

# **Lecturer in Plant Biology** Department of Biology

Closing date: 15 January 2016 Interview date: 18 February 2016 Job reference: 4662













### INTRODUCTION

Research and teaching in the Department of Biology at the University of York is of international excellence and global strategic importance (http:// www.york.ac.uk/biology/). We are committed to strengthening our research and teaching expertise in research foci where we have recognised strengths: Plant Biology, Ecology & Evolution, Bioinformatics & Mathematical Biology, Infection & Immunity, Molecular & Cellular Medicine, Cell & Developmental Biology, Microbiology, Biochemistry & Biophysics. Plant Biology is a major area of strength within the Department and our botanical research spans the range from ecology to cell signalling, with expertise in developmental biology, modelling, physiology, biochemical genetics, genomics and metabolic engineering. Current staff in Plant Sciences benefit from a mixed portfolio of research funding, including UK research councils and charities, EU, overseas charities, governments and industry. There is a vibrant mix of basic and strategic research conducted within the Department.

The University is committed to maintaining its position of strength in Plant Biology and wishes to appoint a new member of academic staff at the Lecturer grade. Our aim is to complement and expand on strengths in both fundamental science and research that will influence policy and practice in related sectors. The Department welcomes applications from candidates across the discipline, building on the present breadth of expertise. These include Departmental interests of candidates engaged with research on cell signalling and development, molecular genetics and genomics, natural product biochemistry and metabolic engineering, which can include synthetic biology and molecular approaches to crop improvement. We are seeking to recruit a scientist with an excellent publication record, consistent with their career stage, who will emerge as outstanding and internationally competitive. In complementing our strengths, the new Lecturer can have access to the Centre for Novel Agricultural Products (CNAP), which provides a focal

point for strategic research on plants and microbes. CNAP's mission is to realise the potential of plant-and -microbial-based renewable resources through molecular genetic discovery and germplasm development. Additionally, there is access to the York Environmental Sustainability Institute (YESI), which operates across the department to provide an interdisciplinary setting to undertake the research needed to tackle major environmental issues, and the York Centre for Complex Systems Analysis (YCCSA), which is an interdisciplinary group that examines systems-level problems by working together with Maths, Chemistry and Computer Sciences. Additional opportunities for translation of laboratory discoveries come from the Biorenewables Development Centre (BDC). This is a University of York not-for-profit company based on the York Science Park that provides industry with new processes to convert plants and bio-waste into high-value products. Candidates are invited to contact either Prof. Seth Davis or Dr. Thorunn Helgason for a confidential, informal discussion.

Candidates must be able to demonstrate a strong commitment to the promotion of teaching and learning and will be expected to actively participate in research supervision, management and administration. New academic staff are not expected to undertake a full teaching and administrative load for the first two years, in order to offer time to establish a research base. During that time the contribution to teaching/administration will not exceed an average of 20% of the working week. After that time, York seeks to ensure the right balance across the three main areas of professional focus so that research potential is maximised and our highly rated teaching quality and learning experience is maintained. We would welcome applications from candidates currently holding Independent Fellowships, and wishing to take up a proleptic lectureship.



### JOB DESCRIPTION

### At a glance

Salary	£37,768 - £46,414 a year
Hours of work	37 a week
Contract type	Open
Based at	Department of Biology, Heslington West

### Main purpose of the role

- To develop research objectives, projects and proposals and carry out individual or collaborative research projects
- To lead and contribute to the production of research outputs and research outcomes
- To design, develop and deliver teaching across a wide range of modules and/or within a particular programme or subject area
- To undertake effectively a range of administrative and managerial responsibilities

### **Key responsibilities**

# (Role holders will be required to undertake some or all of the duties below)

#### Research and Scholarship

- To develop and promote the research activities of the department by developing a personal research plan independently and/or in collaboration with others as part of a larger research team
- To plan, manage and undertake research activities in accordance with a specific project plan, and to manage and guide the work of staff and research students on own specialist area
- To develop innovative research proposals, identify and obtain external sources of funding
- To publish original research in appropriate journals or other relevant media as appropriate and attend international conferences for the purpose of

disseminating research results or for personal development

#### Teaching and Promotion of Learning

- To develop innovative teaching materials, techniques and module design and take responsibility for the quality of the provision
- To plan, deliver and critically review a range of teaching and assessment activities
- To undertake academic supervision of students (including research students) and act as a research supervisor within own specialist subject area
- To set and mark practical sessions, supervisions, fieldwork and examinations and provide constructive feedback to students
- To identify areas where current teaching provision is in need of revision or improvement and propose and implement improvements

#### Management and Administration

- To undertake the duties of a Programme Director and Module Co-ordinator and be responsible for the design, development and management of departmental teaching modules
- To contribute to the recruitment and selection of research and teaching staff
- To contribute to the administration and management of the department
- To advise, supervise and give guidance to other departmental staff as appropriate
- To develop and build internal and external contacts



# PERSON SPECIFICATION

	Essential / Desirable
Qualifications	
PhD or equivalent, preferably in plant sciences	Essential
Appropriate academic professional and teaching qualifications or a willingness to complete the Postgraduate Certificate in Academic Practice	Essential
Knowledge	
Specialist knowledge in subject area	Essential
Knowledge of a range of research techniques and methodologies	Essential
Knowledge of a range of teaching techniques to enthuse and engage students	Essential
Advanced and specialist Information technology (IT) knowledge	Essential
Has research expertise in an area that will complement and enhance the department's research strategy and goals	Essential
Skills, abilities and competencies	
Ability to develop research objectives, projects and proposals	Essential
Well-developed analytical skills	Essential
Highly developed oral and written communication skills, including ability to write and contribute to publications and to disseminate research findings using other appropriate media	Essential
Ability to deliver presentations at conferences and exhibit work at other appropriate events internally and externally	Essential
Ability to extend, transform and apply knowledge from scholarship	Essential
Ability to design teaching material and deliver either across a range of modules or within a subject area	Essential
Ability to supervise the work of others, for example in research teams or projects, and function as an MSc, PhD and postdoctoral supervisor	Essential



# PERSON SPECIFICATION

	Essential / Desirable
Experience	
Proven ability to contribute to high quality research which is publicly evidenced	Essential
Experience of taking responsibility for teaching and learning at undergraduate and ideally postgraduate level	Desirable
Evidence of successful course planning, design and delivery across a range of modules, with exemplification of teaching materials	Desirable
Evidence of dissemination of research findings, which may include: the presentation of papers at conferences and workshops; participation in public engagement events to disseminate research; the publishing of chapters in text books; the publishing of papers; articles or reviews in academic journals or elsewhere; the construction of websites	Essential
Personal attributes	
Show attention to detail and commitment to high quality	Essential
Display creativity, initiative and judgement in applying appropriate approaches to teaching, learning support and scholarly activities	Essential
Positive attitude to colleagues and students	Essential
Willingness to work proactively with colleagues in other work areas/institutions	Essential
Ability to plan and prioritise own work in order to meet deadlines	Essential
Commitment to personal development and updating of knowledge and skills	Essential
Collaborative ethos	Essential
Show commitment to the department/university outside of their chosen field, for example undertaking management and administration duties	Essential



### THE DEPARTMENT

### The Department of Biology

Biology at York welcomes staff and students from around the world. We celebrate excellence, breadth and diversity across the spectrum of modern biology. We are proud to foster a supportive culture that allows all staff and students to reach their full potential. The Department of Biology has a research portfolio that spans ecology to structural biology, and the Department's research has been judged world leading in biochemistry, chronic disease, microbiology, plant biology and ecology. Departmental research is focused around fundamental science research foci, which are Ecology and Evolution, Infection and Immunity, Microbiology, Plant Biology, Cell and Developmental Biology, Biochemistry and Biophysics, Molecular and Cellular Medicine and Bioinformatics and Mathematical Biology.

Following the 2014 REF the Department of Biology at York has again been placed in the Top 10 in the UK. It is 1st for impact outside academia – our research has had major influence on environmental policy, industry and health. This demonstrates our strengths across the biological sciences: from ecology to biochemistry, biotechnology and biomedical sciences.

Biology at York is in fourth place in the Guardian UK University Guide 2015 league table. The University of York is also ranked fourth place in the 2015 Complete University Guide. The Department of Biology covers the spectrum of contemporary biological sciences with no internal barriers, and collaboration within the Department is strongly encouraged. Our Department comprises approximately 65 academic staff, 1 independently funded research fellow, 85 research associates, 170 support (technical, professional and administrative) staff, 180 graduate students, and approximately 863 undergraduates. Several senior positions are funded by charities or industry.

The Department has successfully continued to establish new laboratory space and refurbish our existing space. A new £6M teaching wing opened in 2014 and phase 2 of our expansion is currently under construction is due to open in 2016.

A further major £25M development included the establishment of the Technology Facility, which provides ready access to a wide range of cutting edge equipment, technology and associated expertise. With six specialist laboratories, 2,000m2 of laboratory space and dedicated Laboratory Heads and technicians, the Technology Facility is an integrated part of how we undertake research in the Department. The six laboratories comprise: Imaging and Cytometry, Proteomics, Genomics, Protein Production, Molecular Interactions, and Bioinformatics. Full details of the Technology Facility can be found at <u>http://www.york.ac.uk/biology/technology-facility/</u>

The Department of Biology operates a set of family-friendly



### THE DEPARTMENT

policies and welcomes applications that are made on a parttime and job share basis. We will do our best to accommodate such requests where possible.

Staff working patterns are flexible and a formal flexitime system is also in operation. We provide support and advice for staff taking maternity, paternity, adoption and parental leave, and the University has a nursery and a Child Care voucher scheme.

The Department strives to address gender inequalities and ensure that there is a culture that supports equality and encourages better representation throughout the department. Support for women at all stages of their career is recognised as being extremely important.

The Biology Department at York has been awarded Gold by Athena SWAN, and is one of only three Departments to have achieved this highest level in the recent round of assessments.

It is the first Biology Department in Britain to have received a Gold award. For further information please refer to our information on Athena Swan.



Further information about the department is available at: <a href="http://www.york.ac.uk/biology/">http://www.york.ac.uk/biology/</a>

The Department hosts several research units or centres, including the Centre of Excellence in Mass Spectrometry (joint with Chemistry), the Yorkshire Cancer Research Unit and the Jack Birch cancer research unit. <u>The Centre for Novel</u> <u>Agricultural Products (CNAP)</u> is a centre of excellence for strategic research in the Department, with its national status as a major innovator in the use of renewable resources recognised in 2006 through the Queen's Anniversary Prize for Higher and Further Education. The aims of the Centre are to solve real-world problems concerning biorenewables, bioenergy, natural product discovery and development and environmental bioremediation through the sustainable use of plants and microbes.

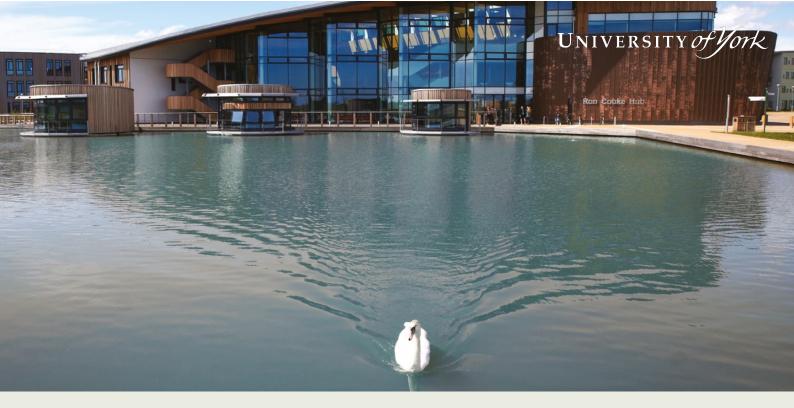
The <u>Bioscience Technology Facility</u> is a unique resource providing a purpose-built facility for our world-class scientists and technologists working across six bioscience research capabilities. Collectively it brings together a unique range of expertise and equipment, and is recognised as a leading example of how to provide research support in the 21st Century. The focus is on six core areas: Bioinformatics, Genomics, Imaging & Cytomtery, Molecular Interactions, Protein Production, and Proteomics. There are also dedicated facilities for studying ancient DNA, and researching palaeoecology, evolutionary origins and environmental change. As befits a department of our size, we have an extensive support infrastructure underpinning our teaching and research. This includes teams in operational services; graphics; horticultural; supplies and goods services; and teaching laboratories technicians. We provide excellent animal house facilities and mechanical and electronic workshops. We also have in-house specialists in Health & Safety, Information technology (IT) and Human resources (HR). Expert help is available to assist with external funding proposals for research activities.

The quality of our teaching is of equal importance to our research and indeed the success of each feeds upon the other. The Biology Department places great emphasis on the quality of teaching and learning at both undergraduate and graduate levels. We are ranked highly in recent National Student Surveys and University league tables.

The undergraduate programme in the Biology Department comprises a BSc in Biology with a number of other specialist degrees: Genetics; Ecology, Biotechnology and Microbiology; Molecular Cell Biology. Other Biology programmes include a year in Industry or Europe, as well as integrated Masters degrees. As with all degree courses in the Department, students take a final year research project over two terms that currently contributes 20% to the degree classification. The Department sets great store by small-group teaching, and all 1st and 2nd year students receive a weekly tutorial in a group of four with a member of staff. In addition to lecturing, running practical classes and taking tutorials, other teaching contributions include supervision of both undergraduate and postgraduate research projects.

In 2014, the Department was awarded an <u>Athena SWAN Gold</u> <u>Award</u> that recognises our commitment to, and achievement in, developing excellent employment practices that support the career advancement of women working in science, engineering and technology (SET) in academia. In a survey undertaken as part of our 2013 Athena submission, more than 90% of academic staff and more than 97% of students regarded the Biology Department as a great place to work for both genders.

The Department of Biology operates a set of family-friendly policies and welcomes applications that are made on a parttime and job share basis. We will do our best to accommodate such requests where possible. Staff working patterns are flexible and a formal flexitime system is also in operation. We provide support and advice for staff taking maternity, paternity, adoption and parental leave, and the University has a nursery and a Child Care voucher scheme. The Department strives to address gender inequalities and ensure that there is a culture that supports equality and encourages better gender representation. Support for women at all stages of their career is recognised as being extremely important.



## The University

Founded on principles of excellence, equality and opportunity for all, the University of York opened in 1963 with just 230 students. In 2015 it is the centre for almost 16,000 students across over 30 academic departments and research centres. In just over 50 years we have become one of the world's leading universities and a member of the prestigious Russell Group.

### Academic excellence

The University has consistently been recognised as one of the leading Higher Education Institutes and is one of just six post-war universities which appear in the world top 100 (2013-14) and 11th in the Times & Sunday Times league table (2014). The University of York has won six Times Higher Education (THE) Awards and five Queen's Anniversary Prizes.

We are proud of our association with Athena SWAN in support of women in science, with gold awards for both Chemistry and Biology and a University-wide bronze award.

Our vision is to make the University of York a world leader in the creation of knowledge through fundamental and applied research, the sharing of knowledge by teaching students from varied backgrounds and the application of knowledge for the health, prosperity and well-being of people and society.

Out of 154 universities that took part in the Research Excellence Framework (REF 2014), The University of York ranks 14th overall and 10th on the impact of our research. The University is consistently in the top ten UK research universities and attracts over £60m a year of funding from research alone.

### Attractive workplace

Centred around the picturesque village of Heslington on the edge of the city of York, our colleges are set in an attractive landscaped campus. With a compact and easy to get around design, York enjoys a safe, friendly atmosphere. The campus offers a wealth of facilities, which includes bars, shops, theatres and concert halls all within easy walking distance.

The University has undergone an unprecedented period of expansion and renewal. Since 2000 we have invested in twenty new buildings on the original campus and have completed the first and second phases of a £750m campus expansion. Our investment in new colleges, teaching and learning space, laboratories, research facilities and a new sports village mean there has never been a better time to join us.

During this period of change we've worked hard to retain our friendly, informal and collegiate atmosphere, which is important to our core values of inclusivity and interdisciplinarity.

We have a thriving international community and are committed to providing all staff moving to York with as much support as possible through our <u>Relocation Package</u> and <u>Welcome Officers</u>.

The University aims to offer a nurturing and supportive environment as an employer. Flexible working hours, nursery facilities, childcare vouchers, cycle to work scheme, generous holidays and an attractive pension scheme all make the University of York one of the region's leading employers.

For further information please visit Rewards Extra



### THE CITY AND THE REGION

### The City of York

Internationally acclaimed for its rich heritage and historic architecture, York's bustling streets are filled with visitors from all over the world. Within its medieval walls you will find the iconic gothic Minster, Clifford's Tower and the Shambles – just a few of the many attractions.

But York isn't just a great place to visit - it's also a great place to live and work. While nourishing a vibrant cosmopolitan atmosphere, York still maintains the friendly sense of community unique to a small city.

Visit <u>www.visityork.org</u> for more information on the city of York

#### Shopping, culture and entertainment

York boasts specialist and unique boutiques but also all the high street stores on its busy shopping streets. Alongside them you will find cinemas, theatres, an opera house, art galleries, a vast range of restaurants, live music venues and clubs. York is particularly renowned for its multitude of pubs and bars, from the modern to the medieval.

### Housing and schools

Whether you choose to live close to the city, in one of the surrounding villages or further afield, you will find a wide range of housing within comfortable distance of York and the University. For families, the area has a range of excellent schools both in the state and independent sector.

### **Great location**

York is one of Britain's best-connected cities. Halfway between London and Edinburgh on the East Coast mainline, on intercity trains you can reach London King's Cross Edinburgh in less than two hours and Edinburgh in two and a half hours. York is also well THE UNIVERSITY served by road links, and it is easily accessible from Mancheste the A1. M1 and the M62. For those travelling from

For those travelling from overseas, Manchester Airport is two hours away and Heathrow Airport just

three and a half. Flights from nearby Leeds Bradford Airport provide easy access to mainland Europe. By Eurostar from London St Pancras, Paris is just over six hours away.

#### Yorkshire

The Lonely Planet guide recently declared Yorkshire the third best region in the world to visit. There is something to cater to every taste, whether it be the rugged landscapes of the Moors or the Dales, the picturesque seaside towns of Scarborough and Robin Hoods Bay, the gothic architecture of Whitby or the vibrancy of cosmopolitan Leeds.





### HOW TO APPLY

### **Apply online**

- Go to <u>https://jobs.york.ac.uk</u>
- Find this job using reference 4662
- Complete the online application form

You will need to submit your completed application by midnight (GMT) on 15 January 2016

### What will I need?

You will need to upload:

- your CV
- a letter describing how you meet the requirements of the job

You will also need details of 3 referees.

### Help and assistance

Direct any informal queries to <u>seth.davis@york.ac.uk</u> or <u>thorunn.helgason@york.ac.uk</u>

If you have any questions about your application, contact the HR Services team:

recruitment@york.ac.uk

+44 (0)1904 324835

