Chair in Plant Biology
Department of Biology

Closing date: 2 October 2022
Interview date: 10 November 2022
Vacancy reference: 11174
INTRODUCTION

The Department of Biology is seeking to recruit an outstanding plant biologist to join the Centre for Novel Agricultural Products (CNAP). Research within CNAP aims to realise the potential of plant, microbial and algal-based renewable resources through gene discovery. From developing sustainable food crops, biosynthesis of natural products and production of sustainable textiles to advancing plants for land decontamination.

We are looking for an outstanding individual with a strong international profile who has research interests in any of the following areas: engineering biology, plant microbiomes, plant genome structure and evolution, plant based medicinal compounds, orphan crops, comparative genomics or photosynthesis.

The position will be based in the Centre for Novel Agricultural Products in the Department of Biology with access to our world-class Bioscience Technology Facility containing state-of-the-art technologies and support for imaging, cytometry, -omics, and biomolecular analysis. The University of York is proud to be a top 10 UK University for Research according to REF2021. Biological sciences research at York has been consistently ranked in the UK top 10 since 2008, including in REF2021. CNAP has an excellent reputation for applying fundamental research to create societal impact, and this new position will develop new research areas that complement existing strengths in, for example, bio-based production of chemicals and high value products, utilisation of sustainable feedstocks for bio-production, improving agriculture and bioremediation, and plant based medicinal compounds. We are interested in applicants with research programmes that consist of excellent fundamental science that is targeted at making high impact science discoveries as well as developing novel solutions for biotechnological use. Applicants should have a well-developed research portfolio and a desire to be a leader and mentor for early career colleagues.

The Biology Department runs highly successful taught undergraduate and masters degree programmes in Biology and specialist areas including Biochemistry, Biomedical Sciences and Biotechnology. We expect the successful candidate will provide leadership, ideas and new disciplinary strengths to influence the development of our taught portfolio. The department has a diverse graduate student body and we would expect the successful candidate to build a research group of graduate students and post-docs.

Professor James Moir
Head of Department
Main purpose of the role
Chairs at York are expected to advance their subject nationally and internationally and to contribute to maintaining the University as an international centre of excellence for the relevant subject area through research and publication, teaching, networking and consultancy.
Chairs are required to undertake the following duties:

Key responsibilities

To support the research activities of the Department
- To carry out internationally outstanding research and scholarship
- To disseminate this research through monographs, articles in journals of international standing, and other appropriate forms of dissemination, including national and international conference presentations
- To play a leading role in the Department in identifying and securing external funding through research grants and contracts, and in developing collaborative research income-generating activities
- To attract and supervise research students, and, as appropriate, post-doctoral researchers and other support staff
- To support, comply with, and contribute fully to research plans and policies of the Department and the University
- To support and mentor junior academic colleagues in order to promote quality of teaching and research and their career development

To contribute to the efficient management and administration of the Department
- To make an important contribution to the leadership and management of the Department, including supporting early career staff and developing new collaborative initiatives
- To attend Departmental meetings, meetings of the Board of Studies, and other committees and working groups within the Department and University
- To carry out relevant professional duties, commensurate with the Professorial grade
- To undertake specific departmental roles and management functions as may be reasonably required by the Head of Department

JOB DESCRIPTION

At a glance

<table>
<thead>
<tr>
<th>Salary</th>
<th>Commensurate with experience on the Professorial scale (minimum £67,940)</th>
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<tbody>
<tr>
<td>Hours of work</td>
<td>37 per week (flexibility available)</td>
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<tr>
<td>Contract type</td>
<td>Open</td>
</tr>
<tr>
<td>Based at</td>
<td>Heslington Campus</td>
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To support the teaching objectives of the Department
- To design and be responsible for delivery of modules and teaching programmes for undergraduate and graduate students
- To play a leading role in departmental and interdepartmental curriculum development and quality enhancement
- To coordinate team teaching, as required, including liaison with other staff and with postgraduates who teach
- To design and mark assessments, and give feedback
- To supervise undergraduate and graduate projects and dissertations
- To carry out teaching in Continuing Professional Development
- To undertake pastoral support of students, as a personal supervisor or in another designated role
- To support and promote fully the University and Department teaching quality assurance standards and procedures
- To make an important contribution to the leadership and management of the Department, including supporting early career staff and developing new collaborative initiatives
- To attend Departmental meetings, meetings of the Board of Studies, and other committees and working groups within the Department and University
- To carry out relevant professional duties, commensurate with the Professorial grade
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# PERSON SPECIFICATION

<table>
<thead>
<tr>
<th>Qualifications</th>
<th>Essential / Desirable</th>
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<tbody>
<tr>
<td>PhD in Plant Biology or related discipline</td>
<td>Essential</td>
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<tr>
<td>Membership of professional societies</td>
<td>Desirable</td>
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## Knowledge

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<tr>
<th>Knowledge</th>
<th>Essential / Desirable</th>
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<tbody>
<tr>
<td>Outstanding and internationally recognised knowledge of relevant subject area</td>
<td>Essential</td>
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## Skills, abilities and competencies

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<thead>
<tr>
<th>Skills, abilities and competencies</th>
<th>Essential / Desirable</th>
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<tbody>
<tr>
<td>Ability to define, lead, manage and attract funds for internationally excellent research, operating across disciplinary boundaries</td>
<td>Essential</td>
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<tr>
<td>Proven leadership and managerial skills</td>
<td>Essential</td>
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<tr>
<td>Ability to manage and interact with staff and students at all levels and to contribute to broadening the strategic development of the Department</td>
<td>Essential</td>
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<tr>
<td>Evidence of international collaboration</td>
<td>Desirable</td>
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<td>Evidence of peer review activities</td>
<td>Desirable</td>
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## Experience

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<tr>
<th>Experience</th>
<th>Essential / Desirable</th>
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<tr>
<td>International leader in a major research field, leadership of research group/theme</td>
<td>Essential</td>
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<tr>
<td>Substantial publication record in leading peer-reviewed journals</td>
<td>Essential</td>
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<tr>
<td>Attraction and effective supervision of postgraduate students</td>
<td>Essential</td>
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<tr>
<td>Significant and sustained success in accessing research grants and other external funding</td>
<td>Essential</td>
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<tr>
<td>Exceptional achievement in curriculum development, course design and teaching, learning and assessment methods at UG and PG levels and in encouraging student access and engagement</td>
<td>Essential</td>
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## PERSON SPECIFICATION

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<thead>
<tr>
<th>Experience (continued)</th>
<th>Essential / Desirable</th>
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<tbody>
<tr>
<td>Invited presentations at major international conferences</td>
<td>Essential</td>
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<tr>
<td>Effective and sustained involvement in major administrative tasks or positions of responsibility within a department or research unit</td>
<td>Essential</td>
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<tr>
<td>Authorship of books</td>
<td>Desirable</td>
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<tr>
<td>Editorial duties with journals</td>
<td>Desirable</td>
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<tr>
<td>Activity as an invited examiner at other institutions</td>
<td>Desirable</td>
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<tr>
<td>Participation in national teaching initiatives or international equivalents</td>
<td>Desirable</td>
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## Personal attributes

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<th>Essential / Desirable</th>
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<tr>
<td>Demonstrable capacity for strategic thinking and planning</td>
<td>Essential</td>
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<td>Ability to take a lead in key administration functions within the department</td>
<td>Essential</td>
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<tr>
<td>Self-motivated, pro-active and innovative</td>
<td>Essential</td>
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<tr>
<td>Strong personal commitment to equality, and diversity and inclusion</td>
<td>Essential</td>
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The Department of Biology at the University of York welcomes staff and students from around the world. We celebrate excellence, breadth and diversity across the spectrum of modern biosciences.

Research
Our research is focused around fundamental science research foci, which are Biochemistry and Biophysics, Bioinformatics and Mathematical Biology, Cell and Developmental Biology, Ecology and Evolution, Industrial Biotechnology, Infection and Immunity, Microbiology, Molecular and Cellular Medicine and Plant Biology. The Department has successfully continued to establish state-of-the-art laboratory space and a new teaching building opened in Autumn 2016. In the 2014 Research Excellence Framework (REF) exercise, the Department of Biology was again placed in the top 10 in the UK. We are ranked 1st for impact outside academia - our research has had a major influence on environmental policy, industry and health. This demonstrates our strengths across the biological sciences: from ecology to biochemistry, biotechnology and biomedical sciences; collaboration across disciplines both internally and externally is strongly encouraged and valued.

Our Bioscience Technology Facility is a unique resource providing a purpose-built facility for our world-class scientists and technologists working across five bioscience research capabilities. Collectively it brings together a wide range of expertise and equipment, and is recognised as a leading example of how to provide open access research support in the 21st Century. The facility has five core areas: Genomics and Bioinformatics, Imaging & Cytometry, Metabolomics and Proteomics, Molecular Interactions, and Protein Production. Supported by over 20 dedicated staff, the facility gives ready access to a wide range of technologies and expertise in an integrated manner that can help drive forward your research efficiently and cost effectively.

Teaching
The Department places high value on its research-led undergraduate teaching which is reflected in our performance in university league tables and the National Student Survey (NSS). The University holds a Gold Teaching Excellence Framework (TEF) award and we are preparing for subject-level TEF in 2020. Our staff are committed to delivering high-quality teaching and developing and applying innovative and appropriate teaching techniques using material which creates interest, understanding and enthusiasm amongst students. Staff continually review teaching content and the curriculum, to ensure our programmes remain up-to-date and excellent.
THE DEPARTMENT OF BIOLOGY

The department is strongly involved with two prestigious Doctoral Training Partnerships (DTP); the White Rose Doctoral Training Partnership in Mechanistic Biology and its Strategic Application (BBSRC) and Adapting to the Challenges of a Changing Environment (NERC). The former brings together the very best molecular, chemical and cellular bioscience research across the White Rose Consortium of Universities (Leeds, Sheffield and York), while the latter encompasses environmental, ecological and evolutionary research across the Universities of York, Sheffield and Liverpool, together with the Centre for Ecology and Hydrology. Students benefit from PhD training programmes with interdisciplinary collaboration at their core. This enables students to develop a range of research skills in biological, biochemical, ecological and environmental areas as well as equipping them with core mathematical, data analysis and generic professional skills that are necessary for bioscience research in the coming decades.

Centre for Novel Agricultural Products
The Centre for Novel Agricultural Products (CNAP) aims to realise the potential of plant, microbial and algal-based renewable resources through gene discovery. From developing sustainable food crops and biofuels to advancing plants for land decontamination, we maximise the value of plants without compromising food security. We use cutting-edge research to harness the power of nature for the development of new products and processes.

CNAP is a centre of excellence where leading researchers investigate fundamental processes driving biological systems. We then apply these insights to solve some of the most pressing environmental, societal and industrial challenges of the 21st Century.

Natural product biosynthesis
Low carbon fuels and chemicals
Algal metabolism and biotechnology
Crops for a sustainable planet

Our Ethos
The Department of Biology operates a set of family-friendly policies and, where appropriate to the role, welcomes applications that are made on a part-time and job share basis. We will do our best to accommodate such requests where possible. Staff working patterns are flexible, a formal flexitime system is also in operation and the University has a nursery on site.

We are proud to foster a supportive culture that helps staff and students reach their full potential and we embrace equality, diversity and inclusion as well as the values of the Athena SWAN Charter in all our departmental activities. Our philosophy is that poor working practices discriminate disproportionately against any potentially disadvantaged group whereas good practices support all.

We have a Gold Athena SWAN award in recognition of our culture, ethos and activity.
OUR COMMITMENT TO EQUALITY, DIVERSITY AND INCLUSION

Founded on the principles of excellence, equality and opportunity for all, the University is proud to create an environment that attracts staff and students from all over the world. What we gain from diversity is immeasurable.

Our Equality, Diversity and Inclusion Strategy, which was developed in partnership with our staff and student communities, describes our commitment to create a culture where everyone can contribute to university life, knowledge and growth.

We want to create a working, learning, social and living environment that will enable all staff and students to achieve their full potential. Our strategy sets out an ambitious set of objectives to succeed in our commitment, but we have a challenging journey ahead. We recognise that we are not truly representative of our communities locally, nationally and internationally. We would like to pay particular focus to gender parity across all levels, particularly in senior roles; the recruitment, retention and success of a more ethnically diverse staff and student community; an accessible and inclusive campus and ensuring that the values and behaviours we expect from everyone embrace inclusive responsibility and leadership.

Opportunity for all
Our outreach programmes and widening participation work have made us one of the most socially diverse universities among our peers. The York Students in Schools (YSIS) programme has been providing a helping hand in the city’s classrooms for 25 years, placing around 700 students with local schools every year. It recently introduced a new English and Mathematics tutoring scheme.

A report by The Reform Research Trust in September 2017 ranked York second out of 29 high-tariff institutions for our track record in increasing access for disadvantaged students from 2011/12 to 2015/16.

Wellbeing and support
Students are encouraged to balance their studies with activities and interests to give them a healthier and more rounded student experience. We have invested heavily in support of physical health with new and improved sports facilities, and in mental health through our Open Door counselling and crisis team which now opens in the evenings during term time. We have also developed a support network of staff trained in Mental Health First Aid. University staff have access to wellbeing help and support, and can access advice through our site. Further information on our health and wellbeing support can be found at https://www.york.ac.uk/staff/support/.
THE UNIVERSITY

We are a world-class institution, focused on creating an environment of excellence in which all our students, staff and researchers can thrive. Our Research Strategy encompasses our vision that York should provide a home for some of the best research in the world. ([https://www.york.ac.uk/research/](https://www.york.ac.uk/research/))

We are a high-performing member of the Russell Group, ranked joint 18th in the Guardian Good University Guide 2022, 19th in the Times Good University Guide 2022 and 19th in the Complete University Guide 2023.

In the recent Research Excellence Framework (REF) exercise, York was ranked in the top 10 of UK universities for research quality, with all of our subject areas ranked in the top 30 (with four Departments positioned in the top five). Over 50 per cent of our research was judged to be four star or “world-leading” and 40 per cent to be three star or “internationally excellent”.

We have been awarded TEF Gold for our research-led teaching which provides "consistently outstanding outcomes for students from all backgrounds".

Our Equality, Diversity and Inclusion Strategy speaks to the core of our values. We hold 23 awards from Athena SWAN, recognising the advancement of gender equality: representation, progression and success for all.

At the heart of the region
The University is deeply embedded in the local community of North Yorkshire. Our values and commitment to the public good have never been more important. We are a hub for sharing knowledge, inspiring collaboration and enriching lives.

In 2021 we were shortlisted for Times Higher Education's University of the Year Award in recognition to the University's response to the Covid pandemic [The Year We Came Together - Our Covid-19 response](https://www.york.ac.uk/about/mission-strategies/vision-for-york/).

Across the University, we are mobilising our knowledge, our people and our resources to tackle the immediate and long-term challenges. The new University Strategy 2030, ([A University for Public Good](https://www.york.ac.uk/about/mission-strategies/vision-for-york/)) was launched at the end of 2021, outlining our vision and strategy for the next decade.

Further information on the new strategy can be found on the following webpages; [https://www.york.ac.uk/about/mission-strategies/vision-for-york/](https://www.york.ac.uk/about/mission-strategies/vision-for-york/).
THE UNIVERSITY

Centred around the picturesque village of Heslington on the edge of the city of York, our colleges are set in an attractive landscaped campus. York enjoys a safe, friendly atmosphere with facilities including 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 spaces, 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 staff moving to York with as much support as possible through our Relocation Package and Welcome Officers.

The University is committed to promoting a diverse and inclusive community - a place where we can all be ourselves and succeed on merit. We offer a range of family friendly, inclusive employment policies, flexible working arrangements, staff engagement forums, campus facilities and services to support staff from different backgrounds.

For further information please visit our employee benefit pages.
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 www.visityork.org 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 in less than two hours and Edinburgh in two and a half hours. York is also well served by road links, and it is easily accessible from the A1, M1 and the M62.

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.
Apply online

- Go to https://jobs.york.ac.uk
- Find this job using reference 11174
- Complete the online application form

You will need to submit your completed application by midnight (local UK time) on 2 October 2022.

What will I need?

We will ask you for details of:

- Your CV
- A cover letter describing your motivation for application and how you meet the requirements of the job
- A statement of your research and teaching intentions

You will also need details of three academic referees (one International) and one Employment referee.

Help and assistance

For an informal discussion regarding this post, please contact Professor Neil Bruce (nell.bruce@york.ac.uk)

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

recruitment@york.ac.uk
+44 (0)1904 324835