Work Experience Job Description

MA LAB

About the Gurdon Institute

The Gurdon Institute is a world-leading centre for research into the biology of development and how normal growth and maintenance can go wrong in diseases such as cancer. Many of our scientists have made pioneering contributions to the fields of basic cell biology, cellular reprogramming, epigenetics, and DNA repair.

Dates of Placement

15-19 July

Placement Description

Area of the Gurdon Laboratory Research

General topic area Mitochondrial DNA (mtDNA) transmission, Mitochondrial diseases

About the team In addition to the 46 chromosomes in the nucleus, our cells contain DNA material inside a subcellular structure known as mitochondrion. The mitochondrion converts energy from food into a form that the cell can use. We investigate how mitochondrial DNA is transmitted from mothers to daughters and how mitochondrial mutations lead to diseases, which affect 1 in 5,000 people in the UK.

Current lab members: One PhD student, one postdoc fellow and one research assistant

Main model(s) used Drosophila (fruit flies) and tissue culture insect cells
**What will you do?**
Spend 3 hours in the lab each day, learning and practicing techniques such as molecular biology, fly sorting, immunostaining, confocal microscopy.

You will attend four, two-hour interactive workshops to help you develop scientific knowledge and practical skills.

Additionally, you will create and deliver a scientific presentation to other work experience students.

You will also have the opportunity to network with post-graduate students and scientists, talk to them about their jobs and lives and find out how research is done in the lab.

**About the successful student**

We expect all students to be punctual, responsible, reliable, curious, and willing to listen to advice and act on feedback.
You must also be available for all of the days during the placement week.

**Ideally interested in:** Biology

**Key skills include:** Attention to detail, proactive, inquisitive

**What you will need**

**You will need to bring**
Closed-toed shoes
A positive attitude

**We will provide**
Lab coat
Protective eyewear
Gloves
Computer access
Free lunch at the Institute (up to £10 per day)
Transportation reimbursement (receipts required, up to £50 per week)

**Questions?**
If you have any questions about this job description, the work experience programme or the application process, please reach out to Naomi at workexperience@gurdon.cam.ac.uk