



Queen Mary
University of London

The PhD Process

Faculty of Science & Engineering

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Deputy Dean for Postgraduate Research

Queen Mary Doctoral College

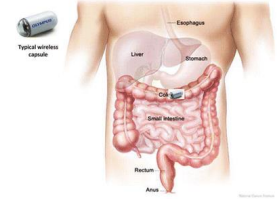
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Session Outline

1. Introductions and The Faculty
2. The Doctoral College
3. Progression through the Degree
4. Advice to new Postgraduate Research students
5. Final Remarks

Introductions – *About Me!*

- Deputy Dean for Postgraduate Research in Science & Engineering
- Manage and Support over 1000 PhD students in the faculty
- Ensure you are supported throughout your PGR life-cycle
- Provide necessary training to PGR supervisors
- Coordinate studentship funding allocation in the faculty
- Support and coordinate large scale PGR bids in the faculty

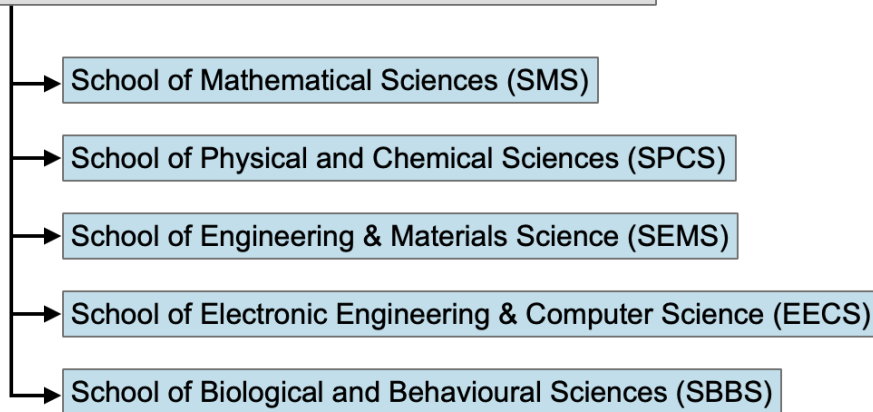


- Professor/Head of the Antennas & Electromagnetics Research Group/Lead for Centre for Electronics
- Team of 19 academics + 45 PhDs + 10 postdocs + 4 technical engineers
- Work on novel antennas and microwave devices for wearable and biomedical solutions from DC to terahertz

Active Outreach Speaker and S&E Communicator (Isambard Brunel Kingdom Award)
British Science Festival and TEDx Speaker (Widening participation)

Our Faculty

Faculty of Science & Engineering (S&E)



Cross-faculty networks/institutes

Bioengineering Network

Material Research Network

Digital Environment Research Institute

Centre for Urban Transport Technology

Science and Engineering



Queen Mary University of London conducts world-class science and engineering research delivering fundamental knowledge and translational impact to benefit society.

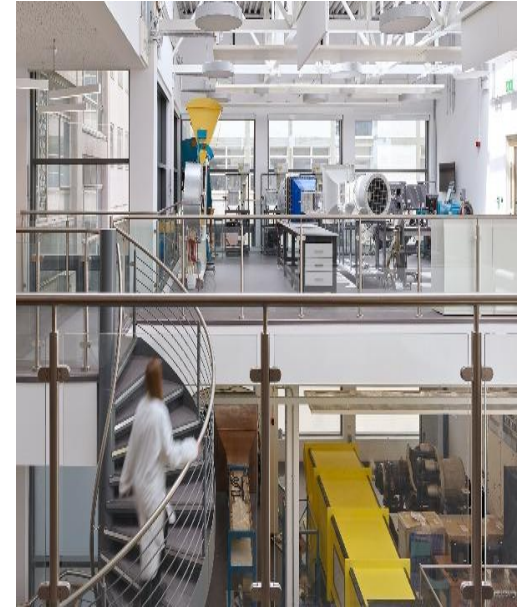


Professor Martin Knight

Dean for Research, Faculty of Science and Engineering

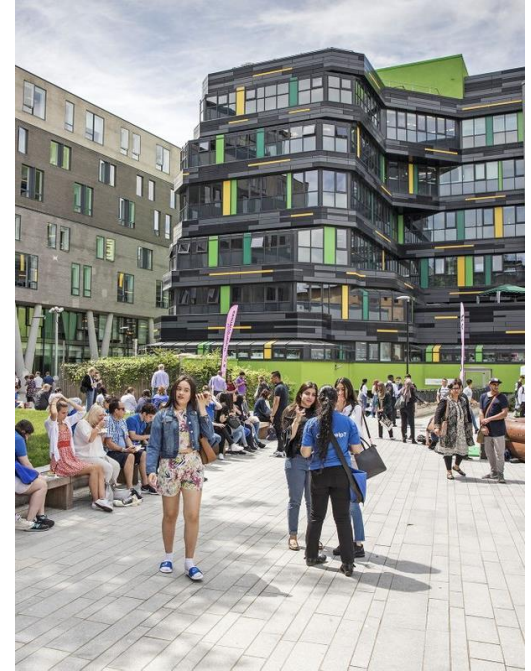
Research Excellence in the Faculty

- 7th in the UK for research quality in last national assessment
- Annual research grant income of ~£45M to £50M.
- NERC Doctoral Training Partnership
 - (UCL, KCL, Kew Gardens, and the Natural History Museum)
- 2 X BBSRC Doctoral Training Partnership
 - LIDO with UCL, KCL and industry
 - Collaborative Training Partnership led by Industry
- 4 x EPSRC Centre for Doctoral Training
 - Data-Centric Engineering
 - Media Arts Technology
 - AI in Music
 - Intelligent Games
- STFC Centre for Doctoral Training in fundamental physics and data intensive science
- Athena Swan accreditation for all Schools.
- Successful spin-out companies; *Apatech*, *Chatterbox*, *Actual Experience* ..



Faculty Vision

- Be recognised as one of the leading science and engineering faculties in the UK, ambition to be ranked in the top 10 universities in the UK
- Have an international reputation for cutting edge research and education, which attracts the best staff and students, and gives them the freedom to excel
- Offer students an education responsive to their personal aspirations and prepares them for leading roles in society
- Have a culture of flexibility and innovation, which embraces diversity, which empowers academic leadership and where excellence is rewarded.



The Doctoral College

Doctoral College Structure



Tim Warner
Dean for Postgraduate Research
Director of the Doctoral College



Paul Chapple
Deputy Dean FMD



TBC
Deputy Dean HSS



Akram Alomainy
Deputy Dean S&E



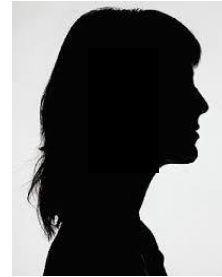
Zi Parker
Doctoral College Manager

- ▶ Directors of Graduate Studies & Deputies at each School
- ▶ PGR Supervisors

Doctoral College Support



Frances Healy
Senior Research Manager
Faculty of Science & Engineering



Mary Childs
Research Degrees Office
Academic Registry and Council Secretariat



Melanie Crisfield
Researcher Development Advisor
Doctoral College



Emma-Marie Fry
Senior Careers Consultant (PhDs and ECRs)
Queen Mary Careers & Enterprise

Progression through the Degree

Who's Who in PGR at Queen Mary?

Every PGR student has **primary supervisor(s)** and wider supervisory team

Directors of Graduate Studies (DGS) oversee PGR provision in each School/Institute

Schools devise their own detailed regulations for PhD students, but must fit with the **College Code of Practice for Research Degrees:**

http://www.arcs.qmul.ac.uk/research_degrees/handbook_code.html

Dean for Postgraduate Research lead the Doctoral College supported by the Faculty Deputy Deans

<https://www.qmul.ac.uk/doctorscollege/>

Appointment of examiners and award of degrees is approved by the **Research Degrees Programmes and Examinations Board (RDPEB)**

The **Research Degrees Office** provides administrative support for PGR and report to the Doctoral College Management Group and RDPEB.

Dedicated member of the RDO for each Faculty

http://www.arcs.qmul.ac.uk/research_degrees/contacts.html

The PhD Thesis

- The PhD thesis must
 - form a distinct contribution to knowledge of the subject
 - afford evidence of originality, shown by the discovery of new facts or by the exercise of independent critical power
 - be of a standard to merit publication in whole or in part
 - be the work of the candidate



PGR Supervision

- Supervisory team: at least two members of Queen Mary academic staff
- Other members can include postdocs, industrial partners, or other external collaborators
- If problems arise with the supervisory relationship, this should be reported to the School DGS in the first instance



Supervisor's Role

- The responsibilities of supervisors and students are set out in the Code of Practice for Research Degree Programmes
- A clear supervision plan is central to progress
- Full-time (FT) students must have a minimum of 10 supervisions per year
- You should use the Supervision Log on MySIS to record supervisions
 - **Full-time: 10 reports/year; Part-time: 5/year**
 - Records date of each supervision, and optional box to record notes
 - You can also attach files (eg thesis chapters) for your supervisory team
 - Each log is reviewed and approved by supervisory team

Supervisor's Role – *Providing Feedback*

- Good feedback is essential to good progress
- Very useful to discuss and agree format of feedback at each project stage
 - Helpful for both to reflect on how you generally work (or would like to work)
 - How far ahead of meetings should any written material be submitted, etc.
- Important: be clear about how feedback on written work will be provided.
 - How many drafts of each chapter will your supervisor be prepared to read?
 - What form will written comments take (brief annotations, discursive prose, both?)

Working Hours and Absences

- FT students are expected to work 35 hours per week
- PT students / supervisors should agree proportion of time spent on research. Typically workload is deemed to be 50%
- Transfer between FT / PT must be *approved by the DGS and to be permanent transfer*
- Agree holiday periods with your supervisor
 - FT students have the same annual leave entitlement as FT staff
 - 30 days + 8 public holidays + 4 QMUL closure days
- In cases of illness inform your supervisors and School of absence.
 - On 8th day of (including non-working days), supply a doctor's certificate for further absence
- If you expect absence for more than 1 month (consecutively or cumulatively) you must apply to interrupt your studies

Interruption of Studies

- Requests should be supported by supervisor and DGS; submitted to the RDO to refer to RDPEB
- Grounds for interruption may include: illness, personal / family reasons, pregnancy, parental or primary-carer leave, adoption leave, financial difficulties. Evidence must be provided.
- Students may not interrupt simply because of a lack of progress!
- Interruptions cannot be made retrospectively, except in exceptional circumstances
- Interrupting students remain registered on their programme, but are not enrolled with Queen Mary. This has consequences for student status, funding, and immigration permission for international students

Extensions

- You're expected to complete within 4 years!
- Apply for an extension to your maximum registration period if circumstances beyond your control make it impossible to complete on time
- Requests should be supported by the supervisor and DGS, and submitted to the RDO to refer to RDPEB
- Extensions only authorised for students in 4th year, or in writing-up status (see later).
- Extensions of up to one year, (normally on one occasion only). Applications must be made 3 months before the programme end date
- Provide evidence of good progress and ability to submit within the requested period

Training

- Supervisor is responsible for monitoring your engagement with training, and ensuring you complete the minimum each year
- UKRI expects all PhD students to undergo 210 hours of training /development during their PhD
- Training opportunities are available through four main routes:
 - Your School (at different levels of formalisation)
 - The Researcher Development team
<https://www.qmul.ac.uk/queenmaryacademy/researcher-development/>
 - A Doctoral Training Partnership (DTP) or Centre for Doctoral Training (CDT)
 - Sometimes available to students not funded by the partnership itself.
 - Find out about relevant providers, eg IGGI / DISCnet / AIM.
 - External courses eg at other universities or research labs

Funding for Travel

- You may have access to School research support funding
- If unavailable, apply to Queen Mary's Postgraduate Research Fund (PGRF):
 - Max. £1000 to attend an international conference/meeting
 - Max. £2000 for fieldwork, networking, access to training/facilities
 - Can only receive PGRF award once
 - Deadlines on 1 November, 1 February, and 1 June (Schools have earlier internal internal deadlines)
- **MUST** show evidence of having sought external funding
 - Alternative Guide to Postgraduate Funding <https://www.postgraduate-funding.com/>
 - Research Professional <https://www.researchprofessional.com>
 - ***Queen Mary has subscriptions to both***
 - National Societies eg Inst. of Physics / Royal Society of Chemistry

Funding for Travel

- The activities' purpose and significance must be shown
- Activities with potential to increase research quality and quantity, or wider dissemination and networks, are prioritised
- Support from primary supervisor and DGS is needed
- Very competitive – not a safety net in any sense

<https://www.qmul.ac.uk/doctorscollege/phd-students/funding/pgrf>



Funding for Activities & Events

- You can also apply to Queen Mary's Doctoral College Initiative Fund (DCIF):
- Supports new student-led activities to enhance students' research experience, intellectual and/or professional development
- May include seminars, conferences, debates, specialist training
- Cannot include equipment or consumables
- Min. £100, max. £1000; applicants without previous DCIF funding are prioritized
- Deadlines on 1 November, 1 February, and 1 June (Schools have earlier internal deadlines)

Funding for Activities & Events

- Must show evidence of having seeking alternative funding
- Activities with a multi/interdisciplinary focus (especially cross-Faculty initiatives), and which engage the maximum number of participants, are prioritised
- Support from primary supervisor and DGS is needed
- Very competitive, like the PGRF scheme

<https://www.qmul.ac.uk/doctorscollege/phd-students/funding/dcif/>



Key Milestones: Progression

- Students must pass first-year progression to continue on their programme
- Each School has different implementations
- All require submission of written work between 6 and 9 months after registration (12-18 months PT)
- Annual (FT) and biennial (PT) progress reviews happen thereafter
- Your DGS / supervisor will advise you
- Progression panels must include at least two people – at least one should be independent of your supervisory team

Key Milestones: Progression

- Students have two attempts to pass progression within 3 months
- Students failing to progress are transferred to MPhil, or deregistered
- Students may be deregistered at any time for insufficient progress, following two written warnings
- Recommendations for deregistration must be approved by the DGS and Deputy Dean
- Students may appeal against deregistration decisions under the Appeal Regulations

Key Milestones: Writing-up Status

- Transfer to writing-up status between **2 and 4 years (4-7 years PT)**
- Max. one calendar year, both FT and PT
- Students in writing-up status **do not** pay tuition fees
- **MUST** have:
 - completed all experimental work / data collection (***Waived for Covid-19 mitigation plan***)
 - be in a position to submit the thesis within 12 months
 - outline thesis plan and estimated completion dates of each chapter
- Applications are approved successively by the primary supervisor, DGS, and Deputy Dean
<http://www.arcs.qmul.ac.uk/research-degrees/research-degree-students/writing-up/index.html>

Key Milestones: Appointing Examiners

- Discuss choice of examiners, and timing of submission with supervisor
- Two examiners must be nominated: 1 internal + 1 external, or both external
- Initiate examination entry process via MySIS – allow at least 3 months
- Examiners must have examined at least 5 PhDs between them, at least **three** from the UK
- Examiners must not have had a connection with the supervisor or student (eg extensive collaboration within the past 5 years)

Key Milestones: Submission

- Must submit **within** 4 years (3 years 364 days)
- Queen Mary may deregister students who do not submit within 4 years
- Funding bodies normally expect students to complete and submit their thesis within 3-3.5 years
- This is the typical duration of a funding award
- All PhD students should aim to complete within their funded period

Key Milestones: Submission

- It is **your** decision when to submit your thesis
- Submit Thesis Submission Form RD02
<http://www.arcs.qmul.ac.uk/research-degrees/forms/>
- Submit 2 printed versions of the thesis, and 1 electronic (PDF) version, no later than 1 month before the viva (*Currently under review*)
- Thesis has 100,000 words limit, excluding bibliography and appendices

Key Milestones: Submission

- Appendices should only include material which the examiners aren't required to read in order to examine the thesis, but may consult if they wish
- On successful completion of the examination, or of amendments/ revisions, you must submit 1 digital copy of the thesis to RDO
- RDPEB can't approve PhD award until final thesis is submitted



Key Milestones: The Examination

Following the viva, examiners **may recommend one** of the following:

1. Pass
2. Pass subject to minor amendments [not affecting arguments or conclusions] to be completed within 6 months
3. Pass subject to major amendments [eg rewriting or restructuring of sections], within 9 months as specified by the examiners
4. Not pass, revise and resubmit within 18 months (for PhD) or 12 months (MPhil)
5. Not pass, but allowed to take a written paper or practical examination
6. Not pass, but allowed to submit to a second oral examination on the same thesis and by the same examiners within 18 months
7. Fail PhD but deemed to have met the requirements for an MPhil or should be allowed to resubmit a revised thesis for the MPhil degree within 12 months
8. Fail outright: no re-entry permitted

Advice to New PGR Students

Advice to New Students

- Ask supervisor for the best thesis they have supervised or examined. Read it, and discuss it with your supervisor
- Network and interact with others, for mutual support and enrichment
- Ask your supervisor, and other academics in your area, to identify ‘classic’ papers in your field. Read them at an early stage
- Remember if you leave it more than a fortnight your supervisor may well have forgotten what you discussed.
- Ask your supervisor what your thesis “challenge” is.
- Own your problem. Make it yours. Keep it at the front of your mind, always.
- Let go of the handrail, swim away from the side. Research requires risks.
- **There are no stupid questions** - constantly ask questions

Transferable Skills

- Technical research skills
- Information searching skills
- Turning your hand to a range of technical and data analysis challenges
- Project management skills
- Presentation skills
- Networking skills
- Teaching/instruction of others
- Working to schedules
- Your career management



Final Remarks

Take advantage of all
opportunities and embrace the
challenge

Enjoy Your PGR Studies!



Thank You

Submitting on Time

Possible Problems

- Slow start
- Never satisfied
- Distracted from main line of research
- Getting a job before thesis complete
- Moving home to write-up

Overall Pattern of Work

- **Keeping records**
 - Day book
 - Filing system
- **Recording achievements**
- **Papers and references**
 - Recording your view of a paper
 - Data base?
- **Planning ahead**
 - “Research can be planned but not blueprinted”
 - Timetables
 - Setting personal targets

Overall Pattern of Work

- **Managing yourself and your time**
 - 1% inspiration 99% perspiration
 - office hours vs psychological moment
- **Research Groups**
- **Cooperating with others for mutual helps and support**
 - Within groups
 - Across groups
 - Other universities

Knowing What Has Been Done Before

- **Not re-inventing the wheel**
- **Information searching skills**
- **Conference / seminar attendance**
 - Don't just focus on your own specialised area
- **Specialist journals**
 - Know what's going on in the wider field

Presentations: *a valuable source for progress*

- **Group seminars**
- **Conference presentations**
 - Forces you to structure and evaluate your research
 - Enables you to spot and remedy flaws in arguments / knowledge
- **Feedback**
 - Helps identify new ways forward

Interruption of Studies

- Interrupting students may continue research work, subject to
retain library access
contact with supervisors to be agreed in advance.
no access to laboratories
no fieldwork to be conducted
- Maximum interruption period is 2 years in total (excluding periods of primary-carer leave)
- Discuss implications of interruption with Advice and Counselling particularly if your fees are paid by a sponsor or, you hold a Tier 4 visa where Queen Mary issued a CAS

Advice to New Students

- Take training seriously – not just for thesis project, but for your career
- Keep meticulous records – will save endless reference-checking later
- Don't be reluctant to experiment – or to be honest about when experiments don't work
- Play with ideas, problems and techniques
- Make sure you can explain your work clearly to non-specialists — takes practice!
- Only a handful of people in the world are genuinely experts in your field. Research always means dealing with non-specialists
- Seek out critical analysis, at conferences etc. Dealing with feedback is a skill that most people need to develop

Advice to New Students

- Manage your time effectively
 - keep regular working hours, set targets, take time off; it's a marathon, not a sprint
 - what tasks need particular resources (internet connection, a desk, quiet...)? what tasks don't need specific resources - can be done at odd ends of the day (eg background reading on the Tube)?
- Back-up everything (twice!)
- Storing your data, references, notes is useless you can retrieve it easily
- It's easy to forget what's new and exciting about your work, especially in the closing stages. Remember – this is something that nobody else knows
- Print the title-page of your thesis, in the required format. Put it in a file. Congratulations. You've started
- Three years will go past surprisingly quickly – don't half-do things so you have to return to

Advice to New Students

- Ask your supervisor what your thesis “challenge” is.
- Own your problem. Make it yours. Keep it at the front of your mind, always.
- Let go of the handrail, swim away from the side. Research requires risks.
- Be ready to abandon ideas if they do not work but do not kill them before they have had a chance to fly.



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