



## Course Information Sheet for entry in 2018-19

### MSc by Research in Biochemistry

#### About the course

This programme aims to train you in cutting-edge laboratory research applying techniques in bionanotechnology, biophysics, computational biology, microscopy, molecular biology, structural biology and systems biology to a broad range of fields including cell biology, chromosome biology, drug discovery, epigenetics, host-pathogen interactions, membrane proteins, ion channels and transporters, and RNA biology.

Applicants are strongly advised to visit the Medical Sciences Graduate School website to help them identify the most suitable course and supervisors.

You will be admitted directly to a particular research area led by departmental members who will be appointed MSc by Research supervisors. Students who have been admitted to a particular research supervisor will not normally do laboratory rotations. You will be based in a research lab and undertake research on a subject agreed with your supervisor.

There are no taught courses examined by written papers, but you will have access to a wide range of lecture courses at a taught master's level and foundation or preliminary level, as appropriate. If you have changed fields, this will enable you to fill in gaps in your background knowledge. There is also a wide range of courses and workshops which you can attend to acquire skills that will be necessary for the prosecution and presentation of your research, as well as your professional development as a research scientist.

You will begin your course as a probationary research student and near the end of your first year you will transfer to a MSc by Research status. To transfer your status, you must apply formally, submit a research report and statement of future research plans, and take an independent assessment by two assessors. Continuation in the programme is subject to the student passing the transfer of status exam.

If you wish, you may attempt to transfer to DPhil status instead of MSc by Research status at the end of your first year. To transfer to DPhil status, you are required to follow the same procedure as probationary research students on the DPhil in Biochemistry and must have supporting statements from your supervisor(s) and college. The length of the programme depends on the following factors as judged by your supervisor(s) and assessors (2):

- focus and rate of student researcher development and progress
- achievement of acceptable focus and scope of thesis
- publication quality research
- length of available funding.

The MSc by Research in Biochemistry is normally a two year course, though if you have an appropriate background in research, you may complete it in one year.

Research areas for the MSc by Research in Biochemistry currently include:

- molecular biochemistry and chemical biology
- structural biology of cell surface and nuclear signal transduction processes, cell adhesion, cell cycle, membrane proteins, receptors and ion channels, drug design, protein folding and dynamics
- modelling and simulation of biological membrane systems
- bionanotechnology and its application to cancer
- targeting viral morphogenesis in antiviral strategies
- integrative systems biology (dynamics of molecular regulatory networks, multidimensional optical proteomics)
- bacterial and parasite respiratory proteins
- bacterial cell biology, protein transport
- control of eukaryotic gene expression
- kinase signalling to gene induction
- mRNA localisation in drosophila
- epigenetic control of chromatin and gene expression
- developmental epigenetics
- DNA recombination and repair
- bacterial chromosome dynamics
- sister chromatid cohesion
- genetic modelling of human disease
- cell biology of innate immunity in drosophila

- genetic defects of mitochondrial energy metabolism
- cell proliferation and cell fate determination during *C. elegans* development.

**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**

1 to 3 years

## Costs

### Annual fees for entry in 2018-19

Fee status	Tuition fee	College fee	Total annual fees
Home/EU (including Islands)	£4,260	£3,112	£7,372
Overseas	£19,915	£3,112	£23,027

The fees shown above are the annual tuition and college fees for this course for entry in the stated academic year; 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.

Tuition and college 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 tuition and college fees).

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 2018-19 is £468, 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 tuition and college 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 2018-19 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>	£258	£361	£2,318	£3,245	£3,090	£4,326
<b>Accommodation</b>	£536	£677	£4,824	£6,093	£6,432	£8,124
<b>Personal items</b>	£118	£263	£1,066	£2,364	£1,421	£3,152
<b>Social activities</b>	£41	£123	£369	£1,105	£492	£1,474
<b>Study costs</b>	£39	£85	£348	£765	£464	£1,020
<b>Other</b>	£22	£47	£202	£419	£269	£559
<b>Total</b>	£1,014	£1,556	£9,127	£13,991	£12,168	£18,655

When planning your finances for any future years of study at Oxford beyond 2018-19, 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).