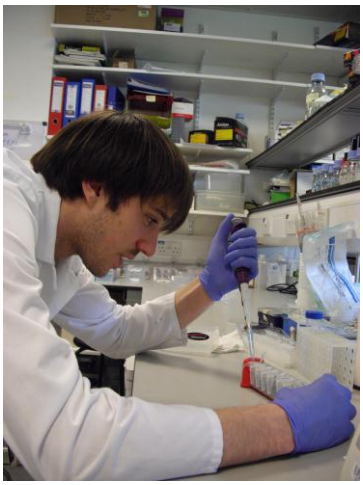
University of Sussex
Life Sciences

Handbook for MPhil/PhD research degrees
2014-15



Welcome to the School of Life Sciences. You join us at an exciting time of expansion and change not just in terms of building works and refurbishment, but in the development of our research focus and the range of services and activities that we offer.

Sussex is an excellent University where both teaching and research are highly valued, and our aim in Life Sciences is to provide a supportive and intellectually stimulating environment for you as you work through your research. Life Sciences has the highest calibre teaching and research faculty, and a friendly network of support staff and academic advisers to guide you through your time with us. So please get to know them as soon as you can!

I very much hope that you will enjoy your time at Sussex, benefit greatly from your studies, and participate actively in the life of your School and the University.

Professor Laurence Pearl FRS
Head of the School of Life Sciences

Welcome to the School of Life Sciences at the University of Sussex. You are joining a community of just under 200 research students in our School. You have every reason to be proud of having been admitted to our highly competitive MPhil/PhD Research degrees. We on the other hand pride ourselves on the research and teaching excellence of our School as well as the excellent support provided to Life Sciences research students by our network of dedicated supervisors, Research Degree Convenors, Research and Enterprise Coordinator and myself. You will also receive strong support and guidance from the Doctoral School of the University.

I very much hope that you will benefit greatly from working on your postgraduate research project in one of our internationally recognised laboratories, and take advantage of all the support, resources and facilities that the University has to offer you.

Professor George Kemenes
Director of Doctoral Studies

School Office
If you have questions, your first port of call will be the School Office, the nerve centre of the school, and you can take any query there. The office staff will probably be able to give you an answer or, if not, point you in the right direction. If your query cannot be answered immediately then you will be asked to complete a query form and one of the office staff will get back to you.

Tom Gittoes and Gwenda Baker in the School Office.

The office is in JMS 3b12a, and will be open 9-5pm during term.
Tel: (01273) 678057
Email: lifesci@sussex.ac.uk

The Director of Student Experience
Within Life Sciences, one member of faculty has the responsibility of overseeing and co-ordinating those aspects of student life, which are part of the academic life of the School in general. This is currently Professor Jonathan Bacon (JMS building, 4D19; J.P.Bacon@sussex.ac.uk). He co-ordinates academic advising within the School, works with Student Representatives to improve communication between students and faculty and has oversight of the Student Mentor scheme. You are welcome to contact him with any concerns you have about these matters.

Student reps
Student reps are undergraduate and postgraduate students elected by Sussex students to represent the views and interests of students. They help the University respond to student concerns about course issues and the wider student experience. Reps find out about issues impacting on students' studies and experience, and take this information informally to individual members of staff in the school, and can raise issues more formally at school and university level committees in order to effect positive changes.

The student rep scheme is co-run by the University of Sussex and the University of Sussex Students' Union. Student reps provide an essential link between students, the Union and the University. Being a student rep gives an opportunity to learn and practice new life skills that can improve your employability.

In Life Sciences there are undergraduate student reps for each year of each subject area along with postgraduate reps for each area. To find out who your rep is, more information about the scheme and how to become a student rep yourself, please go to the website.

http://www.sussexstudent.com/studentreps

Student Life Centre
http://www.sussex.ac.uk/studentlifecentre/
The Student Life Centre offers information and advice to all Sussex Students. The Student Life Centre is based in the heart of the campus: on the ground floor at the front of Chichester 1. You can make an appointment online – just go onto your Sussex Direct site, click on your 'Study' tab and then on Student Life Centre - you can select the advisor you wish to see at a time that suits you.
The SLC offers help on the following:

- Personal concerns affecting study progress or well-being
- Funding and finance including scholarships, bursaries and hardship funds
- Sources of help to improve academic performance – identifying obstacles to learning
- Understanding university systems and regulations in relation to assessment, services, complaints, conduct, and discipline
- Progression, intermission and withdrawal processes - discussion and support
- Referrals to other professional services on campus
- Mitigating evidence help: http://www.sussex.ac.uk/studentlifecentre/mitigation

How we will contact you
Email
You will be registered for an email account here at the University of Sussex, and it is essential that you check this account daily, as much communication is done by email. University emails will automatically be sent to your University account rather than other personal accounts, such as Hotmail.

How you can contact us
The Director of Doctoral Studies, Professor George Kemenes, has overall academic and administrative responsibility for the strategy of MPhil and PhD programmes within the School of Life Sciences. Research students can consult George for advice on all issues related to their studies.

George Kemenes, Director of Doctoral Studies
JMS 3B16
email: g.kemenes@sussex.ac.uk

The Research and Enterprise Coordinator, Dr Deeptima Massey, is the first **'port of call'** for postgraduate research students and the first recourse for all administrative questions, including issues of registration, intermission, extension of registration, or submission of work. Deeptima deals with the administration of MPhil and PhD research degrees. She can be consulted about requests for research support, workspace and requests for financial aid from the University's funds, student complaints, and personal problems. She is the initial contact for admissions. She collects and distributes advance information about MPhil and PhD programmes and research seminars, manages publicity, and is involved in monitoring student progress.
Dr Deeptima Massey, Research and Enterprise Coordinator
(01273) 872774, Internal Extn 2774
Arundel 305 (Arundel Building, Chemistry Office)
email: d.massey@sussex.ac.uk

Research Degree Convenors
Please note your research degree convenors can be contacted to discuss all academic issues including intermission, extension, continuation, progression and all other matters. You are recommended to contact them first other than discussing research matters with your supervisor(s):

Neuroscience: Professor Michael O' Shea (M.O-Shea@sussex.ac.uk)
Chemistry: Dr John Spencer (J.Spencer@sussex.ac.uk)
EBE: Professor Francis Ratnieks (F.Ratnieks@sussex.ac.uk)
Biochemistry: Professor Louise Serpell (L.C.Serpell@sussex.ac.uk)
GDSC: Professor Aidan Doherty (A.J.Doherty@sussex.ac.uk)

Seminars
We have regular seminars starting in the autumn term and going up to the end of summer term. You are expected to attend these seminars as they offer an opportunity to express ideas/doubts/ask questions/raise issues and present new knowledge.
http://www.sussex.ac.uk/lifesci/newsandevents/seminars

Responsibilities of Research Students and their Supervisors

- All research students should be provided at minimum with a 'main' and 'additional' supervisor. In the case of joint supervision, one of the supervisors will be designated as the 'main' supervisor for administrative purposes, and so that you have a clear point of contact in the event of difficulties.
- An 'additional supervisor' (or the supervisor not designated the 'main' in the case of joint supervision) should be able to provide advice and support when the 'main' supervisor is not available. In the event of loss of a supervisor, your school is responsible for finding a suitable replacement, and ensuring that arrangements are in place to support you during any interim period.
- Your responsibilities as a research degree student, and the responsibilities of those involved in your supervision, are outlined in the following two sections.

Supervision
(a) General. Your day-to-day responsibility is to your supervisor and your relationship with him or her will be crucial to your work. It is the supervisor's responsibility, in consultation with the student, to define the research project. Sometimes the initial definition will be rather broad so that you will not be too constrained, e.g., if some aspects prove to be unfruitful. Further, guidance varies considerably according to both the nature of the project and the supervisor's approach. Some supervisors want to be involved in the detailed planning of experiments, especially at the beginning of the project. Others will leave everything to the student, who will then probably learn from inevitable initial errors! Some supervisors work alongside their students at the bench, whereas others leave students to acquire techniques from other workers in their laboratories, or elsewhere. Regardless of the nature of such supervision, however, your supervisor will normally expect to talk with you at frequent intervals about the progress of your research. If necessary, you should take the initiative in arranging appropriate regular discussions with your supervisor. Many supervisors organise regular group meetings where researchers discuss their work in an informal atmosphere.

(b) Role of co-supervisors. In addition to your supervisor you will also be assigned a co-supervisor. Although the latter does not normally take an active part in your general supervision, he or she does have the important task of providing an independent assessment of your progress and may well be able to make useful

suggestions about the project and your approach to it. You are therefore encouraged to make contact with your co-supervisor as soon as possible, and you should always approach him or her if you feel that you are in difficulties generally.

(c) Role of the Research Degree Convenor. The Research Degree Convenor is responsible to the University in relation to registration of research students (PhD and MPhil) and to the Research Councils, for submitting the reports they require and for recommendations on the continuation of grants. Students with problems in connection with their research work are always welcome to discuss these with the Research Degree Convenor.

Responsibilities of research degree students

The responsibilities that must be observed by research degree students are as follows:

- Maintaining regular contact with the main supervisor
- Discussing with the supervisor/s the type of guidance and comment which will be most helpful, and agreeing upon a schedule of meetings
- Taking the initiative in raising problems or difficulties, however elementary they may seem
- For the safety of themselves and others, students working in a potentially hazardous research environment must take the initiative to ensure that they are competent in any relevant research techniques to be used;
- Preparation of a research outline to be approved during the student's first year of study;
- Planning a research project which is achievable within a schedule consistent with the normal expectations of the relevant Research Council, and maintaining progress in line with that schedule;
- Maintaining the progress of work in accordance with the stages agreed with the main supervisor, including in particular the presentation of written material as required in sufficient time to allow for comments and discussion before proceeding to the next stage;
- Providing annually a brief formal report to the Director of Doctoral Studies as part of the annual review process;
- Deciding when he or she wishes to submit the thesis, taking due account of the supervisor/s opinion, which is however advisory only, and of the need to take account of University requirements regarding the length, format and organisation of the thesis;
- Taking responsibility for their own personal and professional development;
- Agreeing their development needs with the main supervisor at the outset of the programme, reviewing these on an annual basis, and attending any relevant development opportunities so identified;
- Being familiar with institutional regulations and policies that affect them, including the regulations for their qualification;
- Being aware of the University's Codes of Practice for Research and Intellectual Property and adhering to the requirements and observing the principles contained therein
- Helping nurture a friendly and communicative school environment: students are asked to participate in networking events held periodically throughout the year.

A student who considers that his or her work is not proceeding satisfactorily for reasons outside his or her control should discuss the matter with the supervisor/s and, failing satisfaction, with the Director of Doctoral Studies concerned who will advise on the relevant procedures. In particular, the student should ask to meet the Director of

Doctoral Studies if the student feels that he or she is not establishing an effective working relationship with the supervisor/s, bearing in mind that the alleged inadequacy of supervisory or other arrangements during the period of study would not constitute grounds for an appeal against the result of a research degree examination unless there were exceptional reasons for it not having come to light until after the examination, in which case it might be considered.

Responsibilities of research degree supervisors

The *main* supervisor is directly responsible in their role as supervisor to the Director of Doctoral Studies and, through that officer, to the Head of School and then to the Pro-Vice-Chancellor (Research).

The main supervisor is expected to provide the student with advice at every stage in the planning and conduct of research and in the writing of the thesis and to ensure that replacement supervision is available in the event of any significant period of absence. The more specific responsibilities of the *main supervisor* are as follows:

- To complete an annual report on the student's progress for consideration within the framework of the school and/or department's annual review procedures, for later submission to the Director of Doctoral Studies;
- To provide advice and support to the student on the preparation of a suitable thesis research outline during the first year of their study, in accordance with School procedures;
- If working in a potentially hazardous research environment, ensuring and monitoring that the student possess adequate technical competence in any relevant research techniques, so that he or she presents no undue risk to themselves, others, and/or University facilities;
- Giving detailed advice on the necessary completion of successive stages of work so that the whole may be submitted within the scheduled time;
- Ensuring that the student is made aware of inadequacy of progress or of standards of work below that generally expected;
- Identifying prospective external examiners.

The more general responsibilities of those involved in the student's supervision are as follows:

- To agree a schedule of regular meetings with the student, in accordance with School policy and in the light of discussion of arrangements with the student;
- Being accessible to the student at other appropriate times when he or she may need advice;
- Giving guidance about the nature of research and the standard expected, the planning of the research degrees, literature and sources, attendance at taught classes, requisite techniques (including arranging for instruction where necessary), and the problem of plagiarism;
- Being familiar with the standard expected of research degree examiners, consistent with the guidance laid down by relevant Research Councils;
- Requesting written work as appropriate, and returning such work with constructive criticism and in reasonable time;
- Arranging as appropriate for the student to talk about his or her work to faculty or graduate seminars, and to be well briefed about the procedures involved in oral examinations;
- Providing clarification on the guidance or comment that will be offered on the student's written submissions;

- Ensuring that the student is aware of the University's Codes of Practice for Research and Intellectual Property and that he or she adheres to the requirements and observes the principles contained therein;
- Providing training in the ethical, legal and other conventions used in the conduct of research, and supporting the student in the consideration of these as appropriate.
- Making an initial assessment, and ongoing review, of the student's training and skills development needs, in accordance with the Vitae Researcher Development Framework, and taking account of the training provision available at Sussex;

- Ensuring that the student is aware of institutional-level sources of advice, including careers guidance, health and safety legislation and equal opportunities policy;

- Maintaining and developing the necessary skills and expertise in order to perform all facets of the role effectively (including taking up appropriate continuing professional development opportunities)

General aspects of Research Training

To obtain a PhD or MPhil you have to submit a thesis containing the results of your research, which is read by both an external and an internal examiner, who subsequently ask you to defend your thesis during an oral examination. (For MPhil candidates the external examiner may deem the oral examination to be unnecessary).

Full-time research students are encouraged to submit PhD theses before research studentships expire. In the past there has been a tendency for students to take longer, but now there is increasing pressure, both from the University and the Research Councils, to keep to an absolute 4-year deadline. (Although part-time students work to a different time-scale, which they should discuss with their supervisors, the appropriate rules and regulations are also strict).

Submission within 4 years can be achieved only by a lot of hard work, involving long hours of usefully spent time, and will usually require close interaction at all stages between the supervisor and the student. Your workload will vary throughout your doctorate, but you should not always expect to be able to fit all you have to do into a 35-40 hour week. Many postgraduates work very long and sometimes very peculiar hours, such as late into the evening, or even through the night. You will be particularly dependent on your supervisor's judgement, at an intermediate stage of your work, on what will be needed to produce a viable thesis. This judgement can be made reliably only if you have kept him or her fully informed of your progress.

It cannot be over-empathised that hard work is needed in the first year. Absorbing and understanding the relevant literature and learning techniques can take a long time Research work is characterised by many ups and downs; you should not be put off if there seem to be rather a lot of 'downs', particularly to start with. Some 'downs' are illusory, because negative results, though perhaps initially appearing to be disappointing, can be just as important as positive ones. When research work goes well it is enjoyable - and the setbacks seem to be less important. However, if it should happen that you develop serious doubts as to whether you have the right temperament for research work, you should discuss the matter with the appropriate people (your supervisor, co-supervisor and the research degrees convenor) and, if the worst comes to the worst, to withdraw before the end of the first year, rather than dropping out at a later stage. Don't let this comment assume too much importance in your mind - most postgraduate students last the course and emerge with their degrees!

Remember that writing a PhD thesis usually takes three to four months. You will need to start to plan it around Christmas in your third year and start writing before your funding runs out. Those who are self-funded should also work within the four-year time frame and submit their thesis by the maximum date of registration. This means that you must organise yourself from the start, in your first year, with regard both to the records you keep of your experimental work and your reading of the literature. (Don't forget that you will need to be able to understand all details of your laboratory notes three/four years after they were written - you cannot be too meticulous about your records).

In addition to your own experimental work and reading of the literature, there are other important aspects of postgraduate training.

You are expected to attend at least one seminar a week in term time. Ideally you should attend some that are pertinent to your project and others for general interest and a wider view of what interests people and what experimental approaches they employ. You are asked to keep a written record of the seminars attended and may be asked to discuss them with your supervisor and co supervisor during your assessment meetings.

You should also consult your supervisor about attending relevant third-year undergraduate course lectures or MSc lectures. They may contain material with which you are not very familiar, but which forms important background material for your work. You may wish to take advantage of these lectures in your second or even third year as your projects progress and you need to find out about different areas.

Many individual research groups within the School hold regular meetings to discuss both their own current work and current literature reports: your supervisor will advise you about these.

Assessment of Annual Progress

The School has formal procedures for the assessment of the progress of research students, which are in turn monitored by the University administration. All students, supervisors and co-supervisors are required to submit annual reports on the students' progress in the summer (first week in June) to the Postgraduate Assessment Committee, which consists of the research degree convenor and other members of faculty. In addition, first year students and their supervisors are required to report on the students' progress in February (mid-year reports). Students who start in January and May submit their full report in the first week of October (instead of June) in their first year; thereafter they follow the annual cycle of submitting reports in June.

As part of the annual review process all students are expected to do a Portfolio of transferable and other skills and achievements. In the Portfolio students are expected to include information on specialist training/workshops/courses attended, transferrable skills training/course attended, talks given at conferences, poster presentations, teaching undertaken, publications, honours and awards and membership of committees/professional societies, voluntary work.

The Research Degree Convenor, on the recommendations of the Postgraduate Assessment Committee, makes recommendations about continuation of studentship and registration annually.

Additional Information on Annual Review, Progression and Research Activities
You are embarking on a programme of research training, which should lead to the degree of MPhil or PhD. The main emphasis of this work will be on your research project, but you should also aim to acquire a wide background knowledge and the ability to express yourself on a range of topics, both verbally and in writing. The following arrangements are designed to achieve these objectives.

1. Project reports. A report on your experimental work should be written at the end of your first year and, at the end of your second year. This report should be handed in to Dr Deeptima Massey, the Research and Enterprise Co-ordinator's Office in Arundel 305 in first week of June. The report should include an introduction, followed by separate discussion and experimental sections, and references. The style of your experimental work and references should normally conform to that of an appropriate journal. These reports will be very useful to you when it comes to writing your thesis, and should be written with that aim in mind. All reports are to be written in English. Please note that students will not be re-registered unless they have completed the attendance at lectures, and produced and had approved the appropriate yearly reports and literature surveys. In addition students and their supervisors are required to complete a mid-year questionnaire on their progress in January/February.

2. Lecture Courses. All graduate students are expected to participate in a programme of study, which includes attendance at postgraduate lectures and seminars, and completion of associated written work. Please therefore consult your supervisor about which lecture courses are most appropriate for your research project and make sure you keep a record of the courses you have attended and include these with your annual report. I will be giving course lecturers a list of the graduate students taking their courses, and will be asking them if the students have attended regularly. Eighty hours of lectures or equivalent course work should be attended during the first two years of a PhD course. First year students should thus select at least 40 hours. Students who have already hold a masters level qualification are exempt from this formal requirement, but they are strongly advised to consult their supervisors as to whether more course work would be helpful. Please note that seminar programmes and conference attendance can also contribute to the 80 hours.

3. Research Seminars It is expected that all students will give an oral presentation of their work at a research seminar sometime in their second or third year.

4. Submission of thesis within University time frame years. You will be given a maximum registration date by the University (four years for a full-time PhD), while your funding is normally only for 3 or 3 ½ years. Failure to finish in time results in financial hardship since we have no funds to support continuing students, and registered students are not eligible for unemployment benefit. The University requires that all theses must be submitted before the end of the fourth year.

5. Laboratory Books. Students are encouraged to keep a lab book in Genome Stability, Biochemistry, Neuroscience and Chemistry; those doing Biology and Environmental Science may also be asked to keep a lab book. You should discuss with your supervisor the most appropriate way to keep a record of your practical work, but the following guidelines may be helpful.

    a. Use one of the duplicate notebooks available from Stores. These have carbon copies and you should regularly remove the copies and keep them somewhere

other than in the laboratory; in the event of a fire or flood you will not have lost all your data.

b. Leave space at the front for an index.
c. Refer all spectra, analyses, *etc.* to the appropriate page of your practical book.
d. Write in your results as you get them in ink or ballpoint. Do not use typing correcting fluids. If you make a mistake, cross it through and start again.
e. Write in English.
f. Give enough detail (including references to the literature), so that a subsequent research worker will be able to repeat your procedures easily.
g. Laboratory notebooks, spectra, *etc.* belong to the laboratory, and are to be left with your supervisor at the conclusion of your project.
h. Labelling of samples - use pencil only, as this neither fades, nor will it be affected by water or solvents in the event of accidents.

Be careful that any equivalent procedure you employ using a computer offers the same guarantees of temporal recording and security of data. Students are urged to back up daily all data and documents on which preparation of their theses depends – including guarding against possible complete loss of laptop or desktop computer or their hard drives.

Chemistry Laboratory 'House Rules'

All postgraduate students must receive, from their supervisor, a briefing on safety in the laboratory. Please read the 'Safety Handbook', sign the declaration on the back page (and return it to the Chemistry Office) before starting work in the laboratory, or withdrawing anything from the stores. Those working in laboratories where lasers are used must arrange to see the video on laser safety as soon as possible (Please discuss this with your supervisor). All experimental workers are required to abide by the rules below. Further details can and should be obtained from your supervisor before you start laboratory work.

1. Read and sign the appropriate project risk assessment before starting work and perform any relevant COSHH assessments before carrying out any reaction.
2. Be sure of the location of the fire exits/fire alarm and any fire fighting equipment that you have been trained to use.
3. Know who your fire warden is and the appropriate assembly point in the event of a fire alarm.
4. Be sure of the location of emergency equipment (safety shower, eye-wash kit *etc.*).
5. Lone lab working is not permitted at any time.
6. Do not attempt new synthetic methods/procedures that have not been discussed with your supervisor.
7. When working out of hours (6pm-8am) you must sign the overnight / out of hours book in the entrance to Arundel.
8. Wear approved PPE (specs, *etc.*) at all times and lab coats when involved in synthetic work.
9. Wear gloves to avoid skin contact with chemicals.
10. Keep your lab area uncluttered and clean.
11. Dispose of waste solvents and chemicals in a correct and timely manner.
12. Return all solvents to the approved storage cabinet after use, do not store on the bench or in fume cupboards.
13. Do not use equipment that you have not been adequately trained to use.
14. Absolutely no eating or drinking in allowed in laboratory areas.

General Information for research students

Access to the building

You need authorisation to the buildings between 5.30pm. and 7.00am. You will need to fill in a form for Security, which authorises you to enter the buildings out of hours to allow you to work late or at the weekends. See your supervisor to get one of these forms.

Photocopying and Printing

Each lab has its own system for this. Usually lab members share a card for the photocopiers. For photocopying done in connection with tutorials you may be running, go to the School Office for a teaching photocopy card.

Telephones

The university telephone number is 01273 606755 and the JMS fax number is 01273 877586, and you should have an internal phone in your lab. Normally you will only be able to make local calls concerned with your work.

Workshops, technicians and specialised assistance

Research students requiring apparatus from the workshops, electronic repairs, photographic or video facilities, help with programming etc. should contact their supervisor.

Overseas students

Students with a first language other than English may need some language instruction. Even those with excellent skills in reading and writing academic and scientific English may find that they need to improve their colloquial English to benefit from seminars and lectures. In such cases the university's Language Centre should be contacted.

Registration Issues

Registration limits

The minimum and maximum periods of registration shall be determined by the Doctoral Studies Committee. The minimum and maximum periods of registration are:

MPhil: For full time study, minimum period of registration is one year, maximum period is three years
MPhil: For part-time study, minimum period of registration is two years, maximum period is four years

PhD: For full time study, minimum period of registration is two years, maximum period is four years
PhD: For part-time study, minimum period of registration is three years, maximum period is six years.

Altering Registration Status

MPhil to PhD

Students who wish to apply to transfer from the MPhil to PhD should consult their supervisor in the first instance and obtain Form RF010 from Deeptima Massey. Applications to transfer, which will not normally be considered until the second year, must be accompanied by evidence of competence to identify and explore the more substantial questions appropriate to the PhD and evidence that the issues or data are indeed appropriate for more extended treatment. Students will be asked to submit a detailed structure and timetable for completion of the proposed PhD

thesis, together with two draft chapters, or the equivalent. A formal interview with the student, the supervisor and the appropriate convenor must be held, and a change in registration will depend on the satisfactory outcome. Reports should be forwarded to the Director of Doctoral Studies, Professor George Kemenes for approval.

The Research Student and Administration Office will write to the student to inform the of the outcome of their application. A student who has been refused permission to change registration from MPhil to PhD or *vice versa* shall have the right to appeal against such a decision and to request that it be changed.

PhD to MPhil

A student who wishes to transfer from PhD to MPhil must consult his/her supervisor and obtain the necessary form from the Research and Enterprise Coordinator to complete.

Full-Time to Part-Time/Part-Time to Full-time or Transfer to Continuation Status

Students wishing to change their registrations from full-time to part-time or part-time to full-time or to continuation status should consult again their supervisors in the first instance. In effect, the minimum periods of registration constitute the threshold for the payment of full-time (or part-time) fees in return for full teaching and library privileges. After two years (or three, in the case of part-time students) PhD students may apply to change to continuation status for a much lower fee, and continue receiving computing and library services and minimal supervision. Normally continuation status is granted if the student and supervisor can show that the research has been completed and the thesis fully roughed out – in other words, that the rest can be done by the student working largely unsupervised. Another possibility, which should be considered if a student needs to undertake substantial amounts of paid work for financial reasons, is for the full-time student to move to part-time status, thus halving the fees required. This preserves access to teaching and the library. All full-time PhDs who have reached the two-year minimum of their registration and who wish to proceed should discuss the next step with their supervisor and with the appropriate Convenor of Research Degrees, if in any doubt; it is advisable to consult with the Director of Doctoral Studies.

Intermission from Research Studies

Intermission in the period of registration can only be granted by the Director provided:
(i) the student can show good cause for the application - personal trouble, authenticated evidence of illness, or some other interruption of the work;

(ii) the supervisor has been consulted and agrees and supports the application in writing. Any written evidence must also be provided. Fees already paid in relation to terms for which intermission has been granted are normally carried forward as a credit against future fees.

Extension of Registration

Candidates for research degrees are required to be registered students of the University when they submit their thesis for examination. Formal application must be made to Director of Doctoral Studies if students wish to extend their registration beyond the maximum periods indicated above. Permission for such extensions will be given only in exceptional circumstances subject to approval by the supervisor(s). Any extension granted will constitute a final period of registration. Only in very exceptional

circumstances will any student then have a further opportunity to submit an application for extension of registration.

Important: Forms for research students

All forms are available at:
http://www.sussex.ac.uk/doctoralschool/internal/codesandhandbooks
Please note that if you complete any of these forms you should do so only after discussion with your main supervisor and after checking with Dr Deeptima Massey (d.massey@sussex.ac.uk). A form will only be acted upon after the relevant academic officers have signed the form and it has been received by the Research Student and Administration Office for processing. The Research Student Administration Office will write to confirm all approved changes.

Postgraduate Research Colloquium

An annual colloquium is held each September. This is a part of your annual assessment. The aim of the colloquium is to bring research students and faculty together from all our five subject groups for a wider discussion of the ongoing research projects.

All third-year research students (PhD and MPhil) are required to give a talk on their ongoing research project. Each student is allocated a 20 minutes slot and expected to give a 15 minutes power point presentation of their research, allowing 5 minutes for questions.

All second year research students (PhD and MPhil) submit a poster in portrait format with maximum size being 60cm wide x 90cm high.

This is not an optional event; it is an essential requirement of the postgraduate training programme, which the School of Life Sciences is committed to deliver. It is therefore expected that all postgraduate research students and their supervisors attend the event.

You must keep the first week in September free in Year 2 and Year 3 to attend the colloquium or present your poster/talk respectively (especially avoid booking holidays or conference presentations).

Examination Matters and Completion

Notice of Intention to submit your thesis

You must give the Research Student Administration Office at least two months prior notice of your intention to submit your thesis or portfolio by completing the form *Application for Entry to the Research Degree Examination* **RF002** which is available from the Research Student Administration Office. You should attach a copy of your summary to the form. Your main supervisor will be required to sign the form to confirm that the prescribed study for the degree has been completed.

When you submit your thesis or portfolio to the Research Student Administration Office, you will be reminded that you must be registered at the time of submission and asked to confirm that this is the case.

The Research Student Administration Office will inform you whether your application for entering the examination has been accepted.

Preparation of your thesis for examination
The Handbook and Regulations for Doctoral Researchers 2014-15 specifies two different thesis submission formats, one pre-viva and one post-viva. For the pre-viva three copies of the thesis in temporary binding are required. Then, 'On successful completion of the examination process you must submit ONE electronic (.PDF) copy of your thesis or portfolio and ONE copy of your thesis or portfolio bound in the approved style'. This second portfolio bound copy needs to have the dark blue cloth with the gold lettering, etc, whereas the pre-viva copies only require an adhesive spine holding them together.

Please note that you need to submit ONE hard bound copy and ONE pdf electonic copy of the thesis to Tierney Dimmock, Research Student Administrative Office, Sussex House (SH110a), University of Sussex, Falmer, Brighton, BN1 9RH.

Language of thesis
The thesis, apart from quotations, should be written in English. Submission of a thesis in a language other than English may be approved by the Doctoral School Committee in exceptional circumstances.

Length and format of thesis or portfolio
General word length for the Master of Philosophy and Doctor of Philosophy – the maximum word length for PhD theses shall be 80,000 words, and for MPhil theses shall be 40,000 words except in the following subjects, where no such limits are specified: Biochemistry and Molecular Biology, Chemistry, Neuroscience, Complex Systems Biology and Genome Damage and Stability.

Plagiarism, collusion and other forms of misconduct
Collusion, plagiarism or any other form of misconduct in an examination or work which is submitted for assessment. It is also an offence to commit any form of misconduct during the course of your research.

Plagiarism is the use, without acknowledgement, of the intellectual work of other people, and the act of representing the ideas or discoveries of another as one's own in written work submitted for assessment. To copy sentences, phrases or even striking expressions without acknowledgement of the source (either by inadequate citation or failure to indicate verbatim quotations), is plagiarism; to paraphrase without acknowledgement is likewise plagiarism. Where such copying or paraphrase has occurred the mere mention of the source in the bibliography shall not be deemed sufficient acknowledgement; each such instance must be referred specifically to its source. Verbatim quotations must be either in inverted commas, or indented, and directly acknowledged.

The Doctoral School
The Doctoral School is a University-wide team supporting doctoral research across all Schools of Study. Sussex has over 900 doctoral students who play a vital role in developing our vibrant intellectual culture. The Doctoral School seeks to enable doctoral students to feel fully integrated as members of this wider research community. Its web pages provide information on diverse issues including training and funding opportunities as well as the university's regulations and codes of practice for PhD researchers (with which you should be familiar).

The Doctoral School will also be organising a number of university-wide events, including a 'Welcome' for all new PhD students and a programme of speakers through

the year. Please check the Doctoral School internal website for updates: http://www.sussex.ac.uk/doctoralschool/internal/

Research Student and Administration Office
The Research Student Administration Office is in Sussex House. It helps ensure the provision of high quality postgraduate education by providing advice and information for current postgraduate research students, academic staff and professional services colleagues across the University. We monitor and record the academic progress and assessment of research students, process changes in students' status, administer the examination process from thesis submission to the viva outcome, and provide advice to current international research students. From October 2014, we will also manage admissions for postgraduate research students in partnership with the University's Schools, providing students and staff with a single point of contact for all the administration associated with the student's journey from initial application through to graduation.

Beyond your programme

Careers and Employability Centre
Careers and Employability can help you develop your skills, confidence, find your sense of purpose and learn about the new career improvisation approaches that will enable you to be successful in the 21st century world of work. You will find details about all the services we offer from part-time jobs and work-insight opportunities, careers review to workshops and events at: www.sussex.ac.uk/careers or call in to Falmer House to find out more.

Volunteering
Project V: Volunteer work placement
Project V helps to arrange placements for students who wish to do volunteer work. Project V is open 11am – 4pm on Monday to Friday during term time. You are welcome to drop in to Project V during these times and have a look at the volunteering opportunities available. A member of the Project V team will give you further information about the volunteering opportunities on offer and help you decide which one is right for you.
http://www.ussu.info/projectv Email: projectv@sussex.ac.uk

Being a Student Ambassador
Our current students are the University's best ambassadors and there are several central University offices who look every year to recruit current students to be involved in recruitment work, both on campus and via external visits to schools and colleges. This sometimes has a particular focus on talking about university life to young people from disadvantaged backgrounds. If this sounds like something you would be interested in, look out for these opportunities, which are usually advertised via student web pages.

Get involved in the Student Union (USSU). There are lots of opportunities to get involved in clubs, societies and the political processes of USSU.

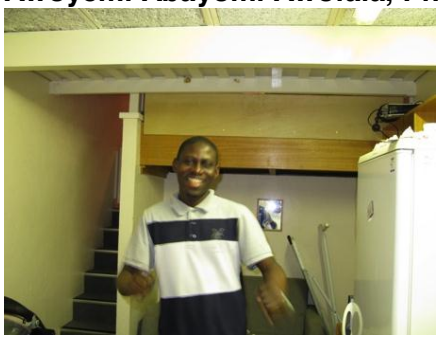
University Bulletin
The Bulletin appears every other Friday in term time. It is available electronically at the University's home page. It contains much useful information on such things as

public lectures and seminars, as well as general University news. It also has a very useful accommodation and for sale column.

Sussex Language Institute
The Sussex Language Institute offers English as a foreign language and academic English language support. The facilities of the Sussex Language Institute (located in Arts A) are open to everyone though there are charges for some of its services. For further information, contact English Language Section: Telephone: +44 (0)1273 873234, **e-mail: efl@sussex.ac.uk, Room: Arts A68**

Current and Recently Graduated Student Perspectives

Awoyemi Abayomi Awofala, PhD in Biology

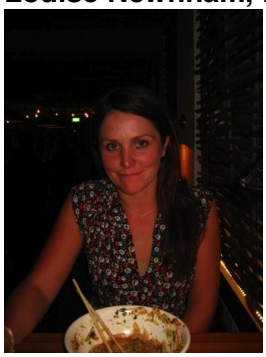


I first heard about Sussex at Tai Solarin University of Education, Nigeria where I was retained and offered a Graduate Assistantship position after graduating with a first Class Honours degree in Biology and Chemistry Education. The University also sponsored me for full-time PhD study at Sussex. Thanks to the partnership deal between Sussex and Tai Solarin.

I came to Sussex in 2007 and as a new research student then my supervisor quickly integrated me into a collaborative research work between the Sussex Centre for Advanced Microscopy and the Cambridge University on Protein Trap Initiative in a screen of Drosophila lines with new fluorescent protein-protein fusions to identify and characterise proteins that change localization and mobility in response to signal transduction and I was not only happy to see the state-of-the-art confocal microscopy facility at Sussex but also pleased to know that I would be using such at least for the collaborative project.

Research at Sussex is intellectually stimulating, provokes and unlocks one's analytical thoughts and intuition. I met an open, dynamic and very inspiring research community while studying for my PhD in the School of Life Sciences. I also enjoyed daily encouragement and supports from my supervisors and research colleagues from other labs. I was able with the support I received from my supervisor to attend conferences and workshops that were relevant to my research work both within and outside the UK. That Sussex research combined a great breadth of knowledge with the state-of-the-art facilities coupled with an amazing and friendly atmosphere made Sussex a perfect environment for me. Indeed, I am confident to say that I have not only been equipped with the vital bioinformatics and statistical theories and skills needed to work with complex data, but also the classical genetic skills and methodologies that could be applied in understanding the mechanisms governing complex disease traits. I found the experience very pleasing and rewarding.'

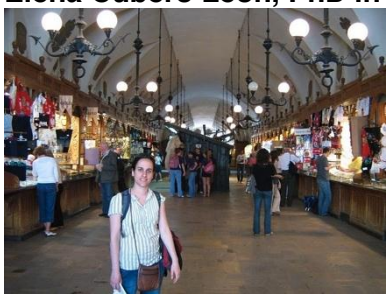
Louise Newnham, PhD Biochemistry



Having spent the last three and a half years completing my PhD in Biochemistry, I can honestly recommend the Life Sciences department at Sussex as a fantastic place to choose for postgraduate study. Not only is the research of the highest possible standard, the support and opportunities given to postgraduate students in the department is outstanding. I have, for example, had the opportunity to travel and present my work at several international conferences in Japan, America and the South of France. The school also has an excellent publishing record with many groups publishing their findings in the top scientific journals. I, like many of my peers, was lucky enough to get a first-author paper published during my time at Sussex. This means that with a bit of hard work, you are in a great position to get your work published, which really does give you a helping hand when it comes to finding a job on the other side of your studies. Asides from the work side of things, being very close to Brighton there's no shortage of festivals, pubs and clubs to take your mind off all the hard work. Sussex University is also situated in the South Downs, which on a nice day makes for a pleasant break from the city.

To summarise, my experience as a PhD student has been a positive one. This is not to say it hasn't been without its bad days. Postgraduate study is extremely hard work wherever you choose to do it. But with the support and opportunities available to Life Science postgraduates at Sussex, I am without doubt that I made the right choice in picking Sussex. I have no inhibition whatsoever in recommending Sussex in general and the School of Life Sciences in particular to anyone who feels a responsibility to contribute meaningfully to human knowledge through research. With Sussex, the sky could be just the beginning.

Elena Cubero Leon, PhD in Biology and Environmental Science



I completed my PhD in Environmental Science at Sussex in September 2009 after three years of intensive research in the area of endocrine disruption in aquatic organisms exposed to environmental contaminants. I chose to apply for a PhD at Sussex because the faculty research interests matched mine and they had a great publication record. On visiting the department for an interview, I decided that this was a good place to develop as a scientist. The department counts with world-class molecular biology equipment and great mass spectrometry facilities. My PhD project was a part of a big interdisciplinary European programme and two faculty members at Sussex supervised my work. My relationship with them was great; we had frequent meetings to discuss my progress and they always gave me feedback about the work that I was carrying out. During this time I was also encouraged to give seminars to other scientists and presentations about my work in International Conferences. This experience, although terrifying at the beginning, has helped me to believe in my research and myself. I must thank my supervisors and fellow colleagues for all the support and encouragement during the tough times.

Ben Warren, PhD in Biology

'I entered into the exciting world of research as a PhD, after pioneering experiments as part of my third year project, lead to an entirely novel finding. We found that mosquitoes use the high-pitched whine they make when they fly to communicate. As part of the Hearing Research Group I extended this work, as the first part of my PhD, to blood-feeding dengue and malaria carrying mosquitoes to discover that they communicate using their flight tone in a similar way. In order to understand this behaviour we decided to investigate how mosquitoes hear the sounds they make when flying. I flew to Germany, briefly, to acquire some experimental techniques then took advantage of a highly sensitive laser, developed at Sussex, to record nanometer movements of the antennae of mosquitoes caused by sound. We published two high-profile papers in *Current Biology* based on this work. As part of the PhD programme I attended international conferences in Paris, Venice, and London to present this work as a poster. After being inspired at the Inner Ear Biology conference in Paris I decided to investigate what underpins the remarkable sensitivity of the mosquito antennae, which surpasses that of our own ears! In order to investigate this I got the mechanical workshop at Sussex to engineer a custom mosquito-sized device, which controls the temperature of a mosquito, which allowed me to identify the cause of the mosquito's sensitive antennae. Findings from these experiments were published and presented orally at two international conferences in Barcelona and Tours, France. Standing up to present my findings in front of the world experts in my field was a daunting experience but generic courses run by the Science Postgraduate Support Group at Sussex, such as oral presentation skills really helped. I was able to develop teaching skills and maintain a broad knowledge base through teaching tutorials and laboratory based demonstrations at Sussex. Enthused by the research environment at Sussex I have applied for a two-year research fellowship in Germany to embark on a career in research'

Bualuang Faiyue, PhD in Biology

'I chose the University of Sussex to do my PhD in Biology because it is one of the top 100 universities in the world. My research is focused on sodium transport in rice (*Oryza sativa L.*) under supervision of Professor TJ Flowers and Dr MJ Al-Azzawi. I try to find where the bypass flow, an important pathway for sodium uptake in rice under saline conditions, occurs in rice. I learn how to collect and analyse sodium in the xylem sap of rice by using the xylem-feeding insect Philaenus spumarius. I also learn the technique to identify passage cells and Casparian bands in the root using fluorescent dyes. With very good facilities at the School of Life Sciences such as the atomic absorption spectrometer, fluorescence spectrometer,

epifluorescence microscope and scanning electron microscope, my research has been conducted so well that I have already published two articles in *Plant, Cell and Environment*.

Sussex provides opportunities for me to develop both academic and social skills. For example, there are many workshops and seminars in various topics to be attended such as time management, oral and poster presentation skills. Giving presentations on 'rRce and salinity' at the University of Sussex, University of Cambridge and Imperial College were the highlight of my time at Sussex. I also participated in ERASMUS IP 2010 at Leibniz Universität Hannover, Germany, for two weeks to increase my knowledge of bioenergy. All the experiences I have gained are extremely valuable for my future career and I really enjoy studying at Sussex'.

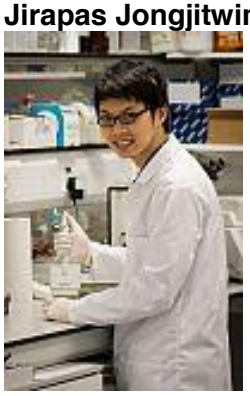
Yari Fontebasso, PhD in Biochemistry

'Green fields, a vibrant student life, a lively city nearby…do you need any other reason why you should choose the University of Sussex for your postgraduate studies? Now, seriously, being a PhD student at the Genome Damage and Stability Centre has provided me with the tools I need for my future career: knowledge, experience, skills. And, most of all, a deep look into myself: my potential, my strengths, my weaknesses. My studies focused on the characterisation of a novel component of the arsenal which living cells use to respond to damage harming our DNA, our precious genetic material. The research PhD I undertook meant also spending long hours and weekends in the lab. This is when having a lovely workplace and supportive colleagues can make a huge difference! At the Genome Centre, the emphasis on collaborative research translates into a network of support for PhD students, and this is particularly important if you get stuck during your studies. The everyday contact with other students, postdocs and lab heads in an informal environment allowed me to feel free to exchange ideas and receive constant feedback and advice. If you look for even more stimuli, then weekly seminars provide you with insights into other groups' research interests, with invited speakers coming from around the UK as well as from abroad. The Genome Centre is also a truly international place, with people literally from all over the world. I moved from Italy to undertake my studies here, and the University of Sussex provided me with all the support needed: as an international student, you can never feel a foreigner here! Of course, all this doesn't mean you'll never experience hard times, or a setback in the progress of your studies. But…that's when the green fields, a vibrant student life and a lively city nearby come to help!'

John Chesebro, PhD in Biology and Environmental Science

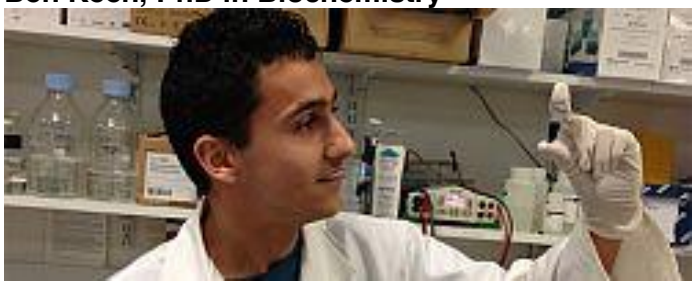
'After completing a Master of Science in Biology in the United States I was recruited to Sussex as a PhD student to further study evolutionary aspects of developmental mechanisms in basal insect species. I find this area of research to be very interesting and I feel lucky to have been given this opportunity to study outside the US. My supervisor is encouraging and insightful and the other lab members are great to work with as well. My research is coming along nicely and since the start of the programme I have been able to present my results at two international conferences; first, at the International Society of Developmental Biologists' Congress in Edinburgh in 2009 and then at the Euro Evo Devo Conference in Paris in 2010. It was a great experience to see the level of research being conducted in the science community around the world and to be able to talk to scientists with similar interests to myself. Overall, the experiences I've had at the University of Sussex have been overwhelmingly positive and my time in Brighton, in general, has been very enjoyable.'

Jirapas Jongjitwimol, PhD in Biochemistry



'Since 2010, I have been funded by a Thai government grant to pursue education at the postgraduate level, for which I chose the University of Sussex. In the Master's programme, Dr Felicity Watts of the Genome Damage and Stability Centre (GDSC) gave me an opportunity to participate in her cancer-related project, as well as supervising me in both technical and management aspects of research life. The excellence of the School of Life Sciences, with its wide range of modern facilities, friendly lab colleagues and supportive teams, has prompted me to continue my study as a doctoral researcher here. Beginning in January 2012 in Watts' lab, I have been part of the team investigating how sumoylation of translation initiation factors plays a role in tumorigenesis. I undertake both *in vitro* and *in vivo* experiments on a regular basis. These include many different techniques eg, protein expression, protein purification, polysomal extraction, immunoprecipitation, immunoblotting and mass spectrometry. I have learnt these new techniques with the guidance of experts in the field. When in need of any assistance, I am always able to get support from both my supervisor and co-supervisor, Professor Simon Morley. Apart from research work, the Gnomes, as GDSC members are informally called, also have regular seminars and lab meetings to share and discuss updates of their own and related work as a way of broadening their knowledge, and I am really glad to be part of them.'

Ben Keen, PhD in Biochemistry



‘Working as a researcher at Sussex has certainly been advantageous to my scientific career. The wealth of expertise and equipment here has allowed for a wide range of experiments that I would never have had the chance to carry out elsewhere. As I work in the Genome Damage and Stability Centre, there is an abundance of knowledge in the field of DNA damage and there is always someone around that can help when you're having issues with a particular project; the input of novel ideas and having people around you that understand your work and can look at it at new and exciting angles has been an invaluable asset during my PhD so far. In addition, having such supportive supervisors and co-supervisors, who are always willing to help out and offer their guidance is such a helpful resource to have. The range of experiments I have had the chance to attempt and the experience I am accruing in both the lab and teaching environments are setting me up excellently for my future.’

Muruj Barri, PhD in Biochemistry

‘My decision to study my PhD at Sussex stems from a combination of several factors ranging from having a lovely atmosphere, offering very good library resources, the role of staff, to having various laboratory facilities that serve the needs of researchers. My passion to do a PhD started when I studied the MSc in Genetic Manipulation and Molecular Cell Biology. This course was useful to enhance my knowledge in genetics. The library resources are great. I can access many scientific journals, and study with my research group in a room. The staff played an important role in encouraging me to continue my science journey. The MSc course convenor had a role in directing me to choose courses to build up my experience in genetics. I had my MSc project with a supervisor who sensed my passion for learning genetics and enthused me throughout my MSc research project. A few months before finishing my Masters, I decided to grab the opportunity to study for a PhD. Soon, I chose my research field which was about motor neuron degeneration diseases at molecular level of genetics. Now, I am investigating the role of TDP-43, RNA-binding protein, in RNA metabolism and how aberrant RNA processing is involved in Amyotrophic Lateral Sclerosis (ALS). I believe Sussex is the best place to study abroad.’

Ali Shahroozi, PhD in Chemistry

'After getting my MChem degree in Chemical Physics in 2003 from the University of Sussex, I went back to my birth country, Iran, to use my knowledge and experience gained here in the business world. I started a chemical company where household chemicals were manufactured and distributed throughout the country under my owned established brand. After seven years of hard work I decided to sell the business and start my PhD in modern material chemistry focusing on Nanomaterials and their applications in Nanotechnology.

I had no difficulties to choose Sussex as my first choice to pursue my aims academically. Sussex gave me such a wonderful experience in the past with all the essential tools and knowledge to enter the demanding business environment after my graduation. Also with world class labs and state of the art facilities in the School of Life Sciences doing a PhD would be an obvious choice. My area of research is on the self-assembly of monodispersed colloidal spheres into highly ordered 3-D colloidal crystals and use them as templates for fabrication of many interesting 3-D porous nanomaterials. Using metal oxide or polymer inverse-opal or shell like structures, well controlled photonic crystals will be developed to harvest solar energy or to create chemical/biological sensors.

The nano labs at Sussex which are supervised by Dr Qiao Chen are cutting edge and the philosophy of research in these labs is to use science for real world applications. Apart from my everyday research, I have also been appointed as an associate tutor to demonstrate and supervise Physical Chemistry labs and workshops respectively for undergraduates. This has given me the opportunity to interact with other students and also develop the essential skills for teaching and supporting others.'

Julia Korchagina, PhD Neuroscience

'I have always believed that doing a PhD is something more than completing your thesis. It is a learning adventure which determines the type of scientist you will be and the directions your research may undertake in the future. I joined the School of Life Sciences at the University of Sussex as a PhD student in October 2009. My research area, genetics and molecular biology of hearing and deafness, is a dynamic, rapidly developing field in Neuroscience. The School is extremely well prepared to meet the needs and requirements of a molecular biologist like me. It has a lot to offer to research students, from modern and well-equipped laboratories and microscope facilities alongside collaboration with world leading institutions. A part of my PhD studies was done in Madrid, Spain, under pleasant weather conditions and a priceless

experience exchange with researchers from abroad. Throughout my research I received excellent supervision. I feel honoured to work with Professor Guy Richardson, Dr Richard Goodyear and Dr Kevin Legan. They are the leading scientists in the field of research on hearing research; I am provided with constant support, guidance and advice. Their effort allowed me to publish my research and to present it at international conferences. The School has also helped me organise various research trips thus giving me an opportunity to expand my PhD experience.'

Adam Close, PhD Chemistry

'My PhD is part-funded industrially by AstraZeneca, which gives me the opportunity to interact with medicinal chemists working in drug discovery and development. This also means my work is applied and may one day be useful towards the development of new medicines. My Sussex laboratory is well equipped for chemical library synthesis (which is collections of new chemicals for testing) which would not be out of place in an industrial setting. Starting in a new research group (Spencer group) to the Sussex department, gave me the chance to set the lab up to my own specification. The department has excellent facilities for enabling efficient research. I share this lab with two other research groups and an office with PhD students from several different groups from the chemistry department; this enables me to work in synergy with other researchers. I find this a friendly non-competitive environment to work in which aids the development of my work.
Since moving to Brighton I have joined a running club and take full advantage of the South Downs that are adjacent to the campus. I also enjoy playing squash on a regular basis with other students and members of the department.

My supervisor has given me the opportunity to go and present a poster on my work at an international conference early this summer which will be very good for my personal development.'

Unum Amin, PhD in Biology

'I was initiated to the Life Sciences family here at Sussex during my MSc degree in 2009. I got to choose out of a variety of research projects available to taught students and my MSc research project entailed the use of Drosophila melanogaster salivary glands using Laser Scanning Microscopy as a means of investigation. The experience gained from that project proved invaluable as it helped me to obtain a PhD studentship in the lab of Professor Juan Pablo Couso, who leads a Drosophila Developmental Genetics group that is funded by the prestigious Wellcome Trust.

I find that the well-integrated, communicative atmosphere in the Life Sciences School is not only conducive to good science, but it also keeps personal interests alive. In a short span of time, I was enabled to identify and be immersed in cutting-edge research that I had only dreamt about as an undergraduate, and to feel right at home while doing so.'

Tom Butterfield, PhD in Biology

'I am currently studying the chemical ecology of the yellow meadow ant (*Lasius flavus*) but more specifically I am investigating how individual ants use chemicals to communicate with the other individuals in the colony.

Studying for a PhD can be overwhelming at times. Especially in the first couple of months; not only are you trying to settle into life in a new city, but you also have to try to integrate yourself into the working environment of your lab/office. Fortunately the lab I work with is full of friendly people and overall the support for students at Sussex is fantastic so the transition wasn't too jarring. However it isn't just your new colleagues which you need to get along with, your supervisors also play a vital role. Again I feel lucky that my supervisors are both experts in their fields and highly knowledgeable, but are also approachable and always ready to provide help and guidance when I need it. So far my experience as a research student has been great, my work is incredibly stimulating and every day brings a new set of challenges which I always love to overcome.'

Nicholas Balfour, PhD in Biology

‘I am now in the third year of my PhD at Sussex University. My research has two prongs, the first is focused on the honey bee (*Apis mellifera*) and its role in agricultural pollination, the second is investigating how farmland can be used to help the honey bee and other flower-visiting insects. I have really enjoyed my time in Brighton and at LASI (Laboratory of Apiculture and Social Insects) and I now feel very settled in both. I am very fortunate to have ended up in such a helpful and friendly team, led by my excellent PhD supervisor Professor Francis Ratnieks.’