UNIVERSITY OF CAMBRIDGE

MRES + PHD STUDENTSHIPS

Student Handbook 2020-2024

CANCER RESEARCH UK | CAMBRIDGE CENTRE GRADUATE TRAINING PROGRAMME

Contents

Welcome Message from the Director of Cancer Research UK Cambridge Centre

We are very pleased to welcome you to Cancer Research UK Cambridge Centre for your postgraduate training.

Being a Masters of Research (MRes) Student is very different from being an undergraduate student or a student on a taught postgraduate course; probably the greatest difference is that it will be largely up to you to decide what you are going to do on a day-to-day basis in your rotations. You will carry out your research under the guidance of a rotation supervisor. You may also have a day-to-day supervisor to help you, most likely a post-doc working in your lab who has a particular interest in your project and who is familiar with the techniques you will be using.

Please do make use of all the support and help that is available to you.

We hope that studying with us will be a positive, informative and enjoyable experience; that it will exceed your expectations and will support you to achieve your goals.

Richard Gilbertson, MD, PhD
Head of Department of Oncology
Li Ka Shing Professor of Oncology
Director of Cancer Research UK Cambridge Centre
University of Cambridge

Important Contacts and Relevant Information

CRUK Cambridge Centre Postgraduate Training Programme Director (Non-clinical)

Dr Heike Laman – hl316@cam.ac.uk

CRUK Cambridge Centre Postgraduate Training Programme Director (Clinical)

Professor Brian Huntly – bjph2@cam.ac.uk

CRUK Cambridge Centre Postgraduate Training Programme Coordinator

To be confirmed

CRUK Cambridge Centre Director of Operations

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Vicki Sparkes – vas33@cam.ac.uk

CRUK Cambridge Centre Postgraduate Training Programme Administrative Assistant

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CRUK Cambridge Centre Finance Coordinator

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Cambridge Students information

https://www.cambridgestudents.cam.ac.uk/

CRUK Cambridge Centre website

www.crukcambridgecentre.org.uk

> All students are required to join a relevant Programme in the Centre – you can do this by clicking '*sign up*' on top right hand corner of the website homepage. Fill in the form and submit it. Your membership will be approved and you will then be able to add a photo and more information to your profile page. By being a member of the Centre you will receive emails and newsletters with information about events and funding awards that may be of interest.

Cancer Research UK website information for students

http://www.cancerresearchuk.org/funding-for-researchers/opportunities-for-phd-students-and-postdoc-researchers

Programme Structure

The CRUK Cambridge Centre Programme is studied on a full-time basis. In the first year you will undertake two 15-week rotation projects, either in a University Department or one of the Partner Institutes, as well as complete training in various topics, such as Data Handling, Time Management, and Research Ethics & Integrity and spend 2 weeks in a clinical setting, as well as a week on Genomic Medicine. You then finalise your choice of PhD project, to start in October, usually choosing to continue of one of the labs that you rotated in, and complete a PhD project proposal. As this is a structured year, we would only permit students to be absent from the Programme in exceptional circumstances (see the section on Annual Leave) but have factored in holidays over the Christmas and Easter periods.

During the PhD project, you will continue to undertake further research skills and subject-specific training, tailored to your research needs.

The Programme is a partnership between several Departments and Institutes at the University of Cambridge and Partner Institutes in the Cambridge area, such as the Babraham or Sanger Institutes. Students undertaking research in Partner Institutes are registered with the University, receive their award from the University and have access to facilities at both the University and the Partner Institutes.

CRUK Cambridge Centre Research Programmes

The Cancer Research UK Cambridge Centre is a partnership between the University of Cambridge, Cambridge University Hospitals NHS Foundation Trust and Cancer Research UK.

The Centre unites more than 900 laboratory researchers and healthcare professionals in 28 University Departments, nine world-leading research institutions, two NHS Foundation Trusts (Cambridge University Hospitals and Royal Papworth Hospital) and four major pharmaceutical companies sited across the wider Cambridge area.

The CRUK Cambridge Centre facilitates new collaborations and drives the translation of new scientific discoveries into clinical applications to improve patient care. By working together across a range of different disciplines, our members are breaking down the barriers between the laboratory and the clinic, enabling patients to benefit from the latest innovations in cancer science.

As one of just four CRUK Major Centres in the UK, we serve as a national and international resource for patients with cancer and their families; researchers and health care providers; and cancer professionals in training.

Our Mission

Our mission is to end death and disease caused by cancer, through research, treatment and education.

Our Vision

To be a world-leader in the development of ways to detect, monitor, and cure cancer.

Our Strategic Objectives

Conduct impactful interdisciplinary cancer research

Our 12 Programmes will deploy Cambridge innovation to better understand the biology and treatment of cancer, including CRUK-designated cancers of unmet need (lung, pancreatic, paediatric, brain and oesophageal cancer).

Adopt a proactive approach to cancer

We will change the way we treat cancer; moving from a reactive system that waits for cancer to present, to a proactive personalised strategy for all patients that detects cancer in its earliest form, intervenes precisely, and closely monitors the disease course with non-invasive technologies.

Develop the cancer leaders of tomorrow

We have launched this new training scheme to produce future generations of cancer leaders, trained in early detection and integrative cancer medicine, to mobilise a step change in the way oncology is practised.

Partner with the public

We will innovate to communicate the 'how' and 'why' of preventing, detecting and treating cancer early. In this regard, we will engage patients at each stage of the research process, ensuring maximum public engagement in the work of our Centre.

The 12 Research Programmes

The Centre supports 12 major interdisciplinary research Programmes, of which you will be part of one or more:

MRes Rotation Projects

You will carry out two 15-week rotations projects during the first eight months of the programme. These rotations will allow you to gain experience of two different research environments and make an informed choice about your PhD project.

At the time of application you will have received a list of available rotation projects. At the start of Michaelmas term 2020, you will have selected and confirmed your choice of first rotation for October – March. You should have also indicated a preference for second rotation to be completed March – July.

Students are encouraged to contact Supervisors in advance of starting the project as there may be background reading to complete. The Supervisor will arrange access to facilities and any specific training required.

Each rotation project is 15 weeks in duration and is spent carrying out research, either in a laboratory or elsewhere depending on the requirements of the project. Following the rotation project, there is a one-week period to write the project report. The one-week writing period is to write up the data; we would therefore not expect that research is undertaken during this time. Further information on what should be included in the project report is contained in the Rotation Project Reports section of this handbook.

Training / Cohort Building

Throughout your 4 years at the University of Cambridge the CRUK CC Postgraduate Training Programme Office will arrange for various training and cohort building activities. These are a compulsory element of the programme you are joining and attendance at such events will be monitored. A timetable of CRUK CC organised activities for your first year can be found at the back of this handbook.

In addition to the training organised by the Training Programme Office you will also have access to a plethora of training opportunities offered by the University Training Service and your department / partner institute.

During the orientation week of the programme, you should attend the University Health and Safety and the Lab and Chemical Management training sessions. You will need to sign up for these online, and a link will be emailed to you.

During your first day in the lab you should be shown the fire evacuations procedures, if not please ask to be shown where to go in the case of a fire.

We have also asked the host labs to include you in their own local health and safety training.

Coursework and Evaluation

Progression within the CRUK CC Postgraduate Training Programme relies on satisfactory completion of the following:

- Attendance at weekly lectures in Cancer Biology & Medicine
- Attendance at the Transferable Skills and Genomic Medicine courses
- Reports on your two rotation projects
- Oral presentations of the rotations (one in March and one in July)
- Poster presentation at the annual Postgraduate Symposium
- PhD project proposal

Students must achieve the following:

- Satisfactory attendance at the formal training assignments
- At least a Satisfactory mark for each of the rotation project reports
- At least a Satisfactory mark for the oral presentation
- At successful pass of the viva voce examination of the PhD project proposal

You will receive feedback and a mark (Excellent, Very Good, Good, Satisfactory or Requires Improvement) for each rotation project report, oral presentation and PhD project proposal. Students whose reports or proposal are marked as 'Satisfactory' or 'Requires Improvement' will be asked to meet with their Postgraduate Training Programme Director and/or PhD Supervisor to discuss additional training and skills development. The CRUK CC Postgraduate Training Programme reserves the right to withdraw financial support if a student is not adequately progressing (i.e., repeatedly receiving 'Requires Improvement' marks) throughout the Programme.

The review process is overseen by the Training Management Committee who will review feedback and marks from Supervisors and Assessors.

Upon starting the PhD proper in October 2021, progression will be determined according to the procedures of the postgraduate programme in your chosen Department or Partner Institute. Funding from the CRUK CC Postgraduate Training Programme is contingent on satisfactory reports of progress submitted via CamSIS by your Department or Institute. Students are expected to submit their thesis within 48 months of starting the Programme. The Programme recommends that students submit a traditional thesis.

Rotation project report

Rotation project reports should be a maximum of 5,000 words in length, including figure legends but excluding the bibliography (and words in figures and tables). Your word count (excluding the bibliography) must be given on the title page.

Reports should be properly referenced. Information on referencing can be found on the Student Registry website: https://www.plagiarism.admin.cam.ac.uk/resources-and-support/referencing

Students must include in the report a preface with a **signed statement** along the following lines: "I confirm that the material in this report is not copied from any published material, nor is it a paraphrase or abstract of any published material unless it is identified as such and a full source reference is given. I confirm that, other than where indicated as above, this document is my own work."

Reports should be broken down into: summary, introduction, methods, results, and discussion.

Introduction: this section should give the non-specialist reader the background information necessary to understand your project and set the results in context in a concise manner. It should not be a full literature review.

Methods: this section should again be concise, yet contain sufficient information to allow someone else to repeat the work: give priority to novel approaches and condense standard molecular methods by citing previous publications or manufacturer's instructions.

Results: this section should flow as a logical, coherent description of the project, including the rationale for doing each experiment. This will not necessarily be the order in which you carried out the experiments. Make use of figures and tables. Remember that this is a report of what you did in your rotation, not a paper for publication: don't just put in your best (or only positive) results, but discuss problems encountered and/or troubleshooting.

Discussion: this section should NOT be a repetition of the Results section, but should critically evaluate the significance of your results in relation to published works, which should also be critically appraised. It will usually contain ideas of further work required to clarify your findings. This is a valuable inclusion in a project report where you may not have had sufficient time to complete the research as you might have wished.
It is recommended that you write parts of the report alongside conducting the research. You will have a one-week writing period at the end of the rotation, but during this time you will need to submit the report to your Rotation Project Supervisor. You should plan your time accordingly so that your Supervisor has time to read the report and provide feedback and you have time to implement the feedback before the submission deadline.
Reports should be .pdf (make sure that the report has not changed once saved in this format) and emailed to the Postgraduate Training Programme office (trainingprogramme@crukcambridgecentre.org.uk) and to the Postgraduate Training Programme Cooordinator before 12:00 on the deadline (see Appendix 2). Hard copies are not required.

Each rotation project report will be read by the Rotation Project Supervisor and two Assessors, nominated by the Supervisor, who will provide feedback and a mark.

PhD Project Proposal

PhD project proposals should be a maximum of 6,000 words in length including figure legends, but excluding the bibliography (and words in Tables). The word count (excluding the bibliography) must be given on the title page. Project proposals should be properly referenced and further information on referencing can be found on the Student Registry website: https://www.plagiarism.admin.cam.ac.uk/resources-and-support/referencing

You will be emailed a PhD proposal proforma which will outline the structure of the proposal. The proforma will describe what detail and information would be required in each section.

Remember to think about issues such as: what controls you will use to test whether your results are meaningful; do you foresee any pitfalls and if so, how might you circumvent them if they arise; what are your back-up plans in case this project fails to work out as expected? You should include a time-line, or flow diagram, to show you have a realistic idea of how long each part of the project is likely to take.

Reports should be completed in time for your chosen PhD Supervisor to read and provide feedback before final submission.

Reports should be in PDF form (make sure that the report has not changed once saved in this format) and emailed to the Postgraduate Training Programme Office (trainingprogramme@crukcambridgecentre.org.uk) and to the Postgraduate Training Programme Coordinator before 12:00 on the deadline (see Appendix 2). Hard copies are not required.

You will attend a viva on the PhD proposal in September 2021, where you will be examined on your proposal in front of an internal and external examiner plus two assessors.

Assessment during the PhD

On successful completion of the required elements of the initial Programme, students will be provisionally registered for the award of PhD. At some point during the second year of the Programme (exact timings will differ according to the host Department or Partner Institute) students will be required to submit a report (First Year Report) which will be examined in a *viva voce* examination. This process will be managed by the Postgraduate Administrator in your Department/Institute. Courses on how to complete this report are available through the Postgraduate School of Life Sciences (PSLS) Researcher Development Programme (www.gradschl.lifesci.cam.ac.uk/). On passing this, students become fully registered for the PhD.

Before the end of the fourth year of funding, students must have completed and submitted their thesis for examination. Further information is available on the PSLS website.

Plagiarism

At all stages of the Programme you must adhere to the University and School Guidelines for assessed work. More information about University's definition of plagiarism and academic misconduct is to be found here: www.plagiarism.admin.cam.ac.uk.

Plagiarism is defined as submitting as one's own work, irrespective of intent to deceive, that which derives in part or in its entirety from the work of others without due acknowledgement. It is both poor scholarship and a breach of academic integrity.

Examples of plagiarism include **copying** (using another person's language and/or ideas as if they are a candidate's own), by:

- **quoting verbatim** another person's work without due acknowledgement of the source;
- **paraphrasing** another person's work by changing some of the words, or the order of the words, without due acknowledgement of the source;
- **using ideas** taken from someone else without reference to the originator;
- **cutting and pasting** from the Internet to make a pastiche of online sources;
- **submitting someone else's work** as part of a candidate's own without identifying clearly who did the work. For example, buying or commissioning work via professional agencies such as 'essay banks' or 'paper mills', or not attributing research contributed by others to a joint project.

Plagiarism might also arise from colluding with another person, including another candidate, other than as permitted for joint project work (i.e. where collaboration is concealed or has been forbidden). A candidate should include a general acknowledgement where he or she has received substantial help, for example with the language and style of a piece of written work.
Plagiarism can occur in respect to all types of sources and media:

- text, illustrations, musical quotations, mathematical derivations, computer code, etc;
- material downloaded from websites or drawn from manuscripts or other media;
- published and unpublished material, including lecture handouts and other students' work.

Acceptable means of acknowledging the work of others (by referencing, in footnotes, or otherwise) is an essential component of any work submitted for assessment, whether written examination, dissertation, essay, registration exercise, or group coursework. The most appropriate method for attribution of others' work will

vary according to the subject matter and mode of assessment. Faculties or Departments should issue written guidance on the relevant scholarly conventions for submitted work, and also make it clear to candidates what level of acknowledgement might be expected in written examinations. Candidates are required to familiarize themselves with this guidance, to follow it in all work submitted for assessment, whether written paper or submitted essay, and may be required to sign a declaration to that effect. If a candidate has any outstanding queries, clarification should be sought from her or his Director of Studies, Course Director or Supervisor as appropriate.

Failure to conform to the expected standards of scholarship (e.g. by not referencing sources) in examinations or assessed work may affect the mark given to the candidate's work. In addition, suspected cases of the use of unfair means (of which plagiarism is one form) will be investigated and may be brought to one of the University courts or disciplinary panels. The University courts and disciplinary panels have wide powers to discipline those found to have used unfair means in an examination, including depriving such persons of membership of the University, and deprivation of a degree.

The University makes use of text-matching software for the purpose of plagiarism education and detection, and reserves the right to submit a candidate's work to such a service. For this purpose, candidates consent to the submission of their papers to the service and for the submitted papers to form part of the service's comparative source work database. To facilitate use of the service, students (and participating Examiners and Assessors) may be required to agree to the service provider's end-user agreement and provide a limited amount of personal data upon registration to the service, for instance, their name, email address, and course details.

Annual leave and Intermission

Due to the structured nature of the first year of the Programme, **it is not possible for students to take annual leave outside of the designated holiday periods in December and Easter** (see Appendix 2 for term dates). In subsequent years of the Programme, students can have annual leave, to be taken at times agreed with their PhD Supervisor.

Students who are unable to work on their project for medical or other reasons, for two or more weeks, can apply to intermit by completing an application form, which is available from their CamSIS self-service page. Further information can be found on the Student Registry webpage at: https://www.cambridgestudents.cam.ac.uk/your-course/postgraduate-study/your-student-status/medical-intermission and https://www.cambridgestudents.cam.ac.uk/your-course/postgraduate-study/your-student-status/non-medical-intermission

Working

Students are permitted to undertake up to eight hours paid employment per week during the course of their studies, usually teaching (demonstrating or supervising). However, we would advise that you do not work during the first year of the Programme.

Laptops and Internet Access

You will be provided with a laptop at the start of your MRes year, which is funded by your consumables budget. Please note that this laptop will have to be returned to the Postgraduate Taining Programme Office at the end of your PhD.

You will need access to the internet on your laptop during the induction week of the programme. For this you will need to access the Eduroam network, for information on how to do this please follow instruction at this link: https://help.uis.cam.ac.uk/service/wi-fi

Leaving the CRUK CC Postgraduate Training Programme

For those students who do not proceed to the PhD degree, there is the option of leaving after the first year and being considered for the award of an MRes degree. This is obviously contingent on satisfactory progress throughout the year.

The exact route will be determined after discussion with your project supervisor, the CRUK CC Postgraduate Training Programme Office and the agreement of the Training Programme Management Committee.

Finances

Students funded by CRUK CC will have their University tuition fees paid directly from the Department of Oncology, should you need to inform your college of who they need to invoice the details are below.

Please ensure the invoice states that it is for tuition fees and your name.

CRUK Cambridge Centre
Department of Oncology
University of Cambridge
Hutchison/MRC Research Centre
Cambridge Biomedical Campus
Cambridge
CB2 0XZ

Stipend payments will be paid on the 26th of each month once the forms supplied by the CRUK CC Training Programme Office have been completed. Your first payment will be on the 26th October 2020 and the final payment on the 26th August 2024.

Your stipend payments will stop as soon as your PhD thesis is submitted.

Student support and wellbeing

There are a number of support mechanisms available to students, in addition to your rotation project and PhD Supervisor.

CRUK CC Postgraduate Training Programme Office

The CRUK CC Postgraduate Training Programme Office can be contacted via email or phone and we are available to offer help, guidance and support throughout your time in Cambridge. We can also put you in touch with other people or groups within the university as appropriate.

Email: trainingprogramme@crukcambridgecentre.org.uk Telephone: 01223 762594/760405

College Pastoral Support:

Your College is responsible for your pastoral support and there are a number of different people in College to whom you can turn for help and advice. In the first instance, students will be assigned a Postgraduate Tutor, who is normally a Fellow of the College and will take an interest in your wellbeing and progress. Postgraduate Tutors, as well as the College Senior Tutor, can offer advice on academic, social, financial, medical and personal matters. Tutorial Office staff, student MRC Welfare Officers and, where available, the College Nurse, Chaplain and College Counsellor can also provide pastoral care and help to students. Further information on the advice and support provided by Colleges can be found here:

https://www.studentwellbeing.admin.cam.ac.uk/college-pastoral-support

University Counselling Service

The Counselling service provides meetings with counsellors and workshops as well as a number of self-help resources. Information can be found on their website at:
www.counselling.cam.ac.uk/studentcouns

GRASP

The PSLS (Postgraduate School of Life Sciences) Graduate Student and Postdoc forum (GRASP) represents postgraduate students and postdocs from each University Department and Partner Institute from Life Sciences. GRASP was developed in 2011 to provide postgraduate students and early career researchers with a platform for the communication of ideas and mutual concerns, and for the coordination of academic activities. Further information about GRASP can be found on the PSLS website:
www.gradschl.lifesci.cam.ac.uk/grasp

Other

General information on being a student at Cambridge can be found here:
www.cambridgestudents.cam.ac.uk/

Students should ensure that they have read the University's Code of Practice for Postgraduate Research Degrees:
https://www.cambridgestudents.cam.ac.uk/grad-code-of-practice/code-practice-research-students

Information specific to postgraduate students in Life Sciences can be found on the Postgraduate School of Life Sciences website: https://www.gradschl.lifesci.cam.ac.uk/

Information for postgraduate students in Colleges can be found at:
http://www.postgraduate.study.cam.ac.uk/colleges

Useful Contacts

Dr Anne Dillon	Postgraduate Training Programme Coordinator	amrd101@cam.ac.uk / 01223 762594
Dr Heike Laman	Programme Co-Director	hl316@cam.ac.uk
Professor Brian Huntly	Programme Co-Director	bjph2@cam.ac.uk
Justin Holt	Postgraduate Training Programme Administrative Assistant	jjh77@cam.ac.uk / 01223 760405

CRUK CC Postgraduate Training Programme Office
Room 4.15
Hutchinson/MRC Research Centre
Cambridge Biomedical Campus
Cambridge
CB2 0XZ

Appendix 1: General Safety in Research Labs

www.safety.admin.cam.ac.uk

Chemicals: All labs contain biologically hazardous chemicals, which are not always immediately obvious. To protect from accidentally exposure to these chemicals, each laboratory holds COSHH forms listing the chemicals used in the lab, how to store and handle them and action to take in case of an accident. You should read the forms before using any listed substances. Your supervisor has a responsibility to ensure that you fully understand the potential hazards in the lab and the appropriate safety measures. You should seek the advice of technical or academic staff on the procedures for using dangerous substances before you start using them.

Radiochemicals: All students who expect to use radioisotopes must be registered with the relevant Departmental Radiation Officers before using isotopes. You must have received basic training on safe handling procedures in order to be registered. You are responsible for ensuring that you are fully aware of both handling and disposal procedures for each radioisotope you use and should therefore contact your supervisor before using any radiochemicals.

Equipment: All electrical equipment is routinely checked. You must not tamper with the power supply to any device. If you suspect a piece of equipment to be faulty, you should report it to the relevant Departmental electricians.

Animals: If you conduct a research project involving any procedures that may have the effect of causing pain, suffering, distress or lasting harm to animals protected by the Animals (Scientific Procedures) Act 1986, you must hold a Home Office licence. This will require attendance at training courses and reading relevant guidance documents. You must not begin any work with animals until you have received the licence, and even then you must work under the close supervision of your supervisor or other appointed persons.

Appendix 2: Notable Dates & Training – Year 1

Date	Event
2020	
28th September- 2nd October	Lab visits with PIs (if necessary for decision-making)
1st October	Term Begins and MRes Induction
6th – 7th October	University Postgraduate Safety Courses
8th October	PIs notified of rotation 1 choice
8th – 14th October	Transferable Skills week
9th October	School of Clinical Medicine (SCM) Postgraduate Induction event (09:00- 13:30)
19th October – 19th February	Rotation 1 (15 weeks)
22nd October	Weekly lectures in Cancer Biology & Medicine commence (9:30-10:30)
2021	
1st- 5th February	Cancer Genomics Course (all MRes & 1st Yr Clinical PhD students required to attend)
22nd – 26th February	Rotation 1 write up
1st – 12th March	Clinical shadowing / Patient facing experience
15th March – 9th July	Rotation 2 (15 weeks)
12th – 21st July	Rotation 2 write up
15th July	Assessed Oral Presentation – Rotation Supervisors to attend (14:00)
16th July	2nd Annual Posgraduate Symposium
22nd July – 18th August	PhD proposal write up and submission
w/b 6th September	PhD Proposal Viva
13th – 30th September	Revise PhD proposal or set up lab