Welcome to the Department of Genetics Postgraduate Open Day

 Speakers

- **Head of Department:** Prof. Steve Russell
- **Head Of Research:** Prof Cahir O’Kane
- **Postgraduate Administrator:** Sean Scinta
- **Student:** Dr Zeynep Öztürk

November 2nd 2022
Our Department

The Department of Genetics is host to around 50-65 postgraduate students at any given time. They work on a wide range of problems of modern biology, including population genetics and ecology, detailed analysis of the transcriptome, and cell and developmental biology.

The Department has its core in the Genetics Building on the Downing site, and also has members in nearby Research Institutes including the Gurdon Institute, Sainsbury Laboratory, and MRC Toxicology Unit. Our groups also collaborate with other local centres including:

- Department of Engineering
- Cavendish Laboratory (Department of Physics)
- Cambridge Institute for Medical Research

These interactions act as showcases for a varied offer of courses and seminars from the different institutes which challenge and develop students.
Our programmes

**MPhil Genetics (Research Only)**

12 months full-time

2 years part-time (case-by-case basis)

Applicants for this course should have achieved a UK Good II.i Honours Degree.

If your degree is not from the UK, please check International Qualifications to find the equivalent in your country.

[University Minimum Academic Requirements link](#)

**PhD Genetics (Research Only)**

3-4 years full-time

5-7 years part-time (case-by-case)

Applicants for this course should have achieved a UK Good II.i Honours Degree.

If your degree is not from the UK, please check International Qualifications to find the equivalent in your country.

[University Minimum Academic Requirements link](#)
The **MPhil in Biological Sciences** is offered by the Faculty of Biology as a full-time period of study and research, and introduces students to research skills and specialist knowledge in the Faculty’s key research areas. While mainly research, it contains more formal classes in research training, and a shorter research project, than the MPhil by research. Many Genetics group leaders offer projects in this program.

**The six “Pathways” offered are:**
- Biomolecular Science
- Cell Science
- Crop Science
- Developmental Biology
- Infection Biology & Molecular Immunology
- Reproduction & Embryogenesis

Prospective students to apply directly to the pathway of their choice. Students choose a supervisor after acceptance, but we also encourage informal contact with potential supervisors before application.

If you have any questions please reach out to the MPhil Co-ordinator

anita.kovacs@admin.cam.ac.uk
Most MPhil in Genetics candidates start in October, to take advantage of Departmental and University induction programmes and funding opportunities, but admission in January or April is also possible.

The examination for the degree of Master of Philosophy consists of a thesis, of not more than 20,000 words in length, exclusive of tables, footnotes, bibliography, and appendices. The assessment also includes an oral examination on the thesis and on the general field of knowledge within which it falls.

Please note: part-time study may not always be viable and will be considered on a case-by-case basis, so please discuss this option with your proposed supervisor before making an application for this mode of study.

**Learning Outcomes**

By the end of the programme, students will have:

- a comprehensive understanding of techniques, and a thorough knowledge of the literature applicable to their own research;
- demonstrated originality in the application of knowledge, together with a practical understanding of how research and enquiry are used to create and interpret knowledge in their field;
- shown abilities in the critical evaluation of current research and research techniques and methodologies; and
- demonstrated some self-direction and originality in tackling and solving problems, and acted autonomously in the planning and implementation of research.
PhD Course Outcomes

PhD students in the Department will undertake 3-4 years of research under the supervision of one or more group leaders, where they will develop an original research question and address this through laboratory or computer-based research.

Students will undertake specific training in their research area, as well as more generic skills training. Supervising undergraduate students is often a rewarding part of the research student experience, and opportunities through the Department’s teaching portfolio and the College supervision system are widely available. Students are expected to submit their thesis by the end of their fourth year.

Towards the end of their first year of study, students are required to complete a satisfactory first-year report and viva.

Most PhD candidates taking this option starting in October, to take advantage of Departmental and University induction programmes and funding opportunities, but admission in January or April is also possible.

Please note: part-time study may not always be viable and will be considered on a case-by-case basis, so please discuss this option with your proposed supervisor before making an application for this mode of study.

Learning Outcomes:

- a comprehensive understanding of techniques, and a thorough knowledge of the literature applicable to their own research;
- demonstrated originality in the application of knowledge, together with a practical understanding of how research and enquiry are used to create and interpret knowledge in their field;
- shown abilities in the critical evaluation of current research and research techniques and methodologies;
- demonstrated self-direction and originality in tackling and solving problems, and acted autonomously in the planning and implementation of research;
- independence in designing and conducting a substantial body of original research, and preparing that data in a format suitable for publication in peer-reviewed journals.
Application Requirements

1. **Identify and make contact with a possible Supervisor(s)**

   Please contact prospective supervisor(s) to discuss potential projects before a formal application. You must identify a potential supervisor (or supervisors) in the Department before applying. Supervisors and their research areas are listed on the Department of Genetics website.

2. **You'll need to get a few things ready before you apply.**

   - Two academic references
   - Transcript
   - CV/resume
   - Evidence of competence in English  
     *If required - you can check using our tool*
   - Proposed Supervisor (Mandatory)
   - Statement of Interest (Mandatory)
   - Research experience (Mandatory)
   - Research Proposal (Optional, depends on funder)
Prospective students must identify a potential supervisor (or supervisors) in the Department before applying. Please contact prospective supervisors to discuss potential projects before a formal application. In your email you can attach both a CV with details of the degrees you have taken and the marks you have obtained, and a brief statement of interest (1-2 pages max). There is no need to attach references or transcripts. Please be aware that our PhD supervisors receive large numbers of enquiries, and that they therefore cannot give detailed feedback on your proposal.

Department Group Leaders Page

Postgraduate Topics in Genetics Page
If you are seeking funding as well as a place in the Department you must apply much earlier than if you are self funded or applying externally for scholarships, in some cases as much as a year in advance.

The University of Cambridge Graduate Prospectus web pages cover the subjects of funding and costs in detail. They also provide links to the relevant Research Councils for UK applicants, and to the Cambridge Trusts for overseas applicants. We also encourage students to explore the Postgraduate Student Funding Search. The School of Biological Sciences website also has information on funds and Fellowships specifically in biology and medicine.

There are two major funding deadlines, GATES US (Application deadline Wednesday 12 October 2022) and the University Funding competition (Application deadline* Dependent on your course – for our department it is 5 January 2023)

The major internal sources of funding are: Cambridge Trust, Gates Cambridge Trust, Harding Distinguished Postgraduate Scholars Programme, Research Councils and collectively College and departmental schemes. Please use the student funding link to help with your search, https://www.student-funding.cam.ac.uk/.

Helpful funding links
- PhD in Genetics | Postgraduate Admissions (cam.ac.uk)
- Funding | Postgraduate Admissions (cam.ac.uk)
- Welcome - Postgraduate Funding Search (cam.ac.uk)
- Cambridge University Scholarship Deadlines | Gates Cambridge
- Scholarships (cambridgetrust.org)
Other Funding Opportunities

Alexander Crummell Master's & PhD Scholarships
These are for UK-based students from disadvantaged or under-represented backgrounds. All fees and maintenance costs are covered. For further details, please see The Alexander Crummell Scholarships | Queens' College (cam.ac.uk) or contact graduate.office@queens.cam.ac.uk

BBSRC-funded PhD studentships*
This doctoral training program (DTP) covers research areas in the remit and strategic priority areas of BBSRC, in several institutions including the Genetics Department. Funded 4-year PhD projects are available in: Agriculture and Food Security, Industrial Biotechnology and Bioenergy, Bioscience for Health, World-Class Underpinning Bioscience. Further information and application details: http://bbsrcdtp.lifesci.cam.ac.uk/
Other Funding Opportunities

MRC-funded PhD studentships*
This DTP is a collaboration between the University of Cambridge and the Babraham Institute. PhD studentships are available in the areas of Population and Systems Medicine, Infection and Immunity, Molecular and Cellular Science, Neuroscience and Mental Health. Further information and application details are available at https://mrcdtp.medschl.cam.ac.uk

NERC funded PhD studentships*
The Cambridge Climate Life and Earth (C-CLEAR) NERC Doctoral Training Partnership provides PhD training across the NERC science portfolio with the Department of Genetics contributing to training in the Biology and Conservation research theme. There are two projects available for the 2023-24 academic year. Please find more information on the links below.

- BC404: Human population history in real landscapes (Lead Supervisor: Aylwyn Scally, Genetics)
- BC425: Genomics of adaptive speciation in Lake Malawi cichlid fishes (Lead Supervisor: Richard Durbin, Genetics)

Mastercard Foundation Masters studentships
For African students, for work in the broad areas of climate resilience and sustainable development. Further information at: https://www.postgraduate.study.cam.ac.uk/funding-overview/mastercard-foundation-scholars-program-university-cambridge

* These DTPs are mainly for UK-based applicants but there is some competitively awarded funding for overseas applicants
Helpful Links & Contacts

- **Postgraduate Admissions** [pg.admissions@admin.cam.ac.uk](mailto:pg.admissions@admin.cam.ac.uk)
- **International Student Office** [international.students@admin.cam.ac.uk](mailto:international.students@admin.cam.ac.uk)
- **International Student Office Visa Guidance** [international.students@admin.cam.ac.uk](mailto:international.students@admin.cam.ac.uk)
- **Cambridge Students Page** [https://www.cambridgestudents.cam.ac.uk/](https://www.cambridgestudents.cam.ac.uk/)
- **Contact Us (cambridgetrust.org)** [Cambridge.Trust@admin.cam.ac.uk](mailto:Cambridge.Trust@admin.cam.ac.uk)
- **Cambridge life | Cambridge students** [https://www.cambridgestudents.cam.ac.uk/cambridge-life](https://www.cambridgestudents.cam.ac.uk/cambridge-life)
- **Search - Postgraduate Funding Search (cam.ac.uk)** [https://www.student-funding.cam.ac.uk/](https://www.student-funding.cam.ac.uk/)

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