# 4-year Wellcome Trust PhD Programme in Molecular, Genetic and Lifecourse Epidemiology, MRC IEU and Cancer Research UK Programmes: Arrangements for Year 1 and Mini-projects and FAQ`s

#### Year 1 timetable

Mini-project 1: Oct-Dec (inclusive)
Mini-project 2: Jan-March (inclusive)
Mini-project 3: Apr-June (inclusive)

Prepare PhD proposal: July-Sept (inclusive)

The three core attachments aim to offer students the opportunity to study a range of research areas with different potential supervisors, before choosing their PhD topic. Broadly speaking they aim to provide training in epidemiology (e.g. analysis of an epidemiological dataset or a systematic review); biostatistics (e.g. statistical genetics, genome wide association study, Mendelian randomization); and either genetic laboratory experience or bioinformatics. Years 2-4 are the PhD and advanced training.

Please note: Students can choose one project at a time or all 3 before they start. Students can choose projects from the <u>project database</u> or lists on this <u>webpage</u>. They can also pursue a project within another UoB department or within our partner institution <u>Sheffield University</u>. Please check with the supervisor to see if the project is still available. If the dataset is ready then they should choose that project first. Most liaison at this time will be with the mini-project supervisor but they should still meet with their main supervisor once a month.

#### **Short courses**

Not all short courses should be done in year 1, but should be spread throughout the 3-4 years of each student's PhD programme to reflect the training needs during each specific year (e.g. the focus should be on basic research training courses in year 1; more advanced research training courses, relevant to the PhD, in years 2-3; wider skills training, beyond the specific PhD requirements, in years 3-4, if required).

#### Role of PhD and mini-project supervisors

Important: Mini-project supervisors must have datasets ready by the 2<sup>nd</sup> week of the mini-project. If students find this is not the case, they should discuss this with Dr Tom Gaunt.

In year 1, the mini-project supervisors will be the key hands on contact (at least weekly but could be more often depending on the nature of the project and as agreed with the student) for each respective project rotation. The mini-project supervisor will be expected to assess the work (written up as a seminar, poster or short paper) and provide feedback at the end of each rotation.

During the 3 mini-projects in year 1 (Oct-June), the planned future PhD supervisor for years 2-4 should meet the students at induction and at regular intervals agreed with the student (we suggest at least monthly) to ensure adequate oversight, discuss training and short course needs, help choose mini-projects that ensure a broad training and begin plans for the PhD project.

During the last 10 weeks of year 1, the PhD supervisor will be expected to meet with the student every 1 or 2 weeks (as agreed with student) to help finalise their project and prepare a detailed research proposal. At the end of Sept, the student will present their proposal to two proposed PhD supervisors and two other staff members in the Department external to the project. The proposal will include: i) a critical literature review, setting the project within the current body of knowledge; ii) hypotheses to be tested; and iii) a research plan and timetable for the next 3 years.

## Completing the mini-projects and assessment

Towards the end of each 3 month mini-project, the students and mini-project supervisors should have a formal review meeting. The student should:

- Draft a 750 word written summary report before the review meeting which covers background and aims including the intended learning outcomes, methods, results and conclusions including how they addressed their learning outcomes. This summary report will satisfy funders, provide an accessible summary for supervisors and programme leaders and gives students a valuable training summary for their own records.
- Submit this draft report to the mini project supervisor before the review meeting with sufficient time to allow reading and comment.
- Discuss the report and the resolution of the project at the review meeting, i.e. should the project be halted or will the team pursue publication?
- Edit the draft summary report to include items discussed at the meeting and send the final version to the mini project supervisor and Tom Gaunt.
- Summaries and feedback should be uploaded to Star.

## Arrangements for final 3 months of 1st year training and the Mini Project Review

During the last 10 weeks of year 1, the PhD supervisor will be expected to meet with the student every 1 or 2 weeks (as mutually agreed with student) to help finalise their PhD project and prepare a detailed research proposal.

#### **IEU Students**

At the end of September, the student will present, to two proposed PhD supervisors and two independent reviewers external to the project (see footnote below\*), the following:

- a) a summary of the training and the 3 mini-projects undertaken in Yr 1 (<u>up to</u> 1000 words.); This should include a brief description of each project including any developments in the mini projects that have occurred since original submission as well as details of training attended.
- b) The PhD proposal (<u>up to</u> 1400 words)The PhD proposal will include a critical literature review, setting the project within the current body of knowledge; hypotheses to be tested and/or developments to be made; and a research plan and timetable for the next 3 years.

### Wellcome Trust Students

At the end of September, the student will present, to two proposed PhD supervisors and two independent reviewers external to the project (see footnote below\*), the following:

- c) a summary of the training and the 3 mini-projects undertaken in Yr 1 (<u>up to</u> 1000 words); This should include a brief description of each project including any developments in the mini projects that have occurred since original submission as well as details of training attended.
- d) The PhD proposal (<u>up to</u> 1400 words)The PhD proposal will include a critical literature review, setting the project within the current body of knowledge; hypotheses to be tested and/or developments to be made; and a research plan and timetable for the next 3 years. The same proposal can be sent to Wellcome Trust and uploaded to Star.

## Both IEU and Wellcome Trust students

Details of the training attended can be entered in the STaR online from – 'Looking Back' page – 'Personal and Professional Development'. The summary of the 3 mini-projects undertaken can also be entered into the STaR online form – 'Looking Back' page – 'Research Progress'. In addition, the student will need to upload a report in STaR that incorporates (1) each of the final (750 word) mini-project reports including supervisors feedback; and (2) the PhD proposal.

The date of the meeting, details of training and mini project report and the PhD proposal should be entered or uploaded in <u>STaR</u>. They should be sent to supervisors and external reviewers in advance of the oral presentation, to a timetable agreed with the reviewers.

The student will do a power-point oral presentation to their supervisors and the external reviewers (<u>up to</u> 15 minutes maximum). This power-point presentation will include: one slide on each mini-project and a summary of the PhD proposal.

The reviewing team can recommend one of the following:

- 1. Unconditional progress to next year.
- 2. Progress to the next year conditional on satisfactory completion of targets and / or further training set by the review group and monitored by the supervisors.
- 3. Review of unsatisfactory progress by the Director of Graduate Studies and/or Head of Department, which could ultimately lead to a termination of the studentship.

Any amendments to the final PhD proposal made as a result of the review should be incorporated into the final PhD proposal report and then the reports (summary of training and the final PhD proposal) should be sent to Sharen O`Keefe for filing.

\* A combination of supervisors and external reviewers are required at the reviews. In most cases the reviewers will be the two supervisors plus two departmental externals. In situations where there is only one supervisor available (e.g. one is on long-term leave / sabbatical at the time of the assessment) then two externals must be used. In this

situation, we would encourage the use of 1 senior external and one more junior external, so that junior staff gain experience of the PhD review process.

#### Feedback

At the end of each year the directors will hold individual 15 minute face-to-face interviews with the students to obtain feedback. The supervisors will be asked for a brief report to the directors on progress.

## **Expected outputs from Year 1**

- Main aim
  - Meet learning objectives agreed between you and your supervisors
- Mandatory
  - o 750 word report on each of the three mini-projects
  - 1400 word PhD proposal
- Others:
  - About 30%-50% of last years` projects have been or are being written up for publication or presented at conferences.

#### FAQ's

#### What is the purpose of the mini-projects?

The intention is that mini-projects prepare the student for their main PhD. The key is linking the experience and the skills that the student wishes to acquire to a project. Eg: If new to epigenetics, and the PhD is epigenetics focused, one of the mini-projects should be in that area. We want to actively expose students to a broad multi-/inter-disciplinary research environment and contribute to their intellectual development. For example, some people broaden their experience and knowledge by doing a lab based project - this may not be directly relevant to their PhD but is part of generic skills training and intellectual development that the course offers. It really is an opportunity to create an individualised programme of training that meets the student's own learning needs, requirements and objectives.

These new skills will then help the student to execute the main PhD project.

## Can I have an external mini project supervisor?

Yes. You can have external supervisors alongside your main UoB supervisor although they cannot claim any financial expenses for their input.

#### I have an idea for a project-can I contact students directly?

New students may already have decided which 3 projects they would like to do. You can ask the postgraduate administrator to send out any last minute project ideas.

## What if my project over runs?

Students should not be required to stop the project at 3 months, but also shouldn't be required to continue it. Not all projects need to reach publication and students should meet with the mini-project supervisor at the end of the 3 months to agree whether and how the work would continue (eg stop, handover or continue to be involved), without pressure to continue.

## How do I produce a paper from the project?

If the student wants to write the project up as a paper, then how this will be done and the roles and responsibilities (who will lead, who will write each section of the paper etc..) of the student and supervisor must be discussed and agreed between them.