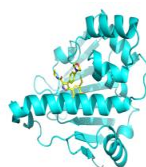
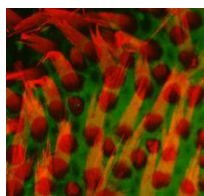
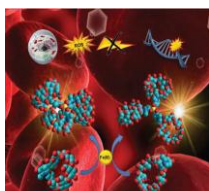
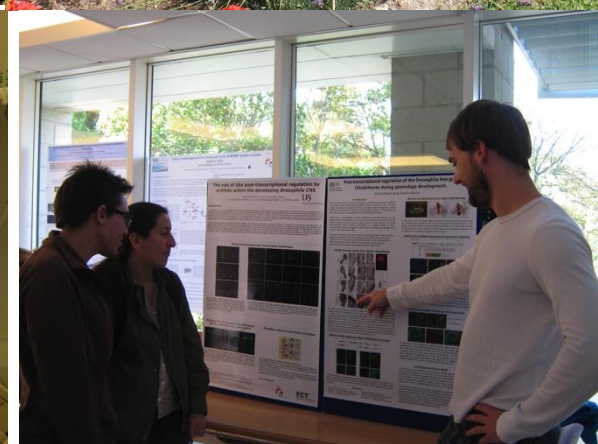
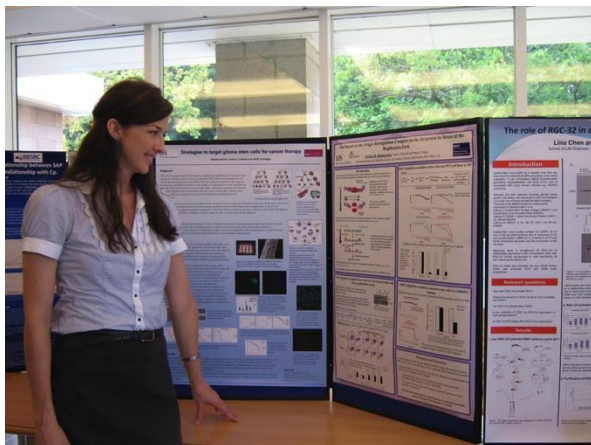




University of Sussex

School of Life Sciences

Handbook for MPhil/PhD Research Programme 2012-13



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 around 200 research students in our School. You have every reason to be proud of having been admitted to our highly competitive MPhil/DPhil Research Programme. 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 Conveners, 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 enjoy your time at Sussex, benefit greatly from working on your postgraduate research project in one of our internationally recognised laboratories, and participate actively in the life of your School and the University.

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.



Carla Baron 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 Dr Liz Somerville (Room JMS 4D20; e.m.somerville@sussex.ac.uk). She 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 her with any concerns you have about these matters. In addition Liz has responsibility for monitoring student attendance, but she hopes that she will not need to contact any of you about this! Although Liz has a formal role with respect to Mitigating Evidence, she cannot talk to you about specific issues here, but is happy to try and give general advice where she can.

Student reps

Student reps are undergraduate and postgraduate students elected by Sussex students to represent the views and interests of students in their subject, department or school year. 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, Prof. 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.

Deeptima Massey, Research and Enterprise Coordinator

(01273) 872774, Internal Extn 2774

JMS 3B12a (School of Life Sciences 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 : Prof. Michael O' Shea

Chemistry: Dr John Spencer

EBE: Prof. Francis Ratnieks

Biochemistry: Dr Majid Hafezparast

GDSC: Prof. Aidan Doherty

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>

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 (D.Phil. and M.Phil.) 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 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 department and school are 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.

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.

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 any grievance 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 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 programme, 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 adhere to the requirements and observe 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.

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 D.Phil. or M.Phil. 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 M.Phil. candidates the external examiner may deem the oral examination to be unnecessary).

Full-time research students are encouraged to submit D.Phil. 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 the 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 much 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-emphasised 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 Postgraduate Departmental 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 D.Phil. thesis usually takes 3-4 months. You will need to start to plan it around Christmas in your 3rd year and start writing before your funding runs out. 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.

- Students working in the Biochemistry and Molecular Biology subject group are recommended to attend the course "Advanced Methods in Molecular Research" during the Autumn Term of the first year.
- 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 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 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.

Within Biochemistry and Molecular Biology subject group, immediately before the start of their third year, all research students are required to give oral presentations of their work to the entire Biochemistry group and a prize is awarded for the best presentation. Furthermore, first year student's present posters over a lunchtime session and receive feedback from teaching and research faculty and other students.

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

General Information for research students

Access to the building

You need authorisation to the buildings between 5.30 p.m. - 7.00 a.m. 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. You will need to sign in after 6 p.m. - using the book by the main entrance to the JMS building.

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, 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.

Chemistry

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 chemical 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 JMS 3B4 in 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 Royal Society of Chemistry 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. Literature survey. You are also required, within the first 18 months, to write a literature survey to cover a topic appropriate to your work, or arising out of the course work you have undertaken. You should discuss the title and contents with your supervisor, and it should be handed in to the Research and Enterprise Co-ordinator's Office JMS 3B12, by 1st April of the next year but one (*i.e.* 18 months later) at the latest. *N.B.* Some supervisors will want their students to complete the survey earlier than this. Students who have completed a taught MSc can be considered for exemption at the discretion of the Chemistry Research Degree Convenor
3. 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.
4. 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.
5. Submission of thesis within University time frame years. You will be given a maximum registration date by the University (4 years for 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.
- 6 Laboratory Books. 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 Departmental 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 solvent 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.

Registration Issues

Registration limits

- The minimum period of registration for **full-time PhD** students is a minimum of two years (6 terms) and a maximum of four years (12 terms).
- The minimum period of registration for **part-time PhD** students is a minimum of three years (9 terms) and a maximum of six years (18 terms).
- The minimum period of registration for **full-time MPhil** students is a minimum of one year (3 terms) and a maximum of three years (9 terms).
- The minimum period of registration for **part-time MPhil** students is a minimum of two years (6 terms) and a maximum of four years (12 terms).

Please note that for part-time students the maximum will depend on a number of factors, such as whether the student has combined full-time and part-time registration. The maximum time allowed for unmixed part-time registration is six years for PhDs and four years for MPhils.

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 of Research Degrees must be held, and a change in registration will depend on the satisfactory outcome. Reports should be forwarded to the Director for approval.

The Student Progress and Assessment 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, but receiving no computing or library services (though library membership can be retained on payment of a supplementary fee) 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/sas/1-3-1-3-1.html>

Please note that if you complete any of these forms you should do so only after discussion with your main supervisor. A form will only be acted upon after the relevant academic officers have signed the form and it has been received by the Student Progress and Assessment Office for processing. The Student Progress and Assessment Office will write to confirm all approved changes.

Postgraduate Research Colloquium

The first postgraduate research colloquium was held on 12th and 13th September 2011. This was introduced this year as 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 on-going research projects.

All third-year research students (PhD and MPhil) are required to give a talk on their on-going 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 first two weeks in September free in Year 2 and Year 3 to prepare for the poster/talk respectively (especially avoid booking holidays or conference presentations).

The second research colloquium is on 3rd and 4th September 2012.

Examination Matters and Completion

Notice of Intention to submit your thesis

You must give the Student Progress and Assessment 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 Student Progress and Assessment 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 Student Progress and Assessment 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 Student Progress and Assessment Office will inform you whether your application for entering the examination has been accepted.

Preparation of your thesis for examination

The Doctoral School handbook specifies two different thesis submission formats, one pre-viva and one post-viva. For the pre-viva three copies of the thesis bound in soft cover 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 electronic copy of the thesis to Penny King, Student Progress and Assessment Office, Sussex House, 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

The issue of plagiarism is a growing academic concern. It is taken very seriously. For tips on how to avoid plagiarism see: www.sussex.ac.uk/academicoffice/1-4-1.html, click on "prevention" on the left of the page.

Referencing Guide

For tips on referencing see:

<http://www.sussex.ac.uk/library/infosuss/referencing/index.shtml>

The Doctoral School

The Doctoral School sits beside the University's Academic School structure, recognising the 1000 postgraduate and postdoctoral researchers at Sussex as a

fundamental part of the University's intellectual vitality, and seeks to enable you to feel fully integrated as members of this wider research community.

The Doctoral School is part of the Research & Enterprise Division and is the principal point of connection between Academic Schools and the University for all matters relating to postgraduate research and postdoctoral provision. The Doctoral School signals the University's commitment to enhancing the quality of the academic and social experience for researchers at Sussex.

A central Doctoral School Office now oversees all aspects of administration for doctoral researchers from admission, administration of funded studentships, annual progress, and professional development activities through to the viva.

Environment for researchers

The Doctoral School provides an exciting interdisciplinary environment through which all researchers across the institution can interact in a way that has previously not happened. While researchers are, of course, an integral part of the academic community within the School of Life Sciences there are also now opportunities for doctoral researchers and research staff across all schools to come together through the Doctoral School academically and socially. The Doctoral School provides a series of social and professional development events year-round, so please visit the Doctoral School website for the latest news as well as events and other opportunities.

Accessing the Doctoral School provision

Researchers need the very best subject-specific skills training in methods and techniques to conduct and complete their work to the highest standards. Increasingly, potential employers and research councils have also stressed the importance of transferable skills, entrepreneurship and personal development crucial to professional life and to securing the optimal career path for doctoral graduates.

The Doctoral School provides for the additional specific training needs for your doctoral research, as well as coordinating professional development activities and opportunities to enhance doctoral researchers' personal and professional development. The Professional Development section of the Doctoral School website provides you with a single gateway to access development resources and opportunities all across campus, online, and beyond Sussex.

The provision includes the *Profolio Programme* (which was shortlisted for a *Times Higher Education Award* for 'Outstanding Support for Early Career Researchers' in 2008), revamped for 2010/11 and open to all doctoral researchers, comprises a series of workshops and drop-ins, a USB drive Toolkit to record professional skills in an electronic portfolio, and an online researcher profile facility which offers you the opportunity to present yourself and your research online, on your departmental web pages while you are at Sussex.

The Doctoral School offers further information and helpful articles through the following social media channels:

Blog: <http://doctoralschool.wordpress.com>

Facebook page: <http://www.facebook.com/SussexDocSchool>

Twitter feed: <https://twitter.com/SussexDocSchool>

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

Testimonials by our current and recent research students

Awoyemi Abayomi AWOFALE
PhD in Biology (2007-2010)



"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 1st Class Honours degree in Biology and Chemistry Education. The University also sponsored me for a 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 characterize 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 ones 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 (2006-2010)



"Having spent the last three and a half years completing my D.Phil 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 department 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. Besides 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 it's 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".

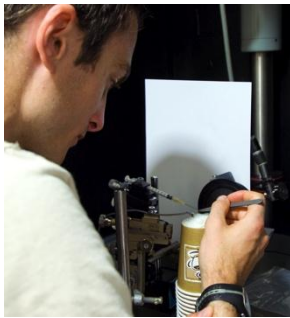
Elena Cubero Leon

PhD in Biology and Environmental Science (2006-2009)



"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 3rd 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 choose the University of Sussex to do my D.Phil. 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 Prof. T.J. Flowers and Dr. M.J. 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 'rice and salinity' at 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 experiences I have gained are extremely valuable for my future career and I really enjoy studying at Sussex".

Yari Fontebasso
DPhil in Biochemistry
GDSC
2007 – 2011



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 DPhil 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 DPhil 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 DPhil 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
DPhil Biology and Environmental Science
2009 onwards



After completing a Master of Science in Biology in the United States I was recruited to Sussex as a DPhil 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 to 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 as 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.