Graduate Studies Committee

Handbook 2017/18

For further information see:

Microbiology Programme Website: https://www.ucc.ie/en/microbiology/study/micropg/

Graduate Studies Office Website: https://www.ucc.ie/en/graduatestudies/

College Calendar: https://www.ucc.ie/admin/registrar/calendar/postgraduate/

Revision date: Thursday, 21 December 2017
School of Microbiology
Introduction

The School of Microbiology Graduate Studies Committee (SGSC) has been set up to ensure a better understanding of the responsibilities of both Student and University in ensuring the best practice in conducting research for the degree of Postgraduate Degrees (MSc and PhD).

There are four principal players in the postgraduate process; the Student, the Supervisor, the School and the University. The School of Microbiology is represented by the School Graduate Studies Committee (SGCS), while the University in this case is represented by the Academic Council Graduate Studies Committee (ACGSC).

This handbook sets out the operational details of the interplay between student, supervisor, SGSC and the ACGSC, and also defines the responsibilities of each partner.

School Policies are also laid down in the handbook. All postgraduates are expected to familiarise themselves with this handbook before beginning their studies and to keep abreast of any changes during the course of their studies.
Quick Checklist of Postgraduate Programme start to finish

At the beginning

- Identify a supervisor and agree entry to the postgraduate programme
- Apply to University via PAC (if EU student). All Non-EU applications should be made to the International Education Office
- Complete all administrative paperwork with the Microbiology School Office Room FSB 452
- Form a thesis committee
- Sign-up and attend any required courses
- Commence postgraduate research in Microbiology

At the end of the first year

- Prepare an annual report for your thesis committee
- Present your research to-date and your research plan to the thesis committee
- Arrange additional meetings as required
- Register on-line for the second year

During the second year

- Attend any courses stipulated by the SGSC, your supervisor or your committee.
- File notice of intention to submit a thesis if planning to submit an MSc thesis (3 months notice)
- For MSc students, submit your MSc thesis.

At the end of the second year (PhD students only)

- Prepare an annual report for your thesis committee
- Present your research to date and your research plan to the thesis committee
- Arrange additional meetings as required
- Register on-line for the third year

At the end of the third year (PhD students only)

- Prepare an annual report for your thesis committee
- Present your research to date and your research plan to the thesis committee
- Arrange additional meetings as required
- Register on-line for the fourth year

During the fourth year

- Deliver a seminar to the School of Microbiology
- File notice of intention to submit a thesis (3 months notice)
- Complete and submit your PhD thesis.
Procedures for Admission to the Microbiology Postgraduate Programme

Applying for a postgraduate position

- Any person wishing to pursue an MSc or PhD degree must first make contact with an individual academic member of staff and following meetings and interviews as required an offer of a postgraduate position may be made by that member of staff.
- Following acceptance of the offer of a position, the prospective postgraduate student then needs to formally apply to the University using either the on-line application system or the International Education Office (see below). This should only be done following consultation with the member of academic staff.

Admission Criteria and Procedures (from the College calendar)

- To be eligible for consideration to undertake a programme of study for a Master's Degree by Research, a candidate must have obtained a standard of at least Second Class Honours in an approved primary degree or possess such other qualifications as the Graduate Studies Committee may recommend to Academic Board.
- To be eligible for consideration to enter on a programme of study and research for the Degree of PhD, a candidate must have obtained a standard of at least Second Class Honours, Grade I, in an approved primary degree, or presented such other evidence as will satisfy the College/Faculty of his/her fitness.
- All EU applications should be made online at www.pac.ie. All Non-EU applications should be made to the International Education Office.

Key Aspects of the Microbiology Programme

- The School of Microbiology has a Graduate Studies Committee (SGSC) that oversees operation of the postgraduate Programme.
- All postgraduate students must form a thesis advisory committee within three months of commencing the programme.
- The thesis committee must include the supervisor and one other member of the academic staff and may include additional staff.
- The different roles of the student, the supervisor and the advisor are set out in the ‘Code of Practice for Supervision of Research Students’ and the ‘Models of Supervision at UCC’ documents available at https://www.ucc.ie/en/graduatestudies/policies/
- The Student must make an annual report to the thesis committee and receive approval to continue in the MSc or PhD programme.
Role of the School in the Postgraduate Process

- Responsibility for overseeing the PhD programme within the School rests with the School Graduate Studies Committee. The SGSC has responsibility for all aspects of the PhD programme, from Admissions to Final Examination.

- In line with the Bologna process, the University has defined a PhD in terms of ECTS credits. “PhD candidates undertake an equivalent of 90 ECTS credits for each calendar year of full-time research, or proportional equivalent for part-time students. Students will complete a minimum of 270 credits (3 years, full-time) and a maximum of 360 credits, for consideration for the award of PhD” (from the Calendar).

- The University also allows students gain up to 90 credits for taking relevant courses. This is recognised in the final transcript but does not form part of the decision to award a PhD. “A number of generic and disciplinary training modules are available to PhD candidates to provide them with research and transferable skills. Students may take modules up to a maximum of 90 credits as part of their PhD studies as advised by their Supervisor(s)” (from the Calendar).

- The School of Microbiology endorses this approach and facilitates students to take some modules.

  - All postgraduates in Microbiology are recommended to take postgraduate module PG6001 STEPS - Scientific Training for Enhanced Postgraduate Studies, PG6005 Biotechniques and PG6026 Teaching and Demonstrating Skills for College of Science, Engineering and Food Science (SEFS) Postgraduate Students. Please see the UCC Book of Modules for module descriptions at https://www.ucc.ie/admin/registrar/modules/descriptions/PG.html
  - Postgrads are encouraged to take relevant skills modules – e.g. PG6009 Graduate Information Literacy Skills and computer (e.g. ECDL) training operates via the computer center
  - Postgraduates may be required to take additional generic training modules that are organised in the future
  - Postgraduates may be required to take discipline-specific modules as part of a tailored training programme.
  - Postgraduates may take additional modules to enhance their own knowledge and skill set.

All postgraduates in Microbiology must have a thesis committee.
Responsibilities of the Student

It is the responsibility of the student to maintain a professional relationship at all times with the supervising academic members and other university staff. The postgraduate student is responsible for the progress and completion of her/his doctorate study. After registering as a postgraduate student it is the responsibility of the student to:

- Be familiar with the University’s regulations and School guidelines and written information pertaining to postgraduate studies, including this handbook
- Be aware of the University administrative requirements pertaining to all steps in the postgraduate process (e.g. dates and deadlines for thesis submission, etc)
- Be familiar with the School of Microbiology postgraduate programme and its requirements
- Agree to a schedule of meetings that will ensure regular contact
- Develop competence in written and communication skills
- Take the initiative in identifying problems and seeking solutions to these
- Document the progress of work as agreed with the supervisor and present written or other material in sufficient time as requested
- Present written or other reports in sufficient time as may be required by the SGSC
- Satisfy the SGSC and Supervisor(s) in the annual evaluations that satisfactory progress is being made. The purpose of this evaluation is to examine the student’s progress, ensure the student has sufficient knowledge of the fundamentals of the chosen discipline, ensure the student has developed a clear plan of research, and has identified a viable topic. The student is expected to present a report of progress to date and successfully defend that report
- Prepare and submit a thesis of original research, in consultation with the supervisor(s) and the SGSC
- Establish to the satisfaction of the examiners at the *viva voce* that the student’s contribution to the work reported in the thesis is clearly indicated
- Students are expected to commit a reasonable effort in terms of time in pursuit of their degree
- Students are expected to give Seminars during the course of their studies
- All postgraduate students in Microbiology are expected to contribute to the undergraduate degree programmes. This involves modest amounts of demonstrating and supervision of undergraduate projects. This forms an important part of postgraduate training
- Postgraduate students are expected to contribute modest amounts of time to the promotion of the discipline and the School if required. This might include attendance at open days, visits to schools, or other outreach activities.
Responsibilities of the Supervisor

It is the responsibility of the supervisor to maintain a professional relationship at all times with the student and to:

- Give guidance about the nature of research and the standard expected, about the planning of the research programme and presentation of a research proposal, about literature research and appropriate courses to attend
- To agree a project outline with the student and to make this outline available to the Thesis Committee and the Chair of the SGSC
- Agree the nomination of an extern with the SGSC for approval by College of SEFS
- Give advice on the necessary completion dates of successive stages of work so that the thesis may be completed within the scheduled time and to familiarise the student with the periodic reviews
- Encourage the student to show initiative and self-motivation in order to pursue independent research with confidence
- Establish and maintain regular contact with the student. Such contact to be available at the request of either the supervisor or the student. In certain circumstances, e.g. external research locations, less frequent contact may be considered appropriate
- If a supervisor is to be on leave for a period greater than one month, to ensure that alternative supervisory arrangements are made
- Request regular written work, interim reports or research results as appropriate. Draft chapters of thesis should be returned with comments within one month during the academic year
- Facilitate the student meeting other researchers in the field and attending meetings or conferences as appropriate
- Ensure that the student is made aware of inadequate progress by specifying the problems and suggesting ways of addressing them. If the supervisor feels obliged to recommend a candidature be terminated because of unsatisfactory progress, he/she must make this recommendation to the SGSC who will inform the student accordingly
- Advise the SGSC of the progress of the student after each review
- Ensure that the work is conducted to a high ethical standard
- Encourage where appropriate the publication of the results of the research, provided that any published work is coherently incorporated into the research
- Ensure agreement is reached with the student on authorship of publications and acknowledgements of contributions
- Ensure that the student is aware of the standard of work that is generally acceptable
- Seek to ensure that research projects sponsored by industry grants or contracts should not impose unreasonable restrictions on dissemination and publication of work done as part of a doctoral thesis or compromise the independence of the research. Where a confidentiality agreement exists between a School and a sponsor, the implications should be made explicit to the student. Submission of the thesis should not be unduly delayed by the School/Sponsor’s interest in the confidentiality of the student’s own work
- To ensure that if the research leading to the Ph.D. is done in laboratories in which several candidates, technicians and post-doctoral fellows contribute to the project, clear delineation of the contribution made by the candidate is essential in a thesis and work done by others should be explicitly defined and acknowledged appropriately
- To ensure that in the event of a student not carrying out their work to the satisfaction of the supervisor(s), a written warning is given to the student by the chairman of the SGSC.
Responsibilities and Role of the Thesis Committee

- It is a University regulation that all PhD students have a thesis committee. It is the policy of the Microbiology School that this requirement is extended to all postgraduate students.
- The committee is comprised of the supervisor, any co-supervisors in the case of joint supervision, or a thesis advisor(s) where relevant.
- The thesis advisor(s) have a role that is distinct from the supervisor(s) and the advisor should not be considered a “co-supervisor”.
- The advisor is independent of the supervisor, the student and the project and so can provide objective inputs to the process.
- Typically, the advisor is another staff member of the Microbiology School. Academic staff of other Departments may also serve as advisors, and some funding agencies require this.
- The advisor is in place to aid the student and to ensure that satisfactory progress towards the postgraduate degree is being made.
- The thesis committee will receive an annual report from the student and will ordinarily meet with the student to discuss progress.
- The format of the meeting is discrentional and may involve a presentation or a less formal discussion.
- The thesis committee will make recommendations to the student regarding progress towards the thesis and may request additional meetings with the student.
- The thesis committee will deliver an annual report on progress and additional reports of any formal meetings to the SGSC.
- The thesis committee will ensure that the student is made aware of inadequate progress by specifying the problems and suggesting ways of addressing them.
- In the event that the thesis committee is dissatisfied with student performance, this must be discussed with the student and a review meeting arranged.
- All reports from the thesis committee are to be co-signed by all members of the committee and the student.
- The thesis committee is required to approve student continuation in the postgraduate programme.
- The thesis committee is required to approve transfer of student registration from MSc to PhD following University regulations.
Thesis Committee: Annual Reports and Reviews

Meetings with the thesis committee.
- Students should meet their thesis committee at least once a year and a review form for each student must be submitted by each thesis committee annually to the SGSC. The format of this meeting is at the discretion of the student and their committee.

Annual report from the thesis committee.
- After each of the first three years, the thesis committee prepares an annual report using a standard template (see appendix for form). This report is seen by the student and all parties sign the report which is then submitted to the SGSC. The report may endorse progress, may recommend that the student carry out specific work in an agreed time-frame, or may recommend that the student not remain in the programme. If the thesis committee recommends that a student not be permitted to remain in the programme, this decision must be communicated directly to the student and to the chair of the SGSC.

Final year Presentation.
- All PhD students are required to give a talk on their project in the School Seminar series in the final (4th) year of their research. Typically, the seminar will be sometime between October and December.

Additional Requirements in specific circumstances
- Some funding agencies or particular programmes may require additional reports, alternative formats to the thesis committee, and additional or specific training requirements. This would be over and above the requirements of the Microbiology Programme. The School will, however, endeavour to be flexible in the requirements on students, and any conflicts between the requirements of different programmes or training schemes should be brought to the attention of the SGSC.
Preparation, Submission and Examination of Theses

- Students are required to inform the University at least three months in advance of their intention to submit a (MSc or PhD) thesis.
- Students need to agree a schedule with supervisors regarding reading of chapters and the whole of the thesis and have due regard for the range of other commitments that supervisors have.
- Supervisors should read the thesis within a reasonable time-frame and return with comments.
- It is the responsibility of the student to achieve a satisfactory standard of writing and presentation in the thesis and should not expect the supervisor to correct language and proofread.
- Supervisors will not approve submission until the thesis is of a satisfactory standard.
- A thesis submission form needs to be included with the submitted thesis. This needs to be signed by the student, the supervisor and the Head of School.
- Students should consult regulations regarding the style (e.g. hard/soft-bound) and number of copies of theses that are required.
- All theses are examined by an examinations board appointed by the University. That board sends a recommendation on whether or not to award the degree to the Academic Council Research Committee.
- All exam boards include an external examiner and an internal examiner.
- Under new regulations, the supervisor is present at the *viva voce* but is not one of the examiners. The student may request in writing to the Graduate Studies Office that the supervisor does not attend the *viva voce*.
- PhD theses are always examined at a *viva voce* (oral defence of work).
- Students should be aware that it is possible to appeal the result of any examination. For this purposes, the University has an examinations appeals officer and an appeals board. Students considering this process should consult the Registrar’s Office to be advised on procedures.
- Students should consult the College Calendar for up-to-date details on examination procedures.

- **Students should note the requirement to be registered in all years until the PhD is submitted.**
Procedures and Protocols for resolving difficulties

- It is accepted that from time to time, situations may arise where there are difficulties in the relationship between a student and his/her supervisor.
- In such cases, all parties are encouraged to take a reasonable and professional approach to resolving the issues that may have arisen.
- Most issues can be resolved locally and amicably!
- A general sequence of events as follows is recommended:
  - Students with academic difficulties are encouraged to discuss the situation with their supervisor in the first instance.
  - In a case, where there is an issue between the supervisor and student regarding progress of the postgraduate work, the matter should be brought to the attention of the thesis committee who will arrange a meeting and attempt to resolve the issue.
  - If the issue is still unresolved, the problem should be brought to the attention of the SGSC Chair who will mediate on the issue.
  - Finally, unresolved issues can be addressed by the Head of School.

- It is also recognised that all students are entitled to discuss their issues with the Head of School at any time by appointment. It is School policy to try to resolve all differences in an amicable way within the School. In extreme cases, however, if a satisfactory resolution is not reached, the matter may be referred to the student ombudsman.

- Following performance assessments, a supervisor may form the view that a student is not making sufficient progress to continue the postgraduate research degree. In this case, there are defined procedures and steps that should be followed to protect a student’s interests:
  - The supervisor needs to meet the student and explain why adequate progress is not being made. The supervisor should outline to the student what needs to be achieved and the requirements of the project.
  - If satisfactory progress is not made, a meeting of the thesis committee to review progress must be convened. If the committee is of the view that progress is not being made, then this view must be communicated in a report that is presented to the student and to the SGSC.
  - A remedial plan must also be designed to set goals that could be achieved in a reasonable time-frame (e.g. 6-12 weeks) to give the student an opportunity to recover the situation. This plan must be prepared in writing and given to the student and forms part of the report that also goes to the SGSC.
  - The thesis committee should be reconvened at the appropriate time to assess whether the student has fulfilled the requirements that were set.
  - If the thesis committee decides that it is not in the student’s interested to continue, this decision must be communicated to the student in writing and copied to the chair of the SGSC and the Head of School.
  - The student may request a meeting with the chair of the SGSC or the Head of School to discuss the outcome if they wish.
General Topics

- Correspondence and communication is important. The School and SGSC will only use UCC student e-mail addresses for bulk correspondence and will not use hotmail, gmail or other outside e-mail accounts. This is to facilitate mailing lists and to ensure that current e-mail accounts are used. All students, regardless of what other e-mail accounts they may use, are required to regularly check their UCC student account for correspondence, especially towards the end of the academic year when details of reports, UCC registration documentation, and other important documents are distributed via this system. Postgraduates should also use their UCC e-mail address for professional correspondence, for example when requesting strains or corresponding regarding manuscripts.

- Funding of postgraduate students is a matter between the student and supervisor. The School does endeavour, however, to ensure that postgraduate stipends are fair and there is a general policy to aim to pay postgraduates at nationally-set rates (e.g. IRC). Almost all postgraduates are funded on external grants secured by the supervisor and the rates payable may be dictated by the funding agency. These rates also change over time, often after a grant was initially funded at a particular level. Postgraduate research is an intensive activity and it is generally not appropriate that students would have outside jobs that take up any significant amount of time. This would also create tax compliance issues as postgraduates are typically funded on a tax-free stipend.

- Regardless of the particular location of a student, the research programme or centre to which the student is affiliated, or the source of funding, every student supervised (or co-supervised) by a member of the Microbiology School Academic Staff is part of the Microbiology Postgraduate programme. This provides the Academic framework by which an MSc or PhD degree can be awarded. Accordingly, it is appropriate that the School of Microbiology is duly acknowledged in all talks, reports and publications. For talks and presentations, this entails including the Microbiology Logo (available from microbiology@ucc.ie) in the acknowledgements section, and for publications, the School of Microbiology must be included in the address line. It is proper of course to also acknowledge other contributors and agencies where relevant.

- There is a Postgraduate Society in the School of Microbiology. This society is responsible for organising various functions and events and is also an interface between the School and the postgraduate students. Students are encouraged to participate in the society.

- All students are encouraged to join the Microbiology Society (https://microbiologysociety.org/). Key benefits of membership include:
  - free subscription to Microbiology Today
  - free attendance (costs paid) at 1 meeting per year (typically in the UK or Ireland)
  - opportunity to apply for grants to attend other meetings
  - opportunities to apply for grants to visit other laboratories for up to three months
  - Membership of FEMS (http://www.fems-microbiology.org/) and associated benefits

- Students should also consider other Disciplinary Societies such as the Society for Applied Microbiology (www.sfam.org.uk/), the British Society for Medical Mycology (http://www.bsmm.org/main.htm), the American Society for Microbiology (http://www.asm.org/), FEBS (http://www.fems.org/) and others. Most of these societies provide grants for courses, meetings and exchanges. By combining grants it is possible to fund attendance at almost any conference.
General School Policies for postgraduate students:

1. Facilities and resources available to postgraduate students within the School and within the University:

Students shall have access to the research laboratories of their supervisor, and the general areas of the School. Students should seek permission before working in any other laboratory or before using equipment in another research laboratory. It is the responsibility of the student to ensure that they do not operate equipment without prior instruction on the safe use of that equipment.

Students will have access to the library using their student cards. The School expects students to conduct themselves appropriately in the library and to adhere to the rules set down by library staff. Students should only use computers within the School after consultation with their supervisor.

2. School staff and research interests:

A brief overview of the staff and research interests is provided on the School webpage: http://www.ucc.ie/en/microbiology/

3. Timing and mode of presentation of reports, reviews, seminars and examinations by which the student is assessed.

Timing and mode of presentation of reports, reviews, seminars will be at the discretion of the supervisor. Examinations will be set by the supervisor or module coordinator where relevant.

4. Coursework and other requirements for the Ph.D. degree.

Students will be required to take those courses prescribed by their Thesis Committee, not to exceed two modules in any single year. Student are expected to be able to demonstrate a general knowledge of the discipline and a detailed knowledge of the area of research.

5. School requirements regarding demonstration, teaching and tutorials by graduate students.

Graduate students are obliged as part of their programme to demonstrate at practicals of the Microbiology School. All efforts will be made to ensure a fair load for each student.

6. School policy on student costs for attendance at conferences.

Where possible, the supervisor will cover the costs incurred in attending conferences from research grant funds. Students are also expected to be proactive in seeking to secure funds for attending conferences and undertaking research visits.

7. School calendar (seminar dates etc).

Students are advised to consult the School notice boards for information relating to seminars, vacation dates, cleaning protocols, etc. Postgraduate students are expected to attend School Seminars.

8. School guidelines regarding thesis content and standards expected.

Theses will consist of a detailed review of the research literature, an account of the materials and methodologies used during the course of the study period, a concise account of the results obtained and a clear interpretation of research results. The student is required to have the approval of their supervisor as to the quality of the thesis before submission.

9. School specifications for the publishing of papers in international journals or international conference presentations as part of the requirements for the Ph.D.
Research must reach a standard such that it is likely to be accepted in international peer-reviewed journals. While students are strongly encouraged to publish their results, and ideally part of the thesis will be published prior to submission.

11. Requirements for student training in health and safety issues.

Students are expected to take part in the regular health and safety training programmes offered by the School/University at the earliest possible time. Students are required to be aware of and to follow safe work practices. This includes wearing a lab-coat when in a lab, and all other aspects of good microbiology practice.

12. Medical issues.

Students are expected to inform their supervisor of any health issues that could affect their ability to carry out the proposed project. Equally, supervisors are expected to inform students as to any risks associated with a particular project or laboratory (for example, work involving infectious agents).
Contact details

Specific enquiries about the programme
Dr David Clarke
Chair, School Graduate Studies Committee
david.clarke@ucc.ie

Paperwork, forms and administrative issues
Ms Hilda Bohane
Microbiology School Manager
h.bohane@ucc.ie

Issues related to postgraduate research
Prof. Gerald Fitzgerald
Head, School of Microbiology
g.fitzgerald@ucc.ie

General postgraduate issues
The Microbiology Postgraduate Society
microbiology@ucc.ie

Appendices – forms and paperwork

These forms are provided for information. Electronic versions are available. Sources of forms are the SGSC for Microbiology Programme forms and the University website for University forms.

All forms can be downloaded for the relevant websites:

Microbiology Programme Website: http://www.ucc.ie/en/micropg/

Graduate Studies Office (GSO) Website: http://www.ucc.ie/en/graduatestudies/ please note that all GSO forms must also be submitted to the School of Microbiology Office, Room 452 in the first instance.
# School of Microbiology Postgraduate Programme

## Annual Progress Report

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<th>Student Name</th>
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<td>MSc, PhD</td>
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### What period does this report cover? Yr 1 Yr 2 Yr 3 Other (explain)

### Thesis Committee

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<th>Supervisor(s)</th>
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<th>Advisor(s)</th>
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### Date of Meeting with thesis committee

### Programme Requirements (Supervisor, if required, initial to indicate fulfilled)

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<th>Written Report</th>
<th>Presentation/Meeting with thesis committee</th>
<th>Satisfactory attendance at stipulated courses</th>
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### Please Attach Report of the thesis committee [separate page(s)]

**Suggested headings**
- State what format the meeting took (e.g. ‘written report and presentation’)
- Comment on reports / presentation
- General comments on progress with the research project
- Specific recommendations or advice

Report attached

### Recommendation of the thesis committee (tick one box)

- [ ] Proceed with / Transfer to PhD
- [ ] Proceed with MSc research
- [ ] Meet with committee again to review progress (indicate time-frame)

**Signatures**

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*Form to be signed by student and thesis committee and returned to chair SGSC (retain copies)*