2015 Movember Foundation
PhD Studentships in
Bioinformatics:
Guidance Notes

Introduction
Prostate Cancer UK has launched an ambitious 10 year Research Strategy setting out how we will invest in the most innovative research to create a step-change in our knowledge of prostate cancer. We have to be smarter in how we detect and treat prostate cancer at every stage, and we need to develop personalised approaches for every man to achieve the best outcome.

As part of our strategy, we have identified three key areas where there are gaps in knowledge or expertise:

- Better Diagnosis (including risk stratification & disease prognosis)
- Better Treatment (for both localised & advanced disease, including improved prediction of which treatment(s) will be effective for an individual)
- Better Prevention

Please see our Research Strategy for further details on these key areas.

Remit
The application submission deadline is 12pm (noon) on Monday 26 October 2015.

The scheme is open only to applicants proposing to train a bioinformatician to PhD level with a project that aligns with our new research strategy (see above).

For the past 5 years Prostate Cancer UK has funded PhDs in basic science with supervisors able to apply for funding for projects across our entire research strategy. There have been notable successes in funding in this way and we intend to continue to fund basic science PhDs across our portfolio, especially because funding at this first career stage is vital to ensuring a supply line of applicants coming in for funding at later career points.
This year, with funding from the Movember Foundation, we will be using our PhD scheme to address a clear gap that we believe is likely to limit progress in prostate cancer in the coming years. That area is bioinformatics. We believe that a significant gap already exists with an insufficient number of researchers with expertise in both statistics/data analysis and prostate cancer.

We will also consider bids for multiple prostate cancer-focussed PhDs from institutions already running large scale PhD schemes in bioinformatics, or that will allow institutions to set up new programmes with a cohort of prostate cancer focussed students. For applications for multiple studentships, individual project applications should be submitted with a paragraph explaining their link to the others that have been submitted.

**PhD Studentship scheme – Eligibility**

To apply to this call, the following criteria must also be met:

- Awards are available to established researchers working within a recognised academic or clinical institution in the UK (including N. Ireland). Applicants should have a strong track record in delivering research relevant to this call, and we welcome proposal from academics not currently working on prostate cancer (however, in such cases an expert from the prostate cancer research community should be named as a Co-supervisor on the proposal).

- Lead Applicants will normally hold tenured or tenure-track academic appointments, or for clinical applicants, they should hold an honorary academic contract at a recognised academic institution.

- Lecturers on fixed term contracts or post-doctoral researchers holding competitively-awarded external fellowships can be Lead Applicants, as long as their contract extends at least 1 year beyond the duration of the fellowship or the host institution has undertaken to award a permanent position at the end of the fixed term.

- Applicants should have a successful track record in supervising and training PhD students.

- Experienced postdoctoral researchers (>3 years) who will be closely involved with supervising the research can be included as co-supervisors if their current contract extends for at least the first two years of the studentship.

- Projects can include a period of research outside the UK where there is a collaborator based overseas. However, research must be conducted predominantly in the UK and Prostate Cancer UK will not make any direct payments to non-UK institutions or pay invoices in any currency other than UK pounds.

- Funds requested in your proposal must be in accordance with our Finance Eligibility Guidelines.
Please note that we will NOT accept applications that:

- Do not fit our Research Strategy
- Are intended solely or primarily to purchase substantial equipment and/or infrastructure
- Are led and submitted by researchers based entirely or primarily outside the UK
- Are submitted by commercial organisations

If you are unsure about the eligibility of your proposal, or if you have any queries about completing the application form, you must contact the Research Team in advance of the submission deadline (email: research@prostatecanceruk.org, or phone: 0203 310 7037).

Once the deadline has passed, you will no longer be able to submit your proposal and there will be no opportunity to debate individual circumstances. Applications which are incomplete, which do not meet the requirements detailed above and which are deemed to be outside of our research strategy will be rejected without being sent for further review.

**Budget & Project Duration**

Our total budget for this scheme is £500k with the aim to make up to 5 awards. With this in mind, awards should not exceed more than £35K per year. We would advise applicants to ensure that the amount requested is a realistic reflection of what is needed to deliver the project as value for money will be a consideration in making final funding decisions.

The project duration can be either 3 or 4 years in length. Applicants proposing 4 year PhDs are advised that a strong case should be made to justify how the extra investment will provide for a more effective training programme to the student.

**Acknowledgment**

The delivery of this research funding scheme is only possible due to the generous funds given to us by the Movember Foundation.

**Making your application**

The application process consists of a single stage. Applications MUST be made using our online Prostate Cancer UK CC Grant Tracker system and be made by the main supervisor who will manage the PhD student and be responsible for the overall delivery of the project.

The application process and assessment of your proposal will reflect the likelihood that the proposal will deliver a PhD qualified researcher who will pursue a career as a prostate cancer-focussed bioinformatician and who will be able to lead data-driven research. It is not necessary to have identified a student at the application stage.
You must fill out all sections of the application form (notes below) and yourself, the Head of Department and the University/Institute Research Grants office (or finance office if not applicable) must complete the online declarations in order for your application to be accepted. The Co-Supervisor must also confirm their involvement in the proposal and must also approve the application before it can be submitted.

Approval from the Head of Department and the Finance Officer will be required after the proposal has been ‘submitted’. The proposal must be submitted and approved by all relevant parties in advance of the deadline for full applications.

The application submission deadline is 12pm (noon) on Monday 26 October 2015.

**Supervisor details**

The Lead Applicant must be the main Supervisor who will manage the PhD student and be responsible for the overall delivery of the project.

Information in this section is automatically populated from your contact record. Please ensure that your CV and Basic Information are up to date via the 'Manage My Details' section in the left hand menu. Please note that this section is not accessible directly from the application form, and so to update your personal details you must first ‘Save & Close’ your application and then click on the ‘Manage My Details’ link in the left hand menu.

When updating your personal details please note the following:

- For publications please only include papers from the past 5 years
- If you have an ORCID ID, please add this to corresponding section under 'Basic Information'

Please also indicate whether you have a fixed term contract or not. If you are on a fixed term please provide dates of employment. If the PhD studentship is due to finish within one year of the end of your contract, please attach a letter from your Head of Department undertaking to award you a permanent position (MS word or pdf documents only. Please see eligibility section above for further guidance).

**Personnel**

This section allows you to add the details of the Co-Supervisor and Collaborators involved in the proposal.

**Co-Supervisor:**

To ensure the student receives sufficient support from a supervisory team it is mandatory to include a secondary supervisor on the application. There should not normally be more than one Co-Supervisor on the application.

Click on ‘Add Co-Supervisor’, and input their name within the corresponding search fields and either select the contact if already on our database or otherwise input their details.
Once added, an email will be sent to the potential Co-Supervisor inviting them to confirm their role in this application.

The Co-Supervisor must accept this invitation to confirm their participation on the proposal. Once they have confirmed their participation, their CV details will automatically be appended to this section (click on the magnifying glass next to the corresponding name to view their CV).

As with the Lead Applicant's details, the Co-Supervisor must ensure that their relevant details are filled in accurately by going to the 'Manage My Details' section. The Co-Supervisor must confirm their participation AND approve the application BEFORE the proposal can be 'submitted'.

Please ensure that you detail how the Co-Supervisor will be involved in the project. To do so, click on 'Add Co-Supervisor Role', select the relevant name and input their role in the corresponding section.

Collaborators:

To include a collaborator onto the proposal, click on 'Add Collaborator' and follow the same procedures as with adding a Co-Supervisor (detailed above). Repeat this procedure for all collaborators on the proposal.

Collaborators are not required to confirm their participation via the on-line system; however, each Collaborator will receive an email to inform them that they have been selected to be involved on this application and will be asked to provide the applicant with a supporting letter.

Please ensure that you detail how each Collaborator will be involved in the project. A letter of support from each Collaborator must be uploaded via this section, alongside the corresponding Collaborators' role. Please repeat this for all Collaborators on this proposal.

Project Summary

Provide a concise scientific title as well as a lay title for your project, and include the duration of the research project (in months) as well as a proposed start date. Please note that it is our expectation that projects should be either 3 or 4 years in duration and successful projects should commence within nine months of completion of contracting.

Within this section you must also indicate which one (or more) of the Prostate Cancer UK priority areas your project shall address (please refer to our Research Strategy for further details), explaining why your research meets the selected priority area(s) (in no more than 100 words).

You must then select up to 6 keywords from the list provided which best describe the project, and provide a brief scientific abstract (in no more than 300 words), outlining the background to the application, the proposed aims of the research to be undertaken and the expected
outcomes. All proposals must clearly state how the planned research aims to improve the health and wellbeing of men affected by prostate cancer.

Please be aware that your abstract will be sent to potential peer reviewers to establish their ability to review the proposal, and if funded, the abstract will also be shared with the National Cancer Research Institute (NCRI) and the International Cancer Research Partnership (ICRP).

Therefore, please do not include any confidential or commercially sensitive information in this section.

Key hypotheses, aims, objectives and milestones
This section is meant to provide an ‘at a glance’ summary of your project plan for the Research Advisory Committee so please keep it as succinct as possible.

Main Aims (up to 100 words)
Please summarise the main focus of the project. If your application is recommended for funding, this section will be used to complete the main aims section of your contract.

Key hypotheses, objectives and milestones (up to 300 words)
Please bullet-point the main hypotheses to be investigated, along with short descriptions of how this will be achieved and a brief timetable of milestones. All proposals must be hypothesis-driven and should articulate a strong, central research question, placed in the context of current knowledge and the potential benefit for men affected by prostate cancer.

Lay summary

Do not include any confidential or commercially sensitive information in this section!

Describe the research proposal under the headings provided, in terms understandable to a reader with no specialist scientific or medical knowledge. It is advised to pitch the summary at a level similar to that of a medical research report in a newspaper. Do not include scientific jargon or abbreviations without further explanation. Within this section of the form, the following questions must be completed:

- What are you proposing? (up to 200 words)
- Why are you proposing it? (up to 200 words)
- How are you proposing to do it? (up to 200 words)
- What evidence or supporting data do you have to support this project? (up to 200 words)
- What are the expected outcomes (up to 100 words)
- How could it make a difference to the lives of men affected by prostate cancer? (up to 100 words)
- Summary of the project in one sentence (up to 50 words)
It is in your interest to take a great deal of care over this section. The lay summary will be used to inform our lay advisors as well as our board of trustees, who make the final funding decision. If your lay summary does not clearly convey the importance of your research project for men affected by prostate cancer then it may very well adversely affect the chance of your application being funded. Prostate Cancer UK staff will take no responsibility for translating the science if the lay summary is inadequate.

This lay summary will be used by Prostate Cancer UK to publicise our research portfolio should your application be successful in receiving funding. Please ensure you are happy for all information in this section to be publicised at a later date.

Project Description
Please outline your proposal by answering all of the questions within this section.

What is innovative about your application? (up to 300 words)
Prostate Cancer UK will only fund novel and innovative research which has high potential to make a real impact on the lives of men with prostate cancer. Please explain what is innovative about the proposed research, including why such a study is needed now and how it will differ from or complement any planned, ongoing, or recently completed studies.

Background to the project (up to 500 words)
Introduce only the most relevant background information necessary to understand the wider context of your proposal – do not write a literature review. It is advised that you place your proposal into a patient-centred context rather than focussing on scientific questions alone. Please include any accompanying pilot data that may be support your application.

Preliminary data (up to 500 words)
Please detail any preliminary/pilot data that supports and strengthens your application within this section (in no more than 500 words) and via the ‘Optional preliminary data figure attachments’ section.

Figures can be included by uploading up to 3 MS Word or PDF files via the ‘Optional preliminary data figure attachments’ section and following the on screen prompts. Papers that have been accepted for publication but are not yet in print can also be uploaded here if you wish for them to be seen by the reviewers (However, Manuscripts under review or in preparation cannot be provided as additional information).

Detailed plan of investigation (up to 1,200 words)
Describe the methodology you will use to address each hypothesis, along with the timescales for each section of the research. Sample sizes, power calculations and any assumptions must be clearly stated and justified. In particular, studies involving patients must clearly state the number of people to be recruited, as well as describe the method of recruitment and assess the feasibility of full recruitment. Clinical trials must describe how the study is statistically powered and for what endpoint. Projects using human or animal tissue samples should state the source and indicate the availability of tissue. An additional figure attachment may also be uploaded (MS Word or PDF files only) in this section.
Potential problems and contingency plans (up to 150 words)
It is acknowledged that research projects often do not run entirely to plan. Please highlight the problems this project is mostly likely to encounter and explain how they will be dealt with.

Dissemination plans (up to 150 words)
Describe how you intend to disseminate the outcomes of your research to the prostate cancer research community and to men affected by prostate cancer, during and at the end of your project. It is expected that research directly involving men affected by prostate cancer has a clear plan for feeding back results to participants at the end of the project.

Integration of this project into the ongoing work of the group/department (up to 250 words)
An isolated, unsupported research project is unlikely to achieve any outcome for men affected by prostate cancer. Explain here why the group/department is suitable to host this project and how the project will integrate into a wider, sustainable and long-term research programme. If you are submitting multiple prostate cancer-focussed PhD applications from the same organisation please detail how this particular project links in with the others. Cohort applications are encouraged but it will be the quality of each individual project that will be key to getting funding.

Value of this project to the prostate cancer research community (up to 100 words)
How will this project contribute to the wider research effort into the diagnosis, treatment and prevention of prostate cancer? Include short and long-term aims.

Value of this project to men affected by prostate cancer (up to 100 words)
Projects that have a clear route to patient benefit will be viewed favourably. It is understood that research into underpinning biological mechanisms is likely to have patient benefit only in the long-term. Nevertheless, you should still provide evidence that a future pathway exists to translate any positive findings towards clinical benefit.

References
You may include up to 50 full references which have been referenced within the Project Description section (in Vancouver format).

Gantt chart
Insert a Gantt chart detailing the main goals, milestones, deliverables and associated major costs and staffing for the grant duration. These will be the key goals and timelines from which the progress of your project shall be measured against, so please ensure that they are achievable within the given timeframe. Attach as a MS Word or PDF document.

Training environment
Outline your institution’s post-graduate training programme, procedures for monitoring progress and additional support available to the student (500 words maximum). In addition, include previous PhD students supervised (including outcome) and any other information which underlines your track record in research and student supervision.
Please comment on the background of the PhD student you have/wish to recruit. For example, are you looking to recruit a biomedical scientist graduate and train them in bioinformatics, or will you be training a mathematician and train them in prostate cancer.

**PhD Student CV**

If a potential student has been selected, attach a 1 page CV for the student in this section of the form by following the on-screen prompts. The selected student must have at least an upper second class degree (or equivalent) in a relevant subject; however please note that it is not necessary to have identified a student at the application stage.

**Other sources of funding / Approvals and licences (if applicable)**

**Other sources of funding**

Please provide details of any other funding received, or applied for, on the topic of this application (up to 200 words per section). In the case of funding already received, it is important to explain how this proposal differs from ongoing work and forms a discrete project. For recent funding applications it is acceptable to have submitted the same project to another funder; however, please give an indication as to when you will know the outcome of the other submission(s). You must inform the Research Team of the outcome as soon as it is known.

**Approvals and licences**

Funding will not be released to successful applicants until all regulatory approvals for the project are in place. Do not include time for animal licence or ethics applications in your project schedule; however, if approval/licences have already been obtained, please attach the corresponding letters in this section (MS Word or PDF only). If submissions are in process, please indicate the status of the application(s) and when a final decision is expected. If approvals are obtained after the submission deadline, please inform the Research Team immediately.

**Use of animals**

If the project involves the use of animals, you must detail the number and species of animal to be used; whether the animals will be genetically modified; 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). We require this information to ensure that all necessary approvals are/will be in place and to collect data for the Association of Medical Research Charities (AMRC) on the use of animals within our grant portfolio. If the appropriate approvals are already in place, please provide the Home Office Number and upload the licence in the corresponding section within the form (MS Word or PDF only).

**Use of stem cells**

Finally, please also indicate whether the research will involve the use of stem cells, providing further justification if embryonic stem cells are to be used.
Intellectual Property / Scientific integrity
Please detail any potential intellectual property which may result from this project and how you propose for it to be suitably managed (up to 1,000 words). Prostate Cancer UK requires any intellectual property generated by the project to be properly identified, secured and exploited. Intellectual property shall vest with the host institution; however, the institution must enter into a revenue sharing agreement with Prostate Cancer UK if any such intellectual property is to be commercially exploited. For further information, please see the terms and conditions of award.

In addition, grants will only be awarded to institutions that have official policy and procedures designed to protect scientific integrity.

Finances
Please refer to our Finance Eligibility Guidelines for further details regarding cost eligibility. Budget items MUST be broken down in as much detail as possible and entered as separate items under the following headings:

We would advise applicants to ensure that the amount requested is a realistic reflection of what is needed to deliver the project as value for money will be a consideration in making final funding decisions. Awards should not exceed more than £35K per year.

Stipend:
A fixed tax-free stipend of £16,000 in year 1, £16,500 in year 2, £17,000 in year 3 and £17,500 in year 4 (if applicable) is provided. Students based at institutions within the M25 will also receive a London weighting of £2000 pa. The charity will only fund home/EU student fees, in accordance with the requirements of the University or Institute. If a non-EU student is recruited, any extra fees must be borne by the institution. College fees will not be funded.

Research expenses:
Detail all expenses that will be directly incurred by the project. If you are including fees for the use of any core research facilities please state the cost per hour or per sample. These costs must be fully justified within the 'Justification of Budget' section.

Animal purchase costs (if applicable):
Animal costs should be listed separately from other research expenses and must be split into purchase and maintenance costs under the corresponding headings within the form. Within the 'Animal purchase costs' section, please detail the species of animal(s) to be used, along with the number of individuals required, the aim/sub-study this relates to, as well as the associated purchasing costs. If more than one species of animal is to be used, please enter these separately.

Animal maintenance costs (if applicable):
As with above, please detail the maintenance costs relating to the species of animal(s) to be used. Please detail the species of animal(s) to be used, the aim/sub-study this relates to and the associated maintenance costs. If more than one species of animal is to be used, please enter these separately.
Travel costs:
We consider scientific conferences to be an important part of student training, and to this regard, £300 is allowed for each year for attendance at national conferences, and £1000 in the final year for an international conference. Attendance alone will not be supported – the student must present her/his work as a poster or oral presentation and Prostate Cancer UK must be provided with a copy of the abstract and presentation in advance of the conference. You must clearly specify and justify conference attendance and any travel plans (excessive travel costs will be queried and may be reduced). For example:

‘Travel to [insert name of conference] in [insert country] on [insert dates] will be required to [insert reasons e.g. presenting work and networking opportunities] costing [insert amount] to cover registration fee, travel, subsistence and accommodation.’

Other costs:
This section should include any other costs such as publication and dissemination costs and purchasing of equipment. Equipment should only be included if essential for the project and must be purchased within the first half of the grant and should not represent a substantial proportion of the overall budget. We encourage research findings to be freely available and disseminated as widely as possible, and so it is permissible to include a small allocation to cover the costs of open access publishing.

Prostate Cancer UK does not pay Full Economic Costs; do not include indirect, estate or any other non-attributable overhead costs in your budget. Applications containing these costs will not be considered. Please refer to our Finance Eligibility Guidelines for further details.

Justification of budget:
Please also provide a brief justification of the costs that you expect to incur. Any items which appear excessive or which have not been suitably justified will be queried by Prostate Cancer UK staff and may be removed from the budget if the application is recommended for funding. Please note that after funding is awarded, any changes in budget allocations must be approved in advance, in writing by Prostate Cancer UK, and increases in the total budget will not be permitted under any circumstances.

Declarations
The application must be approved by the Lead Applicant, the Co-Supervisor, the Head of Department and the Finance Officer who will be responsible for administering any grant that may be awarded. Both the Head of Department and the Finance Officer must be registered on the on-line Prostate Cancer UK CC Grant Tracker system to approve the application.

In the case of the Finance Officer, click on ‘Add Finance Officer’ within the ‘Declaration - Finance Officer’ section and follow the steps to select and invite your Finance Officer to participate (following the same procedure as with adding a Co-Applicant). They must then log into the system and access the ‘Declaration – Finance Officer’ section of the application form and complete the declaration question.
Please follow the same procedure with the Head of Department under the ‘Declaration – Head of Department’ section. Approving the application will imply that the approver has read the terms and conditions and agrees to abide by them if a grant is awarded.

**Submitting your application**

**Validation**

Once you have completed all sections of the form the ‘validation’ tab will highlight any sections which still need completing or that exceed the stipulated word limits or which require confirmation and/or approval from others. You will be unable to submit your application until these have been resolved.

When all sections are complete and all necessary approvals have been made the application is ready to be submitted. You must ‘Save and Close’ the application and this will then take you back to the application details page. The Submit button on the right hand side should now be activated, and you can click this to submit your proposal.

**Following your submission, the application must then be approved by the Head of Department followed by the Finance Officer in advance of the submission deadline.**

Once submitted and approved by all parties, you should receive an automated email confirming your submission. Applications which have been submitted but do not have the necessary approvals will not be accepted.

**Assessment Process**

Applications received by the above deadline will first be validated by the Research Team at Prostate Cancer UK. Any applicants which do not meet the eligibility criteria and remit of this call shall be rejected, and applicants notified, at this stage.

All remaining applications will be reviewed by at least two expert referees in accordance with the guidelines set out by the Association of Medical Research Charities (AMRC).

Final funding decisions will be made towards the end of the year and applicants will be informed of the outcome by email before the end of January 2016.

Once notified of our intention to award, we will begin the contracting process immediately. It is our expectation that contracting should be completed within one month of notification of award (or once any conditions of award have been addressed and/or any financial assessment completed). In any instance, successful projects should commence within nine months of completion of contracting.

**Contact Us**

If you have any queries regarding your application please contact the Research Team at Prostate Cancer UK via:

Email: research@prostatecanceruk.org  Phone: 0203 310 7037