# Plant Biology MPhil/PhD

## Key features of this course:

**The University of Worcester welcomes applications to undertake research towards MPhil and PhD degrees in Plant Biology.**

Research at Worcester has grown significantly in the last 10 years as the University itself has expanded. As a research student you will join a vibrant student community in our Research School and become part of our dynamic research environment.

You will have the opportunity to be supervised by leading researchers in your field and take advantage of our rich Researcher Development programme which will help you to develop the skills and knowledge you need to complete your research degree but also enhance the skills you will need in any future career.

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## Our MPhil/PhD research degree programme offers you:

### Wide variety of research interests

Research interests of the group include plant-microbe interactions, cell cycle and cell signalling. In general, the group use molecular biology, plant pathology, proteomics, genetics, microscopy and bioinformatics to investigate the functional role of genes in various conditions. These include biotic stress, flowering, cell cycling, circadian rhythm, receptor-ligand interactions, identification of pathogen secreted molecules and their function, targeted genome editing using CRISPR technology, comparisons of bacterial genomes using next generation sequencing and bioinformatics.

### Excellent supervision

Benefit from a professional and challenging relationship with your supervisory team, drawn from experienced academics working at the forefront of their disciplines. The team members have collaborations within and outside the UK, thus possibilities for travelling and longer term visits exist at national and international partner universities.

### Resources

Access to the University of Worcester's virtual resources and its state of the art library facilities. The Institute of Science and the Environment has an excellent range of resources available to support your learning and your research project.

### Recent research

Regulation of effectors by circadian rhythm; Identification of PAMPs and apoplastic effectors from downy mildew pathogen; Role of heterozygosity in effector-triggered immunity, investigating immune system of plants using genome editing technology and biopesticides.

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## How to apply

Apply for this course - full time Apply for this course - part time

Please make your application via our online application form. If you have any questions, please contact the Research School on 01905 542182 or research@worc.ac.uk

**Before you submit a full application**, please contact Dr David Storey (d.storey@worc.ac.uk) to discuss your research project and the availability of appropriate supervision.

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## Supervisors

**Dr Rob Herbert**
Expertise: molecular and cell biology of flowering; plant cell and molecular biology.

**Dr Debbie Holmes**
Expertise: genetics.

**Prof. Mahmut Tör**
Expertise: molecular plant pathology; molecular genetics, molecular plant breeding and bioinformatics.

**Dr Mike Wheeler**
Expertise: cell-cell communication/plant reproductive biology and development.

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