



## Course Information Sheet for entry in 2020-21

### DPhil in Cardiovascular Science

#### About the course

This DPhil programme is for basic science graduates who want to undertake advanced research into cardiovascular disease. The programme provides you with a solid grounding in the study of cardiac and vascular biology through the provision of taught courses, advanced level seminars and tutorials predominantly in the first year.

You are provided with a co-ordinated programme of post-graduate teaching in your first year and the possibility of experiencing research in more than one laboratory. This is followed by a three-year research project, under the supervision of a named supervisor. You will gain a greater understanding of the cardiovascular research field and can bring a broader perspective to your research project than is possible under the standard three-year DPhil.

The taught components in the first year include attendance at final year undergraduate lectures in the following areas:

- Option A: Pharmacology and signalling
- Option B: Endocrinology and metabolism
- Option C: Cardiovascular science
- Option D: Molecular pathology
- Option E: Development and disease
- Option F: Infection
- Option G: Immunity
- Option H: Cellular neuroscience
- Option I: Systems neuroscience
- Option J: Cognitive and behavioural neuroscience

You may take first- and second-year BM courses in pathology, immunology, pharmacology and integrated systems physiology. You will have the opportunity to write an extended essay at the end of each period of advanced study.

You will have access to a wide range of training in generic research skills provided through seminars and short courses. Examples of the courses that may be available to you include:

- proteomic methodologies
- genomics and bioinformatics
- confocal microscopy and image analysis
- statistics and experimental design
- information technology/computing skills
- written and oral presentation skills
- laboratory experience

In your first term of graduate study in Oxford you will attend a series of seven two-day mini-rotations where you will meet graduate students and principal investigators working in seven broad areas of areas of cardiovascular science:

- atherosclerosis, diabetes and inflammation (academic lead Charis Antoniades)
- cardiac biology and imaging (academic lead Manuela Zaccolo)
- developmental biology and regenerative medicine (academic lead Nicola Smart)
- endothelial cell and vascular biology (academic lead Kim Dora)
- epidemiology, genetics and big data (academic lead Colin Baigent)
- target discovery and therapeutics (academic lead Shoumo Bhattacharya)

Typically you will experience research in two laboratories during your first year mini-rotations, to expose you to techniques and research modalities. You will be expected to design and execute experimental protocols, critically appraise research methods and experimental results, and communicate research results and their implications to a wide audience.

You will be encouraged to develop DPhil projects that bridge the work of two separate laboratories or that involve two complementary experimental approaches. The first year of your graduate studies will be overseen by an academic mentor who will monitor your academic progress and be available to offer advice and support throughout the course of your graduate studies. The department aims for you to be associated with one host laboratory for the first nine months of your graduate studies under the

supervision of a laboratory mentor who will ensure you receive appropriate training in laboratory methods and in planning, executing and analysing experiments.

You will attend graduate tutorials, to present your latest results and discuss a range of research methods as well as journal clubs where you can discuss papers directly relevant to current lab projects. These regular small group meetings and social interactions help foster a distinct cadre of graduate students who share a common interest in, and enthusiasm for, cardiovascular science.

From the second year onwards, you will spend the remainder of the programme carrying out a specific research project.

You are expected to attend regular lab meetings and take part in all departmental graduate student training and assessment sessions. Your first year is monitored by presentations on your laboratory rotations, typically in the ninth week of each term, ie three times in the first year.

Your progress in the laboratory will be monitored formally via supervisor feedback forms submitted three times per year. You will discuss the report with your supervisor and draw up a list of research goals for the next three or four months.

### Supervision

The allocation of graduate supervision for this course is the responsibility of the Medical Sciences Doctoral Training Centre, and it is not always possible to accommodate the preferences of incoming graduate students to work with a particular member of staff. Under exceptional circumstances a supervisor may be found outside the Medical Sciences Doctoral Training Centre.

Applicants are advised to visit the course page on the centre's website for further information about supervisors associated with this course (see *Further Information and Enquires*).

### Changes to courses

The University will seek to deliver this course in accordance with the description set out above. However, there may be situations in which it is desirable or necessary for the University to make changes in course provision, either before or after registration. For further information, please see the University's Terms and Conditions.

### Expected length of course

<b>Mode of study</b>	Full Time Only
<b>Expected length</b>	4 years

## Costs

### Annual fees for entry in 2020-21

Fee status	Annual Course fees
Home/EU (including Islands)	£7,970
Overseas	£26,405

Course fees are payable each year, for the duration of your fee liability (your fee liability is the length of time for which you are required to pay course fees). For courses lasting longer than one year, please be aware that fees will usually increase annually. Information about how much fees and other costs may increase is set out in the University's Terms and Conditions.

Course fees cover your teaching as well as other academic services and facilities provided to support your studies. Unless specified in the additional cost information (below), course fees do not cover your accommodation, residential costs or other living costs. They also don't cover any additional costs and charges that are outlined in the additional cost information.

Graduate students who have reached the end of their standard period of fee liability may be required to pay a termly University and/or a college continuation charge.

The University continuation charge, per term for entry in 2020-21 is £508, please be aware that this will increase annually. For part-time students, the termly charge will be half of the termly rate payable by full-time students.

If a college continuation charge applies (not applicable for non-matriculated courses) it is likely to be in the region of £100 to £400 per term. Please contact your college for more details.

### Additional cost information

There are no compulsory elements of this course that entail additional costs beyond fees (or, after fee liability ends, continuation charges) and living costs. However, please note that, depending on your choice of research topic and the research required to complete it, you may incur additional expenses, such as travel expenses, research expenses, and field trips. You will need to meet these additional costs, although you may be able to apply for small grants from your department and/or college to help you cover some of these expenses.

## Living costs

In addition to your course fees, you will need to ensure that you have adequate funds to support your living costs for the duration of your course.

The likely living costs for 2020-21 are published below. These costs are based on a single, full-time graduate student, with no dependants, living in Oxford. We provide the cost per month so you can multiply up by the number of months you expect to live in Oxford.

	Likely living costs for 1 month		Likely living costs for 9 months		Likely living costs for 12 months	
	Lower range	Upper range	Lower range	Upper range	Lower range	Upper range
<b>Food</b>	£270	£385	£2,430	£3,465	£3,240	£4,620
<b>Accommodation</b>	£630	£760	£5,670	£6,840	£7,560	£9,120
<b>Personal items</b>	£130	£245	£1,170	£2,205	£1,560	£2,940
<b>Social activities</b>	£45	£110	£405	£990	£540	£1,320
<b>Study costs</b>	£40	£95	£360	£855	£480	£1,140
<b>Other</b>	£20	£55	£180	£495	£240	£660
<b>Total</b>	£1,135	£1,650	£10,215	£14,850	£13,620	£19,800

When planning your finances for any future years of study at Oxford beyond 2020-21, you should allow for an estimated increase in living expenses of 3% each year.

More information about how these figures have been calculated is available at [www.graduate.ox.ac.uk/livingcosts](http://www.graduate.ox.ac.uk/livingcosts).