Annual Review

2024 / 2025

John Innes Centre

Unlocking Nature's Diversity

Contents

Cover image: *Wheat at the John Innes Centre's Experimental Farm, Bawburgh, Norfolk. Credit: Felicity Perry*

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Message from our Director

It has been a truly memorable year for our institute, with landmark milestones and inspiring plant and microbial discoveries.

Our mission is to address pressing environmental and societal challenges, such as sustainable, climate resilient food production and agriculture. But we cannot do it alone.

In much the same way as our researchers and platforms work together across the institute, the Norwich Research Park, and even the world, we also need to influence change and development in key areas, such as policymaking, for our science to truly have impact.

This year we have worked to influence policy at the highest level. The passing of the secondary legislation to implement the Genetic Technology (Precision Breeding) Act for plants in England is a fantastic step forward. This evidence-based legislation enables scientific innovation and industry partnerships to benefit plants, people and the planet, enabling more of our cutting-edge science to become a reality.

My research career centred around the study of wheat, and the advances made in recent years shows the exciting potential for the future, unlocking opportunities to sustainably increase the yield of this global crop.

A landmark paper published this year, the result of a decade-long collaborative study, revealed the huge genetic potential untapped in historic wheat varieties. Also, Dr Myriam Charpentier's discovery about root endosymbiosis and its application in wheat could revolutionise fertiliser use in farming.

Personally, it has been a momentous year as I announced my retirement. I am proud to have worked at the John Innes Centre, an incredible place with wonderful colleagues.

I am delighted to be handing over the honour of leading the John Innes Centre to Professor Cristóbal Uauy. He is well placed to guide the institute through the evolution of our infrastructure, building for the future and securing 21st century accommodation that supports the next 50 years and beyond of the John Innes.

Professor Graham Moore FRS
Director of the John Innes Centre

Message from the Chair of the Governing Council

It would be remiss of me to start with anything other than a huge thank you to Graham for his service and dedication to the John Innes Centre as we approach his well-earned retirement.

He has led the institute through the beginning of a huge change programme across site, as we become future-ready with our Next Generation Infrastructure project to create a world-leading hub for plant and microbial science. His leadership and collaboration have been vital.

I would also like to thank Celia Caulcott for being an exceptionally supportive vice-chair during her time on the Governing Council. As Celia steps down, I am pleased to welcome James McCafferty as our new vice-chair.

Looking to the future, I am delighted to welcome Professor Cristóbal Uauy into the role of Director, who will be building on the excellent work that has already been done, while bringing his unique expertise and vision.

And what a time it is for plant and microbial science at the John Innes Centre. Another year has passed, and again I am astounded by the high-quality science and discoveries that our colleagues have been working on.

We continue to focus on increasing our collaboration with the very best scientists in our field nationally and internationally, while building ever stronger links across the brilliant Norwich Research Park.

As part of our fundraising campaign, we have stepped up our engagement by forging strong connections, and engaging others with our vision. Personally, I am always exceptionally proud to talk about our work, promoting the research and discoveries that make us so unique.

Here's to another year of supporting Healthy Plants, Healthy People, and a Healthy Planet.

Sir Thomas Hughes-Hallett
Chair of the Governing Council

About the John Innes Centre

The John Innes Centre (JIC) is a world-leading international centre of excellence in plant science and microbiology based at the Norwich Research

For the past 110 years, JIC has been addressing global challenges through research. Our knowledge of plants and microbes, combined with our creative, curiosity-driven approach, answers fundamental questions and significantly impacts industrial biotechnology, society, and global development.

Healthy Plants, Healthy People, Healthy Planet (HP3) outlines our vision for delivering a safer, healthier and more sustainable future through the power of plant and microbial science.

In collaboration with world-leading academic partners, we are uniquely positioned to lead the fundamental scientific advances needed to address three intertwined, era-defining challenges: feeding the world, global health threats, and climate change.

Research and Impact

Home to more than **35 RESEARCH GROUPS** working on a variety of plant and microbial science research projects.

On the Norwich Research Park we are co-located with a network of outstanding partners: The Sainsbury Laboratory, Earlham Institute, Norfolk and Norwich University Hospital, Quadram Institute and the University of East Anglia.

Our strategic programmes were rated at **VERY GOOD TO EXCEPTIONAL** in BBSRC's Institute Assessment exercise in 2022.

15 SPIN OUTS SINCE 2002 across a range of fields, including biomedical aspects of vaccine production, development of advanced in-field diagnostic tools to speed up testing for high-profile viral infections, and support to the pharmaceutical industry and researchers with tools to screen novel anti-infective and anti-cancer compounds.

Culture and Community

We are committed to fostering an inclusive and supportive environment for all staff and students.

Proud to have been awarded the **ATHENA SWAN GOLD AWARD** in 2017, and to renew this award in 2024.

A founding signatory of the **TECHNICIAN COMMITMENT**

STAFF AND STUDENTS FROM 40 COUNTRIES

World class training for the **SCIENTIFIC LEADERS OF THE FUTURE**. At any one time, we are training around 100 PhD students.

Science highlights 2024–2025

Finding hidden genetic treasure: study uncovers untapped diversity in historic wheat collection

A decade-long study, led by Dr Simon Griffiths and Professor Shifeng Cheng at the Agricultural Genomics Institute at Shenzhen, has discovered huge genetic potential that is untapped in modern wheat varieties.

The international study reveals that at least 60% of the genetic diversity found in a historic collection of wheat is unused providing an unprecedented opportunity to improve modern wheat and sustainably feed a growing population.

"The remaining diversity represents a goldmine of potential to improve modern wheat," said Dr Simon Griffiths. "The missing 60% discovered in this study is full of beneficial genes that we need to feed people sustainably."

Harnessing landrace diversity empowers wheat breeding, Nature. *DOI: 10.1038/s41586-024-07682-9*

Credit: Dr Peter Emmrich

Updated grass pea genome sequence published

An international research collaboration published a chromosome-scale reference genome of the grass pea (*Lathyrus sativus*), enabling further development of this underutilized, climate-resilient legume.

"This genome allows us to unlock the secrets of grass pea's resilience, to further improve this crop for farmers, and inform development of other crops, such as peas," explained Dr Peter Emmrich, Norwich Institute for Sustainable Development (NISD) and visiting group leader at the John Innes Centre.

Improvements in genome accuracy and completeness also allow researchers to study evolutionary links between species, helping identify gene pathways that could be used to improve the crop or to understand its remarkable drought tolerance.

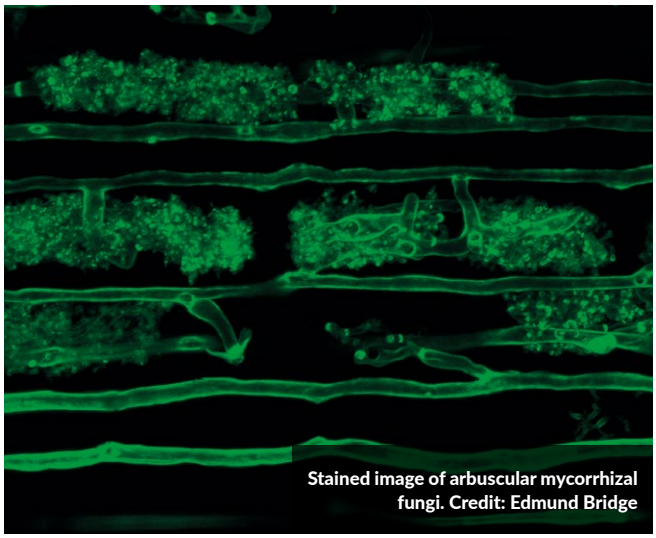
A chromosome-scale reference genome of grasspea (Lathyrus sativus), Scientific Data. *DOI: 10.1038/s41597-024-03868-y*

Fundamental discovery could revolutionise fertiliser use in farming

A new biological mechanism has been found that makes plant roots more welcoming to beneficial soil microbes. The mutation was found in a *Medicago truncatula* gene that reprogrammes the legume's signalling capacity, benefitting partnerships with nitrogen-fixing bacteria and the phosphorus supplying arbuscular mycorrhizal fungi (AMF). Our researchers showed that this same gene mutation created in a calcium signalling pathway enhances endosymbiosis in farming conditions, and in wheat in the field.

"Our findings hold great potential for advancing sustainable agriculture. This mutation offers opportunities for sustainable crop production using endosymbionts, alongside reduced inorganic fertiliser use," said Dr Myriam Charpentier, group leader.

Autoactive CNGC15 enhances root endosymbiosis in legume and wheat. Nature. *DOI: 10.1038/s41586-024-08424-7*



Stained image of arbuscular mycorrhizal fungi. Credit: Edmund Bridge

Mosses and ferns offer new hope for crop protection

Mosses, liverworts, ferns and algae may offer an exciting new research frontier in the global challenge of protecting crops from the threat of disease. These non-flowering plants are often regarded as unsophisticated compared to their flowering relatives. New research has found that bryophytes and mosses in particular, have sophisticated immune receptors.

Dr Phil Carella's group have revealed that nucleotide-binding and leucine-rich repeat receptors (NLR) immune receptor domains, which protect plants against pathogens, are transferable between flowering and non-flowering plants. This breakthrough offers a route to practical applications for crop protection and a source of new resistance genes against pathogens.

"The non-vascular and non-flowering bryophytes are often thought of as simple predecessors of flowering plants, but we find that mosses have an expanded set of immune receptors that are perhaps the most complex amongst plants," said Dr Carella.

+ *The N-terminal domains of NLR immune receptors exhibit structural and functional similarities across divergent plant lineages.* The Plant Cell. *DOI: 10.1093/plcell/koae113*

Barley fine-tunes microbial root communities with sugary secretions

Different types of barley recruit distinct communities of microbes to grow around their roots by releasing a custom mix of sugars and other compounds into the soil.

Dr Jacob Malone, group leader, said: "These microbes help some varieties to grow but not others, suggesting that breeding cereals to recruit beneficial, growth promoting microbes may be possible in the future."

Beneficial microbes that live on or around plant roots can provide nutrition, help the plant withstand stress, and protect it from pathogenic microbes. In return, the plant secretes a portion of the sugars it makes through photosynthesis, along with amino acids and other metabolites, into the surrounding environment.

+ *The genotype of barley cultivars influences multiple aspects of their associated microbiota via differential root exudate secretion.* PLoS Biology. *DOI: 10.1371/journal.pbio.3002232*

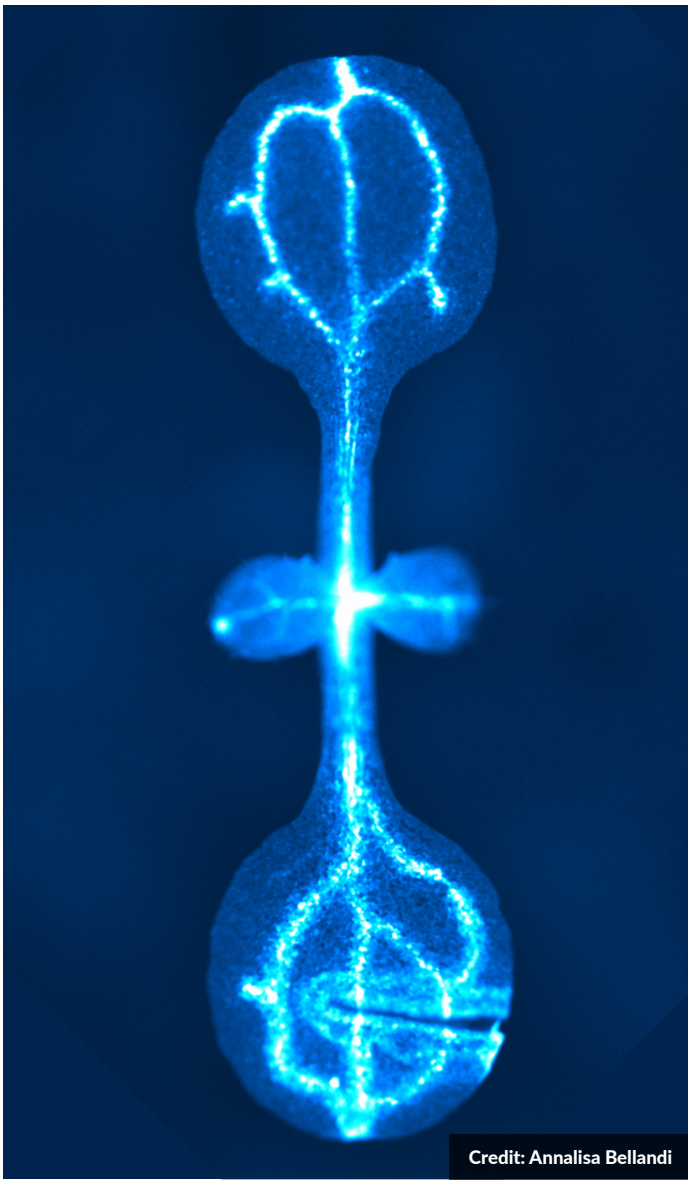
Celebrating success

European funding takes cell-to-cell communication research to next level

Professor Christine Faulkner, group leader, received a European Research Council (ERC) Advanced Grant to support her pioneering research into the mysteries of cell-to-cell communication.

Inspired by their investigations into the route amino acids take through plant tissues, and how they trigger responses in the cells that they pass, ACUTE (Apoplastic signalling communicates emergency responses) will allow the team to explore how a variety of molecules travel between cells, acting as information carriers in response to different stresses.

"We have proposed that the transmission of these signalling molecules is dependent on physical and measurable parameters," said Professor Faulkner. "ACUTE aims to determine these parameters and use them to predict which cells and tissues will respond to different stress signals under different conditions. This way we can predict the overall impact of different stresses across the whole plant."



Credit: Annalisa Bellandi

Major investment for doctoral students on the Norwich Research Park

The Biotechnology and Biological Sciences Research Council (BBSRC) awarded the John Innes Centre a Doctoral Landscape Award, partnered with the University of East Anglia, The Sainsbury Laboratory, the Quadram Institute and the Earlham Institute. These awards support discovery-driven research at universities across the UK to train the next generation of scientists.

Doctoral students will develop their skills and experience across a four-year PhD studentship, with an integrated three-month Professional Internship for PhD Students (PIPS) working on a topic that does not directly relate to their PhD project, to support them to explore future career options.

norwich research park

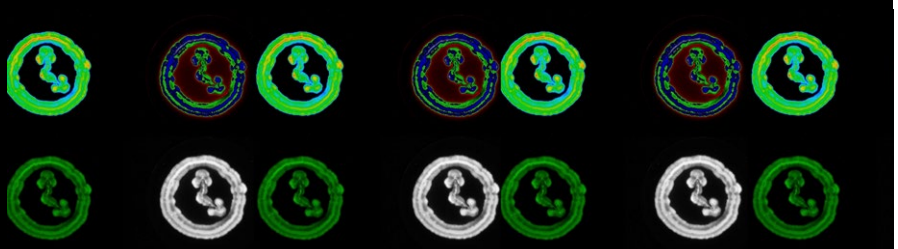
UKRI Biotechnology and Biological Sciences Research Council

European funding to investigate bacteria's biological clocks

An international collaboration investigating the intricacies of biological clocks in bacteria has been awarded European Research Council (ERC) funding.

Professor Antony Dodd, group leader, working with LMU Munich and Leiden secured an ERC Synergy Grant. The project, called MicroClock, follows discoveries by this collaboration of biological or circadian rhythms in the non-photosynthetic soil bacterium *Bacillus subtilis*. The knowledge that this bacterium has internal clocks, which synchronises its activities to daily cycles, opens exciting research horizons in the emerging field of 'chronomicrobiology.'

Professor Dodd said: "The implications of this research will be fascinating and far-reaching: bacteria make up 12 percent of life on earth, cause devastating human diseases, and are vital to soil health and crop protection. They are also central to biotechnology."



Defra funding supports two crop improvement networks

Defra has awarded funding to continue the development of climate resilient legume crops and precision bred wheat, fit for the future of food.

WGIN - the Wheat Genetic Improvement Network aims to generate pre-breeding material carrying novel traits for UK wheat breeding companies, delivering accessible technologies to support breeders and growers. The aim is to deliver wheat that is more nutritious, disease resistant, and better able to withstand drought, salinity and slugs in an ever-changing climate. As part of a new five-year project, led by Rothamsted Research, with collaborators Bristol Genomics Facility and USA-based Arbor Biosciences, the John Innes Centre will lead on honing precision breeding techniques to adapt landraces, ancient and wild wheat varieties, to make them accessible and useful for the breeding industry.

PCGIN - the Pulse Crop Genetic Improvement Network, a consortium of four UK research organisations led by the John Innes Centre was awarded £3m over the next five years to provide improved breeding material for the cultivation of peas, beans and other pulses in the UK.

Professor Janneke Balk, group eader and co-lead of PCGIN, said: "Over the last 17 years PCGIN has made critical contributions to pea and faba bean development that are now close to being brought to market. In the new funding phase, we will expand our research to lentil and common bean, which could be grown more widely in the future as we see higher temperatures in the UK."

PCGIN, led by the John Innes Centre, is in collaboration with the University of Reading, NIAB in Cambridge, the Institute of Biological, Environmental and Rural Sciences (IBERS) at Aberystwyth University, and PGRO, the Processors and Growers Research Organisation, Peterborough.

See page 11 of Advances #37: Dr Sanu Arora and Professor Janneke Balk

JIF/JIC Education Programme

The John Innes Centre's mission to support the delivery of solutions to global challenges, and secure a safer, healthier and more sustainable future includes a pledge to train and develop the next generation of plant and microbial scientists, leaders, technicians, innovators, and entrepreneurs.

This year, the John Innes Foundation supported a new programme to enable a step change in our outreach and education activities – ensuring the John Innes Centre leads the way in inspiring the scientists of the future.

Their generous support allows us to deliver and evaluate a range of coherent long-term activities to reach those at local primary schools through to university, with a focus on improving the social and educational mobility of hard-to-reach groups, and those with low levels of 'science capital'.

Dr Shannon Woodhouse, Education Programme Co-ordinator, said: "We need more students to study plant and microbial sciences. By enriching the curriculum with real-world research examples and facilitating regular opportunities for engagement between staff and students, I believe we can raise career aspirations and encourage young people to consider a career in science."

In less than a year, the Education Programme has already delivered a range of activities and events and has built key relationships across the Norwich Research Park, with local schools and teachers, and with external networks across the UK.

Norfolk Science Teaching Conference

In March 2025, with the Teacher Scientist Network, the John Innes Centre hosted the first event dedicated to empowering and enabling teachers to integrate more plant and microbial science into their classrooms, inspiring their pupils and helping young people make links to future career paths.

The conference provided a unique opportunity for both primary and secondary school teachers to connect with the science and scientists of the Norwich Research Park and access free lesson plans and resources. The half-day event included a keynote address from post-doctoral scientist, Dr Rose McNelly, four workshops and networking opportunities. We were pleased to deliver this event, and work with a number of partners including the SAW Trust, Science and Plants for Schools (SAPS), the Youth STEM Award and the Sainsbury Laboratory.

West Earlham Junior School

On the doorstep of Norwich Research Park, West Earlham Junior School (WEJS) is in an area ranked in the 10% most deprived areas in England. We have been developing our relationship with this local school, following their participation in the John Innes Foundation funded Forest Gardens for Schools Project. This project is helping the school to co-create a biodiverse space in their grounds that can be used in teaching to help build enthusiasm for science and an appreciation for plants. To extend the impact of this work, this year we supported the school to set up an "Eco Team" with eight children (Yr 3-Yr 6; 7-11 years old) volunteering to maintain and champion the forest garden.

Through the Microscope

A family engaging with an artwork in the 'Through the Microscope: Secrets of Norfolk's changing landscape with Edible East' exhibition at Gressenhall Farm and Workhouse.

This exhibition is supported by the John Innes Centre and The Centre for Microbial Interactions, Norwich, and funded by Arts Council England.

For this piece, artist Tara Sampy was inspired by visits to the John Innes Centre and the bags used to limit the pollination of plants.

One vision, two centres of excellence

The John Innes Centre and The Sainsbury Laboratory are world leaders in plant, soil and microbial research.

With a rich history of pioneering work behind us, we're continually finding new ways to improve the future of global health and benefit society.

Our partnership is about innovation and interdisciplinary exploration. We take cutting-edge technology and scientific advances and grow new possibilities in agriculture, food and human health.

Our joint vision, Healthy Plants, Healthy People, Healthy Planet (HP3), will transform our capabilities, creating an epicentre of plant and microbial science.

By creating a world-first international hub for plants we will make new ways of working and problem solving possible. Our plans are already in action, but vital philanthropic support is needed for the HP3 hub to reach its full potential.

HP3 hub

Uniting under one roof in a new, purpose-built space at Norwich Research Park (NRP) we will create a unique ecosystem for plant and microbial innovation.

Providing world-class facilities and state-of-the-art infrastructure for research, the hub will encourage collaboration and create synergy, uniting leading scientists and attracting top talent from around the world to work together to create impactful solutions to global challenges.

> The HP3 hub is uniquely placed to address some of the greatest challenges facing humanity

Sir Tom Hughes-Hallett,
Chair of the Governing Council, John Innes Centre

The way forward

Science-led agricultural innovations can lead the way, and only by working in partnership with a wide range of partners and expertise will we be able provide holistic solutions to the era-defining challenges we face.

1 HEALTHY **PLANTS**

Growing healthier and more resilient plants means we can protect and improve our food sources. To increase crop yield while using less land, water and chemicals, we are:

Boosting resistance to pathogens

We can mine and leverage the genetic makeup of plants and the pathogens that threaten them, using this knowledge to improve plant immunity and secure higher crop yields.

Increasing plant size and yield

Genomic advances mean we can develop novel crop varieties that feed more people with fewer inputs. We're connecting with scientists, crop breeders and farmers around the world to improve production of wheat, pea, potato, oilseed rape and more.

2 HEALTHY **PEOPLE**

Working closely with the Quadram Institute, Earlham Institute, the University of East Anglia and the Norfolk and Norwich University Hospital we will untap the vast potential of using plants and microbes to help protect humanity from illness and disease.

We're developing crops that are more nourishing, making it easier to avoid malnutrition-based illness. And, by gaining insights into how plants interact with pathogens in their natural environment, we can develop medicines to help humans combat disease.

3 HEALTHY **PLANET**

We're developing ways to mitigate the damaging effects of food production on the climate and environment. By improving how plants defend themselves and use nutrients, water and sunlight, we're aiming to create economic opportunities for farmers by reducing agricultural reliance on fossil fuel-based fertilisers, pesticides and fungicides. This will help restore the balance of ecosystems and increase the amount of carbon sequestered from the atmosphere.

Fully realising the HP3 vision

Helping us fully realise our HP3 vision is a once-in-a-generation opportunity. Your philanthropic investment can help us maximise our public/private partnership to harness the power of plants and microbes to meet the world's most critical challenges.

Construction of the hub has already begun, but we need to raise an additional £35m over the next five years to:

Establish state-of-the-art facilities

Facilitate interdisciplinary work

Create a new kind of scientific research

Expand external collaboration

Support UK Government agricultural and crop policies and goals

Help us support UK industrial strategy

BE PART OF THE SOLUTION

If you would like to learn more about partnership opportunities, please contact our Director of Development, Angela Bowen.
Angela.bowen@jic.ac.uk | +44 (0)7714 051 310

Understanding, valuing and celebrating Neurodiversity

Dr Clare Stevenson and Leah Milner-Campbell led an innovative BBSRC-funded project, cultivating a Neuroinclusive environment for staff and students.

Dr Clare Stevenson, Head of Science Coordination & Research Culture

Leah Milner-Campbell, Neurodiversity project officer

Unlocking Nature's Diversity is the institute's ethos. Neurodiversity adds value to social environments in the same way that biodiversity enriches our ecosystems. The unique insights Neurodivergent individuals can bring to a research environment include innovative problem solving, excellent pattern recognition, and increased spatial thinking.

Dr Stevenson, Head of Science Coordination and Research Culture, highlighted: "We all bring our own strengths to a team. When everyone has the psychological safety and trust to bring their real self to work, it makes us all stronger."

Neurodivergent profiles include Autism, ADHD, and dyslexia. More than 20% of the population are Neurodivergent, meaning their cognition differs from what is considered 'Neurotypical' in society.

Following an Accessibility Advocates group seminar on Neurodiversity in 2022, Dr Stevenson was awarded a BBSRC Connecting Cultures grant with the aim of establishing Neuroinclusive best practice principles for research institutes, and to share learning with other BBSRC institutions.

Neuroinclusive building blocks

To foster an inclusive environment, and to value diverse ways of thinking, the project focused on training, awareness raising, and building networks. Neurodiversity project officer, Leah Milner-Campbell, has created bespoke e-learning modules, an accessible and impactful learning experience that resonates within research environments.

Ms Milner-Campbell said: "We have a way to go to make the world fair and equitable, but by embedding structural change and shifting perspectives away from a Neurotypical lens, we can create a research environment where Neurodivergent individuals can thrive."

So far more than 600 people have engaged with the e-learning, from every BBSRC-supported institute as well as colleagues at BBSRC head office, and bespoke training sessions for Neurodivergent individuals, allies, and managers have been delivered in person at seven BBSRC-funded institutes.

> Taking part in the Neurodiversity e-learning was one of the most emotional and rewarding things I've done at JIC. It emphasised that we value one another with all our differences. My challenges aren't half as challenging when I'm among friends
>
> **Dr Lionel Hill, metabolite service manager**

Illustration by Anna Rickards

75% of e-learning participants had never done any Neurodiversity training before this course.
After participating in training:

Neurodivergent participants felt

74%

more confident advocating for their needs at work

Overall, participants felt their understanding of Neurodiversity increased by

53%

Managers felt

33%

more confident managing someone with a different neurotype to their own

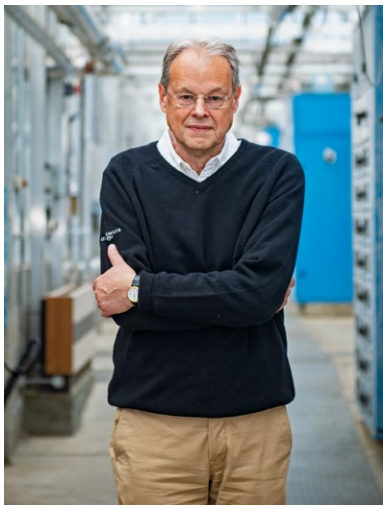
The e-learning courses are available for everyone working at BBSRC institutes. However, if you are interested in accessing them from any other organisation or finding out more, please email jic.neurodiversity@jic.ac.uk or scan the QR code.

Awards and honours

Professor Graham Moore and Professor Saskia Hogenhout elected as Fellows of the Royal Society

Professor Graham Moore, Director, and Professor Saskia Hogenhout, group leader, have been elected as Fellows to the Royal Society. Fellows are leaders in their field, and election recognises their invaluable scientific contributions.

Professor Moore has made outstanding contributions to wheat research, which have provided insight into the pairing and crossover control between related wheat chromosomes. Professor Hogenhout has pioneered research on the functional characterisation of virulence factors from non-culturable bacteria and interactions of sap-feeding insect vectors with plants.



Dr Griffiths honoured by the Royal Agricultural Society of England

Dr Simon Griffiths, group leader and lead for the Delivering Sustainable Wheat Institute Strategic Programme (ISP), won the 2024 Royal Agricultural Society of England (RASE) award for Science and Technology.

This award recognised his exceptional support for crop breeders and farmers, and his outstanding contributions to the agricultural industry, including his work on the ancient Watkins wheat seed collection.

> I was particularly pleased to be nominated for this award by the breeding company Limagrain. We should be proud of the partnerships we have forged with industry and the fact that leading companies are putting their faith and resources into our research

Professor Diane Saunders awarded an OBE

Professor Diane Saunders, group leader and Head of the Crop Genetics Department, was recognised for her outstanding scientific achievements and dedication to women in STEM with an Order of the British Empire (OBE) in the King's Birthday Honours 2024.

> It is a phenomenal honour to be recognised in this way, and really this recognition reflects the remarkable research accomplishments and dedication of each and every person who has worked in the incredible team that I have the privilege to lead at the John Innes Centre

Professor Ellis awarded Mendel Memorial Medal

In March 2025, Professor Noel Ellis was awarded the Mendel Memorial Medal – a prestigious annual accolade given by the Mendelianum, part of the Moravian Museum in Brno. The medal is awarded to an individual who has made an outstanding contribution to the scientific and cultural legacy of the 'Father of Genetics', Gregor Mendel.

Professor Ellis is a senior affiliated scientist with a 36-year association with the John Innes Centre. He said: "I am delighted to receive this prestigious award. The work this award recognises is both biological and historical. The medal celebrates the work of a truly great scientist who is an inspiration for future generations."

Professor Howard elected to EMBO Membership

Professor Martin Howard, group leader, has been elected as a member of the prestigious European Molecular Biology Organisation (EMBO) in its 60th anniversary year. His group combines predictive mathematical modelling with long-term experimental collaborations, to dissect biological mechanisms too complex to unravel by experiments alone.

Professor Howard said: "It is a great honour and privilege to be elected as a member of EMBO. It is particularly pleasing that the heavily interdisciplinary work of my group, applying theoretical tools from physics and mathematics to basic biology, is being recognised."

Biochemical Society Award for researcher

Dr Sam Mugford, research assistant in the group of Professor Saskia Hogenhout, has been recognised by the Biochemical Society. He received the prestigious Research Support Award 2025 for his outstanding service supporting the research of the John Innes Centre.

Celebrating the skills and experience of support staff in education, research and industry, the Research Support Award nomination highlighted his contribution as a mentor and supervisor of research students, and his engagement in social and outreach activities.

"This is a huge honour and an amazing surprise," said Sam. "It's really pleasing to see that there are awards like this that provide recognition for staff in support roles working in a research environment."

New appointments and fellowships

Professor Uauy appointed Director of the John Innes Centre

Following a global search, Professor Cristóbal Uauy has been appointed as the Director of the John Innes Centre.

Professor Uauy is internationally recognised for his significant contribution to the development of resources and tools available to the wheat research community which allow for the rapid identification of genes for key traits. His research has identified important genes for improved yield, quality and disease resistance.

The Director-designate of the John Innes Centre said: "I am delighted and deeply honoured to take on the directorship of the John Innes Centre at such an exciting time, as we progress our vision for Healthy Plants, Healthy People, Healthy Planet."

> I'm passionate about the John Innes Centre's mission which is rooted in its unique blend of interdisciplinary science, and I am looking forward to working closely with colleagues to continue to build on our strength in discovery-led research, as well as applying our knowledge for the benefit of humanity and the environment

Lucia Carter, executive assistant to the Director

Joining the institute in May 2024, Lucia enables the Directorate's office to run smoothly. Whether it is coordinating Committees, managing projects, organising events such as JIC-all, or supporting high-profile visits, Lucia ensures the Director and the Chair of Governing Council are fully supported.

Royal Society Fellowship – Dr Chris Morgan

Dr Chris Morgan, group leader, was awarded a prestigious eight-year Royal Society University Research Fellowship to carry forward his exciting investigations into the mysteries of meiosis, the cell division process in which sex cells – sperm and eggs in humans, pollen and egg cells in plants – are produced.

SECURING THE FUTURE OF FOOD
COULD BE YOUR LEGACY

The John Innes Centre was built on philanthropy

London property developer and philanthropist John Innes left a gift in his will that enabled the John Innes Centre to be established in 1910, the first research centre for the study of plant genetics in Britain.

More than 115 years later, we host more than 600 scientists from over 45 countries. From soil to crop genetics, our researchers are changing the way we understand nature and are using that knowledge to devise the next generation of science-led solutions for sustainable food production. Now you can be part of our story too. Help us to fully realise our Healthy Plants, Healthy People, Healthy Planet (HP3) vision; a once-in-a-generation opportunity, which will benefit all future generations.

Join us

Your legacy pledge will help us harness the power of plants and microbes to meet the world's most critical challenges by:

- Establishing state-of-the-art facilities
- Facilitating interdisciplinary work across different fields
- Future-proofing scientific research
- Educating the scientists and scientific leadership of the future.

Whether you are already connected to the John Innes Centre as a staff member or an alumnus, you support farming and agriculture, you live in Norfolk, or just love your garden and the compost we helped formulate, we would love to hear from you.

To discuss legacy and other philanthropic partnership opportunities during your lifetime, please contact
Angela Bowen, Director of Development:
Email: Angela.Bowen@jic.ac.uk
Telephone: +44 (0) 7714 051 310

For more information about how you can support us, please scan the QR code

Future plans

The next 12 months will be an exciting period for us, as a new Director takes post, an innovative Scientific Strategy is unveiled and a series of targeted recruitment and building plans help us develop the expertise and infrastructure to deliver our ambitions.

Welcoming our new Director

In September 2025 we welcome our new Director, Professor Cristóbal Uauy, an internationally recognised wheat researcher, whose research has identified important genes for improving yield, quality and disease resistance in crops. He takes on the role as we continue to develop ambitious plans to deliver *Healthy Plants, Healthy People, Healthy Planet (HP3)* – our joint scientific vision with The Sainsbury Laboratory.

Creating a world-leading Plant and Microbial Innovation Hub

As our ambitious plan to deliver a Plant and Microbial Innovation Hub progress, we are set to make several major steps forward in the coming year, alongside our partner The Sainsbury Laboratory.

Currently our Next Generation Infrastructure programme focusses on renewing our plant growth facilities and insectary, with work progressing at pace to the south of our campus. Construction of new, and the refurbishment of existing, horticulture infrastructure will modernise our plant growth facilities, and construction of new state of the art glasshouses and an insectary building will begin.

We will build on the progress made in raising over £365m from Government and private sources to date, with a major capital fundraising campaign aiming to raise the final £35m of our infrastructure programme to provide the state-of-the-art facilities planned.

Finally, a major project to refresh how we work with partners to create the best possible environment for plant and microbial science has begun. Bringing people together to strengthen and amplify the impact of UK plant and microbial science is fundamental to our success. We will work to widen the HP3 vision across the Norwich Research Park, creating a shared purpose as we work on new, cross-cutting and collaborative research.

Launching an ambitious new Scientific Strategy

Over the last year, Professor Uauy worked with staff to develop a new Scientific Strategy, which will launch in the coming year. It identifies the major research questions we'll be tackling in the next ten years, and is focused on how plants and their associated microbes are likely to respond to the challenges posed by a changing climate, and the need for more sustainable farming practices.

This refined strategic direction will feed into the mid-term review of our strategic BBSRC strategic funding, guiding our assessment of progress and future plans to ensure we continue delivering world-class, strategically aligned research with clear value and impact.

Recruiting new group leaders with the expertise needed to deliver our strategy

To help deliver our new strategy, we will undertake a targeted recruitment drive to bring in new group leaders in strategic areas such as discovery plant science, plant-insect interactions, and plant associated microbial interactions. This will build our research capacity and expertise in new areas to deliver our strategy.

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Unlocking Nature's Diversity

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