Welcome to the College ........................................................................................................... 4  
Welcome ..................................................................................................................................... 5  
Welcome ..................................................................................................................................... 5  
The Graduate School ...................................................................................................................... 6  
Imperial Success Guide .................................................................................................................. 6  
Introduction from the President of Imperial College Union ................................................................ 7  
Introduction from the President of the Graduate Students' Union .................................................... 7  
1. Introduction to the Department .................................................................................................... 8  
Welcome from Head of Department and/or Programme Director ......................................................... 8  
Academic and administrative staff .................................................................................................... 8  
English language requirement .......................................................................................................... 11  
Attendance and absence .................................................................................................................. 11  
Key dates 2016–17 ........................................................................................................................... 11  
2. Programme information ............................................................................................................. 13  
Imperial Mobile app ....................................................................................................................... 13  
2.1 Introduction ............................................................................................................................. 14  
2.2 Aims and Objectives of the Programme ...................................................................................... 16  
2.3 Practical Programme .................................................................................................................. 20  
2.4 Mini-Research Project ............................................................................................................... 23  
2.5 Important Links and Appendicies ............................................................................................... 25  
Appendix 1: Programme Specification ............................................................................................. 25  
3. Assessment ................................................................................................................................. 28  
3.1 Examinations ............................................................................................................................ 28  
3.2 Research Projects .................................................................................................................... 28  
3.3 Guidelines for Research Projects and Thesis ............................................................................. 31  
3.4 Statement on Plagiarism ............................................................................................................ 35  
4. Board of examiners ...................................................................................................................... 36  
5. Location and facilities ................................................................................................................ 37  
6. Working while studying .............................................................................................................. 39  
7. Health and safety ....................................................................................................................... 40  
8. College policies and procedures ................................................................................................ 43  
Regulations for students .................................................................................................................. 43  
Appeal and complaints procedures .................................................................................................. 43
Academic integrity ........................................................................................................... 43
Cheating offences policy and procedures ...................................................................... 43
Fitness to practise medicine ............................................................................................ 43
Intellectual property rights policy .................................................................................. 44
Use of IT facilities ........................................................................................................... 44

9. Animal research ......................................................................................................... 45

10. Well-being and advice ............................................................................................... 46
Student Space ................................................................................................................... 46
Director of Student Support ............................................................................................ 46
Departmental support and College tutors ........................................................................ 47
Advice services ................................................................................................................ 49
Health services ................................................................................................................ 49
Disability support ............................................................................................................ 49
Library and IT ................................................................................................................. 50
Support for international students ................................................................................ 51

11. Student Records and Data ......................................................................................... 52

12. Work-life balance ....................................................................................................... 53
Imperial College Union .................................................................................................... 53
Graduate Students’ Union ............................................................................................... 53
Sport ................................................................................................................................. 53

13. Student feedback and representation ....................................................................... 54
Feedback from students .................................................................................................. 54
Student representation .................................................................................................... 54
Staff-Student Committee ................................................................................................. 54

14. Student surveys ......................................................................................................... 55

15. And finally ................................................................................................................... 56
Alumni services ............................................................................................................... 56
Opportunities for further study ....................................................................................... 56
Welcome to the College

Congratulations on joining Imperial College London, the only university in the UK to focus exclusively on science, medicine, engineering and business.

From Fleming’s discovery of Penicillin to Gabor’s invention of holography, Imperial has been changing the world for well over 100 years. You’re now part of this prestigious community of discovery and we hope you will take this opportunity to make your own unique contribution.

We’re committed to providing you with the very best academic resources to enrich your experience. We also provide a dedicated support network and a range of specialist support services to make sure you have access to the appropriate help, whether that’s further training in an academic skill like note taking or simply having someone to talk to.

You’ll have access to an innovative range of professional development courses within our Graduate School throughout your time here, as well as opportunities to meet students from across the College at academic and social events – see page 6 for more information.

We actively encourage you to seek out help when you need it and try to maintain a healthy work-life balance. Our choice of over 340 clubs, societies and projects is one of the largest of any UK university, making it easy to do something different with your downtime. You also have free access to gym (following a one-off orientation fee of £40 in 2016) and swimming facilities across our campuses.

As one of the best universities in the world, we are committed to inspiring the next generation of scientists, engineers, clinicians and business leaders by continuing to share the wonder of what we do through public engagement events. Postgraduate students, alongside our academics and undergraduate students, make a significant contribution to events such as our annual Imperial Festival and our term-time Imperial Fringe events – if you’re interested in getting involved then there will be opportunities for you to do so.
Welcome
Professor Sue Gibson,
Director of the Graduate School

The Graduate School has several roles but our main functions are to provide a broad, effective and innovative range of professional skills development courses and to facilitate interdisciplinary interactions by providing opportunities for students to meet at academic and social events. Whether you wish to pursue a career in academia, industry or something else, professional skills development training will improve your personal impact and will help you to become a productive and successful researcher.

Professional skills courses for Master’s students are called “Masterclasses” and they cover a range of themes, for example, presentation skills, academic writing and leadership skills (see page 6 for more information).

All Masterclasses are free of charge to Imperial Master’s students and I would encourage you to take as many as you can to supplement your academic training. The Graduate School works closely with the Graduate Students’ Union (GSU) and is keen to respond to student needs, so if there is an area of skills training or an activity that you would like us to offer, but which is not currently provided, please do get in touch (see page 6).

The Graduate School also runs a number of exciting social events throughout the year which are an opportunity to broaden your knowledge as well as to meet other students and have fun. Particular highlights include the Ig Nobel Awards Tour Show, the Chemistry Show and the 3-minute thesis competition. You should regularly check the Graduate School’s website and e-newsletters to keep up to date with all the events and training courses available to you.

Finally, I hope that you enjoy your studies here at Imperial, and I wish you well.

Welcome
Dr Janet De Wilde,
Head of Postgraduate Professional Development

I would like to welcome you to the Graduate School programme for postgraduate professional development. Our team of tutors come from a wide variety of experiences and we understand just how important it is to develop professional skills whilst undertaking postgraduate studies and research. Not only will this development improve your success during your time at Imperial, it will also prepare you for your future careers. We are continually working to develop the courses we offer and over this year you will see a range of new courses including face-to-face workshops, interactive webinars and online self-paced courses. I encourage you to explore and engage with the diverse range of opportunities on offer from the graduate school and I wish you well in your studies.
The Graduate School

You automatically become a member of the Graduate School when you register as a postgraduate student at Imperial.

The Graduate School has been set up to support all postgraduate students at the College through:

- Training and development courses
- Networking activities, social and academic events to encourage cross-disciplinary interactions
- Forums to represent the views of postgraduate students throughout the College

‘Masterclass’ professional skills courses

You can see the full range of free professional skills courses for postgraduate students on the Graduate School website:

www.imperial.ac.uk/study/pg/graduate-school/professional-skills/masters

All courses can be booked online.

Contact us

Level 3, Sherfield Building, South Kensington Campus
020 7594 1383
graduate.school@imperial.ac.uk
www.imperial.ac.uk/graduate-school

Imperial Success Guide

The Imperial Success Guide is an online resource with advice and tips on the transition to Master’s level study. More than just a study guide, it is packed with advice created especially for Imperial Master’s students, including information on support, health and well-being and ideas to help you make the most of London.

www.imperial.ac.uk/success-guide
Introduction from the President of the Graduate Students’ Union

I am delighted to welcome you to Imperial, and to the Graduate Students’ Union (GSU). I hope that your time here will be fulfilling and valuable, and the GSU is here to try and facilitate this.

Imperial College London is such a wonderful and transformative place that provides a unique and thrilling environment for research and for advanced studies, and the graduate students are a vital and valued part of the wider community of Imperial. Our graduate students are at the forefront of the research done. Therefore, at the GSU we ensure that the experience here fosters both academic achievement and personal development in our students.

The GSU is a University-wide representative body for postgraduate students at Imperial. It promotes the interests and welfare of its members, provides social and recreational activities and advocate for you and your opinions to the University and bodies external to the university. I encourage you to become an active member of the GSU—through involvement in your departments and the many University societies, and through our representational and campaigning activities.

I wish you all a fantastic time here at Imperial. Please take advantage of our rich community, and hope to meet you all soon.

Ahmed Shamso

gsu.president@imperial.ac.uk
1. Introduction to the Department

Welcome from Programme Director

Welcome to the Imperial College London MSc in Molecular Medicine Programme. We very much hope you enjoy the next 12 months with us.

These notes are to guide you in your work during the year. They are not necessarily intended to be a comprehensive account of course requirements, but do cover topics, which are frequently the subject of students’ questions. Thus, this handbook contains the general information you will need to follow the MSc programme.

Please keep this handbook with you throughout the year so that you can use it as a source of easy reference for course dates and programme requirements. If you have any questions about the course that are not covered in this handbook, please don’t hesitate to ask.

An on-line version of this handbook is also available via the MSc in Molecular Medicine Blackboard Learn Webpages at:

https://bb.imperial.ac.uk

Dr Paras Anand
Programme Director
## Academic and administrative staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Location</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Paras Anand</td>
<td>Non-Clinical Lecturer in Infection</td>
<td>8th Floor Commonwealth Building, Hammersmith Hospital Campus</td>
<td>020 3313 2063, <a href="mailto:paras.anand@imperial.ac.uk">paras.anand@imperial.ac.uk</a></td>
</tr>
<tr>
<td>Dr. Mick Jones</td>
<td>Reader in Molecular Medicine and College Tutor</td>
<td>8th Floor Commonwealth Building, Hammersmith Hospital Campus</td>
<td>020 3313 1643, <a href="mailto:m.d.jones@imperial.ac.uk">m.d.jones@imperial.ac.uk</a></td>
</tr>
<tr>
<td>Ms Celeste Miles</td>
<td>Course Administrator</td>
<td>Room 9N4b, 9th Floor Commonwealth Building, Hammersmith Hospital Campus</td>
<td>020 3313 8282, <a href="mailto:celeste.miles@imperial.ac.uk">celeste.miles@imperial.ac.uk</a></td>
</tr>
<tr>
<td>Professor Laki Buluwela</td>
<td>Reader in Cancer Medicine</td>
<td>Room 133, Imperial Centre for Translation and Experimental Medicine</td>
<td>020 7594 2812, <a href="mailto:l.buluwela@imperial.ac.uk">l.buluwela@imperial.ac.uk</a></td>
</tr>
<tr>
<td>Name</td>
<td>Position</td>
<td>Office Location</td>
<td>Contact Information</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------</td>
<td>------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Dr. Andy Porter</td>
<td>Reader in Haematology</td>
<td>Room 4S3, 4th Floor Commonwealth Building, Hammersmith Hospital Campus</td>
<td>020 3313 8276, <a href="mailto:andy.porter@imperial.ac.uk">andy.porter@imperial.ac.uk</a></td>
</tr>
<tr>
<td>Dr. Tom McKinnon</td>
<td>Research Associate, Department of Haematology</td>
<td>5th Floor, Commonwealth Building, Hammersmith Hospital Campus</td>
<td>020 3313 2298, <a href="mailto:t.mckinnon03@imperial.ac.uk">t.mckinnon03@imperial.ac.uk</a></td>
</tr>
<tr>
<td>Dr. Isabelle I Salles</td>
<td>BHF Fellow, Centre for Haematology</td>
<td>5th Floor Commonwealth Building, Hammersmith Hospital Campus</td>
<td>020 3313 2298, <a href="mailto:i.salles@imperial.ac.uk">i.salles@imperial.ac.uk</a></td>
</tr>
<tr>
<td>Dr. Josefin Ahnström</td>
<td>BHF Fellow, Department of Haematology</td>
<td>5th Floor, Commonwealth Building, Hammersmith Hospital Campus</td>
<td>020 3313 2298, <a href="mailto:j.ahnstrom@imperial.ac.uk">j.ahnstrom@imperial.ac.uk</a></td>
</tr>
</tbody>
</table>
English language requirement
If you are not a native English speaker you must meet the College’s English language requirements.
See the Admissions website for details:

www.imperial.ac.uk/study/pg/apply/requirements/english

For information on English language support available while you’re here, see page 80.

Attendance and absence
You must inform your Postgraduate Tutor if you are absent from the College for more than three days during term. If the absence is due to illness you must produce a medical certificate after seven days. If you miss an examination through illness you must produce a medical certificate immediately.

The Registry will be informed of all student non-attendances as the College is obliged to report the non-attendance of students on Tier 4 visas to the Home Office.

Key dates 2016–17

Closure dates
Christmas/New year: College closes at your usual finishing time on the
23 December 2016–2 January 2017
(College reopens on the 3rd January)

Easter holiday: College closes at your usual finishing time on the
11 April 2017 – 18 April 2017
(College reopens on the 19th April)

Early May bank holiday: 1 May 2017
Spring bank holiday: 29 May 2017
Summer bank holiday: 28 August 2017

Key events
Imperial Festival and Alumni Festival: 6–7 May 2017
## Important Course Dates:

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Week</td>
<td>Monday 3rd October 2016</td>
</tr>
<tr>
<td>Mock Exam</td>
<td>Friday 16th December 2016</td>
</tr>
<tr>
<td>Private Study</td>
<td>Monday 19th December 2016 to Friday 6th January 2017</td>
</tr>
<tr>
<td>Return project choice form</td>
<td>Monday 16th January 2017</td>
</tr>
<tr>
<td>Written Exams</td>
<td>Monday 13th February 2017</td>
</tr>
<tr>
<td></td>
<td>Wednesday 15th February 2017</td>
</tr>
<tr>
<td></td>
<td>Friday 17th February 2017</td>
</tr>
<tr>
<td>Poster Session</td>
<td>Tuesday 28th March 2017</td>
</tr>
<tr>
<td>Individual research progress meeting</td>
<td>late April/early May 2017</td>
</tr>
<tr>
<td>Submission of presentation abstract</td>
<td>Midday Friday 23rd June 2017</td>
</tr>
<tr>
<td>Research Project Presentation Session</td>
<td>Thursday 29th &amp; Friday 30th June 2017</td>
</tr>
<tr>
<td>Submission of Thesis Introduction</td>
<td>Monday 3rd July 2017</td>
</tr>
<tr>
<td>Thesis submission</td>
<td>3 pm Friday 1st September 2017</td>
</tr>
<tr>
<td>Viva voce</td>
<td>18th – 29th September 2017 (tbc)</td>
</tr>
</tbody>
</table>

Please remember to check your College email regularly, and the course Blackboard web pages for important announcements and information.
2. Programme information

**Imperial Mobile app**
Don’t forget to download the free Imperial Mobile app for access to College information and services, including College emails and a library catalogue search tool.

[Image](#)  [www.imperial.ac.uk/imperialmobile](http://www.imperial.ac.uk/imperialmobile)
2.1 Introduction

The Faculty of Medicine

The Faculty was established 10 years ago in 1997, bringing together all the major West London medical schools into one world-class institution. The Faculty of Medicine is one of the country's largest medical research and teaching institutions - both in terms of its staff and student population and its research income. It is an academic environment, which finds strength in its diversity, size and make up.

Research - Over 700 Faculty members are active in research, with an annual research income approaching £100 million. Joint research projects with other faculties include initiatives in imaging technology, tissue engineering, bioinformatics and structural biology.

Studying Medicine at Imperial - The Faculty accepts more than 300 undergraduate medical students per year. All learning is set in a clinical context and related to work in the Faculty's six teaching hospitals. Students take a six year course leading to a MB BS degree. This also contains a modular science degree course leading to a BSc.

In 2008 the Faculty initiated a Graduate Entry Programme for Medicine. This four year course integrates with the six year course. Currently 50 students a year are admitted each year.

The Imperial College Healthcare NHS Trust will be formed on 1 October 2007 as a result of the merger of the Hammersmith Hospitals NHS Trust and St Mary's NHS Trust and integration with Imperial College London. The new Trust will be the foundation of the UK's first Academic Health Science Centre (AHSC).

The Principal of the Faculty of Medicine is Professor Dermot Kelleher, who started on 1st October 2012.

Further and up to date information on the Faculty of Medicine and all of the divisions can be viewed on the College Website (http://www1.imperial.ac.uk/medicine).

Please see the Faculty website for information regarding the re-structuring of the Faculty of Medicine taking place in the autumn term 2009.

Academic Environment

The Faculty of Medicine was a pilot for the new structure of Imperial College as a whole, along with the Faculty of Life Sciences. In August 2002, two further Faculties were created: Engineering and Physical Sciences. Subsequently, the Faculty of Natural Sciences was formed on 1 November 2005 from the merger of the Faculties of Life Sciences and Physical Sciences and fully embraces the core scientific disciplines of Biology, Biomedical Sciences, Cell and Molecular Biology, Molecular Biosciences, Chemistry, Mathematics, and Physics. This new structure is part of the Rector's vision to allow Imperial’s wide-ranging academic disciplines to communicate and collaborate more effectively with one another: identifying strategic opportunities for collaborative development, and fostering a sufficiently adaptable academic environment to allow these alliances to mature.
The Faculty of Medicine already has close and productive relationships with many departments across the College. In particular, a firm working relationship with our colleagues in Natural Sciences has already been established, through combined research with the Biomedical Sciences and other Divisions and the establishment of the Graduate School of Life Sciences and Medicine (see below). As the new structure matures, we hope to increase the number and scope of such inter-disciplinary developments with each of our partner Faculties.

Location

The administrative home of the Faculty is based in the Faculty Building, which sits at the heart of the main South Kensington Campus. The Sir Alexander Fleming building houses the undergraduate medicine administration and is shared with the Imperial College Department of Biology, Faculty of Natural Sciences, and are located close to the many other world class basic science and technology departments of IC. Our co-location with non-medical staff facilitates greater exchange of ideas, and staff within the Faculty are continually establishing new and innovative research partnerships with colleagues in other IC departments.

Academic Schools, Institutes and Departments (SIDs) in the Faculty of Medicine

The Faculty is organised into six SIDs: Institute of Clinical Sciences; Department of Medicine; Kennedy Institute of Rheumatology; National Heart & Lung Institute; School of Public Health and Department of Surgery and Cancer. SIDs are multi-site based and together establish a presence on the main hospital sites of the Brompton, Charing Cross, Chelsea & Westminster, Hammersmith, St Mary's and the constituent hospitals of the North West London Hospitals NHS Trust.

Up to date information about the structure of the SIDs within the Faculty of Medicine can be found on the following Imperial College Website; http://www1.imperial.ac.uk/medicine/divisions/

Hammersmith Hospital Campus

The Hammersmith Campus forms part of the Faculty of Medicine of Imperial College of Science, Technology and Medicine, and is an internationally renowned centre for clinical teaching and research. The Campus offers excellent facilities for the training of medical and science graduates in clinical and medical research, many of whom become teachers and research workers in university departments or in research units throughout the country and abroad.

The Dean of the Hammersmith Campus is Professor Jon Friedland.

The Campus is housed in several buildings on the 14 acre site of Hammersmith Hospital along with The Medical Research Council Clinical Sciences Centre (CSC).

The Hammersmith campus has excellent teaching facilities for postgraduate students with lecture theatres, seminar rooms, laboratories and computer room. 10 MSc and MRes courses are currently are taught on the site.

Facilities are also available for selected postgraduates to undertake research either in medical subjects or scientific subjects applied to medicine in preparation for the MPhil and PhD degrees of the University of London, and from 2007 Imperial College London. Research and clinical attachments not leading to degrees but offering experience in specialist fields are available throughout Imperial College.
The campus has an excellent library, the Wellcome Library, which receives 870 periodicals, has a substantial collection of books for reference and provides extensive computer facilities including on-line literature searching. The academic departments are supported by sections of medical illustration, medical engineering, animal breeding and holding units, and a computer unit.

2.2 Aims and Objectives of the Programme

The MSc programme is intended to present the scope and extraordinary potential which molecular biology in the new millennium promises in medical fields such as cancer, inherited diseases, infectious diseases and gene therapy. Imperial College at the Hammersmith Campus is fortunate in having under one-roof scientists and clinicians, many who are pioneers in their fields. The course will provide a comprehensive lecture programme in the areas in which rapid advances are now being made; in addition, it will teach the theory of state-of-the-art techniques and impart hands-on training in their use. A research project forms a significant part of the course and it is intended that the methods taught in the course will be applied to the investigation of specific questions of medical interest. Each project will be conducted in one of the various laboratories in Imperial College under the guidance of senior academics.

The programme is planned in such a way that much prior knowledge in the field is not expected. Basic, leading to more advanced, molecular biology will first be taught with an emphasis on understanding the basis of human disease. This will be followed by a consideration of selected major diseases and other public health concerns. Each of these areas presents particular and different problems in diagnosis of disease and management; the approaches currently being developed by molecular biologists to address some of these problems will be examined.

Lectures will be given by Imperial College Faculty of Medicine staff and experts based at the Hammersmith Hospital Campus, and other parts of Imperial College, as well as other London institutions. Practical molecular and cellular biology sessions in the laboratory will be supervised by experienced members of the staff. Both lectures and practicals will be followed up with tutorials and student presentations. During the research project, students will have regular discussions and tuition from their supervisors, as well as from the course organisers. Students may attend any of the seminar and guest lecture programmes run on the Hammersmith Campus by the various departments in the Faculty of Medicine.

The course was started in October 1996, and is now commencing its 21st year. Over 440 students have so far completed the course.

Course Timetable

The initial 5 month taught section of the course covers the following components. Basic, leading to advanced, concepts of molecular and cellular biology; lectures will then progress to study gene expression and disease, and on to molecular genetics and disease. There is a 2-
week period in February for revision, followed by 1 week of examinations. During the taught period students will have the opportunity, in supervised practicals, to try or see demonstrated important basic molecular biology techniques.

This taught section will be followed by a full-time research project (~6 months) to be carried out in the Imperial College or Hammersmith Hospital departments, subject to approval by all concerned. Each student will be assigned a research project. The projects are such that a student can be reasonably be expected to make an original contribution to the chosen area of research within the time period allotted. The purpose of the project is to provide the student with training in academic research and acquisition of practical skills, including the design of a research project, planning of experiments, dealing with practical problems, recording, presenting and analysing data. Time will be allocated towards the end of the project period to write a thesis on the research work.

See later for detailed course programme.

Programme Content

The lectures are delivered by acknowledged experts in the respective fields and cover a wide range of topics in the following areas.

Advanced Molecular and Cellular Biology Methodology:

Nucleic acids, RNA transcription, protein synthesis and processing, gene expression, recombinant DNA, vectors, transfer of genetic information, polymerase chain reaction (PCR) and DNA sequencing, genetic engineering, basic immunology, gene mapping technologies.

Gene Expression and Disease:

It is not intended to comprehensively cover all aspects of the diseases mentioned in the next two modules, but rather to concentrate on the application of molecular biology to diagnosis and management and concentrate on areas of expertise in the Hammersmith site.

Gene expression of complement, growth factors, differentiation factors, cytokines, hormones, regulatory peptides, viral expression, oncogenes, tumour suppressors, cell cycle control, signalling pathways, apoptosis.

Molecular Genetics and Disease:

Genetic basis of cancer, viruses in cancer, leukaemia, haemophilia, breast cancer, colon cancer, invasiveness, cancer vaccines and gene therapy, diabetes, muscle cell disease, lipoprotein metabolism, endocrine disorders, genome structure and inherited disorders, gene targeting, viral diseases.

Practical Techniques:

There is a basic one week introductory laboratory module, followed by a 2 – 3 week Mini-Research Project module. Various biological themes will be offered, but all will cover techniques such as, growth of tissue culture cells, isolation of RNA, DNA and proteins, western blot analysis of protein expression, real-time Q-PCR for gene expression analysis. Prior to the Mini-Research Project students will plan out their own aims and objectives, their own timetable and practical protocols.
Our Principles

Imperial College London embodies and delivers world class scholarship, education and research in science, engineering, medicine and business, with particular regard to their application in industry, commerce and healthcare.

The College is diverse and international - it comprises academic staff, students and support staff of varied disciplines and backgrounds. It encourages collaboration, actively opposes discrimination and recognises the importance of making a positive impact in the wider community.

This web page defines the guiding principles of the Imperial community. The principles were developed by academic and support staff in partnership with undergraduate and postgraduate students and will be reviewed annually.

*Imperial will provide through its staff:*

- A world class education embedded in a research environment
- Advice, guidance and support
- The opportunity for students to contribute to the evaluation and development of programmes and services

*Imperial will provide students with:*

- Clear programme information and assessment criteria
- Clear and fair academic regulations, policies and procedures
- Details of full course costs and financial support
- An appropriate and inclusive framework for study, learning and research

*Imperial students should:*

- Take responsibility for managing their own learning
- Engage with the College to review and enhance provision
- Respect, and contribute to, the Imperial community

*The Imperial College Students’ Union will:*

- Support all students through the provision of independent academic and welfare assistance
- Encourage student participation in all aspects of the College
- Provide a range of clubs, societies, student-led projects and social activities throughout the year
- Represent the interests of students at local, national and international level

The President & Rector: The President of the Imperial College Union:
Date of Approval: 20th June 2012

Students should look at the full version of this document online as it has extensive links to many other useful webpages.

The full version is available at: http://www.imperial.ac.uk/students/student-support/our-principles/
2.3 Practical Programme

All practicals take place in the Laboratories on the 3rd floor of the Commonwealth Building, in Lab 3S5 or 3N7, and the tissue culture room 3N6.

Lab coats will be provided

Introductory Laboratory Practical Week

1. Genomic PCR and DNA Analysis

Aim: To demonstrate the power of PCR to analyse genomic DNA prepared from mouth wash cells.

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday, October 24</td>
<td>24 October 2016</td>
<td>Preparation of DNA from mouth wash cells</td>
<td>10:00 - 5:00</td>
</tr>
<tr>
<td>Tuesday, October 25</td>
<td>25 October 2016</td>
<td>Preparation of DNA from mouth wash cells</td>
<td>9:30 - 5:30</td>
</tr>
<tr>
<td>Wednesday, October 26</td>
<td>26 October 2016</td>
<td>PCR set-up</td>
<td>10:00 - 5:00</td>
</tr>
<tr>
<td>Thursday, October 27</td>
<td>27 October 2016</td>
<td>PCR Clean up</td>
<td>10:00 - 5:00</td>
</tr>
<tr>
<td>Thursday, November 10</td>
<td>10 November 2016</td>
<td>Data Analysis Session</td>
<td>1:00 - 2:00</td>
</tr>
</tbody>
</table>

2. Expression and Western Blotting of Bacterial Fusion Proteins

Aim: To express and analyse a bacterial fusion protein cloned into pGEX (a bacterial expression vector) by SDS polyacrylamide electrophoresis and visualise by Coomassie staining.

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday, October 25</td>
<td>25 October 2016</td>
<td>Grow bacterial cultures and prepare extracts</td>
<td>9:30 - 5:30</td>
</tr>
<tr>
<td>Wednesday, October 26</td>
<td>26 October 2016</td>
<td>Preparation of SDS PAGE gels</td>
<td>10:00 - 5:00</td>
</tr>
<tr>
<td>Thursday, October 27</td>
<td>27 October 2016</td>
<td>Run SDS PAGE gels and stain</td>
<td>10:00 - 5:00</td>
</tr>
</tbody>
</table>
Tutorials

The tutorial system is designed to provide students with personal contact with individual members of staff, allowing for academic progression as well as pastoral support. At the start of every year students are allocated to a tutor (normally in groups of 4). The tutorial groups meet at regular times, normally once every 2 - 3 weeks, during the taught part of the course. During the project much of the role of the tutor is assumed by the project supervisor. However, the tutor remains available to the student throughout the course, and is the first port of call for pastoral problems.

What occurs in a tutorial group is for agreement by the students and tutor. It may include helping difficulties in understanding lectures, discussing interesting papers and topics, pulling the subject together, advise on writing and going through poster plans. It should be remembered that tutorials are not 'mini-lectures'! The tutors should also give advise on examination technique, which is especially important for students who have not written essays for a long time.

In terms of pastoral care the tutors are the first port of call for problems that the students have, either within the course or outside. In many cases the problems can be dealt with by discussion. However, if the students' problems are more serious the tutor should refer the student to the Course Director and/or other support (counselling service etc.). If the student's problems are seriously affecting their ability to study then the tutor should encourage the student to approach the Course Director, or refer the problem themselves (when ever possible by memo or email so there is a record of the problem). This is especially important if the students are likely to claim that their problems have affected their examination results.

Tutors will be away for holidays, conferences and other reasons. If the tutor is going to be away for a long time or over a vital period (leading up to exams) it would be sensible if they arranged alternative or back up tutorial arrangements with a colleague.

Whenever a student has a problem the tutor should try and be supportive. However, they must be aware that they are not trained to be counsellors, and so should be willing to refer to professionals at an early stage. They should be honest with the student, not promising to be able to solve problems that they cannot and giving them a realistic appraisal of the situation. They should also be aware that there are a minority of students who seek attention and are very good at creating problems and soaking up time and energy. No tutor should feel it necessary to pour time into such a bottomless pit!
The tutor may also provide other pastoral support, such as career guidance, help with choice of project etc. If the tutor may not feel that they are competent to provide such advice then they should point the students in the direction of such help (such as Imperial College Career Service). The tutor is also one of the natural people to provide references for the student.

**Tutor/Tutee Assignment**

This will be made during the first weeks of the course.

**Lecturing Staff**

Please see the list starting on page 41, which gives an email address (if known) and their research interests.
2.4 Mini Research Project

Introduction

When provided with established protocols, we tend to stop thinking and just follow the protocols. This leads to a significant lack of real understanding of the process, the results and how to interpret them.

Established protocols also tend to suggest that a perfect result should be obtained, which does not reflect real life in a scientific laboratory.

The Laboratory Mini-Research Project skills that you need and which are (non-exhaustively) are:
planning, negotiating, calculating, being imaginative and creative, executing an experimental plan in the lab, reflecting on your data, presenting your data, critically discussing your results.

Mini-Research Project Learning Outcomes:

- Identify and plan best experimental approach,
- Retrieve appropriate protocol from the literature and plan experimental approach in detail,
- Safely execute experiments and implement good laboratory practice,
- Generate and analyse experimental data,
- Demonstrate computer-based abilities,
- Generate written reports and perform efficient oral presentations,
- Demonstrate awareness of the human skills required to work efficiently in a team,
- Demonstrate strong management of time and focus.

There are distinct phases of the Mini-Research Project that require varying degrees of:

- Imagination Planning
- Logic Common sense
- Calculation Communication
- Project co-ordination Calmness
- Manual dexterity Analysis
- Decision making Resilience
In the Mini-Research Project you

1. Will work in pairs, and identify the scientific question you would like to address in your mini-research project.

2. Then, write the aims (max 3) that will drive your experimental design during the Mini-Research Project. You might not be able to address all the questions you would like to address, so pick the ones you think are the most interesting.

3. Finally, decide which will be the most appropriate experimental approach, including main techniques and variables (time points, controls, dose response, etc.)

4. During the Mini-Research Project labs you will carry out your proposed experiments.

5. After the labs you will write an individual lab report for assessment, and with your partner give a short oral presentation of your work, which will also be assessed.
2.5 Important Links and Appendices

Appendix 1: Programme Specification for the MSc in Molecular Medicine

Please refer to https://www.imperial.ac.uk/media/imperial-college/medicine/study/postgraduate/MSc-Molecular-Medicine-Programme-Specification.pdf for the up-to-date programme specification.

Course Content

The lectures are grouped into the following modules, but due to the nature of some topics, the lecture content will overlap with other modules. Also, due to the large number of academic staff (~90) involved in the course, modules are not necessarily tightly timetabled.

MSc Core Lecture Module

Introduction to Core Dr M Jones

Molecular and Cellular Biology:

Cell Structure Prof T Cook
Cell Cycle Dr F Tamanini

Genetics:

Variation & Modes of Inheritance Dr I Prokopenko
Introduction to Linkage & Association Studies Dr T Andrew
What makes a good genomic study design? Dr T Andrew

Immunology:

Cells of the Immune System Dr S Rutschmann
Soluble Mediators of the Immune System Dr K Woollard
Interactions of the Immune System Dr W Mitchell
Receptors of the Immune System Dr J Behmoaras

Virology:

Introduction to Viruses Dr M McGarvey
Structure/Function - RNA Viruses Dr M McGarvey
Structure/Function – Retroviruses Dr G Maertens
Structure/Function - DNA Viruses Prof P O'Hare

Methodology:

DNA Sequencing Technologies Dr M Jones
Expression of Recombinant Proteins and Westerns Prof S Ali

Molecular Medicine Lecture Programme Technologies:

Basic Recombinant DNA Technologies Dr M Jones
Reverse Genetics in Cell Biology Prof L Buluwela
Introduction to Gene Therapy

Prof N Mazarakis

Gene Therapy in Neurodegenerative Diseases

Prof N Mazarakis

Bacteriophage-derived Nanotechnologies: an Example of Targeted Cancer Gene Therapy

Dr A Hajitou

Gene Therapy for Muscular Dystrophy

Prof D Wells

CF Gene Therapy

Prof U Griesenbach

Gene Targeting

Dr A Porter

Transgenic Models for Human Disease

Prof N Dillon

Statistics

Dr S Saleh

Regulation, Development & Signalling:

Chromatin Structure & Gene Regulation

Prof R Festenstein

Cell Surface Receptor Signalling I & II

Dr N Dibb

Regenerative Medicine for Patients: the Paediatric Experience

Prof P De Coppi

Bench to Bedside: Alopecia Areata

Dr C Higgins

Genomic Imprinting

Prof G Moore

Early Embryonic Patterning and TGFβ Signalling in Vertebrates

Prof V Episkopou

Molecular Embryology

Dr T Rodriguez

Muscle Cell Biology and Diseases I

Dr S Brown

Muscle Cell Biology and Diseases II

Prof D Wells

Regulation of Endothelial Function by Rho GTPases

Dr B Wojciak-Stothard

Stem Cells for Cardiac Regeneration and Repair

Prof M Schneider

Molecular Analysis of the Expression and Function of Ligand-activated Nuclear Receptors in Vascular Endothelial Cells

Prof J Mason

Angiogenesis

Dr G Birdsey

Disease:

Molecular Basis of Alzheimer’s Disease and New Therapeutic Avenues

Dr M Sastre

The Complement System in Health and in Disease

Prof M Botto

Diabetes

Prof K Meeran

Obesity – Appetite Regulation

Prof W Dhillo

The Genetics of Obesity

Dr K Murphy

Use of Gene Transfer to Study Energy Homeostasis & Obesity

Dr J Gardiner

Hereditary Haemorrhagic Telangiectasia (HHT)

Dr C Shovlin

Coeliac Disease

Prof J Walters

IBD

Dr H Williams

The Role of Nitric Oxide Signalling in Cardiovascular Health and Disease

Dr J Leiper

Insulin Secretion in Diabetes Mellitus

Prof G Rutter

The Genomic and Genetic Approaches to understanding Asthma

Dr Y Zhang

Immune Tolerance: What have we learnt from Allergen Immunotherapy for Hayfever?

Prof S Durham

Biomarkers for Monitoring Efficacy of Allergen-Specific Immunotherapy

Dr M Shamji

The Genetics of Cleft Lip or Palate

Prof P Stanier
Infectious Diseases:
Chemokines in Infectious Diseases  Prof J Friedland
Matrix Metalloproteinases in Tuberculosis  Prof J Friedland
TB Host-Pathogen Interactions  Dr B Robertson
Saccharomyces cerevisiae  Dr E Bignell
Candida Pathogenesis  Dr E Bignell
Sepsis  Prof S Sriskandan
Cytoplasmic Sensors of Intracellular Pathogens  Dr P Anand
Herpesviruses Replication, Entrances and Exits  Prof P O’Hare
EBV  Dr R White
Oncogenic Herpes Viruses  Dr R White
HBV  Dr M McGarvey
HCV  Dr M McGarvey
HTLVI  Prof C Bangham
Foamy Viruses  Prof M McClure
Coronaviruses  Dr M Skinner
Immune Reconstruction in HIV-1 Infected Individuals  Dr N Imami
Vaccines & Immunisation  Dr N Imami
Influenza  Prof W Barclay

Blood:
Haemostatic Gene Polymorphisms in Venous and Arterial Thrombosis  Prof D Lane
Coagulation Disorders  Dr T McKinnon
von Willebrand Factor and Shear Stress  Dr T McKinnon
BAMBI and TGFβ Signalling  Dr I Salles-Crawley
Molecular Techniques in Haematological Malignancies  Prof L Foroni
Targeted Therapy in CML  Prof J Apperley
Acquired and Inherited Deficiency of the Glycosylphosphatidylinositol Anchor  Prof A Karadimitris
The Ubiquitin-Proteasome System: Targeting Protein Degradation as a means to treat Multiple Myeloma  Dr M Kleijnen
Defining the Role of Novel Genes involved in Thrombosis and Haemostasis  Dr I Salles-Crawley

Cancer:
Cell Proliferation  Prof J Gil
Resistance to Endocrine Therapy in Breast Cancer  Prof S Ali
Prostate Cancer  Prof C Bevan
Lung Cancer Biology: Regulation of Cell Proliferation  Dr O Pardo
Lung Cancer Biology: Cell Death and Chemoresistance  Dr O Pardo
Cell Cycle and Signalling in Normal and Malignant Cells  Prof E Lam
Molecular Insights into DNA Replication and Genomic Stability  Prof C Speck
Molecular Mechanisms of Resistance to Cancer Chemotherapeutics  Dr E Yagüe
3. Assessment

3.1 Examinations

There will be a mock exam held on Friday 16\textsuperscript{th} December 2016 to prepare you for the exams in February. Written exams will run in the week commencing 20\textsuperscript{th} February. More information and examples of past papers are available on the Course Blackboard site. Please see page 64 for information about plagiarism and page 72 for information about the College's Cheating Offences Policy and Procedures.

3.2 Research Projects

Research Projects will be assigned by Dr Paras Anand based upon the area of research that the student is interested in. A list of Topic Areas will be provided along with examples of projects in that field from previous years, and potential supervisors in November. Remember that most projects tend involve PCR and DNA analysis, protein expression and western blotting, and/or tissue culture work.

The research project should not be looked upon as deciding your future research career direction, but as gaining six months experience of working in a research laboratory, learning techniques and getting to know what ‘research’ actually involves, from literature searching, experimental planning, performing actual experiments, interpreting the results and deciding the next steps to take, as well as attending research talks and other lab activities.

Example Project

\textit{Induction of the co-regulator RIP140 by Lipopolysaccharide and Interleukin-1\alpha. Molecular Analysis of the Upstream Signalling Pathways and Function in Human Endothelium}

Professor Justin Mason and Dr Damien Calay, Vascular Sciences, NHLI, Hammersmith Hospital Campus

Receptor-interacting protein 140 (RIP140), a ligand-dependent transcriptional co-regulator, plays a central role in female fertility and metabolism. RIP140 interacts with nuclear receptor ligand-binding domains via a recognition motif containing the LXXLL consensus sequence and represses nuclear receptors including the PPARs and oestrogen-related receptors (ERR\textgreek{a} and \textgreek{b})\textsuperscript{1,2}. RIP140 may also act as a coactivator for NF-\textkappa\textb{B}, regulating pro-inflammatory activity of murine macrophages\textsuperscript{3}. RIP140\textsuperscript{−}\textsuperscript{−} mice are lean, demonstrating enhanced glucose tolerance and increased insulin sensitivity, while the females exhibit defective ovulation. RIP140Tg mice suffer pronounced cardiac hypertrophy and impaired function\textsuperscript{4}. Expression of RIP140 is regulated by sex hormones, retinoic acid, vitamin D and during inflammation\textsuperscript{1,2}, and its activity is further modulated by post-translational modification and by interacting proteins. The role of
RIP140 in maintenance of vascular endothelial homeostasis and during inflammation is poorly understood and is the focus of this application.

In our laboratory we have recently demonstrated that RIP140 is present in human endothelial cells and that its expression can be regulated. In particular, we have shown that treatment with either lipopolysaccharide (LPS) or interleukin-1α (IL-1α) increases mRNA and protein levels of RIP140. We now wish to pursue these findings and determine the signalling pathways involved, with specific focus on toll-like receptors, and the signalling molecules MyD88 and NF-κB. Subsequent experiments will explore the function of RIP140 in the endothelium, using siRNA and an adenoviral vector expressing RIP140.

The project will offer the student experience in endothelial cell biology and a variety of molecular and cellular techniques. The study of RIP140 in vascular endothelium is a novel and challenging area of research, with importance for the understanding of the regulation of inflammation.

Aims of the project

- To analyse changes in endothelial cell RIP140 expression following treatment with LPS, IL-1α and toll-like receptor ligands.
- To investigate the role of individual toll-like receptors, MyD88 and NF-κB in RIP140 regulation.
- To investigate the functional effects of changes in RIP140 expression in endothelial cells.


**Below are titles of Research Projects that have been undertaken by students in recent years;**

Epigenetic Modifiers and the Role of the X Chromosome in Differences of Gene Expression between Males and Females  
*Prof Richard Festenstein (MRC Clinical Sciences Centre, Hammersmith)*

Determination of the Importance of Estrogen Receptor Mutations in Breast Cancer Treatment  
*Prof Simak Ali and Prof Laki Buluwela (Cancer Cell Biology, SORA, Hammersmith)*

Role of CppA, a Potential Complement Protease in *Streptococcus pyogenes*  
*Dr Shiranee Sriskandan (Department of Medicine, Hammersmith)*
Central Nervous System Tuberculosis, Interferon-\(\gamma\) and Matrix Metalloproteinase-9

*Professor Jon Friedland (Department of Medicine, Hammersmith)*

Protein Kinase \(\epsilon\) - A Critical Upstream Regulator of Vascular Endothelial Cytoprotective Genes

*Dr Justin Mason (NHLI, Hammersmith)*

Bacteriophage nanotechnology in gene delivery applications to cancer cells

*Dr Amin Hajitou (Department of Medicine, Hammersmith)*

Development of a gene expression knockdown system for the human pathogen, *Chlamydia trachomatis*

*Prof Myra McClure (Virology, Department of Medicine, St Mary’s Campus)*

The Role and regulation of the Forkhead Transcription Factor FOXO3A in Human Breast Cancer Cells

*Prof Eric Lam (Cancer Cell Biology, SORA, Hammersmith)*

Characterising the interaction of Von Willebrand Factor with TREML-1

*Dr Tom McKinnon (Haematology, Department of Medicine, Hammersmith)*

Dissecting Nitric Oxide Regulatory Pathways Using CRISPR-mediated Mutagenesis

*Dr James Leiper (MRC Clinical Sciences Centre, Hammersmith)*

Determination of the role of telomerase in the induction of replicative senescence and apoptosis in cardiac progenitor cells

*Prof Michael Schneider (NHLI, Hammersmith)*

Suppression of local Th2 cytokine response and induction of protective immunoglobulin responses in the nasal mucosa following grass pollen-specific immunotherapy

*Prof Stephen Durham & Dr Mohamed Shamji, (NHLI, South Kensington)*

Regulation of the Type 2 diabetes GWAS gene SLC30A8/ZnT8

*Professor Guy Rutter (Department of Medicine, Hammersmith)*
3.3 Guidelines for Research Project and Thesis

Research is hard work, obsessive, has 'highs' and 'lows' but if you are prepared to put in the commitment it can be very rewarding - so, work hard and enjoy yourself!

1. Research Project

Working in a research laboratory is a very different activity from attending lectures and practical classes:

It is expected that you work in the lab, Monday to Friday, between 9:00 am and 6:00 pm. For Safety and Security reasons, you MUST not work alone in the lab. Work outside of the above hours is only allowed if there are other workers present to supervise you.

Research requires commitment and organisation. There is no official timetable so you will need to organise your time efficiently. Experiments can be variable in length, and may contain quite long gaps (e.g. restriction enzyme digestions, PCR, etc.); do not waste these "gaps", use them to read scientific literature, collate previous data, plan future experiments, start to write your thesis.

Research can be unpredictable. The protocol for an experiment should be fully discussed with your supervisor, or experienced member of the laboratory recommended by your supervisor, before you start this. This avoids unnecessary errors that can waste a lot of time and reagents. However, an experiment is designed to investigate the unknown, and therefore cannot always be guaranteed to be successful. It is not the equivalent of doing a class practical, where the teaching staff have tested everything thoroughly beforehand. You must therefore be prepared for disappointments as well as successes.

Research requires a mixture of intellectual and practical input. It cannot all be done in the library, nor can it all be done at the laboratory bench. You need a balance of both activities. The more you read the more you will understand the background and significance of your research. This will help you to do better, more creative experiments.

Research Literature. The basic source of research information is the scientific journal. However, it is often best to read a good review article of your chosen area first. At the start of your project your supervisor should give you a selection of review and original articles to read. You should read these and also use them as a source of further reading.

In addition, you should make full use of the excellent facilities in the Wellcome Library. Check new issues for interesting articles. Learn how to use the Medline to do a computer literature search in your subject area.
Experiments should be planned in advance. Before you do an experiment you should think it out carefully in advance, planning all the appropriate controls as well as your experimental system. Discuss experimental design with your supervisor before you start the experiment. This can avoid mistakes and so save valuable time and reagents. Where possible, use the same batch of reagents (e.g. restriction enzyme) for all your experiments, to ensure reproducible results.

Who to ask for advice and help? Ask anybody working in your lab. Do not be afraid to ask (they won’t bite). However, if you do not understand or are confused by the answer (2 different people may give you 2 slightly different solutions to the problem), you should discuss the matter with your supervisor.

How is the practical work organised? Now that you are working on your own research project, you are responsible for all aspects of your work. This means that you should learn to make up your own reagents (e.g. buffers) and should clean up your area of the laboratory when you have finished. This is crucial for the successful, integrated functioning of a research laboratory.

Finance. Research reagents are very expensive so please be very careful and do not waste them. All your reagents will be ordered via your supervisor or a designated person, with whom you can discuss your requirements fully. If you find that a reagent has been finished or is about to run out, you should inform them. Please remember that new reagents may take several days to arrive.

Safety. The laboratories are covered by strict safety regulations. You will be given a copy of these before you start to work in the laboratory. Make sure that you have read these carefully before you start experimental work.

If there is anything that you do not understand, PLEASE ASK.

2. Departmental Activities.

As you are scattered around the Hammersmith site, there will be only a few occasions when you will all be together. You should consider yourself a part of you designated department, and participate in all activities of that department. The following is a list of the types of activities that may be carried out in your department.

Journal Clubs. A member of the department selects a paper for discussion, and presents it (background, methods, data, conclusions, significance) at the meeting. Everyone is given a copy of the paper in advance. This should be read before the meeting so that you can understand and can participate in the discussion.
Departmental Internal Seminars and Laboratory Meetings. The head of each main laboratory organises regular informal meetings at which current research progress (problems as well as successes) can be discussed. These are usually held once a week. You will be expected to attend and participate in your laboratory meeting.

Departmental External Seminars. These are held once a week or month depending upon individual departments, and are an important part of research life. Speakers are usually external to the ICSM and have been invited because of the quality of their research and its relevance to the ongoing projects in the Department. It is important to attend these, even if you find some a little hard to understand - this is quite normal at the start of a research career, and the solution is to discuss the parts that you found difficult with colleagues in the laboratory/department.

Research Presentation. Each MSc student will give a short presentation on their research. This seminar group is intended to be formal and will consist of all your fellow MSc students, your supervisor and colleagues in the laboratory in which you are working, and the main teaching staff involved in the MSc. These seminars will be held in late June/early July, at a time when you should be preparing to start writing your thesis. It will help in preparing for your thesis and viva.

Course Committee
1. Composition

   Course Organiser:       Dr P Anand
   Course Tutors:          Dr L Bulawela
                           Dr A Porter
                           Dr A Varela-Carver
   Student Representatives: 2 - 3*

* If the course has less than 10 students, 1 - 2 representative
   If the course has more than 10 students, 2 - 3 representatives

2. Remit of the Course Committee

   • Manage the course to ensure that it delivers its aims and objectives
   • Review the curriculum on an annual basis, taking into account student feedback and trends and requirements in medical education
   • Review the recruitment to the course and identify new areas of marketing
   • Review External Examiners’ reports and ensure that criticisms are duly noted and acted upon
   • Review the needs of students and ensure that any problems are dealt with quickly
• Review the costs and budget for non-staff costs of the course

3. **Reporting Structure**

   The Course Committee will report to the Section of Infectious Diseases and Immunity Senior Academic Staff Committee, Department of Medicine Postgraduate Teaching Committee (PGTC), Faculty of Medicine Postgraduate Committee (FoM PGC), and the Graduate School Postgraduate Quality Committee (PQC).

4. **Frequency of Meetings**

   The Committee will meet ~every 6 weeks throughout the year.
3.4 Statement on Plagiarism

You are reminded that all work submitted as part of the requirements for any examination (including coursework) of Imperial College and the University of London must be expressed in your own words and incorporate your own ideas and judgements.

Plagiarism, that is, the presentation of another person’s thoughts or words as though they were your own, must be avoided, with particular care in coursework, essays and reports written in your own time. Note that you are encouraged to read and criticise the work of others as much as possible. You are expected to incorporate this in your thinking and in your coursework and assessments. But you must acknowledge and label your sources.

Direct quotations from the published or unpublished work of others, from the internet, or from any other source must always be clearly identified as such. A full reference to their source must be provided in the proper form and quotation marks used. Remember that a series of short quotations from several different sources, if not clearly identified as such, constitutes plagiarism just as much as a single unacknowledged long quotation from a single source. Equally, if you summarise another person’s ideas or judgements, figures, diagrams or software, you must refer to that person in your text, and include the work referred to in your bibliography. Departments are able to give advice about the appropriate use and correct acknowledgement of other sources in your own work.

The direct and unacknowledged repetition of your own work which has already been submitted for assessment can constitute self-plagiarism. Where group work is submitted, this should be presented in a way approved by your department. You should therefore consult your tutor or course director if you are in any doubt about what is permissible. You should be aware that you have a collective responsibility for the integrity of group work submitted for assessment.

The use of the work of another student, past or present, constitutes plagiarism. Where work is used without the consent of that student, this will normally be regarded as a major offence of plagiarism. Failure to observe these rules may result in an allegation of cheating. Cases of suspected plagiarism will be dealt with under the College’s Examination Offences Policy and may result in a penalty being taken against any student found guilty of plagiarism.

For further information, please refer to the Cheating Offences Policy and Procedures section on page 74 of this handbook.

As part of your MSc you will be required to complete the mandatory Online Plagiarism Course, more details can be found at http://www.imperial.ac.uk/study/pg/graduate-school/professional-skills/masters/online/
4. Board of examiners

Board of Examiners

- Dr Paras Anand, Course Director
- Dr. Mick Jones, Deputy Course Director
- Prof. Laki Buluwela, Course Tutor
- Dr. Andy Porter, Course Tutor
- Dr. Tom McKinnon, Course Tutor
- Dr. Isabelle I Salles, Course Tutor
- Dr. Josefin Ahnström

For external examiners

- Professor Val Speirs, University of Leeds
- Dr. Hannah Mitchison, University College London
- Dr. Tom Vulliamy, Queen Mary University of London

It is common for Master's level students to have some form of academic or social interaction with their external examiners at some point during or after their studies as well as during the assessment process itself.

It is inappropriate for you to submit complaints or representations direct to external examiners or to seek to influence your external examiners. Inappropriate communication towards an examiner would make you liable for disciplinary action.

External examiners reports can be found here:

www.imperial.ac.uk/staff/tools-and-reference/quality-assurance-enhancement/external-examining/information-for-staff
5. Location and facilities

Imperial has a number of campuses in London and the South East. All have excellent travel links and are easily accessible via public transport.

Your main location of study will be:

Imperial College Hammersmith Campus,
Du Cane Road
London,
W12 0NN

Hammersmith Campus

Reaching Hammersmith Campus

By bus: Buses No. 7, 70, 72, 272, 283 all stop in front of the hospital

By Tube: Take the Central Line to White City, East Acton or the Hammersmith and City line to Wood lane. The Campus is a 15 minute walk from any of these stations.

NIHR/Wellcome Trust Imperial CRF

The Clinical Research Facility (which is part of the Wellcome Trust Clinical Research Network) has been completed within the Hammersmith Campus site and was opened in May 2012. As well as expanding the capacity for clinical research, the new Centre capitalises on existing academic-industry collaborations and provides extensive opportunities for undertaking more clinical trials, in both healthy volunteers and patients.

www.imperial.ac.uk/estates-facilities/travel/shuttle-bus

Facilities

Computer access and printing is available for student use in the Commonwealth building: 3rd floor computer lab & 1st / ground floor library training facility. The Hammersmith Campus library is located on the 1st floor, Commonwealth Building. The library holds books and an excellent range of periodicals covering all of the themes of the MRes programme. Wireless access is current available throughout the Commonwealth Building and in the Wolfson Education Centre.

Shuttle bus

A free shuttle bus runs between our South Kensington, White City and Hammersmith Campuses on weekdays. Seats are available on a first-come, first-served basis. You need to show your College ID card to board. Download the timetable at:

www.imperial.ac.uk/estates-facilities/travel/shuttle-bus
Maps

Campus maps and travel directions are available at:

- [www.imperial.ac.uk/visit/campuses](http://www.imperial.ac.uk/visit/campuses)

Accessibility

Information about the accessibility of our South Kensington Campus is available online through the DisabledGo access guides:

- [www.disabledgo.com/organisations/imperial-college-london-2](http://www.disabledgo.com/organisations/imperial-college-london-2)
6. Working while studying

If you are studying full time, the College recommends that you do not work part-time during term time. If this is unavoidable we advise you to work no more than 10–15 hours per week, which should be principally at weekends and not within normal College working hours.

Working in excess of these hours could impact adversely on your studies or health.

If you are here on a Tier 4 visa you can work no more than 20 hours a week during term time. Some sponsors may not permit you to take up work outside your studies and others may specify a limit.

If you are considering part-time work during term time you are strongly advised to discuss this issue with your supervisor or Postgraduate Tutor. If you are on a Tier 4 visa you should also seek advice from the International Student Support team regarding visa limitations on employment.

Please refer to our policy on working while studying:

7. Health and safety

You are responsible for looking after your own health and safety and that of others affected by your College-related work and leisure activities. You must:

- comply with all local and College policies, procedures and codes of practice and with the arrangements which the College has in place to control health and safety risks.
- ensure that your activities do not present unnecessary or uncontrolled risks to yourself or to others.
- attend appropriate induction and training.
- report any accidents, unsafe circumstances or work-related ill health of which you become aware to the appropriate person.
- not interfere with any equipment provided for Health and Safety.
- inform your supervisor or the person in charge of the activity in cases where you are not confident that you are competent to carry out a work or leisure activity safely, rather than compromise your own safety or the safety of others.

The College’s Health and Safety Policy can be found at:


Your Departmental safety contacts are:

- **Heather Combe**
  - Hammersmith /Burlington Danes/Commonwealth Building
  - h.combe@imperial.ac.uk

- **Sukwinder Singh**
  - Hammersmith
  - sukwinder.singh@imperial.ac.uk

You will be required to complete inductions and attend training sessions to safely complete this course, these will include (and not be limited to) College online safety course, specialist departmental safety training, lab training. These sessions will be scheduled into your course timetable, and are compulsory.
The College Safety Department

The Safety Department offers a range of specialist advice on all aspects of safety. This includes anything which you feel might affect you directly, or which may be associated with teaching, research or support service activities.

The College’s activities range from the use of hazardous materials (biological, chemical and radiological substances) to field work, heavy or awkward lifting, driving, and working alone or late.

All College activities are covered by general health and safety regulations, but higher risk activities will have additional requirements.

The Safety Department helps departments and individuals ensure effective safety management systems are in place throughout the College to comply with specific legal requirements.

Sometimes the management systems fail, and an accident or a near-miss incident arises; it is important that we learn lessons from such situations to prevent recurrence and the Safety Department can support such investigations. All accidents and incidents should be reported online at:

www.imperial.ac.uk/safety

To report concerns or to ask for advice you should contact your programme director, academic supervisor or departmental safety officer in the first instance. You may also contact the Safety Department directly.

Occupational Health requirements

The College Occupational Health Service provides services to:

- protect health at work
- assess and advise on fitness for work
- ensure that health issues are effectively managed

The Service promotes and supports a culture where the physical and psychological health of staff, students and others involved in the College is respected, protected and improved whilst at work.

www.imperial.ac.uk/occupational-health

Please refer to the safety pages within the Department of Medicine website.

https://www.imperial.ac.uk/department-of-medicine/for-staff/health-and-safety/ (Imperial Login Required)
Laboratory Safety

GENERAL

- **No** food or drink to be taken into the laboratory.
- **No** smoking or cosmetic application in the laboratory.
- Wear lab coats and disposable gloves.
- Follow standard microbiological practices: **No** mouth pipetting is allowed.
- Disinfect biological material with chloros.
- Minimise the creation of aerosols.
- Wash hands prior to leaving the laboratory.
- Flammable chemicals should not be used near an open flame.
- Read the COSHH forms provided.

SPECIFIC CHEMICAL HAZARDS

1. Phenol/Chloroform (PCI)

**Phenol** is a powerful systemic poison and absorption through the skin occurs with great rapidity. Ingestion of phenol is usually rapidly fatal. In addition to its corrosive action phenol acts as a local anaesthetic; hence only a slight tingling of the contaminated skin may be felt. **Chloroform** is very toxic by inhalation, causing drowsiness, nausea, vomiting and unconsciousness. It is toxic by ingestion and irritating to the skin and eyes, causing conjunctivitis and burning. Small volumes of phenol/chloroform mixtures [<1 ml] will be used in these practicals to remove proteins from aqueous solutions of DNA. This is achieved by mixing or vortexing carefully in tightly capped tubes to avoid leakage or spillage.

**Precautions:** Phenol/chloroform is dispensed **only** in the fume hood. Avoid contact with the skin in all circumstances. Wear gloves at all times. Wear safety glasses at all times. Dispose of waste phenol carefully in the containers provided in the fume hood.

**In the event of a spill:** Contain with absorbent granules/tissues and remove any affected clothing.

**REPORT IMMEDIATELY TO A SUPERVISOR.**
8. College policies and procedures

Regulations for students
All registered students of the College are subject to the Regulations for Students, the College Academic and Examination Regulations and such other regulations that the College may approve from time to time.

www.imperial.ac.uk/about/governance/academic-governance/regulations
www.imperial.ac.uk/students/terms-and-conditions

Appeal and complaints procedures
We have rigorous regulations in place to ensure assessments are conducted with fairness and consistency. In the event that you believe that you have grounds for complaint about academic or administrative services, or wish to appeal the outcome of an assessment or final degree, we have laid out clear and consistent procedures through which complaints and appeals can be investigated and considered:

www.imperial.ac.uk/about/governance/academic-governance/academic-policy/complaints-appeals-and-discipline

Academic integrity
You are expected to conduct all aspects of your academic life in a professional manner. A full explanation of academic integrity, including information on the College’s approach to plagiarism is available on the Student Records and Data website:


Cheating offences policy and procedures
It is important that you learn how to properly attribute and acknowledge the work, data and ideas of others. Plagiarism is scientific misconduct, and students whose assessments can be shown to contain plagiarism are subject to penalties as outlined in the College’s Cheating Offences Policy and Procedures – see Appendix 3 of the Examination Regulations which can be found here:

www.imperial.ac.uk/about/governance/academic-governance/regulations

Fitness to practise medicine

Intellectual property rights policy
For further guidance on the College's Intellectual Property Rights Policy, please contact the Research Office:

www.imperial.ac.uk/research-and-innovation/research-office/ip

Use of IT facilities
View the Conditions of Use of IT Facilities:

9. Animal research

Understanding the basic biology of infections, injuries and chronic diseases is an essential step in finding new treatments and cures. From cancer to malaria and war wounds to heart disease, research using animals forms an important element of Imperial's work.

The College believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes where their use is shown to be necessary for developing new treatments and making medical advances.

Imperial is committed to ensuring that, in cases where this research is deemed essential, all animals in the College's care are treated with full respect, and that all staff and students involved with this work show due consideration at every level.

For more information please see:

[www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/animal-research](http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/animal-research)
10. Well-being and advice

Student Space
The Student Space website is the central point for information on health and well-being.

www.imperial.ac.uk/student-space

Director of Student Support
The Director of Student Support has overall responsibility for all matters relating to student support and well-being.

www.imperial.ac.uk/people/d.wright

Departmental support and College tutors
Your Department has a system of academic and pastoral care in place to make sure you have access to the appropriate support throughout your time here. This includes:

Postgraduate tutor
The Department’s postgraduate tutor can offer pastoral support and advice. You can arrange to have a meeting with him/her at any time during your studies – what you discuss will be completely confidential.

If necessary they will direct you to an appropriate source of support.

Your Post Graduate Tutors are:

Dr Wayne Mitchell
Hammersmith
w.mitchell@imperial.ac.uk
College tutors
College tutors operate outside of any department. They provide guidance and assistance to students in regard to welfare issues and are also involved in College disciplinary matters involving students. For more information see:

www.imperial.ac.uk/student-space/here-for-you/college-tutors-and-departmental-support

Advice services
The tutor system is complemented by a College-wide network of advice and support. This includes a number of specialist services.

Careers Service
The Careers Service has strong links to your Department and you will have a named Careers Consultant and Placement and Internship Adviser who will run both group sessions and individual meetings within your Department. You can arrange to meet with your linked Careers Consultant or Placement and Internship Adviser either in your Department or centrally on Level 5 Sherfield where the Careers Service is based.

Visit the Career Service’s website to:

- Book a careers appointment
- Find resources and advice on successful career planning

www.imperial.ac.uk/careers

Counselling and Mental Health
The Student Counselling and Mental Health Advice Service offers short-term counselling to all registered students. The service is free and confidential. Counsellors are available at the South Kensington, Hammersmith and Silwood Park Campuses.

www.imperial.ac.uk/counselling

Financial support and tuition fees
If you’ve got any questions about student financial support (loans, scholarships and research council studentships, US and Canadian loans) then contact the Student Financial Support team:

020 7594 9014
student.funding@imperial.ac.uk
If you suddenly find yourself in financial difficulties or experience an unexpected change in circumstances, you may be eligible to apply for emergency financial help through the Student Support Fund. The Fund offers a one-off payment of up to £2,000 to cover such emergencies as last minute accommodation and travel necessities, equipment and childcare. It does not have to be repaid.

www.imperial.ac.uk/students/fees-and-funding/student-support-fund

For tuition fees queries, contact the Tuition Fees team:

020 7594 8011

tuition.fees@imperial.ac.uk

Imperial College Union (ICU) Advice Centre

Imperial College Union runs the Advice Centre independently of the College with advisers on hand to provide free, confidential, independent advice on a wide range of welfare issues including housing, money and debt, employment and consumer rights, and personal safety.

www.imperialcollegeunion.org/advice

Student Hub

The Student Hub represents a single point of contact for all key administrative information and support. The Student Hub team can help you with enquiries about:

- Accommodation (including checking contracts for private accommodation)
- Admissions
- International student enquiries
- Research degrees
- Student financial support
- Student records
- Tuition fees

Level 3, Sherfield Building, South Kensington Campus
020 7594 9444
student.hub@imperial.ac.uk
www.imperial.ac.uk/student-hub
Health services

NHS Health Centre and finding a doctor

Even if you’re fit and healthy we recommend that you register with a local doctor (GP) as soon as you arrive in London. For help finding your nearest GP see the Student Space website:

www.imperial.ac.uk/student-space/here-for-you/find-a-doctor

There is an NHS Health Centre on our South Kensington Campus which you may visit during clinic hours if you’re feeling unwell. Students living within the practice catchment area are encouraged to register with the Centre.

www.imperialcollegehealthcentre.co.uk

NHS Dentist (based in the Health Centre)

Imperial College Dental Centre offers a full range of NHS and private treatment options.

www.imperial.ac.uk/student-space/here-for-you/dentist

Disability support

Disability Advisory Service

The Disability Advisory Service provides confidential advice and support for all disabled students and students with specific learning difficulties.

If you think you may have dyslexia or another specific learning difficulty but have never been formally assessed, the Disability Advisory Service offers initial screening appointments.

Room 566, Level 5, Sherfield Building, South Kensington Campus

020 7594 9755
disabilities@imperial.ac.uk
www.imperial.ac.uk/disability-advisory-service
Departmental Disability Officers

Departmental Disability Officers are the first point of contact within your department. They can apply for additional exam arrangements on your behalf, and will facilitate support within your Department.

Dr Michael McGarvey
Director of Post Graduate Studies

St Marys
(0)20 7594 9035
m.mcgarvey@imperial.ac.uk

More information on Departmental Disability Officers is available at:

- www.imperial.ac.uk/disability-advisory-service/support/ddos

More information on procedures for the consideration of additional exam arrangements in respect of disability is available at:


Library and IT

Information and Communications Technologies (ICT)

If you’re having problems with technology (including computers, laptops and mobile devices), you can get help from ICT’s Service Desk.

- 020 7594 9000
- www.imperial.ac.uk/ict/service-desk

Software shop

The Software shop offers a variety of general and subject specific software programs and packages for free or at a discounted price for Imperial students.

- www.imperial.ac.uk/admin-services/ict/shop/software

Library services

The Central Library at South Kensington is open around the clock pretty much all year. Make sure you find out who your departmental librarian is as they’ll be able to help you find resources for your subject area. Also, don’t forget to check out the Library’s range of training workshops and our other campus libraries for access to specialist medicine and life sciences resources. Alongside these physical spaces and resources, the Library provides over 170,000 electronic books, journals and databases available both on and off campus and a free document delivery service to help you source books and articles from around the UK and the rest of the world:
Religious support

The Chaplaincy Multi-faith Centre has chaplains from many different religions, as well as prayer rooms and information on places of worship. In addition, it runs meditation classes and mindfulness workshops for stress management. There is a student-run Islamic prayer room on campus and separate areas available for male and female Muslims.

Support for international students

English language support

The Centre for Academic English provides free in-sessional English courses for international students while they are studying. These include classes and workshops on academic language, social language, the four skills of reading, writing, listening and speaking, 1-1 consultations with a tutor to work on a piece of academic writing or an oral presentation, self-study resources in the VLE Blackboard, and the Conversation Project, which partners students with a native-speaker volunteer to practise social and conversational English.

International Student Support team

Students from outside the UK make up around half of our student population, so our International student Support team offers year-round support to help our international students settle into Imperial life. This includes UK visa and immigration advice and trips to different places of interest.
11. Student Records and Data

The Student Records and Data team are responsible for the administration and maintenance of the student records for all students studying at the College. This includes enrolments, programme transfers, interruption of studies, withdrawals and processing of examination entry for research degree students. The team also use this information to fulfil reporting duties to the Student Loans Company, Transport for London and the UKVI, as well as other external bodies.

The team is currently responsible for the processing of student results and awards on the student record system as well as the production and distribution of academic transcripts and certificates of award.

Student Records and Data produce a variety of standard document requests for both current and previous students including council tax letters, standard statements of attendance and confirmation of degree letters.

Appeal administration also sits within the team, as does the responsibility for confirming qualifications via the Higher Education Degree Datacheck service.

**Student records and examinations**

📞 +44 (0)20 7594 7268
✉️ records@imperial.ac.uk

**Degree certificates**

📞 +44 (0)20 7594 8037
✉️ certificates@imperial.ac.uk
12. Work-life balance

The pace and intensity of postgraduate study at Imperial can be demanding so it’s important to find time for outside interests.

**Imperial College Union**
The Union’s range of 340+ student-led clubs, societies and projects is one of the largest of any UK university, opening up lots of ways for you to enjoy your downtime.

[www.imperialcollegeunion.org/about-us](http://www.imperialcollegeunion.org/about-us)

**Graduate Students’ Union**
The Graduate Students’ Union is the postgraduate arm of Imperial College Union. The GSU works alongside the Imperial College Union President to ensure that the requirements of postgraduate students are catered for. It also organises a number of academic and social events during the year.

[www.union.ic.ac.uk/presidents/gsu](http://www.union.ic.ac.uk/presidents/gsu)

**Sport**
Beginners and semi-professionals alike will receive a warm welcome in our sports clubs, which are subsidised by Imperial College Union to make it a little bit cheaper to keep doing a sport you love.

Access to swimming facilities, including sauna, steam room and spa at Ethos sports centre, is completely free from your very first day. Gym facilities across all campuses are also free after you’ve completed a fitness orientation for a one-off charge (£40 in 2016–17).

[www.imperial.ac.uk/sport](http://www.imperial.ac.uk/sport)
13. Student feedback and representation

Feedback from students
The College and Union is committed to continually improving your education and wider experience and a key part of this is your feedback. Feedback is thoroughly discussed by your student representatives and staff.

Student representation
Student Representatives are recruited from every department to gather feedback from students to discuss with staff. More information about the role, and instructions on how to become an academic representative, are available on the Imperial College Union (ICU) website.

www.imperialcollegeunion.org/your-union/your-representatives/academic-representatives/overview

Staff-Student Committee
The Staff-Student Committee is designed to strengthen understanding and improve the flow of communication between staff and students and, through open dialogue, promote high standards of education and training, in a co-operative and constructive atmosphere. College good practice guidelines for staff-student committees are available here:

www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback
14. Student surveys

Your feedback is important to your department, the College and Imperial College Union.

Whilst there are a variety of ways to give your feedback on your Imperial experience, the following College-wide surveys give you regular opportunities to make your voice heard:

- PG SOLE lecturer/module Survey
- Student Experience Survey (SES)
- Postgraduate Taught Experience Survey (PTES) – next due to run in spring 2018

The PG SOLE lecturer/module survey runs at the end of the autumn and spring terms. This survey is your chance to tell us about the modules you have attended and the lecturers who taught them.

For PG SOLE your lecturers will receive their individual numerical results and comments shortly after the survey closes. To make the most of your opportunity to give your feedback, please do not use offensive language or make personal, discriminatory or abusive remarks as these may cause offence and may be removed from the results. Whilst this survey is anonymous, please avoid self-identification by referring to personal or other identifying information in your free text comments.

The Student Experience Survey (SES) is another opportunity to leave your views on your experience. This survey will cover your induction, welfare, pastoral and support services experience.

The Postgraduate Taught Experience Survey (PTES) is the only national survey of Master’s level (MSc, MRes, MBA and MPH) students we take part in. This is the only way for us to compare how we are doing against the national average and to make changes that will improve our Master’s students’ experience in future. PTES covers topics such as motivations for taking the programme, depth of learning, organisation, dissertation and professional development. PTES last ran in spring term 2016 and will run again in spring 2018.

All these surveys are anonymous and the more students that take part the more representative the results so please take a few minutes to give your views.

As a result of feedback to previous surveys, we have: introduced an evening event in the first term where students have the opportunity to meet interact with each other and developed opportunities for students to directly feedback on their experience through staff-student liaison groups.

The Union’s “You Said, We Did” campaign shows you some of the changes made as a result of survey feedback:

- [www.imperialcollegeunion.org/you-said-we-did](http://www.imperialcollegeunion.org/you-said-we-did)

If you would like to know more about any of these surveys or see the results from previous surveys, please visit:

- [www.imperial.ac.uk/students/academic-support/student-surveys/pg-student-surveys](http://www.imperial.ac.uk/students/academic-support/student-surveys/pg-student-surveys)

For further information on surveys, please contact the Registry’s Surveys Team at:

- [surveys.registrysupport@imperial.ac.uk](mailto:surveys.registrysupport@imperial.ac.uk)
15. And finally

Alumni services
When you graduate you will be part of a lifelong community of over 190,000 alumni, with access to a range of alumni benefits including:

- discounts on further study at the College and at Imperial College Business School
- alumni email service
- networking events
- access to the Library and online resources
- access to the full range of careers support offered to current students for up to three years after you graduate
- access to our Alumni Visitor Centre at the South Kensington Campus, with free Wifi, complimentary drinks, newspapers and magazines, and daytime left luggage facility

Visit the Alumni website to find out more about your new community, including case studies of other alumni and a directory of local alumni groups in countries across the world.

www.imperial.ac.uk/alumni

Opportunities for further study

The course is aimed at students (UK, EU and overseas) who wish to gain valuable training in molecular biology (theoretical and practical) as it is applied to medicine. The course is designed to appeal to both basic and clinical scientists, and will provide basic training for those wishing to pursue a career in scientific medical research. Medical, dentistry, veterinary and basic science graduates with a good degree in any biological science (such as biochemistry, genetics) or chemistry are eligible to apply. For medically qualified students, the course will provide a good background for further research (especially for those who were unable to do the intercalated BSc).

For the most able students, this MSc will provide an excellent training if they wish to follow up with a PhD. This is particularly relevant in light of the EU Bologna Agreement whereby it is expected that all students studying for a PhD will be required to have a Master’s degree. The skills acquired on the course will also be of value for those wishing to pursue a career in industry, clinical service or related disciplines.

Notices of job opportunities are posted on the Division and Personnel notice boards and the College website. They will also be distributed via your College email account as and when we are notified of them. The College has its own professional Careers Advisory Service (South Kensington Campus. http://www3.imperial.ac.uk/careers) and organises a number of Careers Fairs and company interviewing schemes, as well as being able to provide a more general careers advice service.

Imperial College works closely with employers and industry, including Industrial Advisory Panels to design Master’s courses which provide graduates with technical knowledge, expertise and transferable skills and to encourage students to take internships and placements. All Master’s courses are designed with employer needs in mind with some Master’s courses accredited by Professional, Statutory and Regulatory Bodies.