# Course Information Sheet for entry in 2025-26: DPhil in Genomic Medicine and Statistics

## **Course facts**

Mode of study	Full Time Only
Expected length	4 years



## About the course

This four-year DPhil programme aims to train and nurture future leaders in the application of genomics to advance human health. It will equip them with skill sets spanning experimental and analytical genomic science in order to realise the potential of genomics and practice the qualities of fair and inspiring leadership that we will instil during the course.

The first year includes taught modules focused within the first term. First-year students then undertake short research projects in up to three laboratories in three-month rotations, with further training and teaching sessions tailored to the needs of individual students. The research projects and lab visits help inform the choice of DPhil project to be undertaken over the subsequent three years of the programme. The final three years of the course will comprise doctoral research under the supervision of two named supervisors and a doctoral committee. Applicants are advised to visit the Doctoral Training Centre course webpage for further information about supervisors connected to this programme.

The programme actively seeks to recruit students from very diverse backgrounds, united by a track record of academic excellence and enthusiasm for this field. Students receive world-class training, supervision, mentorship and pastoral support. Promoting excellence in research culture underlies all aspects of the programme with a commitment to support creativity, prioritise diversity and inclusion, and promote best practice.

## **Module information**

The programme is focused on the following themes:

- genomic and -omic technologies (including method development, single cell genomics, imaging, model systems, CRISPR screens, genome engineering, proteomics, metabolomics, high throughput screening)
- functional genomics (gene regulation and epigenetics)
- genome biology (genetic variation, recombination, human history, evolution, palaeogenomics, pathogen genomes)
- genomics of disease (Mendelian, multifactorial traits, cancer)
- genomic analysis (bioinformatics and statistical genetics)
- from genes to clinical proof of concept (integrated drug development pipeline spanning genetic-led target discovery, structural biology, medicinal chemistry)
- application of genomics in the clinic (rare disease diagnostics, cancer therapeutics, personalised medicine and genome therapies).

Teaching modules combine theoretical and practical classes, with further skills training available through the Medical Sciences Doctoral Training Centre.

# Teaching and learning

The taught component of the course will be delivered by expert faculty including experienced principal investigators and postdoctoral scientists. Class sizes for taught modules will typically be between 5 and 20 students depending on format and content (median estimated at 12 students). Peer-to-peer and independent learning is also encouraged. Lab rotations will be under the supervision of a named principal investigator. Workload involved is commensurate with full time employment.

Training will be tailored to the individual needs of the student throughout the course. There will be opportunities for internships. Student feedback is recognised and valued. Mental health is a priority with a proactive approach to prevention, early recognition, peer and professional support. Bullying and harassment is prevented by promoting an encouraging and enabling culture with leadership by example and compulsory supervisor training. In addition to departmental membership, all students will be members of an Oxford college which further enhances interdisciplinarity, understanding of excellence in research culture, provision of outstanding pastoral and welfare support, and wider educational experience.

The programme is hosted in the interdisciplinary environment of the Centre for Human Genetics (CHG), which hosts world-leading research groups in genomic analysis, functional genomics, bioinformatics, statistics, population genetics, translational genomics, protein structure and functional biology, together with outstanding disease-focused research including cardiovascular medicine, type 1 and type 2 diabetes, cancer genetics, immunity, inflammation and infectious disease.

United by common interests in understanding the molecular basis of disease, researchers come from clinical and pure science backgrounds. The CHG is part of the Nuffield Department of Medicine and closely linked with the clinical departments in the Oxford University Hospitals NHS Foundation Trust, providing unique opportunities for translation of

research into clinical practice which is further enhanced by having the Oxford NIHR BRC Genomics Theme based within the CHG and the Centre for Personalised Medicine.

The CHG has outstanding facilities including: omic technology platforms, computational genomics, biomedical research computing, cellular imaging, iPSCs and flow cytometry, all of which are available to support your research project.

The interdisciplinary nature of the CHG strongly encourages interactions between research groups, and the centre runs internal and high-profile external seminar series, retreats for students and post docs, journal clubs, away days, training in public engagement and communication skills, and social events, to enable such interactions on a frequent basis.

Co-located on the Old Road campus with the CHG and across the Medical Sciences Division (MSD) are complementary research institutes and key stakeholders for translation (NHS and industry) that together constitute a remarkable interdisciplinary environment for genomics research and training.

This includes expertise in immunology, infectious disease and cancer through the CAMS Oxford Institute and the Ludwig Institute for Cancer Research, and the analytical expertise of supervisors from the Big Data Institute and the Department of Statistics. Supervisors from the Target Discovery Institute and Department of Chemistry have further highly complementary translational expertise, for example in proteomics, metabolomics and medicinal chemistry that reflect the necessary interdisciplinarity to translate the potential of genomics.

The course also includes leading scientists from the Weatherall Institute of Molecular Medicine in genome engineering, relevant model systems including stem cells, gene regulation and epigenetics. The translational application of genomics is being pioneered in Oxford, with supervisors in addition to those at the CHG in pathogen genomics, palaeogenomics as well as in clinical application spanning rare disease and intervention to effect cure using gene editing constituting some of the most advanced work worldwide in this area.

The NIHR Biomedical Research Centre supports collaboration with the NHS and active engagement with outstanding clinical trials units experienced in experimental studies and the Oxford NHS Genomic Medicine Centre further enriches this. Oxford has also a highly active entrepreneurial spirit where spin out companies are encouraged and supported alongside collaborations with established biotech and pharma.

This outstanding cross-disciplinary research environment is underpinned by the latest technologies, including mass spectrometry, advanced microscopy, metabolomics and proteomics, single-cell deep phenotyping, preclinical model organism analyses, and one of the most advanced computing facilities (based in the CHG) in Europe.

#### **Attendance**

The course is full-time and requires attendance in Oxford. Full-time students are subject to the University's Residence requirements.

Provision exists for students on some courses to undertake their research in a 'well-founded laboratory' outside of the University. This may require travel to and attendance at a site that is not located in Oxford. Where known, existing collaborations will be outlined on this page. Please read the course information carefully, including the additional information about course fees and costs.

# Resources to support your study

As a graduate student, you will have access to the University's wide range of world-class resources including libraries, museums, galleries, digital resources and IT services.

The Bodleian Libraries is the largest library system in the UK. It includes the main Bodleian Library and libraries across Oxford, including major research libraries and faculty, department and institute libraries. Together, the Libraries hold more than 13 million printed items, provide access to e-journals, and contain outstanding special collections including rare books and manuscripts, classical papyri, maps, music, art and printed ephemera.

The University's IT Services is available to all students to support with core university IT systems and tools, as well as many other services and facilities. IT Services also offers a range of IT learning courses for students, to support with learning and research.

You will have access to:

- Experimental facilities, as appropriate to your research
- Extensive IT support from both the CHG and University IT Services
- Library services such as the Radcliffe Science Library and the Cairns Library

The provision of project-specific resources will be agreed with the relevant supervisor during the planning stages for the research project.

The department has been awarded an Athena SWAN Silver award in recognition of the commitment made to promote gender equality through its organisational and cultural practices and its efforts to improve the working environment for both men and women. Students will benefit from the outstanding environment for graduate studies provided within the University of Oxford.

## 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.

The first year will be overseen by an academic mentor who will monitor academic progress and be available to offer advice and support throughout the programme. The final three years of the course will comprise doctoral research under the supervision of two named supervisors and a doctoral committee, who will bring together complementary expertise and experience relevant to the doctoral research. The programme supervisors represent the full spectrum of cutting-edge interdisciplinary research relevant to genomic medicine and statistics across the University with supervisor training and monitoring to ensure the highest quality supervision.

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*).

#### **Assessment**

All students will be initially admitted to the status of Probationer Research Student (PRS). Within a maximum of six terms as a PRS student you will be expected to apply for transfer of status from Probationer Research Student to DPhil status.

A successful transfer of status from PRS to DPhil status will require the submission of a report on progress to date on research and future plans. Students who are successful at transfer will also be expected to apply for and gain confirmation of DPhil status within ten terms of admission, to show that your work continues to be on track.

Both milestones normally involve an interview with two assessors (other than your supervisor) and therefore provide important experience for the final oral examination.

You will be expected to submit an original thesis of up to 50,000 words within a maximum of four years from the date of admission. To be successfully awarded a DPhil in Genomic Medicine and Statistics you will need to defend your thesis orally (viva voce) in front of two appointed examiners.

### Changes to this course

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 you commence your course. These might include significant changes made necessary by any pandemic, epidemic or local health emergency. For further information, please see the University's Terms and Conditions (http://www.graduate.ox.ac.uk/terms) and our page on changes to courses (http://www.graduate.ox.ac.uk/coursechanges). Please see the course page on the Graduate School website for further details about funding for this course.

#### Costs

## Annual fees for entry in 2025-26

Fee status	Annual Course fees
Home	£10,070
Overseas	£33,370

#### Information about course fees

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 (http://www.graduate.ox.ac.uk/terms).

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 2025-26 is £672, 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 £600. Please contact your college for more details, including information about whether your college's continuation charge is applied at a different rate for part-time study.

#### 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 and any additional course-specific costs, 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 the 2025-26 academic year 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 one month

	Lower range	Upper range
Food	£330	£515
Accommodation	£790	£955
Personal items	£200	£335
Social activities	£45	£100
Study costs	£40	£90
Other	£20	£40
Total	£1,425	£2,035

## Likely living costs for nine months

	Lower range	Upper range
Food	£2,970	£4,635
Accommodation	£7,110	£8,595
Personal items	£1,800	£3,015
Social activities	£405	£900
Study costs	£360	£810
Other	£180	£360
Total	£12,825	£18,315

# Likely living costs for twelve months

	Lower range	Upper range
Food	£3,960	£6,180
Accommodation	£9,480	£11,460
Personal items	£2,400	£4,020
Social activities	£540	£1,200
Study costs	£480	£1,080
Other	£240	£480
Total	£17,100	£24,420

When planning your finances for any future years of study at Oxford beyond the 2025-26 academic year, it is suggested that you allow for potential increases in living expenses of 4% each year – although this rate may vary depending on the national economic situation.

More information about how these figures have been calculated is available at www.graduate.ox.ac.uk/livingcosts.

# **Document accessibility**

If you require a more accessible version of this document please contact Graduate Admissions and Recruitment by email (graduate.admissions@admin.ox.ac.uk) or via the online form (http://www.graduate.ox.ac.uk/ask/form).