



## Introduction

The John Innes Centre (JIC) is a world-renowned, independent, international centre of excellence in plant science, genetics and microbiology. It fosters a creative, curiosity-driven approach to answering fundamental questions in bio-science, and translating research into societal benefits.

JIC is one of eight <u>UKRI-BBSRC</u> strategically funded Research Institutes. It is located on the Norwich Research Park in the UK.

### Our Mission and vision

The JIC's mission is to generate knowledge of plants and microbes through fundamental research and to use this knowledge to benefit agriculture, the environment, human health and well-being. It provides world-class postgraduate education in plant science and microbiology as part of its mission to train the scientific leaders of the future and is committed to engaging with policy makers and the public.

JIC is at an exciting point in its history having developed an ambitious vision delivering solutions to global challenges with The Sainsbury Laboratory (TSL). Healthy Plants, Healthy People, Healthy Planet (HP³) seeks to secure a safer, healthier and more sustainable future through the power of plant and microbial science. It addresses three critical challenges facing the planet which must be addressed in a rapidly closing window of time. These are:

- Feeding the world by sustainably increasing crop yields
- Combatting global health threats such as antimicrobial resistance and viral pandemics
- Meeting the challenge of climate change developing crops resilient to environmental fluctuations and requiring inputs that are low carbon

A recent transformational £317 million investment from the UKRI Infrastructure Fund and £51 million in private capital investment are enabling the JIC and The Sainsbury Laboratory's to also realise their ambitious Next Generation Infrastructure programme. The development of the site over the new six years will provide new, cutting-edge, interdisciplinary facilities and create a UK hub for plant and microbial research. This will supercharge the national ability to translate scientific knowledge into practical solutions and allow delivery of the Institutes' HP³ vision.



#### Our successes

The JIC's success is built on its international workforce, collaborations and outlook. It is a vibrant, diverse, multinational research community including a workforce from 44 countries. Its international scientific reputation is built on its commitment to excellence, as well as training and developing all staff, strengths in publications and research, the provision of state-of-the-art research facilities, and a high performing environment. It attracts leading early career researchers and the brightest PhD students, postdoctoral scientists and fellows with the potential to be future research leaders.

Over the last several years JIC has launched several spin-out companies. These companies cover a range of fields including biomedical aspects of vaccine production, the development of advanced infield diagnostic tools to speed up testing for high-profile viral infections and the production of enzymes, substrates and technical support providing the pharmaceutical industry and researchers with tools to screen novel anti-infective and anti-cancer compounds.

We are also proud to have collaborated with our partners on the Norwich Research Park (NRP) in the recent launch of a new Centre for Microbial Interactions. The centre represents one of the world's largest concentrations of microbiologists on a single site, with more than 100 microbiology research groups based at the NRP's partner institutions and businesses. .

In 2022/23, the John Innes Centre had a total income of £58.4m and total expenditure was £53.5m. This includes research, research infrastructure, and research support. Independent research has shown that for every £1 invested in the John Innes Centre, £15 is generated for the wider UK economy.





As a testimony to the dynamic, supportive and collegiate working environment and research excellence, amongst JIC's Group Leaders there are six Fellows of the Royal Society, alongside EMBO members and Group Leaders with civic Honours. Many JIC scientists are members of Science Advisory Boards, Editorial Boards and grant reviewing committees, and recent highlights of awards won by the researchers include:

- <u>Dr Diane Saunders OBE</u> received the British Society for Plant Pathology (BSPP) RKS Wood Prize for 2024, recognising the profound impact of her work on the understanding of plant-pathogen interactions and agriculture and her dedication to mentoring young scientists.
- <u>Dr Yiliang Ding</u> was the first UK plant scientist to receive a Blavatnik Award, recognising her fundamental discoveries about RNA and her dedication translating this into real work solutions.
- <u>Dr Simon Griffiths</u> won the 2024 Royal Agricultural Society of England (RASE) award for Science and Technology, which recognises outstanding contributions to the agricultural industry.

The JIC's focus on identifying, nurturing and training future research leaders is a primary driver of its scientific effectiveness. JIC is committed to staff and student development and creating a supportive and inclusive research environment in which everyone can achieve their potential. This is underpinned by our scientific facilities and 15 Technology and Research Platforms, which support our research and training all the way from the molecule to the field. Our Germplasm Resources Unit is also a national capability. It aims to capture the broadest possible gene-pool diversity of the UK's major strategic crops and crop wild relatives, to support plant science and crop improvement through breeding.

Further information is available on the John Innes Centre website at: www.jic.ac.uk

# JIC's Research

The JIC's core research areas are funded by the UK Biotechnology and Biological Sciences Research Council (BBSRC) and directly address the UK Government's objectives in Food Security, Net Zero, Human Health and Industrial Biotechnology. The strategically funded BBSRC research is organised into four Institute Strategic Programmes (ISPs):

## **Advancing Plant Health**

Feeding the world sustainably in the face of the climate emergency is one of the biggest challenges of our time. Currently, up to 30% of global crop yields are lost each year to pests and diseases, costing the world economy \$540 billion annually. To tackle this issue, the Advancing Plant Health (APH) ISP through its four work packages is investigating the molecular mechanisms behind plant interactions with pathogens, pests, and beneficial microbes. By building upon recent discoveries in plant immune systems, genomics, and advanced bioimaging, the program aims to protect crops against diseases and parasites and enhance plant growth, resilience, and sustainable agricultural productivity. Find out more - Advancing Plant Health (APH) | John Innes Centre (jic.ac.uk)

## **Building Robustness in Crops**

The aim of the Building Robustness in Crops (BRiC) ISP is to deliver genetic diversity and knowledge, innovative technologies and training to allow sustainable production of robust high-yielding crops. Our research is focusing on oilseed rape, pea, cereals and Brassica vegetables and has been developed through consultation with industry to identify key problems and challenges for crop production. We will use an interdisciplinary approach combining our research expertise in crop science, plant developmental biology, gene regulation, genomics and computational biology to develop new knowledge and resources to facilitate innovation in the agro-economy. Find out more - Building Robustness in Crops (BRiC) | John Innes Centre (jic.ac.uk)

## **Delivering Sustainable Wheat**

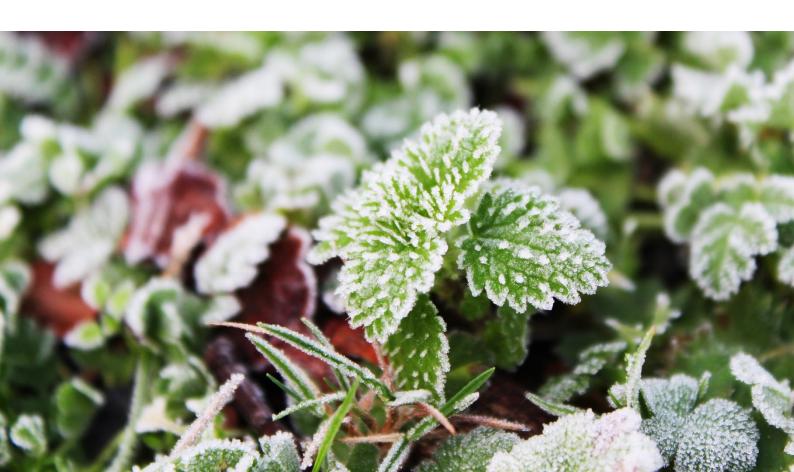
Wheat is an essential crop globally and is a staple in the UK and Western Europe. With a projected population of 10 billion by 2050, the need for sustainable wheat production is urgent. However, the current production of wheat is fragile, and the majority of the world's supply comes from just five countries. Climate change, new diseases, and declining water resources pose significant challenges for farmers, and future increases in production must be achieved without equivalent growth in fertilizer use, which is a significant source of greenhouse gases. This new, multi-disciplinary programme brings together the complementary skills of four research institutes – the John Innes Centre, Rothamsted Research, Quadram Institute, and Earlham Institute – the National Institute of Agricultural Botany, and the universities of Leeds, Nottingham, Lancaster, Bristol, and Imperial College London. Find out more – Delivering Sustainable Wheat (DSW) | John Innes Centre (jic.ac.uk)

### Harnessing Biosynthesis for Sustainable Food and Health

Human society is dependent upon products made by plants and bacteria. Two major, interwoven challenges of national and global importance are the supply of sufficient, nutritious, and sustainably produced food, and the maintenance and extension of healthy lifespans. Our capacity to discover, identify, edit and produce chemicals has been revolutionised by recent large-scale sequencing of plant and microbial genomes. These genomes reveal that plants and bacteria can make many products that have not yet been identified and tested. We will exploit plant and bacterial genomic information to discover novel natural products likely to contribute to new generations of medicines, antibiotics and other valuable natural chemicals such as environmentally-friendly pesticides. State-of-the-art technologies will be used to determine the mechanisms of action of these novel molecules. Find out more - Harnessing Biosynthesis for Sustainable Food and Health (HBio) | John Innes Centre (jic.ac.uk)

There are many examples of excellent research at JIC which has led to impact, to name just a few:

- JIC scientists have developed high-yielding crop varieties, such as Maris Piper potatoes, Maris Otter Barley and Beneforte Broccoli.
- JIC's research led to the generation of the first hybrid antibiotic. This led to five spin-out companies exploiting microbial genomics for antibiotic discovery.
- QS-21 is a potent vaccine adjuvant. Our advances in research on QS-21 open up unprecedented opportunities for bioengineering of vaccine adjuvants, investigating structureactivity relationships and understanding the mechanisms by which these compounds promote the human immune response.
- Determining the molecular basis of vernalisation in plants, a process by which flowering time is regulated.



# Governance and Organisation

The John Innes Centre is organised into five departments:

- Biochemistry and Metabolism,
- Cell and Developmental Biology
- Computational and Systems Biology
- Crop Genetics
- Molecular Microbiology

There are in total about 450 staff members at JIC, including approximately 90 PhD and MSc students and about 40 Research Groups led by Group Leaders. In addition, Norwich Bioscience Institutes Partnership (NBIP), provides support services to JIC, TSL, Earlham Institute and Quadram Institute and the JIC Director manages a range of these support services.

The John Innes Centre's <u>Governing Council</u> is responsible for oversight of the management and administration of JIC's income and expenditure, assets and liabilities. The Governing Council has responsibility for developing the long-term vision for JIC alongside the Director and oversees the management and achievements of the institute.

The Members of JIC are BBSRC, the John Innes Foundation and the University of East Anglia. The Members are all guarantors of JIC, a company limited by guarantee and a registered charity. The Governing Council comprises the Chair, three science and three non-science Trustee Directors and three Trustee Directors representing the Member organisations (BBSRC, JIF, UEA).

The <u>Science and Impact Advisory Board</u> (SIAB) is comprised of internationally renowned scientists and reviews and supports the development of the scientific vision and strategy of the JIC. SIAB is chaired by a Trustee Director and reports to the Governing Council on the JIC's science programmes in relation to JIC's mission.

JIC is involved in significant international collaborations, not just within the EU but also further afield. The JIC helps the UK to be the partner of choice for plant and microbial science research globally. This is achieved through strong links to institutes worldwide and close collaboration with a range of partners including:

- The UK-CGIAR Centre which is harnessing the country's strengths in science and technology to help tackle the interconnected challenges of global food security and climate change.
- JIC's Centre of Excellence in Plant & Microbial Sciences with the Chinese Academy of Sciences (CEPAMS) is an advanced life sciences research programme between the UK and China.
- A strategic collaboration with the International Maize and Wheat Improvement Center (CIMMYT), for joint research, knowledge sharing, and communications to further the global effort to develop the future of wheat.



## The Role

## Purpose of the post

The Director is responsible for leading the organisation's ambitious future strategy, building on the current strengths, and creating new opportunities. Their exceptional leadership will enable the JIC to continue to achieve the highest levels of scientific excellence and its vision as a hub for plant and microbial research. The Director will develop, articulate and promote the vision and strategy to staff, stakeholders, collaborators and funders, including the UK government, and win recognition nationally and internationally.

## Key areas of responsibility

#### Leadership

- 1. Provide inspirational and visionary strategic leadership and management, enabling the JIC to be responsive to the changing research landscape and emerging opportunities.
- 2. Ensure the Institute continues to recruit, retain and develop the talent necessary to deliver its vision and strategy, and to play its part in the training of the next generation of researchers, technical specialists, entrepreneurs and innovators.
- 3. Actively contribute to the provision of an outstanding research setting within JIC, establishing JIC as a hub for plant and microbial science, exemplifying excellent research practice, a positive research culture, and an inclusive environment.

#### **Strategy**

- 4. Working effectively with JIC's Governing Council and management team, provide strong and ambitious leadership in the shaping of JIC's future vision while ensuring we operate within an effective governance framework.
- 5. Ensure the development and implementation of strategic plans which build on the Institute's current vision 'Healthy Plants, Healthy People, Healthy Planet' (HP³).
- 6. Inspire JIC's continued delivery of world-leading discovery, strategic and translational science which supports future grant income and wider economical and societal impacts tackling grand challenges both nationally and internationally.

#### **Partnerships**

- 7. Work with NBI partners to develop the Institute's role as a national coordinating 'hub' for research in the area, building a clear and distinct identity and role within the ecosystem.
- 8. Prioritise the JIC's national and international partnerships and strategic engagement with research communities, driving connections across disciplines where these add value.
- 9. Build on our relationships with BBSRC, NRP, NBI, UEA and work to develop opportunities and capitalise on efficient partnership working and collaborations.



#### **Engagement and relationship management**

- 10. Support the development and maintenance of external relations and stakeholder engagement essential to the Institute's vision and scientific priorities promoting JIC to external bodies, enhancing its reputation, profile and influence in the UK and international forums, and maximising funding and capital investment.
- 11. Ensure the Institute effectively communicates its research to relevant public audiences and policy decision-makers, to maximise its impact.

#### **Business/Commercial Development**

12. Oversee the Institute's strategies for knowledge exchange and commercialisation, ensuring JIC continually scans the horizon for new opportunities for business development and commercialisation, and actively pursues those that align with its strategic objectives.

#### Infrastructure

13. Support the delivery of the Next Generation Infrastructure programme, providing new, cutting-edge and interdisciplinary research facilities at the Norwich Research Park.

#### **Financial and Operational**

- 14. Work to ensure JIC's long-term sustainability, developing a diverse range of funding sources and ensuring the efficient use of Institute resources to meet scientific and/or strategic objectives.
- 15. Support and ensure appropriate structures for management, consultation, decision-making and communication within JIC.



# Person Specification

The successful candidate will be an accomplished scientist and a senior leader, with experience of working with researchers, executives, boards and external stakeholders and funders. They may come from the academic, not for profit, or commercial sectors and they will be able to lead, develop and shape a team to support them in delivery of JIC's vision. They will be able to represent the JIC at the highest levels with a range of stakeholders from academia, Government, BBSRC, UKRI, and industry.

Ideally, they will possess the following attributes:

#### Leadership

- A strong and inspirational leader, able to work with, motivate and develop a wide range of staff and stakeholders.
- Able to enthuse and inspire people to commit to our vision and contribute to our future success by creating an outstanding research environment.
- A respected scientist in plant or microbial science.
- Proven ability and confidence to operate and deliver in a highly visible, senior role.
- Political awareness and well-developed emotional intelligence.

#### **Strategy**

- Leadership success in a similar scientific organisation or environment, demonstrating vision and the ability to operate strategically.
- Astute with the ability to develop the Institute to meet future scientific challenges, while identifying and realising opportunities to ensure sustainability.
- An understanding of the UK and international funding landscape with a successful track record in research and funding.

#### Management

- Ability to manage and build a sustainable, diverse research institute, identifying and managing critical issues while utilising the strengths of staff to deliver the vision.
- Outstanding relationship building qualities and an ability to inspire and assemble high performing, self-managing individuals and professional teams.
- Passionate about collaboration and collegiality, and able to lead JIC through development and change.
- Confident decision maker, with business and financial acumen.

#### Communication, negotiation and relationship management

- Excellent communicator with the ability to act as an ambassador and engage at all levels developing strong productive relationships nationally and internationally.
- Skilled negotiator, able to drive forward the interests of institute and strategic partnerships.
- Able to create, build, strengthen, and sustain collaborative relationships and networks while also enthusing staff, the public, NRP, BBSRC, UKRI.



# Terms of appointment

JIC Governing Council is looking to make the appointment in February 2025, and the new Director will assume the position in Q3 2025.

A competitive salary and benefits package is available for the successful candidate.

# **Equality, Diversity & Inclusion**

JIC is committed to equality of opportunity for all employees, and actively supports inclusivity and diversity. The JIC is proud to hold a prestigious Gold Athena SWAN award in recognition of our inclusive culture, commitment and good practices towards advancing of gender equality. It offers an exciting, stimulating, diverse research environment and actively promotes a family friendly workplace.

# How to apply

Saxton Bampfylde Ltd is acting as an employment agency advisor to JIC on this appointment. Candidates should apply for this role through our website at www.saxbam.com/appointments using code: **IAPAPD.** 

Click on the 'apply' button and follow the instructions to upload a CV and cover letter, and complete the online equal opportunities monitoring\* form.

The closing date for applications is Friday 22nd November 2024.

\* The equal opportunities monitoring online form will not be shared with anyone involved in assessing your application. Please complete as part of the application process.

#### Due diligence

Due diligence will be carried out as part of the application process, which may include searches carried out via internet search engines and any public social media accounts.

#### **GDPR** personal data notice

According to GDPR guidelines, we are only able to process your Sensitive Personal Data (racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data, biometric data, health, sex life, or sexual orientation) with your express consent. You will be asked to complete a consent form when you apply and please do not include any Sensitive Personal Data within your CV (although this can be included in your covering letter if you wish to do so), remembering also not to include contact details for referees without their prior agreement.



# Saxton Bampfylde

#### LONDON

The Ministry, Borough Workspace & Members' Club South London, 79-81 Borough Ro London SE1 1DN

#### EDINBURGH

46 Melville Street Edinburgh EH3 7HF

#### saxbam.com

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