

DEPARTMENT OF BIOLOGICAL SCIENCES

APPENDIX TO THE MPHIL/PHD DEGREE STUDENT HANDBOOK 2023/24

This appendix should be read in conjunction with the <u>core MPhil/PhD student handbook</u>

The Department of Biological Sciences sits within the School of Life Sciences and the Environment, which covers the following disciplines: Biological Sciences, Earth Sciences, Geography and Psychology. The Department of Biological Sciences is located in the <u>Bourne Building</u>.

Welcome to your School

As Director of PGR Education, I am delighted to welcome you to the School of Life Sciences and the Environment. The School, which was launched on 1 August 2019 is one of the largest and most diverse in the University; our vibrant research culture spans the arts and humanities and social and natural sciences. The School – which brings together Biological Sciences, Earth Sciences, Geography, and Psychology – is designed to encourage world-leading research that spans disciplinary boundaries and addresses some of the most significant planetary challenges we face.

Postgraduate research students are central to the vitality of the School's research culture and I hope that you will find here a stimulating and supportive environment in which to pursue your studies. In the coming days you will meet the supervisory team who will offer you day-to-day guidance during your research project. You will also be introduced to the subject-specialist research groups and centres that exist at departmental level to support the wider community of researchers working in particular fields or disciplinary areas.

You will find support in your studies not only from your immediate supervisory team but also from the PGR Lead in your home department – Dr Laurence Bindschedler (Biological Sciences), Dr Rebecca Fisher (Earth Sciences), Dr Sasha Engelmann (Geography), Dr Rob Lachlan and Dr Shiri Lez-Ari (Psychology) – and from the Doctoral School. We are here to help, so please do not hesitate to ask questions or to seek advice, particularly as you settle into your studies.

Dr Christina Manning, Director of PGR Education for the School of Life Sciences and the Environment.

Welcome to your department.

We welcome you to the Department of Biological Sciences. The PhD programme usually lasts three years and the majority of PhD students will complete the course in three or four years of full-time study. Today, at the start of your postgraduate research course, this might seem to be a long way

away, but you should not underestimate how long it will actually take you to complete your project. Throughout your PhD journey your supervisory team will remain your main points of contact and support. Your supervisors will be closely involved and will provide training, guidance and other reasonable assistance to help you achieve your goals.

Over the next few years, you will enjoy the intellectual and social camaraderie of your Research Centre and of the Department of Biological Sciences. You will become an integral part of the academic life of the School of Life Sciences and Environment. The Doctoral School will facilitate networking with research students across the University. PhD research often involves close interaction with external institutions other Universities and commercial partners and you will most likely have ample chances to experience such collaborative research first hand, or spend time conducting research externally to the University.

PhD scholars are expected to advance understanding and produce a significant and distinct original contribution to the knowledge of the subject of their research. The next three-four years will provide you such an opportunity. Achieving this will require dedication, intellectual rigor, good planning skills, hard work, good teamwork and interaction with your supervisory team, and a lot of patience. By the end of your PhD course you will have produced a thesis to report your discoveries, demonstrate your critical thinking powers, intellectual and professional maturity. You may experience periods of frustration and disappointment when things just don't work out as well as you would like, but these should be more than compensated for by moments of tremendous excitement when experiments or surveys help you to discover something truly novel.

On behalf of the Department of Biological Sciences I am delighted to welcome you to the School and wish you to have a successful PhD.

Dr Laurence Bindschedler, Departmental PGR Lead for the Department of Biological Sciences Professor Elli Leadbeater, Departmental PGR co-Lead for the Department of Biological Sciences

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School helpdesk*			276884	118

Key contacts

* For the majority of your administrative, (non-scientific or research specific, related issues, please contact the Doctoral School. However, for queries associated with the department of biological

sciences, or the school of Life sciences and the Environment (LSE) *eg.* about teaching contracts, expenses and study space within the school, please contact the School LSE School helpdesk.

Staff

List of academic staff in the Department of Biological Sciences

Research areas

As a postgraduate student, you will become a member associated with one or more of our four research themes (in alphabetical order):

- Biodiversity and Ecosystem Services (BES)
- Data And Technology Resources (DATR)
- Healthy Ageing and Molecular Medicine (HAMM)
- Sustainable Engineering and Food Security (SEFS)

The theme structure will replace our previous centres: *Biomedical Sciences*, (*Dr H. Augustin, Head of BMS*), *Environmental and Evolutionary Biology*, (*Prof. Mark Brown, head of EEB*) and *Plant Molecular Sciences* (*Prof. A. Devoto, head of PMS*).

You are strongly encouraged to attend events associated with the research theme relevant to your own research.

Find out more about the research groups in the Department of Biological Sciences

Departmental seminars

Unless you are working for extended periods in other laboratories off-site or in the field, postgraduate students are expected to attend departmental seminars, usually taking place on Wednesday afternoon. Although these may not always be directly relevant to your field of research, they should help to broaden your scientific education, and should also illustrate how to present research seminars (and in a few cases, how not to present them!). Seminars schedule, speakers' names, talk titles and any updates will be circulated by email. Check the department webpages, and the TV screen in the foyer for updates.

Staff-Student Action Meeting

The School of Life Sciences and the Environment is keen to hear the views of its postgraduate students through a new School-level Staff-Student Action Meeting. It is anticipated that meetings will be held termly, beginning in the autumn. MSc and PhD Representatives (Reps) will be present to represent the views of their peers.

Postgraduate representatives from the School's four departments will be appointed and the Students' Union will also provide representatives with appropriate training and support in order to allow them to undertake their roles effectively.

The Meeting is an important forum in which issues that concern postgraduate students particularly can be aired and in which solutions can be discussed and identified.

Things to do in the first few days

- Self-enrol to the PhD Moodle website <u>Course: PhD in Biological Sciences</u> (royalholloway.ac.uk). Use enrolment key 'PHD' and then click on the orange 'Enrol me' button. You only need to do this on your first visit to the course space, after that you will then see the course under your My Courses list as usual. Your enrolment should continue for 4 years and you won't need to enrol again next year. Another useful Moodle page is <u>Course:</u> <u>MSc in Biological Sciences Research (BS5200) (royalholloway.ac.uk)</u> There you will find a detailed list of Departmental training courses for postgraduate students and links to the University training events.
- Meet with your supervisor and complete the project registration form. This and other forms should be returned electronically by email to doctoralschool@royalholloway.ac.uk.
- Familiarize yourself with the timetable of postgraduate training courses provided by the Department, School and the University.
- Familiarize yourself with the training provided by the <u>Researcher Development Programme</u> the links should be visible in Moodle.
- Discuss with your supervisor(s) any training needs you may have. If you have recently completed one or a number of similar training courses or you may have already had attended these as part of your MSc course, you may opt out of some of the departmental training areas.
- Make sure that you have selected or have been allocated a pastoral advisor who will be part of your supervisory team, but who is not associated with your research or your supervisor research group. You can ask for advice on who to chose from your supervisor, or one of the PG research leads (Laurence Bindschedler/ Elli Leadbeater).
- Familiarise yourself with the Research Degree Student Handbook, this appendix and the safety handbooks (available from the <u>PhD in Biological Sciences Moodle page</u>).

You and your supervisory team

As a student in the Department of Biological Sciences, you are expected and required to know your own responsibilities and to follow relevant <u>University regulations</u>.

Each student is allocated a supervisory team, which will include as a minimum two members: a principal (first) supervisor and either a second supervisor or an advisor:

- **Supervisor** all MPhil/PhD students will have a principal supervisor, who will be an expert in your academic field, will oversee your progress and will remain your first point of contact throughout the course. Your supervisor bears the major responsibility for the supervising and supporting you academically and pastorally. Your supervisor will also suggest the names of your advisor, any co-supervisors and nominate the independent examiner as outlined below. At times when your supervisor is not available, contact your co-supervisor or advisor for advice.
- **Co-supervisor(s)** depending on the nature of the research, and often in case of multidisciplinary or collaborative research projects, students will have one or more co-

supervisors, who will provide additional source of academic and/or pastoral support and will share supervisory responsibilities with the principal supervisor. The majority of PGR students expect to have at least one co-supervisor.

• **Pastoral advisor** - each research student will be allocated an advisor as an **additional source of pastoral support**. Advisors are not expected to have expertise in the student's research area or to offer guidance on academic work but have an essentially pastoral role.

See <u>Code of Practice for research degree students and supervisors</u> for further details.

• Independent academic examiner - During your MPhil/PhD programme you will be attending regular formal review meetings and will also have an internal upgrade meeting. All these meetings (@4, 9, 21, 33 months), except for your first 4-month review, will have to be attended by another Independent academic examiner, normally another member of academic staff. This academic staff member is expected to have expertise in your research area but is not expected to play a substantive role in supervision. The role of this expert will be to serve as independent examiner at review and upgrade meetings.

Formal supervisory meetings

You will meet with your supervisor(s) and advisor regularly during the academic year. For laboratory-based projects, students can expect regular contact, with substantive discussion meetings often on a weekly basis for full time students (or fortnightly for part-time students). In exceptional circumstances (e.g. fieldwork or the student working abroad) communication by e-mail or telephone will be an acceptable substitute for all face-to-face meetings. Irrespective of these, full time students are expected to have scheduled formal supervisory meetings with your supervisor and/or co-supervisor as follows (part time students will have pro-rata equivalent of these):

- a minimum of one meeting per month in the first year and,
- on average, <u>one meeting every six weeks</u> throughout subsequent years (10 meeting per year)

Advisors should be available throughout the period of your studies and will expect to meet you a minimum three times per academic year on average.

You should make a note of these meetings and their outcome by entering details into the <u>Supervisory Log form</u>.

Remark: In addition to your regular formal one-to-one meetings with your supervisor, you are very likely expected to attend regular "lab meetings" with your team as arranged and suggested by your supervisor. You might also have the opportunity to attend research meetings/ seminars organised by the research centre for which you are affiliated.

Annual reviews and upgrade

Although you will meet with your supervisor regularly during the academic year, your academic progress is formally reviewed first at 4 months (8 months if part time), then once every twelve months, regardless of whether you are studying full or part time, typically at 9, 21 and 33 months.

See links below for accurate details.

- <u>Core annual review details</u>
- Annual reviews in the Department of Biological Sciences

All MPhil / PhD students start their programme on the MPhil and have to pass the upgrade review meeting in order to be eligible to submit for the PhD.

- <u>Core upgrade details</u>
- Upgrades in the Department of Biological Sciences

Training within the Department of Biological Sciences

Training material available online and further information:

Researcher Development Programme

Course: MSc in Biological Sciences Research (BS5200) (royalholloway.ac.uk)

In addition to the training courses run by the University as part of the <u>Researcher Development</u> <u>Programme</u>, the department has developed a set of training modules for students to enhance their research skills and other skills useful to their future careers. This timetable is primarily designed for our Masters Students but there are elements that we feel would complement your research and generic skills training. The sessions which you have to attend as a 1st or 2nd year PhD student will be indicated on the timetable which can be found on Moodle page <u>Course: MSc in Biological Sciences</u> <u>Research (BS5200) (royalholloway.ac.uk).</u> Most of the departmental training sessions will take place in the first two weeks of term 1 and term 2.

Please note that if you are interested in demonstrating on undergraduate practical courses, as a paid demonstrator, you are expected to attend the "demonstrator induction" session, taking place at start of term (usually Monday week 2). Sometimes the session is repeated at the end of first term. For late starters, catch up sessions will be organised, so you do not miss the opportunity. For more details, please email Elli Leadbeater <u>Elli.Leadbeater@rhul.ac.uk</u> (who is organising demonstrator allocations.

Students are advised to check Moodle for any updates. Further questions about Departmental training courses may be directed to MSc Director Paul Devlin (Paul.Devlin@rhul.ac.uk). Attending these courses counts toward the minimum postgraduate training requirements of 5 days a year on average. Failure to meet the minimum training requirements will affect the outcome of annual reviews and of the upgrade. It is your responsibility to manage the attendance. If you attend in a different year, you will need to add your name to the bottom of the register in the year that you do attend it.

Remember to log all of your training on your <u>training log</u> and include a copy with other forms submitted for your annual reviews.

Coursework

Taught modules for the training provided by the Department are built around five key components of research skills and knowledge:

- personal research skills
- information technology

- data acquisition, management and analysis
- communication and presentation of results
- obtaining research funding

As a PhD student you can decide if for your personal development you would like to submit coursework for the sessions you have attended. Not all sessions have coursework. Coursework is due one week after being set in the session. Academic member of staff conducting the training session will advise on the coursework submission deadlines and the location of the Masters Submission box if the coursework is not electronic. Remember to include your name on your coursework. Please note that you will be given a mark if you submit coursework but this is for feedback only and does not count toward your final award.

Industrial Placements for Doctoral Training Partnership Research Council funded Students

During the course of the PhD, most students affiliated to a Doctoral Training Partnership (DTP) programme are expected to complete a Professional Internship (PIPS), or have an industrial placement at their industrial/ commercial sponsor (for iCASE students), usually the placement is directly related to the research project and relevant to your industrial partner). If an industrial placement is required by your DTP programme, you should discuss, organise and agree about the placement in due time with your supervisor. Students should keep their supervisors informed throughout the process of arranging and undertaking an internship. Supervisors are encouraged to maintain contact with their students whilst on placement and where possible visit the student on placement at least once. Typical procedure for the PIPS placement is dictated by the DTP programme/ type of funding you are affiliated with. Typically, you should expect procedures similar to below.

- The student and supervisors (Royal Holloway and placement supervisors) agree a set of objectives and potential outcomes from the PIPS placement, and formally record these.
- The host organisation is informed of these plans, and the plans are also deposited with the Doctoral School. The host organization can, of course, help in drawing up these plans.
- If the plans need modifying for any reason during the PIPS, the student and supervisor do so and the host organization is informed of the revision. The primary supervisor makes monthly contact with the student to ensure progress and offers some due diligence on the progress of the placement.
- Upon completion of the PIPS a two page report (maximum) is provided to the supervisors and a copy deposited with the Doctoral School. This report covers what work was done, and describes the progress made against the agreed objectives.

All other PhD students are also encouraged to seek a placement, ideally in the second or third year of their PhD. In the case of Non-DTP BBSRC students, the placement may be related to their doctoral research. But in any case, this must be discussed and agreed with the supervisory team.

What to do before you embark on your placement

Once this has been organised but before you head off, please complete the PIPS or equivalent form which can be found on PhD Moodle. Please advise where you will be placed and the term of your placement.

On your return

On your return you will need to complete a report. Details on how to do this can be found <u>here</u>.

The Postgraduate Symposium in the Department of Biological Sciences

Each year the department runs an Annual Postgraduate Symposium at which all MPhil/PhD postgraduates are expected to give a presentation in a friendly and supportive atmosphere. First year students must present a 10-12 min talk. Second year students must present a poster and third year students present a 25 min talk. These presentations at the Symposium forms part of postgraduate training programme in the Department and all students should present. If exceptional circumstances prevent one to participate in the Symposium, the request should be made by the student supervisor. Part time students should present every other year. You are required to attend all presentations.

The Postgraduate Symposium in the department of Biological Sciences is usually scheduled for the week immediately following the end of the spring teaching Term (usually taking place in the last few days in March). The timing and various instructions will be announced in advance. Usually the Symposium lasts two days (typically Tuesday and Wednesday of that week).

The following presentation schedule is designed to prepare you gradually for the important task of presenting your first talk or poster at a scientific meeting:

- Year 1. You will present a 10-12 minute talk, outlining the rationale and main objectives of your project and presenting any preliminary results you may have.
- Year 2. You will prepare a poster illustrating some aspects of your work, including some results. You will be required to present and defend your poster during the designated poster sessions. You will have to upload your poster file in the <u>PhD in Biological</u> <u>Sciences Moodle page</u>.
- Year 3. Finally, you will give a more substantial 25-minute talk on your main findings, making full use of visual aids. Students registered for 4-year funding may choose to present in their 3rd or 4th Year.

Everyone, regardless of year, should submit an abstract.

Preparation and presentation of research talks and posters will form an integral part of your postgraduate training within the School. All MPhil/PhD students should present their work at the Symposium. Communication skills are a vital feature of your training. Feedback will be provided to all Symposium presenters (oral and posters) by academic staff from the relevant Research Centres acting as assessors. A record of your presentations should be entered on your training logs and used as part of the annual review.

The Department training courses have classes on Symposium presentation and Poster design. These are usually timed to occur in January to assist PhD students who require training ahead of the Symposium. Refer to the training Timetable for the specific dates and times.

Your abstract (300 words maximum)

A call will go out in due course requesting abstracts for you talk/poster. Please make sure you send this by the deadline otherwise you will hold up the publishing of the programme. In the recent years Abstract submissions will be online on the <u>PhD in Biological Sciences Moodle page</u>.

Your poster

The standard size of the poster is 841 mm × 1189 mm, Portrait orientation, with a maximum file size

of 20 MB.

Part-time students and absences

Part-time students may present the poster in their second or third year, and may present a final talk in their fourth or fifth year.

In the case that a student is going to be away during the scheduled PG Symposium presentation, e.g. attending a field course of a Conference elsewhere, this planned absence should be reported by the student and supervisor to the Departmental Postgraduate Lead.

Help with thesis writing

There are several sessions available to you on the <u>Researcher Developer Programme</u> to help you with preparing your thesis and indeed your viva.

We have a library of some useful training guides as follows:

- <u>Techniques for projects and dissertations</u>
- Managing large Word documents in Word
- Tips and Tricks for using Word to produce your Thesis
- <u>Multilevel lists in Word</u>

Making a purchase for your project

It is quite likely that you will need to make purchases to support your project during your years as a research student. Your supervisor or a nominated staff member in the research group will normally be responsible for authorising any purchases. Individual arrangements may vary, hence you should seek advice and instructions from your supervisor regarding the local purchasing practices in your Lab.

Purchasing is organised through the School of Life Sciences and the Environment helpdesk. Contact lse-school@rhul.ac.uk for further details, or the <u>BioSciencesordering@rhul.ac.uk</u> email.

School safety

At the start of the programme, you will and must attend the session on safety in the lab and field. Please familiarise yourself with the School Safety Handbook (available on Moodle)

It is your legal duty and that of your supervisor to take due care of your own safety and that of others.

Your supervisor is responsible for assessing the risks of their work and ensuring their staff and students do likewise. They must ensure they carry out the following:

• Written risk/COSHH assessments of the work should be completed before each stage of the work commences. A simplified ethic form should also be completed.

Visit you regularly in the laboratory to ensure you are working safely and assess your practical ability. Ensure you attend a safety induction, read the School Health & Safety Handbook, Radioisotope Users Manual and read the appropriate risk and COSHH assessment forms associated with their field work or laboratory procedures.

The School Health and Safety Co-ordinator is Elaine Turton (Elaine.Turton@rhul.ac.uk).

A detailed practical notebook must be kept and be available for the supervisor and the examiners. Think 'safety' before every operation that you carry out. Study plans produced in advance will help you not only to identify potential hazards and control their risk. They will also help you to be more efficient in your work.

Students are responsible for the general cleanliness of their own apparatus and working areas in the laboratory including shelves, benches and cupboards. An effort should also be made to respect communal space and equipment and to ensure that damage is not caused to the latter through incorrect usage. All equipment malfunctions, however trivial, must be reported immediately to Elaine Turton. A failure to do so could result in costly damage and/or serious safety problems.

Teaching and paid work opportunities in the Biology Department.

During term time, there is the opportunity to get some paid work and teaching experience (demonstrator, coursework marking, exam invigilator) to support undergraduate teaching in practical or field courses. There are also a few other paid opportunities for technical support work within the department. For this, please contact Elaine Turton (Elaine.Turton@RHUL.ac.uk). There are other opportunities of paid work in the University, best is to check the University website or contact the Students' Union for further information on opportunities.

To know more about what is required to be a demonstrator you should:

- Make sure that you attend the Demonstrator induction/ information course at start of term 1. Note that you do not need to attend the teaching training RHUL INSTIL programme to demonstrate, but if you do, we will do all what we can for you to get some demonstration experience.
- Get in touch with the Demonstrator Coordinator Professor Elli Leadbeater (, <u>Elli.Leadbeater@rhul.ac.uk</u> (previously Laurence Bindschedler) who is responsible to allocate demonstration slots, and will liaise with you and with the lecturers running practicals/ field course.
- Check your University email regularly, and promptly answer calls from the Demonstrator Coordinator
- Inform/ Agree with you PhD supervisor about your demonstration load, as not to impact your research work.
- If you have agreed to demonstrate in the coming academic year you will need to liaise the Demonstrator Coordinator. They will suggest demonstrating sessions and contact the LSE admin team for you to get a contract set up. Note that you need a demonstrator contract to be allowed to demonstrate.
- If you signed with the Demonstrator Coordinator to demonstrate for a particular session, you must attend it. Demonstrators are required for practicals, to enhance undergraduate student experience, and your help is absolutely needed and valuable. So please act professionally to the best possible standards.

Please note that if you are enrolled in full time PhD, it is illegal to work more than 20h per week. Although demonstrating can be a good financial help/ top up, it won't cover your full cost of living, and although we will try to accommodate your demand, we cannot guarantee how many hours you can get, as we need to give a fair share of hours between willing demonstrators. Moreover, priority is to first match demonstrator expertise with the course and lecturer requirements, to improve the undergraduate student experience. Demonstrating is a privilege, as being an easy way to get some paid teaching and leader experience. It is also important to remember that you need to prioritise your PhD work.

Socials and event to mingle with other PhD students at RHUL and staff within the Department of Biological Sciences or the School of Life Sciences.

And finally, at last, we want you to have a nice experience with a feel of inclusivity within the department of biology, School of Life Sciences and the Environment, and PhD students. Through reps, and other initiatives, we are strongly encouraging interactions with your peers from other groups, other departments and within the doctoral school, in research, formal settings. We will be launching new events to get things started at different levels. Please do engage with those, as a good excuse to mingle with others, and have fun, whether this is scientifically sharing your passion for your research topic or just pure social fun.

Some of the key "official and less official events" where you will be meeting people outside your groups

- Induction and socials at departmental, LSE School (Life Science and the Environment) and Doctoral School (University) level
- Training sessions with the Biology PhD and MSc by research students
- Networking, training and workshops within the LSE or doctoral school
- Biology annual PhD symposium (2 days in term 3, date tba)
- Departmental seminars with guest speakers
- Thematic group meetings with internal speakers
- Interest groups such as "R" ...
- Socials initiated by the PhD reps and PhD students community.
-