the necessary conditions have been met.
- GA12.2 Before any grant can be awarded Cancer Research UK may require that a satisfactory arrangement between the host institution and Cancer Research Technology is in place concerning intellectual property and commercial exploitation of Cancer Research UK-funded research. Technology transfer agreements are already in place with the majority of relevant institutions but if an agreement does not exist, or the parties cannot reach agreement, award of the grant will be delayed until this issue is resolved to the satisfaction of both the host institution and Cancer Research UK.

GA13 TERMS AND CONDITIONS FOR RESEARCH GRANTS

Please ensure that you read the Terms and Conditions and Administrative Guidelines for Research Grants and Awards. The Terms and Conditions, Cancer Research UK Funding Policies, any additional special terms and conditions specified by Cancer Research UK on any grant awarded and the Grant Award Letter (GAL) together set out the Terms and Conditions on which the grant is awarded by Cancer Research UK.

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