

## Graduate School

ANNUAL REPORT 2013–14





# Contents

## 4 Introduction

- 4 Introduction to the Graduate School
- 4 Roles, staff and structure of the Graduate School
- 4 President's Awards for Excellence 2014
- 4 Director of the Graduate School's Award for Professional Skills Development 2014

## 5 Graduate School provision

- 5 Professional Skills Development for research students
- 6 Doctoral courses delivered in 2013–14
- 8 Research to Inform Programme Content and Development
- 8 Imperial PhD Scholars
- 8 International Doctoral Summer Schools
- 9 Professional Skills training for Master's students – The MasterClass Programme
- 10 Enterprise and Entrepreneurship Project
- 10 Cohort building
- 10 Accredited Graduate Teaching Assistant (GTA) training – Supporting Teaching Accreditation and Recognition (STAR) framework

## 11 Graduate School committees and working parties

- 11 Committees
- 11 Working parties
- 11 PGR issues and Master's Programme Organisers' meetings
- 11 Graduate School Operations Group

## 12 Graduate School events

- 12 Welcome events
- 12 Ig Nobel Awards Tour Show
- 12 Annual Live Chemistry Show
- 12 Annual Research Symposium
- 13 3 Minute Thesis competition

## 14 Supporting the student experience

- 14 Student evaluation and focus groups
- 14 Wellbeing
- 14 Student Barometer
- 15 Postgraduate Research Experience Survey 2013
- 15 Peer review of tutors
- 15 Codes of conduct

## 16 Statistics

- 16 Number of professional skills courses delivered in 2013–14
- 17 Attendance statistics

## 18 Forthcoming priorities and conclusions

- 18 Course development
- 18 CRICK
- 18 Education and Student Strategy: World-Class Research Supervision Project
- 18 Conclusions

# Introduction

## ➔ Introduction to the Graduate School

The primary purpose of the Graduate School is to deliver an effective and innovative programme of professional skills training to both Doctoral and Master's students. Additionally, the Graduate School provides opportunities for students to network with peers and engage in interdisciplinary discussion at academic and social events which take place throughout the year.

Following the end of Roberts funding for researchers' skills and career development, in 2013–14 a Working Party was established to develop the College's proposition to doctoral students and to carry out a major review of Graduate School provision. The outcome of this review led to the development of a comprehensive and relevant professional skills training programme which is fully embedded within research programmes.

To ensure that skills training continues to provide students with the opportunity to develop attributes which are of most value to employers, the Graduate School has established a new External Advisory Board which will meet for the first time in 2014–15 and annually thereon, to review the portfolio of courses on offer to students.

## ➔ Roles, staff and structure of the Graduate School

The Graduate School is led by the Director, Professor Sue Gibson, and Deputy Directors, Dr David McPhail and Dr Bernadette Byrne, who work in partnership with the Manager of the Graduate School to develop postgraduate educational strategy and policy. Although the quality assurance of postgraduate provision is managed and administered centrally by the Registry's Quality Assurance team, the Director and Deputy Directors take a lead role in postgraduate quality assurance and chair a number of senior quality assurance committees. They also represent postgraduate educational matters at senior College Committees.

The Manager of the Graduate School has overall responsibility for ensuring the operational efficiency of the Graduate School and is supported by a Deputy who leads the administration team. The Postgraduate Development Unit (PDU), led by the Head of Postgraduate Professional Development, is a team of dedicated tutors responsible for the design and delivery of the professional skills courses.

## ➔ President's Awards for Excellence 2014

The Graduate School is extremely pleased to announce that Dr Caroline Hargreaves was awarded a President's Award for excellence in pastoral care and that Dr Helal Ahmed was awarded a President's Award for excellence in teaching. Both will be presented with their awards at a special ceremony in November 2014.

## ➔ Director of the Graduate School's Award for Professional Skills Development 2014

The Graduate School's Director's Award for Professional Skills Training is an initiative to recognise the outstanding contribution to and support for the Graduate School's professional skills development programmes among Imperial academics and postdoctoral tutors.

The award is open to all members of College academic, support and postdoctoral staff who assist the Graduate School with the delivery of Graduate School courses. Previous winners have included Dr Colin Belton, Professor Paul Langford and Mr Ebrahim Mohamed. This year the award was presented to Mr Greg Artus from the Centre for Co-Curricular Studies.

### ↓ Graduate School staff 2014–15

Front row (left to right): Kelly Hayes, Rebecca McKone, Sarah Faux, Bernadette Byrne and Hayley Cordingley

Back row (left to right): Paul Seldon, Caroline Hargreaves, Helal Ahmed, James Tilley, Laura McConnell, Sue Gibson, David McPhail and Sergio Santos



# Graduate School provision

## Professional Skills Development for research students

The hall mark of Graduate School training provision continues to be ‘compulsion with flexibility’ with students being required to attend a minimum number of courses, but having a wide selection to choose from. The courses vary in length and format, from one-hour lectures and e-learning courses to a residential workshop.

The programme is divided into three sections which are aligned to the three key stages of doctoral studies:

- » **Underpinning** – the early stage (0–9 months)
- » **Consolidating** – the mid stage (9–20 months)
- » **Completing** – the late stage (20+ months)



Students are required to meet the minimum attendance requirement: four courses, each from a different domain in the Underpinning stage or the Research Skills Development (RSD) course plus one other course from any domain in the Underpinning stage, prior to the Early Stage Assessment (ESA) at nine months.

Within each stage, workshops have been grouped into a number of different domains, addressing the personal and professional qualities, knowledge and skills most relevant to postgraduate researchers as they progress. In addition, there is an Enrichment section which offers further workshops available to students at any stage. The provision is informed by a scholarly approach with research informing its content and student evaluation ensuring its efficacy.

The programme features two flagship courses – Finish up Move on (FUMO) and the RSD. The RSD course is a residential course recommended for all early stage researchers. It takes place at Easthampstead Park in Berkshire, a Victorian mansion situated within 60 acres of beautiful parkland. The course is designed to enhance both the personal and research effectiveness of participants and to help develop a social and support network.

FUMO is an interactive two day non-residential course which is recommended to students in the Completing stage of their doctorate. It covers what students need to know about how to successfully complete their research degree and move on to the next phase of their career. The programme includes discussion, reflection and practical exercises. There is also a small reception and networking event to provide an opportunity for students to talk to peers, alumni and the course tutors.

# Doctoral courses delivered in 2013–14

## Underpinning stage

DOMAIN	COURSE
<b>Residential</b>	Research Skills Development (RSD)
<b>Career Options</b>	Career Planning for 1st Year PhDs: Engineering and Physical Sciences Career Planning for 1st Year PhDs: Life Sciences and Medicine
<b>Information Management</b>	Endnote Information Retrieval The Information Landscape: Introducing the Web of Science Core Collection Database The Information Landscape: Keeping your Research Up to Date
<b>Personal Effectiveness</b>	Assertiveness Myers Briggs: Introduction Negotiation Skills for Researchers Time Management
<b>Presenting</b>	Presentation Skills Half Day Workshop Technical Presentation Fishbowl
<b>Professional Conduct</b>	Science, Research and Integrity Science in Context: Philosophy of Science Science in Context: Science Communication Use of Animals in Biomedical Research
<b>Project Management</b>	Creativity and Ideas Generation Doing Creative Research Project Management for Researchers Becoming an Effective Researcher Efficient Reading Experimental Design for Laboratory Based Research Managing your PhD Project Research Design for Social Sciences and Medicine
<b>Statistics</b>	Introduction to Regression Modelling Introduction to Statistical Thinking Introduction to Statistics using SPSS Stats for Research Stats from Scratch
<b>Writing</b>	Academic Writing Skills Systematic Reviews Tackling a Literature Review Technical Writing for Physical Scientists and Engineers Technical Writing: Tools and Strategies to Start and Keep Going Writing for Publication

## Consolidating stage

DOMAIN	COURSE
<b>Advanced Writing</b>	Grant Writing
<b>Career Planning</b>	Career Decisions and Job Choices for PhDs: Physical Scientists and Engineers Planning Your Career: Doctoral Students from Life Sciences and Medicine Planning Your Career: Medically Qualified Doctoral Students Thinking About Management Consulting? Myers Briggs: Careers Networking
<b>Advanced Presenting</b>	Advanced Presentation Skills Effective Poster Presentations Practical Presenting for Conferences
<b>Progressing</b>	Motivating and Independence for Mid-to-Late Stage Researchers

### Completing stage

DOMAIN	COURSE
Career Action	Career Focus for the Future Effective CVs and Applications Interview Practice with Video Playback Job Search with a Difference Preparing for Interviews
Completing	Planning and Writing a Thesis and Preparing for the Viva Finish Up Move on (FUMO) Introduction to Making Your Thesis Open Access

### Enriching stage

DOMAIN	COURSE
Business and Enterprise	Developing Business and Enterprise Awareness Discovering Entrepreneurship and Innovation Entrepreneurship 3 Day Workshop Intellectual Property and its Importance to Researchers Introduction to Business Ethics Social Enterprise: The Common Good
Professional Conduct	Science, Research and Integrity Science in Context: Philosophy of Science Science in Context: Science Communication
Mini MBA Programme	Introduction to Business: Accounting Introduction to Business: Entrepreneurship Introduction to Business: Marketing Introduction to Business: Organisations Introduction to Business: Strategy
Public Engagement	Blogs, Twitter, Wikis and Other Web-based Tools: Collaborating and Building Your On-line Presence Communicating Research in Schools Communicating Science: British Science Association Workshop Effective Public Engagement Science and the Media
Resilience	Stress Management: The PhD and Beyond
Working with Others	Preparing for Leadership Leadership in Action Understanding Competencies Effective Communication: Stop, Look, Listen Myers Briggs: Personality and Communication

The Graduate School has also produced two videos which are available to view online:

- » Passing your viva
- » Presentation skills

Also available online are help sheets for writing, presentation and career planning and the Graduate School's Maths and Stats online catch-up course.

Find them on our website:

[www.imperial.ac.uk/graduateschool/currentstudents/onlineresources](http://www.imperial.ac.uk/graduateschool/currentstudents/onlineresources)  
[www.imperial.ac.uk/graduateschool/currentstudents/helpsheets](http://www.imperial.ac.uk/graduateschool/currentstudents/helpsheets)

The Graduate School is currently developing its online course provision and will be making all course material available on Blackboard from 2014–15.

Finally, in light of the College's new requirement for all Doctoral theses to be submitted electronically, the Graduate School's Research Integrity Working Party has developed a new online course entitled *Plagiarism Awareness*. The course is designed to provide students with guidance and information about proper citation and attribution in writing. After completing the course students will be able to explain what plagiarism is, be familiar with the concept of academic integrity, be able to explain how to avoid plagiarism and learn what the College's policy concerning plagiarism is.

The course is compulsory for all Doctoral students to complete prior to the ESA.

Find out more about the online Plagiarism Awareness course:  
[www.imperial.ac.uk/graduateschool/plagiarismawarenesscourse](http://www.imperial.ac.uk/graduateschool/plagiarismawarenesscourse)

## Research to Inform Programme Content and Development

### ASSESSING THE MOVE TOWARDS ONLINE/BLENDED LEARNING

During 2014–15, the Graduate School's PDU will be investigating the impact of online/blended learning for both Doctoral and Master's students by requesting feedback from students and running focus groups.

### DOCTORAL ALUMNI VIEWS IN CONTEXT

This new project builds on findings from a Master's in Education (2013) and will begin to bridge the gap in knowledge of the outcomes and impact of the doctoral experience. The Graduate School has carried out evaluation and research on provision from the outset. Research to date has focused on Doctoral student views of the professional skills programme, creativity, wellbeing and entrepreneurship.

[www.imperial.ac.uk/graduateschool/studentexperience](http://www.imperial.ac.uk/graduateschool/studentexperience)

This research will consider quantitative and some qualitative data from doctoral alumni as to what they value in terms of supporting and developing their professional trajectories, and how their changing views can inform the professional skills agenda.

## Imperial PhD Scholars

In October 2013, the first cohort of Imperial PhD Scholars commenced their studies. The Imperial PhD Scholars are a group of academic high achievers who have been awarded a scholarship by the College. The Graduate School has developed a series of special events and courses for these individuals to enhance their experience at the College. In January 2014, a 'meet and greet session' was organised by the Graduate School and hosted by the College President & Rector, Professor Sir Keith O'Nions. Baroness Eliza Manningham-Buller (Chair of Council) was invited to talk to the Scholars about leadership and the event ended with a networking reception. The Graduate School also organised a lunchtime innovation lecture delivered by Professor David Gann, Vice-President (Development and Innovation) a Strengths-finder Workshop and a Careers Workshop entitled *Professional Development to Enhance your PhD Experience*.

Moving forward, the Graduate School has established a Working Party to develop the special programme of activities for Imperial PhD Scholars during 2014–15 and beyond.

## International Doctoral Summer Schools

Summer Schools are organised and delivered in partnership with the International Office and other participating summer school institutions. The summer schools that took place in 2013–14 were:

- » **Tsinghua:** 21 June – 18 July 2014, Tsinghua University, China (one week course plus three week research placement)
- » **Hong Kong:** 20 July – 16 August 2014, Hong Kong University (one week course plus three week research placement)
- » **MIT:** 9 –13 June 2014, Easthampstead Park, UK (one week course)

Summer Schools encourage participants (PhD students) to explore and identify key elements of team working, networking, effective communication and project management. They are a balanced and structured programme of exercises and review sessions that provide a variety of learning situations allowing participants to identify and take away relevant lessons and skills to use within their chosen careers or in academia.

In addition, the International Summer Schools have developed researchers' global skills and have been successful in strengthening the College's collaborative research links with key partner institutions, including, most recently, MIT. In partnership with the Graduate School, the International Office has established a Working Party to review the Doctoral Summer Schools and so far, the working party has identified two new potential Summer Schools which will be explored further during 2014–15.

## Professional skills training for Master's students – The MasterClass Programme

Imperial College London is one of only a few institutions in the UK to provide a professional skills training programme for Master's students. The MasterClass Programme is designed to complement academic study and courses have been scheduled to run at appropriate times throughout the academic session. Since its inception in 2011–12, the programme of courses has been expanded and now includes a specific set of courses for MRes students.

In addition to the courses below, the Graduate School's Research Integrity Working Party has also developed a Master's version of the online *Plagiarism Awareness* course which is compulsory for all Master's students as of October 2014.

Unlike the Doctoral professional skills programme there are no minimum attendance requirements and students are free to take as many courses as they wish. The value that students place in the MasterClass Programme is evidenced by the rise in attendance, from just 605 students in 2011–12 to 3,198 students in 2013–14.

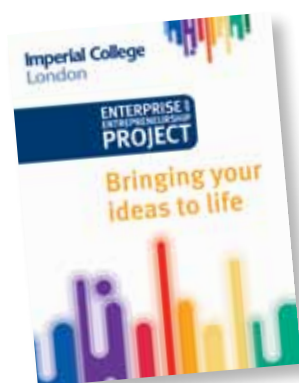
### Programme of MasterClasses delivered in 2013–14

- » **Academic Writing**  
This session covers Master's thesis planning, structure, style, and the writing process itself.
- » **Creative Thinking**  
Students complete activities with different examples of ways to think creatively outside the box.
- » **Developing Your Career Through Networking**  
Students explore how using different networking techniques and strategies can maximise chances of finding all potential career opportunities.
- » **Note Taking and Examination Skills**  
This course gives students advice on how to prepare for exams by making revision notes and using different learning techniques.
- » **Informational Posters – Layout and Design**  
The course gives a brief introduction to academic posters, before quickly turning to practical aspects of layout and design.
- » **Interpersonal Skills**  
In this course students identify good and bad interpersonal skills and the strategies and skills that are used when working with others.
- » **Interview Skills**  
A highly interactive session aiming to provide greater understanding about job interviews for postgraduate students and how to deal with challenging questions often encountered with employers.
- » **Job Search with a Difference**  
This course offers an insight into how the UK graduate recruitment market works, with up-to-date information about potential vacancy sources, as well as strategies for successful job hunting using social media and networking.
- » **Leadership Skills**  
In this course students learn about the different leadership styles that leaders implement and their advantages and disadvantages.
- » **Myers Briggs**  
Introduction to the Myers Briggs personality model. Knowledge of this versatile development tool offers greater self-awareness and a useful framework with which to improve our understanding of others.
- » **Note Taking and Efficient Reading**  
Students learn how to be selective in choosing reading material and the importance of making good notes in preparation for exams.
- » **Negotiation Skills**  
This course introduces strategies for negotiating that can be applied in a range of academic, professional and personal situations.
- » **Preparing and Writing a Literature Review**  
Students learn what should and what shouldn't be included in the literature review and how to prepare and structure it.
- » **Presentation Skills**  
This course offers ideas and tips on targeting presentation content for the audience, slide design and delivery to meet the needs of peers and academics.
- » **Public Speaking**  
Public speaking is not simply telling an anecdote or joke at a party, introducing oneself or delivering a paper at a conference. This course examines not only how to inform or express thoughts, but also how to change emotions, actions and attitudes.
- » **Research Ethics**  
This workshop explores the wider issues of research ethics.
- » **Research Skills and Reference Management**  
Becoming an effective researcher takes practice. This session introduces key research tools, reference management software and the importance of building up an effective search strategy.
- » **Stepping Up: Master's to PhD**  
In this session students explore the decision to undertake a PhD.
- » **Stress Management**  
This workshop examines responses to stressful events, considers personality type, self-esteem and their relation to stress, and looks at coping mechanisms.
- » **Time Management**  
By exploring how to manage time successfully, students can become more effective in completing tasks and reducing stress and anxiety.
- » **Experimental Design\***  
Students learn how to use careful planning and preparation to design an experiment.
- » **Writing a PhD Proposal\***  
This course helps students to learn how to write and structure a good PhD research proposal.

\*Recommended for MRes students

## Enterprise and Entrepreneurship Project

The Enterprise and Entrepreneurship Project is a two year joint initiative between the Postdoc Development Centre and the Graduate School to enhance training in this domain and to promote development opportunities within and outside of Imperial for postgraduate students and postdocs. A series of professional skills courses and practical application sessions have been developed and will be piloted during 2014–15.



More information can be found on the project website:

[www.imperial.ac.uk/graduateschool/eeproject](http://www.imperial.ac.uk/graduateschool/eeproject)

The Enterprise and Entrepreneurship Project Manager has also established a Project Advisory Board, chaired by Mr Bruno Cotta (Director of Enterprise Strategy) to provide information and guidance for the project which closes in July 2015.

## Cohort building

The Graduate School's cohort building programme is designed to support academic departments by enhancing the research environment and research student experience. We offer guidance and examples of best practice on cohort building activities and events, along with tailored cohort specific training courses. More information about the programme, including how staff and students can apply for funds to support cohort building activities, is available on the cohort building website. The Graduate School's Cohort Coordinator, Dr Caroline Hargreaves ([c.hargreaves@imperial.ac.uk](mailto:c.hargreaves@imperial.ac.uk)) is available to advise individuals and chairs a Cohort Leaders' forum in which to share good practice.

During 2013–14, the Graduate School approved funding for 10 cohort building activities. Examples of these are available on the cohort building website. Activities included networking and information sharing events for students, a brain science retreat, an international conference on 3D imaging and a postgraduate symposium.

[www.imperial.ac.uk/graduateschool/cohortbuilding](http://www.imperial.ac.uk/graduateschool/cohortbuilding)

## Accredited Graduate Teaching Assistant (GTA) training – Supporting Teaching Accreditation and Recognition (STAR) framework



The Graduate School, in partnership with the Educational Development Unit (EDU), has developed a GTA training programme to recognise the teaching carried out by PhD students which may lead to accreditation from the Higher Education Academy (HEA) as part of Imperial's STAR framework. The programme is designed to complement departmental GTA training programmes but also offers students whose departments do not have such a programme in place a way in which to have their teaching contributions recognised.

The programme will run for the first time in 2014–15 and will be reported on in more detail in next year's report.

More information can be found at:

[www.imperial.ac.uk/star-framework](http://www.imperial.ac.uk/star-framework)

# Graduate School committees and working parties

## → Committees

### POSTGRADUATE PROFESSIONAL DEVELOPMENT COMMITTEE (PPDC)

The PPDC is chaired by the Deputy Director of the Graduate School (Professional Skills), Dr Bernadette Byrne. The Committee ensures the development and provision of balanced training programmes in professional skills for all postgraduate students and considers the training and support of supervisors. The PPDC monitors the quality of programme delivery, both at the individual workshop level and for the programmes as a whole.

The PPDC seeks to continually develop new aspects of the programmes to meet changing needs and will receive recommendations to enhance the programmes from the new External Advisory Board. The PPDC also takes an interest in the development of e-learning provision to facilitate off-campus learning and develops links with other agencies (national and international) to maintain an awareness of the needs of employers, research councils and other stakeholders to enhance training.

### GRADUATE SCHOOL'S CENTRE FOR DOCTORAL TRAINING (CDT) / DOCTORAL TRAINING PROGRAMME (DTP) GOVERNANCE COMMITTEE

The Graduate School's CDT/DTP Governance Committee is chaired by the Director of the Graduate School, Professor Sue Gibson. The Committee acts as a forum in which to share good practice across Research Centres and to provide oversight of and help to coordinate the additional training provided to students by these Centres. The value of establishing peer groups and cohorts has been identified by this committee and is now one of the College's research degree precepts which departments are assessed against.

The Graduate School is also able to gather information from this committee to inform its own training programme and to ensure that students who do not belong to a CDT or DTP are given a comparable learning experience and support. Likewise, the Graduate School shares good practice and provides training support and advice for tutors on the design and delivery of CDT/DTP run professional skills courses.

### QUALITY ASSURANCE COMMITTEES

Although administered and managed centrally by the Registry's quality assurance team, the Director and Deputy Directors chair a number of senior College quality assurance committees which report to Senate. These are:

- » Postgraduate Research Quality Committee (PRQC)
- » Master's Quality Committee (MQC) Business, Engineering and Physical Sciences (BEPS)
- » Master's Quality Committee (MQC) Medicine, Life Sciences and the School of Professional Development (MLSPD)

The PRQC advises the Senate on all matters relating to postgraduate education and research, changes to higher degree regulations and policy developments in the UK and internationally affecting postgraduate education. The Committee also determines the standards and frameworks by which departments operate for postgraduate education and research, among other things.

The MQCs advise the Senate on all matters relating to the quality assurance of postgraduate taught education, changes to UK and international policy affecting postgraduate taught education. The Committees also receive the external examiner reports for all Master's programmes of study and make recommendations on changes to the Regulations affecting postgraduate taught courses.

## → Working parties

### RESEARCH INTEGRITY

The Graduate School's Research Integrity Working Party was established to review the current support and guidance available to staff and students in certain matters relating to research integrity, specifically copyright and plagiarism awareness. As previously mentioned, in 2013–14, the Research Integrity Working Party developed two new compulsory online courses in Plagiarism Awareness, one Doctoral and one Master's version. In 2014–15, the Research Integrity Working Party will be developing a new online course in Copyrighting and will be strengthening guidance to staff in matters relating to research integrity.

### IMPERIAL SCHOLARS

The Graduate School established the Imperial Scholars' Working Party to further develop the courses and special activities for the Scholars in 2014–15 and beyond. The Working Party comprises representatives from all Faculties and CDTs and is chaired by Dr Bernadette Byrne.

### INTERNATIONAL DOCTORAL SUMMER SCHOOLS

The International Doctoral Summer Schools Working Party is chaired by Professor Sue Gibson, Director of the Graduate School. It is administered mainly by the International Office. The Working Party has reviewed the College's existing Doctoral Summer Schools and is working to develop new strategic partnerships for 2014–15 and beyond.

## → PGR issues and Master's Programme Organisers' meetings

The Graduate School organises these meetings as a forum for postgraduate departmental administrators and academic staff concerned with postgraduate education to share their views on areas of concern. The meetings are also an opportunity for the Graduate School to share forthcoming developments and canvass opinion on such matters and they are a networking opportunity for all concerned. As of 2014–15 these meetings will be merged into one Postgraduate Staff Forum.

## → Graduate School Operations Group

The Graduate School's Operations Group has a focus on postgraduate educational strategy. The Group, comprising members of the Graduate School management team, also takes an interest in the quality assurance of Graduate School courses, particularly in light of the requirements and expectations set out in the RCUK Concordat. It is responsible for the overall purpose, role and function of the Graduate School.

# Graduate School events

## → Welcome events

The Graduate School delivers Welcome Talks to Master's and research students as part of the College's induction for new students. As well as the College welcome, members of the PDU also visit each department to provide a more bespoke talk to students and to provide tailored information on professional skills training. In 2013–14, the Graduate School also held second year orientation meetings for PhD students progressing to their second year. These talks raised awareness of support and development opportunities relevant to mid-stage Doctoral students and topics included changing expectations, career choices and thesis embargoes.

The talks are available at:

[www.imperial.ac.uk/graduateschool/secondyearorientationtalks](http://www.imperial.ac.uk/graduateschool/secondyearorientationtalks)

## → Ig Nobel Awards Tour Show

The Graduate School was delighted to host the Ig Nobel Awards Tour Show for the ninth consecutive year on 14 March 2014. The show was presented by Marc Abrahams, organiser of the Ig Nobel Prizes, Editor of the *Annals of Improbable Research* and *Guardian* columnist, and featured a host of Ig Nobel Prize winners and other 'improbable' researchers.

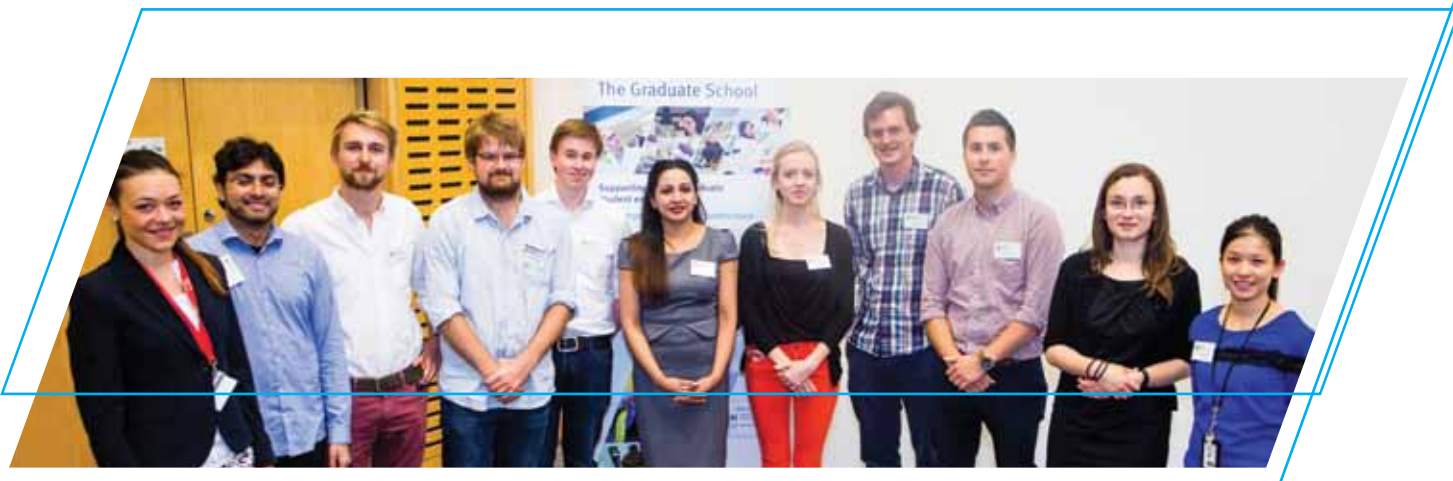
## → Annual Live Chemistry Show

On 2 May 2014, the Graduate School hosted its annual Chemistry Show, featuring a demonstration of live experiments. The show was performed by Professor Hal Sosabowski, Professor of Public Understanding of Science and Principal Lecturer in Chemistry at the University of Brighton. Professor Sosabowski has performed for several years at this event and does live experiment shows across the country. He has appeared on television in the *Ministry of Mayhem* programmes and on the BBC2 show, *Rocket Science*.

## → Annual Research Symposium

The Graduate School's Annual Research Symposium took place on 18 July 2014. Students were nominated by their department to take part in the poster competition and each department was allocated a maximum number of places. There were over 90 posters entered into the competition this year with all departments represented. The event provided a platform for networking with students from different disciplines, staff members and visitors. This year the symposium featured a guest lecture entitled Science in the Public Eye from actor and Imperial alumnus, Steven McGann.





↑ Students who took part in the College's 3 Minute Thesis competition 2014



### → 3 Minute Thesis competition

3 Minute Thesis (3MT®) is a research communication competition developed by The University of Queensland. The exercise challenges PhD students to present a compelling oration on their thesis topic and its significance in just three minutes. 3MT® develops academic, presentation, and research communication skills and supports the development of research students' capacity to effectively explain their research in language appropriate to a non-specialist audience. It is a professional and highly engaging international competition.

This year the Graduate School held the College's inaugural competition. Eleven finalists, selected from departmental heats, participated:

- » **Ian Harrison** • Department of Medicine
- » **Paola Boscolo** • Imperial College Business School
- » **Anna Cocking** • National Heart and Lung Institute
- » **Samuel Cooper** • Department of Materials
- » **Gordon Inggs** • Department of Electrical and Electronic Engineering
- » **Tina Khan** • National Heart and Lung Institute
- » **Tomaz Kostrzewski** • Department of Life Sciences
- » **Ruxandra Luca** • Imperial College Business School
- » **Hikmatali Shariff** • Department of Physics
- » **James Semple** • Department of Physics
- » **Jasmine Sze** • Department of Chemistry

After careful consideration, the judges awarded the following prizes:

- » **1st Prize:** Anna Cocking
- » **2nd Prize:** Samuel Cooper
- » **3rd Prize:** Hikmatali Shariff

Anna went on to represent the College at the national semi-final at the University of York where she won a place at the national final competition. The final took place on 9 September at the Vitae International Researcher Development Conference.

Videos of all the finalists' orations are available to view online at:

[www.imperial.ac.uk/graduateschool/events/threeminutethesis](http://www.imperial.ac.uk/graduateschool/events/threeminutethesis)



# Supporting the student experience

## → Student evaluation and focus groups

All students are asked to evaluate the Graduate School's professional skills training courses via internal student evaluation forms. Evaluation forms are reviewed by the Graduate School to ensure continual enhancement of the programme. Issues raised by students are also brought to the attention of the PPDC. Students are invited to participate in external student surveys such as the Postgraduate Research Experience Survey (PRES), the Postgraduate Taught Experience Survey (PTES) and the Student Barometer, the results of which are carefully considered by the Graduate School and where appropriate, the PPDC. Additionally, the Graduate School holds student focus groups in which to acquire further feedback on provision from students and staff.

The Graduate School is currently piloting the use of online course evaluation software and is developing a new student feedback section on its website which includes a 'you said, we did' webpage. The new student feedback website will be developed throughout 2014–15 and further details will be provided in next year's report.

The Graduate School also works and supports the Graduate Students' Union to improve mechanisms of feedback and representation at College.

## → Wellbeing

The wellbeing assessment, previously carried out in 2009 was updated and repeated in May 2014. Nine additional items were added to the instrument, mostly focusing on supervision. There were 1,248 responses, which was 46 more than in 2009.

Detailed analysis of the initial results will take place during the coming year and will help to inform a major project which the Graduate School is taking forward during 2014 as part of the new Education and Student Strategy: World-Class Research Supervision.

## → Student Barometer

The Student Barometer is the largest annual study of students in the world with almost 250,000 respondents from 193 institutions in 14 countries across five continents. All students are invited to participate in the survey and for the autumn 2012 survey, the College had a 33.9% response rate overall. In this most recent survey, the Graduate School was ranked as follows among institutions who took part in the survey.

GROUP	TOTAL NUMBER OF INSTITUTIONS	IMPERIAL RANKING
Global	193	9
UK	60	7
Russell Group	16	3
London	12	2

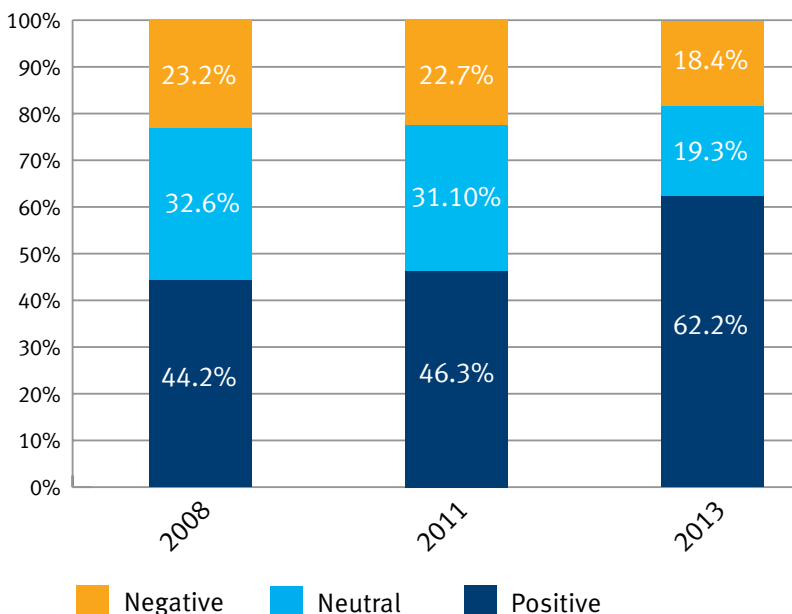


### Postgraduate Research Experience Survey (PRES) 2013

The PRES is a national survey of postgraduate research students which invites them to comment on their course and experience. The survey is open to all PhD, EngD and MD(Res) students. In 2013, over 100 universities and colleges took part. The survey ran between March and May 2013 and the College achieved a participation rate of 43.7%.

PRES asks students to comment on supervision, research community, progress and assessment, opportunities and research skills. Students were also asked about the Graduate School’s Professional Skills Development programme and how useful they found it. The graph below shows that since 2008, of the students who responded to PRES, there has been a substantial increase in the proportion of students finding the Graduate School courses useful.

*PhD students finding the Graduate School professional skills courses useful*



### Peer review of tutors

The Graduate School’s system of peer observation has been designed to enhance the quality of the training offered to students, to positively support all tutors in their own professional development, to complement existing internal quality assurance mechanisms and to be compatible with College policy on peer observation. It is intended to provide an opportunity for enhancement of each tutor’s teaching in terms of both content and method of delivery. It is the responsibility of each tutor to initiate and follow through the arrangements for being observed at intervals no greater than every three years. The PPDC reviews the outcome of peer review.

### Codes of conduct

From October 2014, the Graduate School will be using Blackboard as a repository for all its course material. Each course site will have access to an online discussion forum. In response to this, the Graduate School has developed a code of conduct for the use of online discussion forums. Also, in recognition of the fact that more students are using mobile devices, the Graduate School has also developed a code of conduct for the use of mobile devices.

Both codes are available at: [www.imperial.ac.uk/graduateschool/currentstudents/codesofconduct](http://www.imperial.ac.uk/graduateschool/currentstudents/codesofconduct)

# Statistics

## ➔ Number of professional skills courses delivered in 2013–14

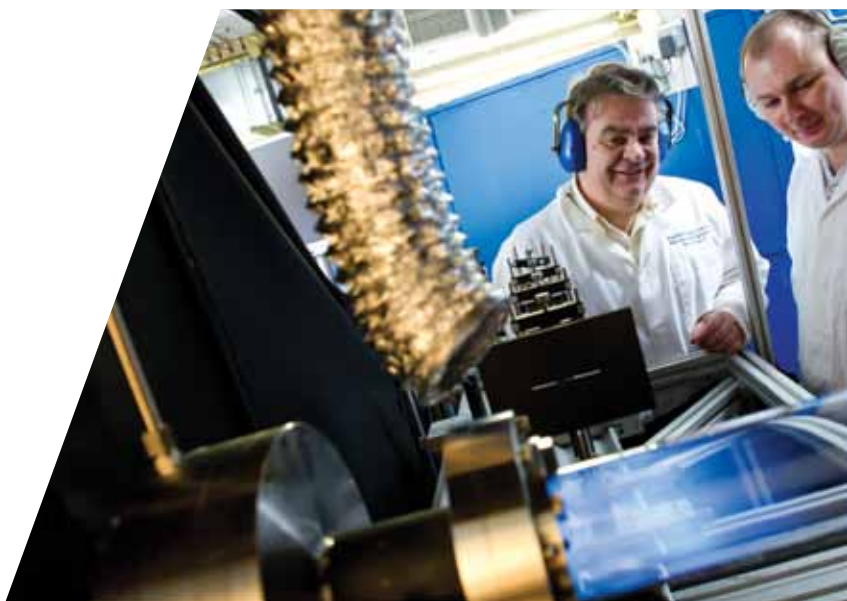
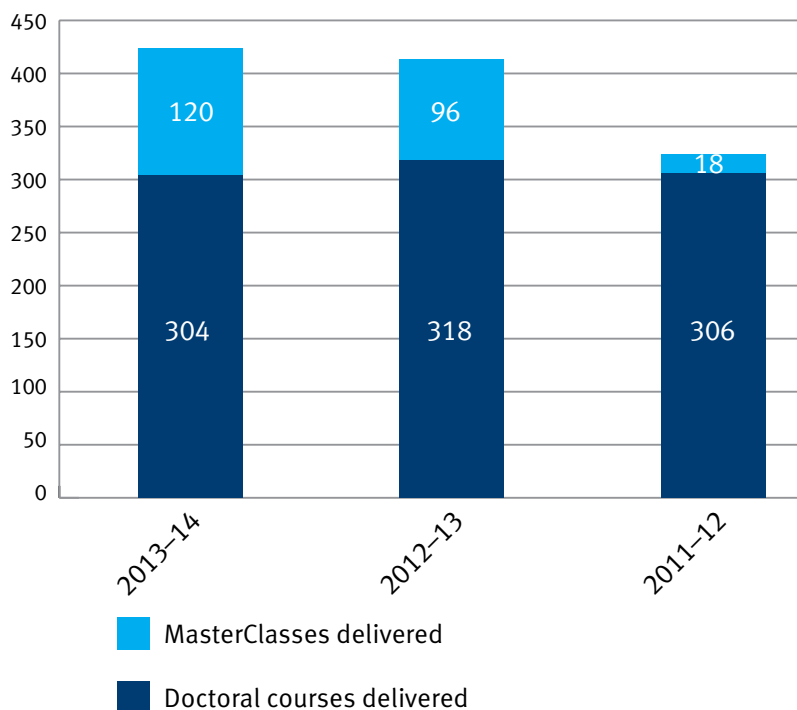
In 2013–14, the Graduate School delivered 83 different Doctoral courses. Some courses were delivered more than once so in total, the Graduate School delivered 304 Doctoral courses.

Twenty-two different MasterClasses were delivered in 2013–14. Some of these were delivered more than once so in total, the Graduate School delivered 120 MasterClasses.

The graph below compares the number of courses delivered by the Graduate School in 2013–14 with the previous two academic sessions. You can see that there is an increase in the number of MasterClasses being delivered which reflects that MasterClasses is a new programme, currently being developed and expanded by the Graduate School. The number of Doctoral courses remains fairly constant.

The total number of courses delivered by the Graduate School in 2013–14 was 424. In 2012–13 the total number was 414.

*The total number of Graduate School Doctoral courses and MasterClasses delivered during the previous three academic sessions*



**Attendance statistics**

Including attendances at MasterClasses, there were 9,018 student attendances at Graduate School courses during 2013–14. 5,836 of these were student attendances at Doctoral professional skills courses. On average, for those students registered for a Doctoral degree in 2013–14, 59% took more than the required minimum number of Graduate School courses. This compares with 50% in 2012–13.

The graph below compares student attendances at Graduate School courses in the last five academic sessions. 2012–13 was the first year in which the Graduate School distinguished between MasterClasses and Doctoral student attendances.

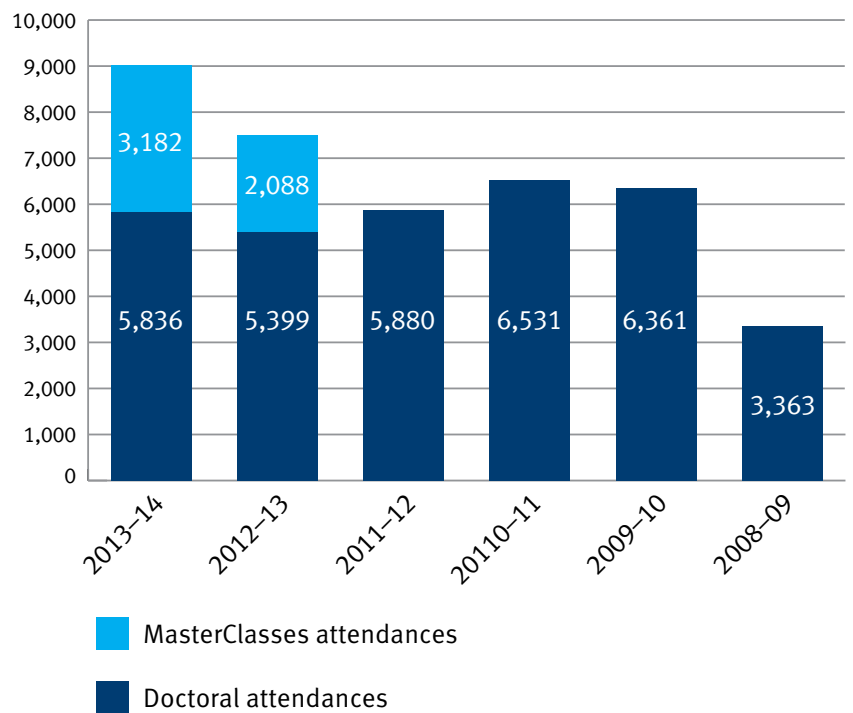
The number of Doctoral student attendances remains fairly constant whereas the number of MasterClasses attendances is increasing.

When the total number of student attendances at both Doctoral courses and MasterClasses in 2013–14 with 2012–13 is compared, there has been an increase in attendance of 20% overall.

Of those students who attended MasterClasses during 2013–14, 955 students took more than one. Given the College does not require Master’s students to attend MasterClasses, this demonstrates the value of this provision to students.



*The number of Doctoral and MasterClass student attendances for the previous six academic sessions*



# Forthcoming priorities and conclusions

## → Course development

Throughout 2013–14, the Graduate School has continued to work closely with staff and students to ensure that improvements to programme provision are made and bespoke courses developed where requested, particularly at outlying campuses. Online courses and online material have been enhanced and will be developed further during 2014–15. The Graduate School will also be taking steps to increase external input into the development of the professional skills programmes to ensure that students are provided with the opportunity to develop skills and attributes that employers value most.

## → CRICK

The Francis Crick Institute is a partnership between Imperial College London, King's College London, University College London, Cancer Research UK (represented by the London Research Institute) and the Medical Research Council (represented by the National Institute of Medical Research). The partners have been working together to develop a CRICK PhD programme, the first cohort of which will be arriving in September 2014. CRICK students can make use of the facilities, in particular those of the Graduate School, at any of the HEIs involved in the partnership. The Graduate School will be taking a lead administrative role in the management of the CRICK student experience and will be developing the operational processes involved in ensuring this new and exciting venture evolves smoothly.

## → Education and Student Strategy: World-Class Research Supervision Project

One of the strategic aims set out in the College's Education and Student Strategy document, published in autumn 2013, is for the College to achieve international recognition for a distinctive education. This led to the Doctoral Proposition, a document developed and refined through extensive consultation, which outlines what postgraduate research students can expect of their education and wider student experience at Imperial College London. The Doctoral Proposition vows among other things that the College will 'provide a world-class research programme throughout which internationally-acclaimed academics support, inspire and challenge you as you develop into an independent researcher.'

In order to take this forward, the Graduate School will be leading the World-Class Research Supervision Project, commencing early September 2014. A working party has been established to explore what constitutes world-class doctoral supervision, to consider the different models for delivering this ideal and to develop ways in which to ensure that the College delivers world-class supervision to every student.

## → Conclusions

In 2013–14, the Graduate School delivered an effective and relevant programme of professional skills development training for both Doctoral and Master's students. During 2014–15, the Graduate School will work towards enhancing this provision by strengthening input from employers and industry via the new External Advisory Board and by building internal and external networks. The Graduate School will also work closely with academic departments to ensure the College meets its proposition to Doctoral students and will take the lead in developing a new proposition for Master's Students.

The Graduate School will continue to deliver excellent opportunities for students to network with colleagues from across the College via its academic and social events including the Research Symposium, 3 Minute Thesis competition, Live Chemistry Show and the Ig Nobels Awards Tour Show. Additionally, the Graduate School will continue to support the Graduate Students' Union to improve mechanisms of feedback and representation at College.

Finally, thanks are extended to members of academic staff, the Careers Service and the International Office who have supported the delivery of Graduate School courses. Thanks are also extended to the Centre for Continuing Professional Development and the EDU.

**Laura McConnell**  
Manager of the Graduate School  
November 2014



[www.imperial.ac.uk/graduateschool](http://www.imperial.ac.uk/graduateschool)



→ Stay in touch



Imperial College  
Graduate School



@ImperialGradSch