

ANNUAL REPORT AND ACCOUNTS FOR THE YEAR ENDED 31 MARCH 2024

## **CHARITABLE OBJECTIVES**

### THERE ARE THREE REASONS FOR CONTROLLING DISEASES OF ANIMALS:

- the direct impact of the disease on the health and welfare of the animals;
- the indirect impact on human health, welfare and prosperity due to reduced availability of food; and
- the spread of infections causing disease from animals to humans (zoonoses).

There is also the added possibility of disease transferring from humans to animals (reverse zoonoses). The World Health Organisation states that zoonoses comprise a large percentage of all newly identified infectious diseases as well as existing infectious diseases of humans.

### PIRBRIGHT'S CHARITABLE OBJECTIVES ARE:

• to conduct and promote scientific research on diseases of animals, including exotic diseases, and to develop appropriate methods for their control, and on matters concerned with animal health, and ancillary thereto, to publish the results of such research; and

• to prepare, edit, print, publish, issue, acquire and circulate any literary works or matters treating of or bearing on the said research work, establish and maintain collections of material, literature and scientific data relating thereto, disseminate information obtained therefrom, and contribute towards the provision of a library or libraries designed to assist such work.



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Front cover: Bluetongue virus (BTV) infection (green) in the salivary glands (red – tubulin) of the vector species *Culicoides sonorensis*. The salivary glands of *Culicoides* biting midges consist of two large lobes, each with four smaller accessory glands arranged as a rosette around them. Although the salivary gland lobes can support viral replication, the accessory glands are the primary site for BTV infection. Cellular nuclei and the ommatidia of the compound eyes can be seen in blue.

Image taken from Guimerà Busquets et al., 2023. doi: 10.1186/s12575-023-00221-2

Left: The BBSRC National Virology Centre: The Plowright Building.



### FOREWORD BY THE CHAIR OF THE BOARD OF TRUSTEE DIRECTORS

As Chair of the Board of Trustee Directors, it is my pleasure to present the Trustees' Report incorporating the Strategic Report for the year 1 April 2023 to 31 March 2024.



THE PIRBRIGHT INSTITUTE AIMS TO PROVIDE THE UK AND INTERNATIONAL COMMUNITY WITH THE CAPABILITY TO PREDICT, DETECT, UNDERSTAND AND RESPOND TO THE THREAT OF SERIOUS VIRAL DISEASES OF LIVESTOCK, AND THEIR SPREAD FROM ANIMALS TO HUMANS. Pirbright's contribution remains a critical one both for the UK and globally. The excellent facilities available at Pirbright and the significant

continuing investment made by UKRI – Biotechnology and Biological Sciences Research Council (BBSRC) – have further strengthened the Institute, allowing world-class science to thrive on the site. The Board of Trustee Directors are confident that The Pirbright Institute has the scientific and support personnel, coupled with the high- containment facilities, to deliver worldclass science and allow it to achieve its strategic aims.

The Pirbright Institute's scientific strategy is underpinned by a series of strategic partnerships with stakeholders globally, including other UKRI-funded institutes, academic and research institutions, governmental agencies, international charities and philanthropic foundations. The Institute is also committed to playing a key role in nurturing the next generation of researchers, technical specialists and innovators, and is committed to offering apprenticeship opportunities and technical training courses (both in person and online) to contribute to the broader impact that UK science makes nationally and globally.

In the year of the report, Pirbright has embarked on its exciting new five-year scientific programme funded by BBSRC, providing the core infrastructure support and funds for its flagship scientific programmes to enable the Institute to deliver its scientific strategy. The ability of the Institute to respond to national emergencies is being demonstrated by its preparedness for monitoring bluetongue virus infections in England.

Competitively won research grant income at the Institute is key to the Institute's financial sustainability and there is a very strong pipeline of awards over the next year, which exceeds the target required within the budget. The Institute is very proactive in identifying new sources of income to support its science and this is an area where growth is expected during the years ahead.

Culturally, the Institute is committed to equality, diversity and inclusivity (EDI) in all it does. It wishes to build upon its Athena Swan Silver award in 2023 to further enhance what it does in this area to ensure it is proactive in supporting an inclusive environment with a focus in the forthcoming year on mental health. The Athena Swan Charter is a framework used across the globe to support and transform gender equality within higher education and research.

Pirbright continues to be committed to acting in an

environmentally responsible way becoming more energy efficient in all activities, including decommissioning older buildings. This strategy has resulted in a substantial reduction in energy consumption on the site over the last year and providing a firm platform to realise further efficiencies in coming years. However, the carbon footprint of the Institute has increased in the year, due to our Combined Heat and Power plant (CHP) coming online. The CHP generates electricity by burning gas, there by moving the carbon footprint of this process from the supply chain to Pirbright.

As Trustee Directors, we are committed to continual improvement of the governance of the Institute and ensuring that we are fully aligned with the Charity Governance Code. We continue to reflect on our board effectiveness through an annual review whilst ensuring effective communication occurs between the Board of Trustee Directors and the Senior Leadership Board. The Board receives regular updates from different internal members of staff of the Institute at each board meeting with an opportunity for question-and-answer sessions. Trustee Directors are encouraged to spend time after Board meetings interacting with staff and visiting facilities, especially new infrastructure developments on campus. As Trustee Directors we recognise that we have a responsibility to engage with the employees and students who work at the Institute to ensure we understand any issues or concerns and are fully appraised of matters that directly affect them. We intend to expand the opportunities for interaction in the forthcoming year by attending all-staff briefings and arranging Trustee Director 'drop in' sessions.

As Trustee Directors, we also recognise our responsibility to ensure the future success of Pirbright. To assist in discharging these responsibilities, the Board has three sub-committees: the Finance and Audit Committee, the Risk and Assurance Committee and the Nominations and Governance Committee. In addition, the Trustee Directors have a Scientific Advisory Board, which comprises world-leading scientists from academia and funding agencies. An annual joint meeting between the Board of Trustee Directors and the Science Advisory Board provides the opportunity for strategic discussions about the Science Strategy and external factors impacting on its delivery and horizon scanning.

On behalf of the Board, I am grateful for the commitment and contribution that the Director, the Senior Leadership Board and indeed all the staff at The Pirbright Institute have made in the last year to ensure its continued success in the future.

### PROFESSOR VINCENT EMERY

Chair of Board of Trustee Directors, The Pirbright Institute

### REPORT BY THE DIRECTOR & CEO

In the financial year 2023-2024, The Pirbright Institute again achieved a strong performance. We continue to deliver very effectively against our scientific objectives and secure additional external funding from an increasingly broad range of funders.

### WE ARE BECOMING MORE INVOLVED IN PROGRAMMES TO REDUCE THE IMPACT OF LIVESTOCK PRODUCTION

**ON CLIMATE CHANGE.** This is not a change in the Institute's strategy – we are focusing on understanding whether it is possible to develop vaccines to control methane production in ruminants and the impact of controlling diseases and improving animal health on greenhouse gas (GHG) production. We will work in collaboration with international centres of expertise on livestock GHG production to deliver these programmes of work.

The increase in global energy costs could have been very challenging financially. However, support from our major strategic funder, BBSRC, helped to ensure financial stability. Also, our energy saving programme, which was started a number of years ago, resulted in very significant reductions in energy consumption on site this year. However, it is disappointing that the carbon footprint of the Institute has increased over the previous year due to the Institute now generating its own power, through our CHP, which effectively moves the carbon footprint from the supply chain into the Institute.

In late 2023, we were asked by the UK government to provide the laboratory diagnostic capacity to identify and control an incursion of bluetongue virus in Norfolk and Kent. The national reference laboratory led by Dr Carrie Batten responded quickly to this request from government and so played a major role in the removal of the temporary designated disease control zones. In addition, expert advice has been provided to government and livestock keepers. This once again emphasises the critical role Pirbright plays as a national disease control capability.

In parallel, our research scientists and reference laboratories have continued to support global disease control programmes by working with international agencies, commercial companies and governments.

We have made renewed efforts to ensure everyone in the Institute is treated fairly by increased awareness of equality, diversity and inclusion (EDI) and recruiting a dedicated EDI manager. It is pleasing that our efforts have been recognised externally by an Athena Swan Silver Award.

Pirbright works at the highest level of biological containment and is highly regulated. Consequently, rigorous control of our processes and facilities is critical. Importantly, there were no significant enforcements from our regulators this year. We adopt a principle of complete transparency with all of our regulators and external auditors to ensure we are always following best practice. Similarly, internally we actively encourage all staff to report any incidents, accidents or near-misses to ensure the safe operation of the site.



The Centre for Veterinary Vaccine Innovation and

Manufacturing (CVIM) has been established on the Pirbright site for over a year now and currently has four vaccine development programmes. Also, we are in the advanced stages of designing a new dedicated building to produce material at good manufacturing practice standards. Importantly, we are increasing our interactions with commercial partners, which is a critical step to ensure new products are available to livestock keepers in low and middle income countries.

We are looking forward to continuing to reduce the impact of diseases on livestock globally, and most importantly, reduce the environmental impact of agriculture in the year ahead.

### PROFESSOR BRYAN CHARLESTON MRCVS FRS Director & CEO

The Pirbright Institute

# **ABOUT PIRBRIGHT**

Pirbright is a world-leading centre of excellence in research and surveillance of virus diseases of farm animals and viruses that spread from animals to humans. The Institute receives strategic funding from BBSRC and works to enhance capability to contain, control and eliminate these economically and clinically important viral diseases through highly innovative fundamental and applied bioscience.

### **OUR PURPOSE**

Pirbright's charitable objective is to conduct and promote scientific research on diseases of animals, including exotic diseases, and to develop appropriate methods for their control.

### OUR MISSION

The Institute's mission is to be the world's leading innovative centre for preventing and controlling viral diseases of livestock.

### **OUR VISION**

The vision of Pirbright is to apply scientific research to prevent and control viral diseases, protecting animal and human health and the economy. The Pirbright Institute Science Strategy can be found on the Institute's website: pirbright.ac.uk

### **OUR STAFF AND STUDENTS**

Pirbright employs just under 400 staff, with its research supported by 44 students from a range of backgrounds, and prides itself on its diversity. The Institute is based on a campus site in Pirbright in Surrey.

### **OUR VALUES**

The staff and students working at the Institute take PRIDE in everything we do, which is reflected in our values:

*Passion* – for the highest-quality standards, delivery and performance.

*Reliability* – in everything we do: leadership, learning, biosecurity, problem anticipation and containment of unexpected events.

Innovation – is the driving force behind our fundamental and applied science. Our work is positioned at the cutting edge of science to deliver solutions for global good.

*Dignity and respect* – we respect and trust all in our diverse community.

*Excellence* – we aim to deliver the best in all aspects of our work, including health, safety, biosafety, scientific research, customer service and protecting the environment.

### **OUR SCIENCE**

Pirbright provides national and international capacity to predict, detect, understand and respond to emerging new viral diseases of livestock and endemic viruses that are circulating in and outside of the UK.

Our diagnostics, surveillance facilities and expertise enable us to act as a national capability, protecting the UK from livestock viral diseases that threaten our borders, allowing us to act decisively and swiftly in the event of an outbreak in order to control it as rapidly as possible. Our fundamental research falls under two science programmes, which study either hosts or viruses and their interactions.

## **INSTITUTE STRATEGIC PROGRAMMES**

Pirbright's science is organised into two close-linked and highly integrated programmes, one on virus biology and the other on host responses. Together they deliver important new knowledge and innovative disease control measures.

### PROGRAMME ONE: VIRUS LIFECYCLES AT MULTIPLE SCALES

Pirbright's research programme focusing on viruses is driven by the overarching question: "How do viruses replicate within the infected cell, induce species-specific disease, transmit between hosts and circulate around the globe?" The research is focused on three broad topics: biology of virus-infected cells; virus-host interactions controlling species-specific outcomes; understanding and predicting disease spread. These topics are led by Professor Nicolas Locker, Dr Helena Maier and Dr Naomi Forrester-Soto, respectively. Together, they drive scientific delivery of the programme across Pirbright.

Overall, this programme will:

• Generate new fundamental knowledge of the life cycles of high-consequence viruses, develop new approaches for engineering attenuated viruses as novel vaccines and investigate how co-infecting viruses compete and evolve.

• Investigate how virus-host interactions control speciesspecific pathology and understand how viruses overcome barriers to species jumping.

• Use 'omics, systems and imaging datasets to build in-silico models of the infected cell.

• Study how viruses transmit between hosts by both direct mechanisms and via insect vectors. Use appropriate models and genotype-to-phenotype studies to predict large-scale spread, zoonotic potential, impact of climate change and risk to the UK.

• Provide an international hub for veterinary, zoonotic and One Health studies of viral disease.

### PROGRAMME TWO: HOST RESPONSES TO VIRAL INFECTION

Pirbright's host programme is driven by the overarching question: "What properties of the host determine the outcome of viral infection?" The programme focuses on three broad topics: a fundamental understanding of immune responses; differential outcomes of viral infections; enhanced protective responses in vertebrate hosts. Professor Simon Graham, Dr Wilhelm Gerner and Professor Elma Tchilian are respective Topic Leads for each of these areas, supporting scientific delivery, monitoring and review of this programme of research.

Overall, this programme aims to:

• Advance our understanding of complex immune responses using comparative systems approaches to better define the molecular and cellular basis of protection.

• Identify new vaccine targets and delivery methods that induce the most broadly protective responses.

- Enhance disease control measures for existing viruses and enable rapid responses to future threats.
- Help predict and risk assess potential viral threats to the UK.

• Actively contribute to the larger One Health agenda by promoting and using natural host species and viruses related to human pathogens.

• Enable and enhance bioscience research across the UK and internationally through collaboration and strategic research partnerships.

These strategic programmes officially started on 1 April 2023, following the application process to UKRI BBSRC for continued strategic investment through the Institute Assessment Exercise (IAE) 2022. The science builds on our previous strategic investments, and these strategic programmes underpin Pirbright's overall science strategy, which is further supported by significant leveraged funded.

### DIAGNOSTIC AND SURVEILLANCE EXPERTISE

Pirbright has a long history of protecting the UK from disease and has been home to the World Reference Laboratory for Foot-and-Mouth Disease (WRLFMD) for over 60 years. We also operate the Non-Vesicular Reference Laboratory (NVRL) for a number of high-consequence diseases of growing importance, including African swine fever virus, bluetongue, peste des petits ruminants, rinderpest, African horse sickness, lumpy skin disease, sheep pox and goat pox. These laboratories provide an essential diagnostic and advice service to the UK Government Department for Environment, Food & Rural Affairs (Defra), United Nations Food and Agriculture Organization (FAO) and the World Organisation for Animal Health (WOAH).

These laboratories receive samples from all over the world and are instrumental in providing countries with sophisticated data on strains of viruses causing disease and helping to select vaccines to aid control. Furthermore, our scientists have provided training to improve diagnostic capacity in Indonesia, Jordan, Kenya, Thailand, Philippines, Uganda and Kuwait. During 2023-2024, the Pirbright reference laboratories processed 64,860 samples. In late 2023 through to February 2024, the NVRL (with support from other departments) responded to a BTV-3 incursion, resulting in large-scale surveillance across two temporary control zones in Norfolk and Kent. Over 58,500 samples were tested by PCR.

The international reference laboratories are accredited to ISO/ IEC 17025, a UKAS-accredited laboratory, number 4025. In 2023-24, this accreditation was renewed following a successful assessment by UKAS.

### PIRBRIGHT SCIENCE HIGHLIGHTS 2023-2024

The scientific progress outlined in this report focuses on our research into viruses affecting livestock and zoonotic viruses, which have implications for animal and human health, as well as food and economic security worldwide. Our advancements in research, vaccine development and diagnostic tests contribute to global preparedness in combating viral outbreaks through prevention and control. For more information, please visit pirbright.co.uk to explore our latest findings.

### PIRBRIGHT COLLABORATION UNCOVERS LICENSED DRUGS AS POTENTIAL TREATMENTS FOR POXVIRUS INFECTIONS, INCLUDING MPOX AND SMALLPOX

Researchers from the University of Cambridge, University of Oxford and The Pirbright Institute discover how poxviruses evade cellular defences and identify existing drugs that can inhibit them. Published in Nature, the study reveals how poxviruses exploit a cellular protein to overcome host defences, facilitating replication and transmission. Drugs targeting this protein impede poxvirus replication without promoting drug resistance. This approach shows promise against various poxviruses, including monkeypox and smallpox, with implications for both human and animal health. The collaboration underscores the importance of initiatives like the Monkeypox Consortium and highlights Pirbright's role in advancing epidemic understanding and public health measures globally. www.pirbright. ac.uk/news/2023/08



Pirbright collaboration uncovers licensed drugs as potential treatments for poxvirus infections, including mpox and smallpox Monkeypox virus under the microscope. Credit: BlackJack3D

### PROFESSOR BRYAN CHARLESTON ELECTED AS FELLOW OF ROYAL SOCIETY

Professor Bryan Charleston, Director and CEO of The Pirbright Institute, is elected as a Fellow of the Royal Society, recognising Professor Charleston's international renown for his expertise in host-pathogen interactions related to livestock viral diseases. His research focuses on preventive measures, benefiting animal and human health, as well as global food security. His work using the natural host has advanced the development of new reagents and innovative methods to support disease control and improve food security and has made significant contributions to the broader field of comparative biology. The honour is an opportunity to make a significant impact in the bioscience field and enhance infectious disease control. The Royal Society elects individuals who significantly contribute to natural knowledge, including mathematics, engineering science and medical science. Following a rigorous nomination and application process, around 80 Fellows and Foreign Members were elected to become Fellows of the Royal Society in 2023. www.pirbright.ac.uk/ news/2023/05/professor-bryancharleston-elected-fellow-royal-society

### AVIAN DISEASE RESEARCH: PIRBRIGHT SCIENTISTS STRENGTHEN UK-CHINA COLLABORATION

A team from The Pirbright Institute visited China to strengthen ties in avian disease research. China's poultry industry, crucial for global food security, faces threats from various pathogens. Pirbright and a number of Chinese institutions established the Centre of Excellence for Research on Avian Diseases (CERAD) in 2015, facilitating collaborative research. Professors Venu Nair and Munir Iqbal, along with Dr Yao, visited several of the academic institutes in China and participated in scientific discussions and presentations showcasing recent advances in disease control. They inaugurated the China European Joint Laboratory, highlighting UK-China collaboration. CERAD expands with South China Agricultural University's inclusion, demonstrating a model for international cooperation in addressing global health challenges, particularly in veterinary medicine.

www.pirbright.ac.uk/news/2023/12/avian-disease-research-pirbright-scientists-strengthen-uk-china-collaboration



Pirbright scientists welcome the South China Agricultural University, Guangzhou, as a new member of CERAD in a ceremony at the College of Veterinary Medicine, Guangzhou

### PIRBRIGHT AND VIDO EXPAND COLLABORATION TO ADVANCE VACCINE MANUFACTURING

The Pirbright Institute's Centre for Veterinary Vaccine Innovation and Manufacturing (CVIM) and the University of Saskatchewan's Vaccine and Infectious Disease Organization (VIDO) have signed a memorandum of understanding (MOU) to enhance collaboration and training in vaccine manufacturing for animal health. Supported by various funders, including the Bill & Melinda Gates Foundation, the collaboration aims to develop vaccines for emerging infectious diseases in livestock, particularly in low- and middle-income countries (LMICs). CVIM focuses on bridging research and product development, while VIDO brings expertise in vaccine development and containment facilities. The partnership aims to address global challenges in food security and combat zoonotic diseases. www.pirbright.ac.uk/ news/2023/10/pirbright-andvido-expands-collaborationadvance-vaccine-manufacturing

### PIRBRIGHT JOINS HUB TO TACKLE VECTOR-BORNE DISEASES

The Pirbright Institute collaborates on a £1.5m One Health Vector-Borne Diseases Hub led by Imperial College London, funded by Defra and BBSRC. It involves multiple research institutions to combat diseases spread by insects, ticks and mites, impacting human, animal and plant health. With climate change expanding vectors' range, diseases like Lyme disease and West Nile virus pose increasing threats. The Hub adopts a One Health approach, integrating data and expertise from diverse disciplines to predict and mitigate outbreaks. Its goals include sharing data, building networks and enhancing communication to address challenges in vector-borne disease control.

www.pirbright.ac.uk/news/2023/12/pirbright-joins-hub-tackle-vector-borne-diseases

### PIRBRIGHT SHARES IN GLOBAL VACCINES FUND

A £6.3m funding initiative has provided support for five Global Vaccines Networks, including the International Veterinary Vaccinology Network (IVVN), which includes The Pirbright Institute. Supported by UKRI, IVVN, led by The Roslin Institute and The Pirbright Institute, aims to develop vaccines against animal diseases worldwide. With over 1,900 scientists from 93 countries, IVVN receives £1.2m from the Medical Research Council (MRC) over two years. The network focuses on combating livestock diseases in low and middle income countries, promoting collaboration, funding projects and training scientists, particularly women. These networks address infectious disease threats, enhancing global preparedness, with emphasis on antimicrobial resistance.

www.pirbright.ac.uk/news/2023/12/pirbright-shares-global-vaccines-fund

### PIRBRIGHT STRENGTHENS ANIMAL DISEASE PARTNERSHIP WITH INDIA

The Pirbright Institute and India's National Institute of Animal Biotechnology (NIAB) have signed a MOU to establish a collaborative laboratory partnership focusing on animal diseases and zoonoses. The MOU, signed in Hyderabad, strengthens commitments in the 2030 India-UK Roadmap. Pirbright's Director, Professor Bryan Charleston, along with representatives from the UK's Animal and Plant Health Agency (APHA) and Foreign, Commonwealth & Development Office (FCDO), attended the signing. The partnership aims to enhance research and innovation in veterinary vaccines, fostering food security and human health. This collaboration aligns with the UK-India Roadmap's goal of bolstering bilateral research and innovation efforts over the next decade.

www.pirbright.ac.uk/news/2024/02/ pirbright-strengthens-animal-diseasepartnership-india

### SCIENTISTS IDENTIFY T-CELLS INVOLVED IN ANTI-VIRAL IMMUNITY AND DISEASE DURING BLUETONGUE VIRUS INFECTION IN SHEEP

A Pirbright Institute study reveals the crucial role of 'helper' T-cells in sheeps' immune response to bluetonque virus (BTV), transmitted by Culicoides midges. The research, funded by BBSRC and Defra, employed a sophisticated T-cell depletion model, mimicking natural infection. By infecting live hosts with midges, scientists observed T-cell subsets' impact on disease progression, immune responses and virus transmission. Results showed CD8+ T-cells, associated with lower severity, and CD4+ T-cells, crucial for timely immune response. This novel approach sheds light on T-cells' diverse functions, guiding future vaccine design. The study, published in Frontiers in Immunology, offers insights into combating BTV and inspires vector-borne disease research with representative infection models. www.pirbright.ac.uk/news/2024/02/ scientists-identify-t-cells-involved-antiviral-immunity-and-disease-duringbluetongue



### AVIAN BRONCHITIS VACCINE REPLICATES IN CELL CULTURE

Researchers at The Pirbright Institute have developed novel vaccines for avian bronchitis that replicate in cell culture, offering 100 per cent protection against infectious bronchitis virus (IBV). Published in *PLOS One*, the study outlines a method using reverse genetics to modify the IBV spike gene, enabling replication in Vero cells, expediting vaccine production. Led by Dr Erica Bickerton and Dr Sarah Keep, this research addresses challenges in traditional vaccine generation, emphasising the importance of rapid response to emerging strains. This innovation not only aids the poultry industry but also potentially informs vaccine development for other coronaviruses, contributing to global food security. *www.pirbright.ac.uk/ news/2024/01/avian-bronchitis-vaccine-replicates-cell-culture* 



### ANCIENT DNA SHOWS HOW A CHICKEN VIRUS EVOLVED TO BECOME MORE DEADLY

The Pirbright Institute collaborated with the University of Oxford and the Ludwig Maximilian University Munich to track the evolution of Marek's disease virus (MDV). MDV, which costs the poultry industry \$1bn a year, was examined using ancient DNA, revealing insights into viral evolution. By comparing ancient and modern genomes, researchers identified genetic changes causing increased virulence. The study, published in Science, used DNA from archaeological chicken bones, revealing MDV's presence 1,000 years prior to 1907's discovery. It highlights the significance of historical biological material. The findings offer promise for controlling MDV and other viral infections, aiding vaccine development and immune response understanding. www.pirbright.ac.uk/news/2023/12/ ancient-dna-shows-how-chicken-virusevolved-become-more-deadly

### PIRBRIGHT JOINS EUROPEAN AFRICAN SWINE FEVER PROJECT

The Pirbright Institute joins the EU-funded VAX4ASF project led by HIPRA to develop nextgeneration vaccines against African swine fever (ASF). With Horizon Europe's support, the four-year initiative aims to create a durable solution against ASF virus, crucial for animal welfare and global economic stability. ASF has caused severe losses globally, affecting pigs and wild boars. VAX4ASF brings together 17 partners from EU, US, and Kenya, including renowned scientists and innovative pharmaceutical companies. By innovating vaccination approaches, the project targets eradicating ASF, emphasising its impact on animal health, the economy and rural communities worldwide. https://www.pirbright.ac.uk/news/2024/02/pirbright-joins-european-african-swine-fever-project



### STUDY EXAMINES 'VIRUS AND HOST' FACTORS IN AFRICAN SWINE FEVER

The Pirbright Institute has collaborated with University College London in a BBSRCand Wellcome-funded study on African swine fever virus (ASFV) replication in pig cells. UCL researchers, led by Professor Finn Werner, unveil insights into ASFV gene expression and replication mechanisms, publishing their findings in Nature Communications. Using cryo-electron microscopy, they elucidate the ASFV RNA polymerase's structure and unique features. Pirbright scientists, led by Dr Linda Dixon and Dr Chris Netherton, will explore factors affecting ASFV replication to understand the replication cycle and develop antiviral compounds. This collaboration builds on previous gene expression mapping achievements. www.pirbright.ac.uk/ news/2024/02/studyexamines-virus-and-hostfactors-african-swine-fever

### PAVING THE WAY FOR RAPID DETECTION OF VECTOR-BORNE VIRUSES

Pirbright researchers and collaborators from the London School of Hygiene and Tropical Medicine (LSHTM) have secured an MRC grant to develop field-ready tests for detecting vector-borne viruses in mosquitoes and faeces. With 80 per cent of the world's population affected by vector-borne diseases, the project aims to address their escalating impact, focusing on areas with limited vaccines and treatments. Led by Professor Susana Campino, LSHTM and Dr Kevin Maringer, Pirbright, the team plan to develop a molecular xenomonitoring assay for easy deployment in resource-limited settings. Field trials in Tanzania and Puerto Rico will assess the test's effectiveness in detecting viruses in vectors and non-vectors post-blood meal, offering hope for simplified disease monitoring. www.pirbright.ac.uk/news/2024/03/ paving-way-rapid-detection-vectorborne-viruses

### NEW COLLABORATION TO FIND VACCINE PROTECTION FOR THE 'KNOWN UNKNOWN'

The Pirbright Institute and UK Health Security Agency (UKHSA) collaborate to develop vaccines against lethal henipaviruses. Henipaviruses like Nipah and Hendra cause severe encephalitis and respiratory diseases in humans and animals. Funded by the MRC, the project aims to create panhenipavirus vaccines offering crossprotection. Led by Dr Stephen Findlay-Wilson, it addresses challenges in conducting clinical trials due to low infection rates. Dr Dalan Bailey from Pirbright emphasises the importance of understanding cross-protection for pandemic preparedness. Professor Isabel Oliver of UKHSA sees the study as vital for global health protection and pandemic readiness. www.pirbright.ac.uk/news/2024/03/ new-collaboration-find-vaccineprotection-known-unknown

### NEW SEASONAL CONTROL MEASURES FOR BLUETONGUE VIRUS

Defra announced a 'vector low' period, reducing bluetongue virus (BTV-3) transmission risk from midges. Dr Marion England from The Pirbright Institute highlighted decreased midge activity due to colder weather, making virus transmission unlikely. Consequently, Defra adjusted disease control measures, opting not to cull animals with older infections showing BTV-3 antibodies. Movement restrictions in Temporary Control Zones (TCZ) were eased with negative premovement test requirements and licensing. Surveillance continued, and Defra advised reporting any suspected cases to the Animal and Plant Health Agency (APHA). This proactive approach aimed to mitigate BTV-3 transmission risks while ensuring livestock welfare. www.pirbright.ac.uk/news/2024/02/ new-seasonal-control-measuresbluetongue-virus

### FINANCIAL REVIEW OF THE YEAR

The financial year under review was the first year of the five-year settlement from BBSRC, following a detailed Institute Assessment Exercise undertaken in 2022-2023.

The settlement was £2.1m, 13.6 per cent higher than the previous funding round at £17.6m, and as with the previous review, will be flat funding for the five years of this funding round. Therefore, there is an expectation that savings and income from other sources will need to be generated to maintain the level of operation currently supported by the settlement and that operating surpluses generated in the early years of the award will be used to support anticipated deficits in the final years of the funding cycle.

Although BBSRC continued to support Pirbright to withstand the higher level of energy costs, we are not complacent about the impact these costs are having on the financial sustainability of Pirbright. We have instigated an energy reduction programme that has reduced gross energy usage on the site by around 20 per cent on an annualised basis, and around 12.5 per cent when allowing for new facilities that have come online since April 2023.

### INCOME

Total income amounted to £44.7m (2023: £46.9m); this was principally due to core funding from BBSRC increasing by £1.2m and income from scientific grants increasing by £2.5m, which mitigated some of the reduction arising from a lower level of funding for the capital development of the site as the current phase reaches completion. Investment in tangible fixed assets in the year totalled £8.3m (2023: £12.1m). This was funded by grants from the Institute's principal sponsor, BBSRC, Defra and other grant-awarding bodies.

### EXPENDITURE

Expenditure undertaken to support continuing activities in the year amounted to £54.7m (2023: £50.6m).

Staff costs are the Institute's most significant expenditure accounting for £18.6m (34 per cent of expenditure) in the year (2023: £17.7m, 35 per cent of expenditure). The increase of £0.9m (5.1%) is in part attributable to the pay review during the year and in part due to the high number of staff positions occupied, as compared to the prior year. Post Brexit and COVID-19, Pirbright carried a significant number of vacancies as staff members revaluated where they wanted to live and what they wanted to do, however during the year both our ability to both recruit and retain staff has significantly improved with vacancies falling back to historic levels.

Energy costs are also very significant to Pirbright, with the site requiring power equivalent to 5,000 homes to maintain containment of the facilities on site. Energy costs, net of funding from BBSRC of c.£2.3m, remained largely unchanged at c.£1.8m.

As the new buildings and facilities have come online over the past few years, the depreciation charge has steadily risen, increasing from £10.5m in 2022-23 to £11.3m this year, an increase of c.£0.8m.

Finally, repairs and maintenance costs rose by £3.0m in the year as a number of ageing capital assets have been refurbished. This includes the Building Automated Control System to comply with latest human factors best practice and replace the controllers that monitor this system, decommissioning costs of old facilities and refurbishment of the effluent treatment plant in ISO 11.

### **GRANT PROPOSALS**

The Institute continues to achieve notable success with scientific grant applications. During the year, Pirbright researchers submitted grant proposals with a sponsor value of £29.8m (2023: £16.5m) and were awarded grants with a value of £22.6m (2023: £9.5m). The significant increase in the value of applications and awarded grants was in part due to one grant application and award of £8.2m.

### **CASH AND TERM DEPOSITS**

Cash and term deposits at 31 March 2024 were £28.0m (2023 : £34.8m), a reduction of £6.8m in the year, as result of significant payments for the capital development on site from funds already received from BBSRC. Pirbright deposits its cash with UK-registered financial institutions in accordance with the

Institute's investment policy. Investment income from cash deposits in the year was £0.9m (2023: £0.3m), the increase in the year reflecting rising interest rates.

#### **NET MOVEMENT IN RESERVES**

Pirbright has three categories of reserves: restricted reserves, which represent monies previously provided by BBSRC to support development activity on site and business cases, together with the assets developed with previously awarded funds; designated reserves, which represent monies previously agreed by the Trustee Directors for specific projects; and general reserves. During the year, total reserves decreased from £341.6m to £331.6m, a decrease of £10.0m (2023: £3.6m). The Pirbright Institute recorded a net increase in general reserves of £2.2m (2023: £0.4m), a net increase in designated reserves of £0.3m (2023: £0.5m) and a net decrease in restricted reserves of £12.5m (2023: £13.5m).

The decrease in restricted reserves was specifically in the Fixed Asset Fund, as development of the Pirbright site continues under the Master Plan, with depreciation now being incurred on buildings coming online exceeding new funding, as the second phase of the Plan nears completion. The Fixed Asset Fund reserves fell by £11.2m (2023: £4.4m) as the depreciation of assets now in use outstripped new investment in assets on the site. During the year, the Biggs Avian Research Building was officially opened. This facility increases the Institute's capacity to undertake research into both endemic and exotic infectious diseases of poultry. Construction of the Brooksby Building continued. The Brooksby Building will be a self-contained, standalone, large animal experimental facility designated to accommodate in vivo studies involving high-containment pathogens of livestock, such as foot-and-mouth disease virus (FMDV), as well as pathogens that can spread from livestock to humans.

#### **RESERVES POLICY**

#### Unrestricted funds

As in previous years, it is the policy of the Trustee Directors to ensure the General Fund in the unrestricted reserves is maintained above £7.6m. This will enable the Institute to manage fluctuations in income and unforeseen cost pressures, as well as provide cover for the redundancy liabilities taken over from BBSRC, when the staff of the Institute were transferred to the Institute in January 2017 under a Transfer of Undertakings (Protection of Employment) exercise.

At 31st March 2024 unrestricted general reserves were £10.1m (2023: £7.8m).

#### Designated funds

Designated funds have been set aside by the Trustee Directors for specific purposes to support the purchase of science equipment, to provide additional scientific staff, to support the training and learning programme, which shares Pirbright's expertise, and to provide funding for various small-capital projects.

#### Restricted funds

The Institute has been undertaking a significant building programme within the Pirbright site for which funding has been received from BBSRC. The funding of this programme is via grants, which are held within the restricted funds; the total fund value is £314.6m (2023: £325.8m). This funding is solely and specifically granted for the purpose of the building programme, hence the inclusion within the restricted fund. This represents the value of the buildings that have already been constructed. Pirbright also has a number of smaller restricted funds, which are held to support the capital development programme, support the running costs associated with the Brooksby Building prior to practical completion and the revaluation of the investment property.

Full details of all reserves and movements in the year can be found at Note 15 to the Financial Statements.

### **FUNDRAISING ACTIVITIES**

Section 162a of the Charities Act 2011 requires charities to make a statement regarding fundraising activities. Although the Institute does not undertake direct fundraising from the general public, with the legislation defining fundraising as "soliciting or otherwise procuring money or other property for charitable purposes," we have to disclose the value of such income in the year. We have received no such income during the current or previous financial year and have consequently received no complaints in respect of our fundraising activities.

### PIRBRIGHT'S PERFORMANCE 2023-2024

### **PIRBRIGHT'S PRINCIPAL OBJECTIVES**

To continue a world-leading research programme publishing groundbreaking scientific research, winning research funding, recruiting and retaining the brightest and the best staff and students.
To develop further the Pirbright long-term vision of scientific research, with impact in enhancing our collaborations with agencies to improve disease control in low- and middle-income countries.

• To continue to implement the fully funded development programme to provide additional animal research facilities for the study of highconsequence pathogens. These facilities will further enhance Pirbright as a unique national and international capability.

• To develop strong strategic collaborations with other global centres of excellence to support the Institute Strategic Programme grants. • To diversify our funding through greater collaboration with international partners via various new funding opportunities.

• To maintain high-containment infrastructure, to manage the safety, security, environment and quality risks from our work with high-consequence pathogens, and to provide training and expertise to external partners in these areas.



### PIRBRIGHT'S KEY PERFORMANCE INDICATORS (KPIS)

• Publications in relevant scientific journals, with a benchmark of one paper per postdoctoral scientist a year.

• Success rates for research grant proposals over the next five years: 35 per cent in terms of successful applications and 30 per cent in terms of value of the awards.

• Annual research income of at least £12.5m externally won funding each year over the next five years.

• Recruitment and the retention of high-quality staff and students; to achieve less than 15 per cent annual staff turnover a year.

• Compliance with all statutory requirements as a major hazard site, close cooperation with regulators and conformity to applicable standards such as ISO/IEC17025.

### **OUR PERFORMANCE AGAINST OUR KPIS**

• We published 137 papers in a range of high-impact journals achieving an average of 1.1 publication per postdoctoral scientist in the year.

• We achieved 56 per cent successful grant applications and 75 per cent in terms of value of the awards against significant UK and international competition. The high value of awards received is as a consequence of one particularly high value grant; if this is excluded the value of the awards achieved would be 66 per cent, still significantly above the target KPI.

• The annual grant income for 2023-2024 was £17.6m, exceeding the £12.5m target by 41 per cent.

• At the end of March 2024, the rolling annual average voluntary staff turnover figure was 13.9 per cent, significantly below 22.6 per cent at the end of last year and below the 15 per cent target.

• Pirbright is subject to a HSE Major Hazard Intervention Plan comprising a minimum of three scheduled HSE inspections each year to monitor compliance with its licence under the Specified Animal Pathogens Order 2008 (SAPO) and with regulations under the Health & Safety at Work etc Act 1974. No legal enforcement notices were issued by HSE (or any other regulatory authority) against Pirbright in the year. One enforcement letter was issued by HSE against Pirbright in relation to a planned inspection on containment and control in some of the high-containment laboratories. The letter required improvements to operational management of certain laboratory equipment. Please note: a letter sets out actions and deadlines but is a lower level of enforcement than a legal notice and does not appear on the public record, but is disclosable by HSE under FOI. Non-compliance with a letter would lead to a notice. We complied in full with the actions stipulated in the letter by the deadline given.

• Pirbright Reference Laboratories & Disinfectant Testing are accredited to ISO/IEC 17025 and thus subject to an annual surveillance audit by UKAS. Accreditation has been successfully maintained for 2024-2025 and the annual audit gave no improvement actions. No other enforcement action was taken against the Institute during the year by any other regulatory or audit body on any aspect of biorisk, animal scientific procedures regulation, health and safety, security, environment, quality or wider compliance. Nor were there any incidents reportable to any regulatory or audit body under any applicable legislation or standard.

### DELIVERING THE BBSRC INSTITUTE STRATEGY

The BBSRC Institute Strategy, published in July 2021, sets out BBSRC's approach to supporting and working in partnership with the institutes it strategically funds.

The strategy outlines three themes that underpin the principles of its strategic investment:

- Capability
- Connectivity
- Culture

To support this, Pirbright has established a range of additional activities around these themes to help deliver the strategy.

#### CAPABILITY

Our capability has been enhanced with the recruitment this year of two senior Group Leaders, Professor Nicolas Locker and Dr Naomi Forrester-Soto, who are recognised experts in their field. In addition, the Institute's Fellowship programme has expanded, with five new Fellows appointed this year. These help further strengthen our critical mass, expanding our interdisciplinary teams to deliver science of national and international strategic importance. We also introduced the Pirbright Strategic Career Development Awards to support early career researchers towards independent working. At Pirbright we provide support across all stages of the scientific career path, helping to ensure that we maintain and continue to develop not only the scientific capabilities of Pirbright but of the UK research ecosystem.

This year, a Level 3 Leadership and Management Programme for emerging leaders has been delivered to staff working in different disciplines at Pirbright. This programme of up to 15 months helps support future leaders with the tools and skills to lead people and manage high-performing teams, as well as develop skills in project and operational management, decision making, finance, relationship building and communications.

### CONNECTIVITY

Pirbright continues to act as central hub for collaboration, providing expertise in animal health, immunology, virology and related disciplines to many national and international consortia. The UKRI-funded Monkeypox Consortium is an example that underscores the importance of collaboration to push scientific boundaries and accelerate progress. Pirbright is also one of eight scientific organisations working together to help understand and develop ways to mitigate against avian influenza virus as it has emerged. The FluMap Consortium aims to develop tools to try and fill key knowledge gaps around the bird flu virus and the reasons for its circulation in wild bird populations, as well as factors that drive emergence in poultry.

On the international stage, this year has seen continued commitment to the Centre of Excellence for Research on Avian Diseases (CERAD) with partners in China, a highly productive collaboration established almost 10 years ago, that continues to improve our understanding and advance knowledge in the area of avian research, as well as contribute towards the training of both the UK and Chinese bioscience workforce. Our relationship with the Indian National Institute of Animal Biotechnology (NIAB) has also been a key focus this year. This partnership aims to enhance research and innovation in veterinary vaccines, fostering food security and human health. This collaboration aligns with the UK-India Roadmap's goal of bolstering bilateral research and innovation efforts over the next decade.

There are many examples of how we collaborate to share knowledge, expertise and experience across all disciplines at Pirbright and the wider innovation community. This year we have partnered with a range of international organisations to share our expertise in how to manage and operate specialised research infrastructures, with a focus on high-containment engineering and risk management. This includes knowledge sharing with partners from Canada, Ireland and Chile. We continue to work with our strategic partners outlined within our Institute Strategic Programme Grants to advance scientific knowledge and increase critical mass. Plus, we work closely with the seven other BBSRC institutes across all our capabilities.

#### CULTURE

The Institute has recruited its first Equality, Diversity and Inclusion (EDI) Manager to support the delivery of our continual EDI. Considerable progress has been made with gender equality across many areas of Pirbright, which was recognised this year with an Athena Swan Silver Award, a five-year accreditation that highlights Pirbright's commitment to supporting women and marginalised groups in science. The EDI Manager works with our EDI Committee to support delivery of actions identified through both the Athena Swan action plan and the broader employee engagement plan. They provide support to our staff and student networks, including the Rainbow Network and Neurodivergent Support Group.

Our Early Careers Forum goes from strength to strength, seeing an increasing number of members and a range of peer-to-peer support, knowledge sharing and networking opportunities. A focus this year has been to ensure a diverse spread of members across all areas of the Institute and establishing more formalised feedback and communication channels with senior management.

This year has also seen the recruitment of two Roving Researchers at Pirbright. Our Roving Research staff are employed to support a range of projects and individuals to maintain research momentum and to minimise the impact of a leave of absence or time away from the laboratory, such as longterm sick leave (alternative support is provided specifically for parental leave) or caring responsibilities. Pirbright is piloting the Roving Researcher initiative for an initial period of three years, during which time we will review the success of the scheme.

### STAKEHOLDER ENGAGEMENT – SECTION 172 STATEMENT

The Trustee Directors consider that the decisions they have made during the financial year have satisfied the requirements of S172(1) of the Companies Act 2006 and they have acted in good faith to promote the success of the Institute, and in doing so, have taken into account the stakeholders and matters outlined in S172(1).

The Board of Trustee Directors has the ultimate responsibility for the Institute and delivery of our charitable objectives. Key decisions made by the Trustee Directors during the year included:

• Approval of the Operational Plan and Budget for 2023-2024, including the pay award and the first year of the five-year cycle of funding from BBSRC.

• Approval of Delegation of Authority from Trustee Directors to the Director of the

- Institute, Company Secretary and the Senior Leadership Board.
- Appointment of a new Trustee Director.

### THE TABLE BELOW SETS OUT PIRBRIGHT'S SIGNIFICANT STAKEHOLDERS

	HOW WE ENGAGE
Employees	Employee engagement forms a central part of the Institute's strategy. We employ a variety of ways to communicate with our staff and students in a dialogue so we can also gain feedback. Communication channels include a monthly e-newsletter, intranet, forums, staff briefings, surveys, digital screens, internal seminars, blogs and workshops. Further information about our employees can be found on page 24.
Students	Pirbright has a vibrant student community and we are committed to supporting, nurturing and offering additional learning and training opportunities to them. Find out more on page 24.
Funders	We engage with funders at all stages of the funding process and have regular dialogue and face-to-face meetings with our key investors. Please see page 27 for more information.
Research organisations and partners	Pirbright undertakes numerous collaborations with universities, research institutes and disease-control agencies around the world. More details are given on page 26.
Pharma	Partnerships with pharmaceutical companies are essential for the development of vaccines, diagnostics and medicines. Find out more on page 26.
Farmers	We engage with the farming community through specialist farming press, through farming organisations and bodies and media outlets, including BBC World Service and BBC Radio 4 <i>Farming Today</i> , as well as at agricultural events.
Regulators and government	As a major hazard site, Pirbright works closely with the Health & Safety Executive (HSE), counter-terrorism security authorities, the Home Office and other regulators. As a national capability for the prevention and control of exotic viral diseases of livestock, Pirbright works closely with Defra, BBSRC UKRI and others. As the World Reference Laboratory for certain pathogens and a regional Reference Laboratory for others, Pirbright works closely with the UN Food & Agriculture Organization (FAO) and World Organisation for Animal Health (WOAH). As an ISO/IEC 17025-accredited testing laboratory, Pirbright works with the UK Accreditation Service (UKAS). See page 20 for more details.
Public	We engage with the public through our outreach and public engagement programmes. Please see page 17 for more information.
Local community	Our neighbours are extremely important to us and we engage by supporting the local community in a number of ways, including sponsoring local events, volunteering in local conservation initiatives such as Fox Corner Conservation and engaging with the parish, borough and county councils over development on our campus. Our scientists also visit local schools and colleges – more information can be found on page 17.
Suppliers	One of the ways we engage with our suppliers is through Supplier Days held several times a year at Pirbright. We hold regular meetings with our suppliers both about purchasing matters and ethical matters, particularly those around modern slavery and human trafficking principles.

# **ENGAGING WITH THE PUBLIC**

Researchers and operations staff at Pirbright are dedicated to public engagement, actively interacting with various audiences such as schools, students, farmers and the general public. In the 2023-2024 period, the communications team participated in 25 face-to-face public-engagement activities, inspiring young scientists at schools and career events and engaging with the public at local fairs, including a Pirbright Institute open-door event for friends and family members of staff and students.

### PIRBRIGHT'S OPEN-DOOR EVENT

At the beginning of April 2023, The Pirbright Institute welcomed over 800 people on site for two days of discovery, interaction and celebration.

The Celebration Days provided a unique opportunity for staff, students and stakeholders to learn more about Pirbright's work and gave staff and students the opportunity to highlight their recent successes.

Teams and research groups from across the organisation presented interactive exhibits, hands-on experiences and competitions to inspire and educate people of all ages.

The 36 displays took visitors on a journey through virus construction and behaviour, used virtual reality to enable people to experience a walkthrough of high-containment facilities, and guests also had the chance to join 'Dr Zoo' in breaking the codes to escape a deadly outbreak. Most importantly, everyone got to learn more about the staff and students behind the Institute.

With Pirbright's mission of being a leader in preventing and controlling viral diseases in livestock, having the opportunity to raise awareness of the research undertaken at the Institute and sharing the innovation on how that happens is key.

### **INSPIRING FUTURE SCIENTISTS**

Throughout this year, Pirbright volunteers have attended more face-to-face career events, focusing on secondary and sixth-

form students, helping us to inspire more students from a wider range of backgrounds and interests to consider scientific careers. During 2023-2024, 61 unique volunteers from our staff attended 24 external events, including fairs, lectures and workshops.



Volunteers from Pirbright at a careers event at Bishop David Brown School, November 2023

### SUPPORTING OLD AND NEW VOLUNTEERS

The success of Pirbright's engagement programme relies on the much appreciated contribution of its dedicated volunteers. Training is crucial for supporting both staff and students, as well as attracting potential future volunteers. This past year, the Institute has had approximately 35 science, technology, engineering and mathematics (STEM) ambassadors. We actively encourage participation in the STEM Learning Network, connecting schools with STEM ambassadors who volunteer their expertise for talks and events. Additionally, we provide specialised training for PhD and placement students to enhance their understanding of engagement and equip them with the necessary communication skills to interact effectively with the public.



A Disease Detective of the future at the Institute Celebration Day in April 2023

### **COMMUNITY ENGAGEMENT**

The Pirbright Institute maintains longstanding partnerships with the Pirbright Parish Council, St Michael and All Angels Parochial Council and local resident groups. Over the past decade, we have attended and sponsored initiatives in the local community.

During 2023-2024, we sponsored and attended the Pirbright Village Summer Fair, promoting the Institute's world-class research and interacting with the local community. We sponsored the Village Christmas lights, with staff and students attending the grand 'switch on'.

Beyond parish and church council activities, the Institute engages with the community through environmental stewardship. Our involvement in maintaining the Fox Corner Community Wildlife Area not only provides staff recreational opportunities, but also fosters collaboration with local residents and the Surrey Wildlife Trust. In October 2023, the Institute contributed to a project for a replacement boardwalk and dipping platform at the Community Wildlife Area pond.

In 2024, the Institute expanded its community involvement by supporting Pirbright Primary School's new science lab project, further demonstrating the Institute's commitment to proactive engagement and open communication.

## **COLLABORATIONS AND NETWORKS**

Pirbright works with many different external collaborators from academia, industry and non-profit organisations. In the 2023-2024 financial year, we entered into 54 new collaboration agreements with 59 organisations based in 13 countries.

Of the 59 organisations, 35 were academic, 12 commercial and 12 public bodies, non-governmental, or charities. These collaboration agreements reflect new research projects with external partners, including universities in the UK and abroad, multinational pharmaceutical companies and research institutes with an interest in animal health or zoonoses. Our research collaborations include projects related to emerging porcine influenza and coronaviruses, development of novel viral vectors for use as poultry vaccines, and ongoing research on developing an effective vaccine against African swine fever.

We have ongoing collaborations with new and existing commercial partners in a variety of projects. We are working with one UK-based startup to develop and evaluate herpesviral vectors for use to prevent porcine reproductive and respiratory syndrome (PRRS), and with another to develop and evaluate multiplexed diagnostic assays. We are in discussions with a European pharmaceutical company to develop new vaccines for infectious bronchitis virus, a coronavirus that affects poultry, and with an animal breeding company to explore genetic mutations that confer disease resistance in cattle and pigs. We are continuing to develop candidate vaccines to prevent African swine fever virus, a devastating disease of pigs threatening Europe, and we have continued with two projects with industrial partners to develop multivalent poultry vaccines using recombinant viral vectors.

We also entered into 46 new confidentiality agreements, including 29 with commercial partners, allowing us to have open conversations to discuss potential partnerships, and 85 agreements related to the transfer of material to and from Pirbright and organisations in 22 different countries.

We are continuing to develop the relationships with the Vaccine and Infectious Disease Organization (VIDO), part of the University of Saskatchewan. VIDO is Canada's national centre for pandemic research and performs research on a range of human veterinary diseases; it is building a Vaccine Development Centre, which will be capable of manufacturing vaccines up to containment level 3. A Pirbright delegation visited VIDO in March 2023, and this was followed up with a very successful visit from VIDO animal technicians to Pirbright in November 2023 to observe our processes and protocols for working with animals, specifically in relation to African swine fever.

Pirbright received funding from the BBSRC's International Institutional Awards to support the establishment and development of international partnerships and networks. This funding will be used to support a variety of partnering initiatives, such as establishing an international bluetongue virus (BTV) workshop to exchange knowledge on the BTV status, working with a collaborator to study the spread of animal diseases in livestock markets, and building capacity and exchanging knowledge on biosafety and biocontainment practices with partners based in India.

We are involved in several different networks, often taking a leading role in establishing international communities to exchange knowledge, collaborate and share best practice.

Pirbright is a founding member of the UK-China Centre of Excellence for Research on Avian Diseases, alongside four Chinese academic organisations. Professor Venugopal Nair OBE leads Pirbright's involvement in this network. The Centre aims to support research into major avian diseases affecting both countries by providing support for collaborative research projects, and enabling joint applications for funding, people exchange, knowledge exchange and commercialisation efforts. In 2023-2024, we have expanded the network to include more Chinese members, all of whom have committed to providing funding to support networking activities.

The G2P-UK National Virology Consortium, a UKRI-funded national research project of which we are a member, continues to enable knowledge exchange to develop risk assessments of SARS CoV-2 variants. We are also collaborating with the University of Liverpool to support the economic modelling of animal diseases in partnership with the project team of Global Burden of Animal Diseases (GBADs). GBADs work to provide funders, consumers and policy makers with data and information on animal health systems to allow effective evaluation of animal health investments and guidance on the allocation of scarce resources.

Pirbright joined a consortium led by Imperial College London, and partnering with the London School of Hygiene & Tropical Medicine, the University of Liverpool, and the UK Centre for Hydrology & Ecology to establish the One Health Vector-borne Diseases Hub. This Hub is jointly funded by Defra and UKRI and will consider the impact of infections that span across human and animals to understand the role of the environment and global climate change. It is a multi-disciplinary collaboration aimed at responding to infectious disease threats.

Pirbright is also a member of the FluMap Consortium. This consortium joins eight of the UK's top research organisations together to understand and develop methods to mitigate the risk of influenza in birds. The network established the need to improve understanding of biosecurity risk points and the implementation of effective biosecurity practices on poultry farms. The project has been awarded follow-on funding which will enable further development of prevention and mitigation approaches.

Egg candling technique used to determine embryo viability for vaccine production.

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### RISK MANAGEMENT AT PIRBRIGHT AS A MAJOR HAZARD SITE

Risk management is critical to the safe reliable operation of Pirbright as a major hazard site.

Risk management is critical to the safe reliable operation of Pirbright as a major hazard site. It requires specialist expertise, ownership of risk by all staff, students and stakeholders, and development of Pirbright as a high-reliability organisation and a beacon of excellence.

Risk management at Pirbright has three broad objectives:

- To facilitate science excellence and capability, both in
- research and in diagnostic surveillance.
- To reinforce financial sustainability and high reliability.

• To ensure the work of the Institute cannot jeopardise the UK livestock population and agricultural economy, the health and safety of people, or the environment.

Risk management at Pirbright includes a risk & opportunities register, key and safety performance indicators (KPIs and SPIs), and operational planning linked to both risks and opportunities and to strategic objectives. The risk & opportunities register is regularly updated and reviewed for action by Senior Leadership Board (SLB) and Trustee Directors. The register includes operational risks (biorisk, health and safety, security, cyber, environment, quality, engineering), continuity risks, strategic risks (reputational, enterprise, financial, political), and opportunities. There is an internal audit and inspection programme for critical risks and areas. Pirbright actively maintains open and cooperative relationships with stakeholders, regulators and accreditation bodies. A portfolio of insurance protects Pirbright and its stakeholders. Policies include property damage and business interruption; employers, public, product and management liabilities; and professional indemnity.

### BIORISK

Many of the animal viruses studied at Pirbright are highconsequence pathogens, ie, are not endemic to the UK and so could cause a disease outbreak if released. Authority to work with such pathogens is via a SAPO (Specified Animals Pathogens Order) Licence issued and enforced by the Health & Safety Executive (HSE).

Pirbright's SAPO Licence is at Containment Level 4 (the highest level) and the Institute is classified as a major hazard site. Each year there is an HSE intervention plan, and in 2023-2024, this comprised three visits by specialist inspectors scrutinising functional safety management in conformity with IEC 61511, containment and control in laboratories working with foot-and-mouth disease virus, and an annual performance review and scoring in conjunction with senior Pirbright and HSE leaders. There were also security inspections by specialist counter-terrorism police officers and audits by insurers. Biorisk management at Pirbright comprises containment engineering and operational controls. Engineering infrastructure includes sealed facilities, negative pressure cascades, high-efficiency air filtration, effluent treatment plants, incinerators, autoclaves, fumigation chambers and automation and control systems. Operational arrangements include risk assessments, operating procedures, training and competency, waste management, transport procedures, emergency plans and exercises, audits and inspections, planned preventative maintenance (PPM), validation and testing. Pirbright has all these measures in place, and each element is examined by HSE every few years through its intervention plans. All high containment facilities at Pirbright are less than 15 years old.

### QUALITY AND ORGANISATION

Diagnostic surveillance and disinfectant testing at Pirbright are in UK Accreditation Service (UKAS) accredited testing laboratories (no. 4025) to ISO/IEC 17025 quality standard, which is integral to their role as a UK Reference Laboratory for Defra and a UK national capability, and their global role as a WOAH Reference Laboratory and FAO/WOAH World Reference Laboratory for specific viruses. Pirbright's management system ensures conformity with 17025 and underpins wider risk management across the Institute. The annual 17025 surveillance audit of the Reference Laboratories in April 2023 by UKAS gave an extremely positive outcome, with just two very minor findings.

In addition to its risk management system, assurance arrangements and regulatory oversight, Pirbright actively works to improve its risk control and resilience. In 2023-2024, this included BBSRC-funded capital projects for development of an integrated alarm management system software solution and extensively refurbished control room to address HSE-identified human factors issues, and replacement of obsolete controllers in air handling systems. In 2023-2024, there were also internal projects to implement functional safety and process safety management systems, to integrate human factors management into processes, to improve control of musculoskeletal risks, to further enhance technical and organisational cyber security, to develop a competency framework, to improve management of change processes, and to develop major hazard leadership training. Pirbright strives to adopt best practice, which includes coordinating the cross-sector UK Biorisk Strategic Leadership Group, active roles in the BSL4ZNet international consortium of high containment facilities and the EuFMD consortium of European FMDV facilities, and publication of peer-reviewed papers and symposia presentations on biorisk.

## **RISK MANAGEMENT**

Key risks are summarised in the table below.

	CONTEXT	CONTROL / MITIGATION	
BIOSAFETY (UNINTENTIONAL RELEASE OF, OR EXPOSURE TO, HIGH CONSEQUENCE PATHOGEN)	Pirbright is classified by the Health & Safety Executive (HSE) as a major hazard site, because release of the high-consequence viral pathogens of livestock animals that the Institute works with (such as foot-and-mouth disease virus) could cause a serious disease outbreak, leading to destruction of many animals, extensive national disruption and severe economic loss. Some of the pathogens are also zoonotic, which means they can infect humans and cause serious illness.	Physical, engineering, operational and management measures for biological containment in compliance with relevant UK legislation (Specified Animal Pathogens Order 2008, Control of Substances Hazardous to Health Regulations 2002, Genetically Modified Organisms (Contained Use) Regulations 2014), associated standards (including FAO/ EuFMD minimum standards for labs working with foot-and-mouth disease virus), and Approved Codes of Practice and guidance; and in alignment with ISO 9001, ISO 14001, ISO 35001, ISO 45001 and IEC 61511. Also, an annual HSE Major Hazard Intervention Plan, and staff cohort of competent biorisk advisers	
BIOSECURITY (DELIBERATE RELEASE OF, OR EXPOSURE TO, HIGH CONSEQUENCE PATHOGEN)		Physical, operational and management measures for security in conformity with requirements of the UK National Counter Terrorism Security Office, with oversight by regional counter terrorism security advisers, 24/7/365 guard force, background screening of new starts, and multiple layers of physical security.	
QUALITY	As well as being a leading research institute, Pirbright provides diagnostic and surveillance Reference Laboratories for a range of pathogens for the UN Food and Agriculture Organization (FAO) and the World Organisation for Animal Health (WOAH), and is funded by BBSRC UKRI and Defra as a UK national capability to provide diagnostic capacity to support the detection and control of national disease outbreaks. The quality of Pirbright's scientific output is therefore critical, and FAO, WOAH and Defra / UK Government require the Reference Laboratories to be accredited to the ISO/ IEC 17025 international quality standard.	Accreditation of the Reference Laboratories to ISO/IEC 17025 by the UK Accreditation Service (Pirbright is UKAS Accredited Testing Laboratory No 4025), development and implementation of a quality management system across the Institute, an internal audit programme, and alignment to ISO 9001 and other relevant ISO management standards in key operational areas in support of the Reference Laboratories.	
ANIMAL WELFARE	Research with animals is an integral part of the research programmes at Pirbright and is carried out to extremely high UK standards of ethics and animal welfare, which are the most stringent in the world, addressing this critical reputational risk.	Physical, operational and management measures for animal welfare in compliance with UK legislation (Animal Scientific Procedures Act 1986) and associated Approved Codes of Practice and guidance, oversight by UK Home Office, application of 3Rs (Replace, Refine, Reduce) and ARRIVE guidance (Animal Research: Reporting <i>In Vivo</i> Experiments).	

Continued overleaf

Pirbright

	CONTEXT	CONTROL / MITIGATION	
CYBER SECURITY	<ul> <li>Pirbright has to address the cyber, continuity, people and financial threats that organisations in all sectors must deal with. Potential consequences of these are amplified for Pirbright because of the possible effects on its biological and quality risks.</li> <li>Cyber-attack could impact containment systems and inhibit science output, unless robust tested countermeasures are in place and kept current.</li> <li>National power outages could impact containment systems and inhibit science output, unless maintained tested backups and plans to manage such situations are in place and subject to regular review and exercises.</li> <li>Recruitment and retention issues could lead to shortage of the essential specialist skills for safe and reliable operation of facilities and to adverse impacts on science capability, unless effective strategies are developed and implemented to mitigate such issues.</li> <li>Insufficient funds for maintenance could lead to reduced reliability of containment systems or of science equipment, unless there is rigorous financial control and successful winning of competitive funding.</li> </ul>	Comprehensive portfolio of cyber security countermeasures and management systems in conformity with requirements of UK National Cyber Security Centre 10-Steps and HSE OG86 (cyber security requirements for critical controls), with segregation of critical resources from networks and carrying out regular drills, training and exercises. Also processes to manage and monitor GDPR compliance.	
CONTINUITY		Plans for incident and crisis management, business continuity plans in alignment with ISO 22301, backups and contingencies for critical services and supplies, contingency plans for Reference Laboratories for disease outbreaks, and all plans regularly tested by drills, training and exercises.	
PEOPLE		Allowances for responsibilities and for recruitment and retention, training and development, career pathways with merit awards and a career development policy and process, annual performance and personal development reviews, generous pension provision and life cover, and employee benefits platform and assistance programme.	
FINANCIAL		Rigorous systems for financial planning, control and monitoring; ongoing risk management; processes and support to facilitate preparation, submission and management of competitive funding grants and capital funding bids; commercial business development programme, with Pirbright Innovations Ltd as a vehicle for commercial work; comprehensive portfolio of insurance; anti-fraud and anti-bribery policies; annual audit; and ongoing reportage to BBSRC as core funder, landlord and strategic partner.	
ECONOMIC	Adverse effects on the UK and world economy from global and other events are a substantial threat to the funding landscape and to the operational cost base, particularly from high levels of inflation and the impact of rising energy costs.	Inflation is factored into business planning, including planned increases in income from competitive funding sources and appropriate commercial activities, and savings from improved procurement and BBSRC-funded 'spend-to-save' capital works, including projects to reduce energy consumption and costs.	

## A SUSTAINABLE FUTURE

The Institute is committed to environmental sustainability, biodiversity and reducing its carbon footprint. Pirbright is also conscious of its broader social and governance responsibilities.

The cutting-edge research undertaken at the Institute is made possible by a range of highly specialised facilities, both in high- and low-containment environments. However, these facilities require a significant amount of energy to operate and maintain our biosecurity. The amount of energy used onsite is comparable to some 5,000 homes, and with the significant increase in energy process in recent years, energy conservation and reduction are important to us. We are also very conscious of the greenhouse emissions that we are responsible for and take our responsibility to reduce our carbon footprint seriously.

Over the last year the Institute has started an energy reduction programme with these projects focused on reducing energy costs, reducing energy consumption, reducing our carbon emissions, and making the site more energy efficient. The most significant of these projects, from a financial viewpoint, was the installation of a Combined Heat and Power Plant (CHP), which became operational in summer 2022 and now provides around 75% of Pirbright's power needs. The CHP has significantly reduced the cost of energy used on site, but as the CHP burns gas to produce electricity, it has significantly increased the total amount of energy consumed. This is similar to the rest of the country, with the disparity between gas and electricity prices being a disincentive to adopt low carbon technologies, such as using heat pumps instead of gas boilers. However, to counter this we are committed more than ever to reduce our carbon footprint by reducing our energy consumption on site.

During 2023-2024 an accommodation review has been undertaken leading to the consolidation of the insectaries on site and the closure of older, less energy-efficient buildings.

The Pirbright Energy Policy and Action Plan drawn up last year has led to the implementation of heat and steam recovery from the CHP, energy setback on the most energy- hungry building, the Plowright Building, housing high containment, chiller water system optimisation and feasibility studies into energy production from solar arrays. These projects have all received funding from BBSRC during the year to progress these projects.

The amount of energy consumed by the Institute is directly related to the level of science activity on the site. The figures on the right reflect the Institute's best estimates of its environmental impact during the 2023-2024 financial year.

As mentioned above, Pirbright started running its own CHP in the summer of 2022. This generates electrical power for the site from gas. This is the reason for the significant increase in gas consumption in the year, mirrored by a significant reduction in electricity consumption.

The Institute continues to base its environmental objectives around the UKRI Environmental Sustainability Strategy, which drives towards a zero-carbon future by 2040. This ensures new building proposals will consider the carbon impacts of facilities throughout their life, from the building materials used to energy consumption and energy sources employed once operational. The Institute's environment and energy team promote the continual improvement of energy and environment performance on the Pirbright site, monitor and review the energy and environment policy, report on and action results of inspections and audits and provide a forum for personnel to raise queries related to energy and environmental sustainability.

Pirbright's finances are also aligned to the green agenda and now operate with Barclays' Green Deposit Scheme. This allows deposits by the Institute to be earmarked against the banks' green bonds, which in turn are matched against a range of climate-related projects, including energy efficiency, renewable energy, green transport, sustainable food, agriculture and forestry, waste management and greenhouse gas emission reduction. In March 2023, the GBP market value of Green Bonds held by Barclays totalled over £1.9 billion, with a total  $CO_2$ impact of almost 4.0 million tonnes. At 31 March 2024, the Institute had £9.7m deposited in this scheme.

Finally, we are cognisant of our broader responsibilities and during the year published our Modern Slavery & Human Trafficking Statement and have recently published an update on last year's plan and our new plan for 2024-2025. During the year 91% of all staff and students successfully competed training, an anonymous channel was set for staff and students to report concerns, whether these were on the Pirbright site or encountered through our work around the world, updated our collaboration agreements to ensure that we have the right to terminate contracts with partners who don't adhere to the principles adopted by the Institute and started working with our suppliers to ensure they also adopted UK legislation in this regard. The full plan and updates can be found at Modern Slavery & Human Trafficking Statement on our website.

GREENHOUSE GAS EMISSIONS EMISSIONS TONNES CO <sup>2</sup> e	2023-2024	2022-2023			
Scope 1: Gas	8,222,130	5,931,270			
Scope 2: Electricity	724,980	1,167,820			
Scope 3: Official business travel	6,470	3,600			
Total emissions	8,953,580	7,102,690			
Emissions per £ of grant received	0.24	0.21			
ENERGY CONSUMPTION kWh					
Scope 1: Gas	43,827,272	31,492,412			
Scope 2: Electricity	3,561,046	6,098,984			
Scope 3: Official business travel	11,754	11,175			
Total energy consumed	47,400,072	37,603,121			
Consumption per £ of grant received	1.40	1.11			
FINANCIAL INDICATORS					
Total energy cost £'000	4,390	3,679			
Energy cost per £ of grant received	11.72p	10.89p			
Cost of official business travel	5	6			
Cost of official business travel per ${\tt f}$ of grant received	0.0001p	0.0002p			

# OUR PEOPLE

Our scientists are also supported by highly skilled on-site specialists in health, safety, biosecurity, engineering and research services, as well as our support functions such as IT, Finance, HR and Security.

### EMPLOYEE ENGAGEMENT

Last year, we launched our revised Pirbright Institute Research Culture Statement which demonstrates our passion for the work we do and provides a clear set of expectations to guide our thinking and planning. This statement also ensures our approach continually and consistently supports and directs the work we undertake that enables the Institute to operate as a top-performing organisation.

The Institute is committed to an open and inclusive culture, where difference is celebrated and the contributions of all are encouraged, valued and respected, and to this end we have embedded equality into every aspect of our work. This commitment is reflected in our continued desire to create and enable an environment where everyone feels welcome and can be themselves whilst at work. We are committed to nurturing and promoting equality, diversity, and inclusion (EDI) as a way of working and this has become the golden thread through all our processes and decision making.

Providing opportunities for individual recognition and reward is central to our Pirbright Research Culture. In addition to our employee reward package, we encourage our employees to apply for personal promotion. This scheme recognises an individual's work and commitment through a standard of delivery that is over and beyond their current role scope and responsibilities and is rewarded with a personal grade promotion. Another is to recognise the additional dedication and commitment of individuals not yet ready for promotion and allows a within-band salary increase. In 2023, 27 members of staff achieved success through these reward schemes. Successful employees were celebrated in person at all staff events and via the intranet.

In addition to individual recognition, we also acknowledge and recognise exemplary team effort. Teams are nominated by and voted for by their peers. The winners of these awards are celebrated at our Christmas event.

This year, the Institute achieved a Silver Athena Swan award recognising our ongoing commitment to gender equality. This award reflects the continued growth of equality, diversity and inclusion across the Institute that is at the heart of all we do.

As indicated above, EDI is the golden thread that binds the Institute together and is reflected across all activities and decision making. The EDI Committee successfully sought out approval via the Institute Development Grant (IDG) funding to employ a dedicated full time EDI Manager, and during the year our EDI manager reporting to the EDI Chair, was recruited to drive our employee engagement action plan and further embed EDI.

Our EDI Committee reports directly to the SLB and is empowered to make operational decisions. With representation from across the Institute, this committee meet regularly to manage and/or escalate as appropriate any topics or issues identified. As an example, this committee enabled the creation of a Nursing Mothers room and are now exploring how additional equality charters can support our wider EDI ambitions. We have three staff network groups: the Rainbow network, Neurodiversity network and Carers network. These networks are developing, with a small and growing number of participants. The Institute provides meeting space and small incidental financial support. The groups meet regularly to share information, provide mutual support, highlight key external support mechanisms with signposting.

Representatives from the EDI Committee also work closely with HR and Health and Safety and Bio Safety (HSBS) in delivering a complimentary Wellbeing programme. Consisting of information and awareness, these sessions are conducted online and in person via training courses, workshops and webinars covering a wide range of physical, cultural and mental health-related topics.

### HOW WE COMMUNICATE

Accurate and timely communication is key to us keeping our workforce informed and updated. There are several avenues available to facilitate both direct information sharing and two-way dialogues.

In addition to our various groups and committees, there are formal, regular information-sharing forums, such as a quarterly Director-led staff briefing, monthly Management Forum meetings, newsletters and ad hoc focus groups, etc. SLB conduct biweekly 'site walks', meet a member of SLB for coffee, and SLB drop-ins. HR also conduct regular drop-in sessions giving employees an opportunity to raise topics of their choice in a supported and informal environment. Our Communications team encourage and support individual blogs on a wide range of topics, and general information is posted on the intranet and site-wide screens. Additionally, knowledge-sharing talks led by our scientists and/or external visitors are scheduled on a monthly basis for a site-wide audience. Employees have various options available to raise a concern confidentially, via our active-bystander and whistle-blowing processes, or directly with HR or SLB should a need arise.

The Institute conducts biannual staff engagement surveys that are followed up with focus groups to further develop the feedback and enable employees to co-develop action plans with a view to continuous improvement. This year we have engaged a new provider with a platform that will enable 'real time' interaction with those completing the survey whilst maintaining the full confidentiality of the employee. This new platform will further enable the Institute to drive our Employee Engagement Action Plan.

This year the Institute enabled the creation of a Staff Representative Forum. This forum has representation from across the Institute, and is the conduit to gain employee feedback HR related topics, such as changes to HR policy etc.

### TRAINING AND DEVELOPMENT

Employees are encouraged to discuss with their line manager the training opportunities available and courses that would enhance their career aspirations.

Through our dedicated Learning & Development (L&D) manager, we offer a comprehensive training programme that is available to all with an online booking process. All training options are advertised in the monthly HR newsletter, on the intranet and in all staff emails. Our training programme includes role-specific courses and opportunities for personal development and qualifications. We deliver career development options such as project management unconscious bias awareness. Additionally, L&D have delivered management training on leading, promoting and supporting EDI, managing teams and an emerging leaders programme for our upcoming leaders of tomorrow. We are now developing a 'Pillars of Development'-style approach which will provide further support and guidance to both the individual and the Line Manager for the most appropriate development opportunity, whether that is formal classroom style training, webinars, conferences or side by side experiential learning.

### **RETENTION AND RECRUITMENT**

As a world-renowned research institute, we attract top talent from around the globe, with staff and students currently representing more than 40 different nationalities, contributing to the enrichment of our overall cultural diversity. To further enable this diversity, the Institute supports overseas candidates with visa costs and the global talent mobility scheme.

During the year, our end-to-end recruitment process was completely redeveloped. As a result, we have significantly reduced our time to offer to an average of 18 days. We have improved our stakeholder management for both the candidate and the hiring manager with a more focused, role-specific approach.

At the start of the year our staff turnover was on average 22 per cent. However, this has seen a definite and steady decline over recent months to an average of just under 14 per cent. The UK talent market remains particularly volatile with candidates staying actively engaged in multiple opportunities enabling them to move quickly as roles are offered. There are a number of different skill sets that also remain as both nationally and internationally scarce, roles such as data analysis, electrical engineering and HR continue to be recognised as 'hard to fill'.

We recruited to 98 vacancies through the year, this was a significant reduction from 149 vacancies in the previous year. 19 per cent of these vacancies were filled through our internal redeployment process, either as a result of grant funding ending for specific projects or for those employees looking for development opportunity and progression. Since the new recruitment process was launched in August 2023, there have been only 17 repeat campaigns for recruitment into the same post, this again a significant reduction from the prior year with 49 repeat campaigns being opened.

As at the end of the year, we are supporting 46 employees with their immigration needs across all Directorates.

### SUMMARY OF PIRBRIGHT'S GENDER PAY GAP

The gender pay gap is defined as the difference between the mean or median earnings of male and female employees, expressed relative to male earnings. The mean pay gap is the difference between the average hourly earnings of men and women. The median pay gap is the difference between the midpoints of hourly earnings of men and women.

The Institute is pleased to have maintained a relatively equal gender balance in terms of employee numbers for the last five years. However, we recognise the Institute's mean hourly pay gap has increased, from 10.3 per cent in 2022 to 11.6 per cent in 2023, an increase of 1.3 per cent. The median hourly gap has also increased from 6.6 per cent in 2022 to 11.6 per cent in 2023. Whilst we have seen a steady decrease in our gender pay gap over the last five years, we recognise that there has been a slight increase in 2023.

When reporting data over a long period of time there is always the expectation that data will fluctuate, however our ongoing efforts to combat the gender pay gap can be seen in the reduction from 16 per cent in 2018 to 11.6 per cent in 2023.

Whilst we are confident that men and women are paid equally for carrying out equivalent roles across the Institute, we recognise the need to redress the gender balance across all bands of the workforce and a number of initiatives have been put in place to support this change.

We offer a range of flexible working arrangements and family-friendly policies, which enables us to attract and retain equal numbers of women and men. We are also able to report that both men and women have benefited from our enhanced flexible and family friendly policies, including shared parental leave.

The full report can be found on our website.

### **OUR STAFF AND STUDENT PROFILE**

There continues to be an almost equal balance of male and female employees across the Institute, with approximately 49 per cent male versus 51 per cent female, although this does differ between directorates, specifically our Estate Management Services experience a gender balance challenge. Staff total headcount at the year-end was 379, with an additional 44 PhD students with a 64 per cent female 36 per cent male split ratio.

## **INNOVATIONS AT PIRBRIGHT**

Commercial activity is an important element of the Institute's strategy to diversify funding streams and ensure a more financially sustainable organisation for the future.

The Pirbright Training team continues to develop and deliver training courses in three key areas of Pirbright's expertise: control of viral diseases of livestock, high containment engineering and biosafety practices. The team can develop training in different formats, including face-to-face, online instructor-led and self-directed eLearning, and all content is developed in a format to make learning as engaging as possible, including through the use of text, quizzes, highly effective graphic design, and interactive videos.

In the 2023-2024 financial year, Pirbright's eLearning courses related to foot-and-mouth disease, African swine fever, Marek's disease and the maintenance of HEPA filters and biological safety cabinets were purchased online. In addition, staff members from a small UK enterprise attended in-person training at Pirbright on biological safety cabinet maintenance.

Pirbright continues to offer in-person laboratory diagnostic techniques training for a variety of diseases. During the year, several individuals attended training in diagnosis of foot-andmouth disease and lumpy skin disease. In addition, members of the Institute's World Reference Laboratory for Foot-and-Mouth Disease (WRLFMD) and the Non-Vesicular Reference Laboratory (NVRL), visited laboratories in Indonesia, Kuwait and the Philippines to provide bespoke training in the diagnosis and laboratory techniques of foot-and-mouth disease and African swine fever.

Pirbright generates impact and ensures effective use and exploitation of our research results by licensing technologies such as vaccine candidates to industrial partners, especially Other sources of commercial income include the provision of research reagents, such as material used in diagnostics developed by Pirbright researchers. As part of our reference laboratory capabilities, we also perform some commercial services, such as diagnostic kit evaluations, disinfectant testing, and some diagnostic testing. In addition, Pirbright experts also provide consultancy services on a variety of topics such as the control of animal diseases.

During the reporting year, Pirbright has been working on setting up the new Centre for Veterinary Vaccine Innovation and Manufacturing (CVIM). This initiative will support the development of vaccines to combat neglected zoonotic (diseases that can spread from animals to humans) and veterinary diseases. The new Centre will accelerate the development of vaccines from early-stage research to large scale manufacturing and deployment.

Whilst CVIM is part of Pirbright, it is scientifically independent, and its governance teams are chaired by independent members. In the 2023-2024 year, CVIM worked on four different vaccines development projects, particularly evaluating three different vaccine platform technologies for suitability in the animal sector, and one vaccine candidate to prevent a high-consequence disease of livestock. Most of this work is done in partnership with multinational and small biotechnology companies. This veterinary vaccine expertise was recognised in a UK Government White Paper titled "International development in a contested world: ending extreme poverty and tackling climate change."

pharmaceutical companies. Most often, licenses follow extensive funded collaborations with our industrial partners. These licences generate ongoing income for the Institute, often in the form of royalty payments based on commercial sales. Examples of licensed technologies include: a vaccine for the prevention of peste des petits ruminants (PPRV); antibodies that recognise veterinary antigens and are widely used in veterinary research; and a technology that may improve the yield of viruses grown in chicken eggs, thereby making vaccine production more cost-effective.



From left to right: Peter Stoichceff, President of The University of Saskatchewan; Dr.Volker Gerdts, VIDO Director and CEO; Professor Bryan Charleston FRS, Director of The Pirbright Institute signing the MOU between CVIM and The University of Saskatchewan's (USask) Vaccine and Infectious Disease Organization (VIDO)

# **INVESTING IN OUR FUTURE**

Continual enhancement of the facilities on the Pirbright site is imperative to maintain and support the world-class science and research undertaken. BBSRC continues to provide considerable capital funding to the Institute through the award of capital grants, including the Small Value Capital Grant Award as part of our core funding.

### THE AWARDS RECEIVED DURING THE YEAR INCLUDED:

PROJECT: COMARK SYSTEMS REPLACEMENT AUTHOR(S): ANTHONY CLARKE AND ANA CORRAL VALUE: £487,190

FUNDER: BBSRC, CAPITAL FUNDING This award provided support for a replacement environmental monitoring system, providing assurances regarding the integrity of our biological assets held within temperature-dependent and highly regulated facilities. A robust system, that ensures regulatory compliance, is essential to underpin the strategic science delivered within Pirbright's unique high biological containment facilities and thereby ensure Pirbright's role as a National Capability.



### PROJECT: A MOLECULAR IMAGING SYSTEM FOR THE BBSRC NATIONAL VACCINOLOGY CENTRE: THE JENNER BUILDING SCIENTIST: PROFESSOR MUNIR IQBAL

### VALUE: £142,994

### FUNDER: BBSRC CAPITAL FUNDING

This award provides support for continued capability for infrared molecular imaging at Pirbright. This is an essential capability, as our research community routinely utilise biomolecular imaging for qualitative and quantitative measurements of viral and host cell protein interactions employing a range of in vitro assays. Characterisation of molecular components of viruses and host cells that influence disease outcomes is essential for achieving our overall scientific objectives.



### SMALL VALUE CAPITAL GRANT

A further 8 projects were supported by Pirbright Small Value Capital Grant, part of our strategic investment from the BBSRC. These science projects totalled £320,441, providing support for replacement of essential laboratory equipment underpinning our research activities, as well as equipment that allowed expansion of our capabilities. Underpinning equipment purchase included liquid nitrogen storage tanks, enhanced PCR capacity, replacement microscopy for use in microinjections to generate transgenic insects, as well as imaging capabilities to provide precise quantitative read-outs and measurements of a broad range of immune effector molecules for the evaluation immune cell functions. In addition, to maximise the benefits and range of biological samples collected from animal studies a haematology analyser for the monitoring of whole blood parameters of animals in Pirbright's high containment facilities has been acquired. We have also acquired an Oxford Nanopore Technology (ONT) PromethION 2 Solo to support long read sequencing at Pirbright, to further enhance our high containment genomics research. This compliments existing sequencing capabilities and provides an important added platform to support veterinary health research, supporting our ambitions to deliver 'omicsdriven research.

## **GOVERNANCE AND MANAGEMENT**

The Pirbright Institute is an independent company, limited by guarantee and a registered charity. It is governed by a Board of non-executive Trustee Directors who provide strategic input to the Senior Leadership Board at Pirbright. Science at the Institute is reviewed by an independent group of leading researchers who comprise the Science Advisory Board and whose role is to provide advice and guidance on science strategy and direction.

### ORGANISATION AND GOVERNANCE

The Annual Report provides information for legal purposes on the charitable company, its activities and its main achievements. The financial statements have been prepared in accordance with the Charities Act 2011, the Companies Act 2006, the Memorandum and Articles of Association and Accounting and Reporting by Charities: Statement of the Recommended Practice applicable to charities preparing their accounts in accordance with Financial Reporting Standards applicable to the UK and Republic of Ireland (FRS102), effective 1 January 2019.

### THE BOARD OF TRUSTEE DIRECTORS

The Trustee Directors serving on the Board during the year and since the year end were:

- Professor Vincent Emery Chair
- Professor Mike Turner Deputy Chair
- Ian Black (resigned 7 June 2023)
- Rona Chester
- Jon Coles
- Emma Griffin (resigned 31 March 2024)
- Alison Hardy
- Dr Paul Logan
- Dr Linda Magee OBE
- Professor Deenan Pillay
- Jane Tirard
- Tamsin Webster (appointed 12 October 2023)

Trustee Directors are appointed by the existing Trustee Directors for three years, when they are eligible for reappointment for a second term. In exceptional circumstances, Trustee Directors can be appointed for a further three years beyond that giving a maximum of nine years.

Prior to the recruitment of a new Trustee Director, a skills audit of all Trustee Directors is undertaken to determine the skills required of the incoming Trustee Director. The Trustee Directors then appoint a recruitment agency specialising in non-executive and Trustee Board Member appointments to undertake the recruitment on their behalf. This process is managed by the Nominations and Governance Committee, with interviews undertaken by members of this committee and the Chair of the Board of Trustee Directors.

### TRUSTEE DIRECTORS PURPOSE

The purpose of the Board of Trustee Directors is to ensure that the Institute carries out its purpose for the public benefit in accordance with its memorandum, articles of association and governing law, and to ensure that they comply with their duties under Section 4 of the Charities Act 2011 to have due regard to the public benefit guidance by the Charity Commission.

The Trustees Directors are satisfied they have complied with their duty in section 4 of the Charities Act 2011 to have due regard to public benefit guidance published by the Charity Commission. Based on this guidance, and as described in the Trustee Directors' Report, the Trustee Directors believe the activities of The Pirbright Institute to be charitable in nature.

The main focus of the Trustee Directors is on leadership, strategy, performance and assurance, with a focus on maintaining Pirbright's reputation, staff and infrastructure while protecting the Institute's sustainability.

Furthermore, the Trustee Directors must act in the Institute's best interests; they must ensure that the Institute's resources are managed responsibly; they must act with reasonable care and skill; they must ensure that the Institute complies with all statutory accounting and reporting requirements; and they must meet the oversight requirements expected of a major hazard site.

The Board of Trustee Directors has established three committees to support it in its work: the Finance and Audit Committee, the Risk and Assurance Committee and the Nomination and Governance Committee.

The Trustee Directors have also established a Scientific Advisory Board, comprised of independent leading scientists, to provide advice, guidance and recommendations regarding the scientific strategy and direction of the Institute. In addition, the Science Advisory Board provides assurance to the Trustee Directors on the quality of science and research, the relevance and importance of the scientific strategy, and advise on the Institute's positioning within the international scientific landscape.

### TRAINING OF TRUSTEE DIRECTORS

The Institute continually reviews its practices for induction and ongoing Trustee Director training. All Trustee Directors joining Pirbright undergo an extensive training, which covers:

• Building an understanding of the nature of the Institute, its purposes, and the stakeholder landscapes in which it operates. In particular, this will cover the importance of leadership in a major hazard environment.

• Developing understanding of the role, including legal duties and ethical expectations.

- Building a link and relationship with the Institute and its employees, beyond that of the Senior Leadership Board.
- Developing an understanding of the Institute's main relationships and future opportunities.

Trustee Directors are encouraged to attend appropriate external training events where these will facilitate the undertaking of their role and understanding of their responsibilities.

The Trustee Directors have undertaken a review of how effective the Board is which was facilitated by Campbell Tickell, an organisation with a specialism in Board governance. A plan of actions arising from this review is currently being implemented, including a self-appraisal of adherence to the Charity Governance Code for England & Wales (as updated in 2020).

### CONFLICTS OF INTERESTS

Trustee Directors and any co-opted members are required to declare any conflicts or potential conflicts of interests at Board of Trustee Directors and sub-committee meetings, and these are recorded in the minutes. Depending on the conflict, the Chair may require a Trustee Director or co-opted member to either leave the meeting, or not take part in a discussion or decision on a particular Issue. During the year, no Trustee Director declared a conflict of interest.

### TRUSTEE DIRECTORS' INDEMNITY INSURANCE

The Institute maintains liability insurance for the Trustee Directors, with an annual aggregate cover limit of £10m for all claims against them in that capacity. The Trustee Directors have also been granted a qualifying third-party provision under section 233 of the Companies Act 2006. Neither the Institute's indemnity nor insurance provides cover in the event that a Trustee Director is proved to have acted fraudulently or dishonestly. The premium and related costs in respect of this policy were £36,279 (2023: £36,940).

### COMPLAINTS

The Trustee Directors and the staff of the Institute are committed to providing a high-quality, responsive and transparent service to all the people and organisations with which we interact. However, the Trustee Directors are aware that sometimes Pirbright will not reach the high standards they have set themselves, so they have established a complaints procedure for external parties to raise a complaint against the Institute.

During the year one complaint was received (2023: None). Full details of the complaints procedure can be found on the Institute's website.

#### **RELATED PARTIES**

The Institute has a subsidiary undertaking, Pirbright Innovations Limited. The Trustee Directors consider that the activities of the subsidiary are not material to the financial position of the Pirbright Institute Group and have therefore elected not to produce consolidated financial statements.

Genomia Management Limited was formed on 16 April 2004 and is also a company limited by guarantee. The company was established by way of grants from the Department of Innovation, Universities and Skills and the European Regional Development Fund. The company manages the Genomia Fund, the objective of which is to assist in the development of research output from the members into commercially realisable opportunities. The Institute has equal membership in this company with The Roslin Foundation, Moredun Research Institute, Rowett Institute of Nutrition and Health and Scotland's Rural College (SRUC). During 2023-2024, the Institute resigned its membership of this organisation, which has been accepted by Genomia Management Limited, and therefore the Trustee Directors no longer consider this company to be a related party.

## **GOVERNANCE STRUCTURE**



### BOARD OF TRUSTEE DIRECTORS



#### PROFESSOR VINCE EMERY CHAIR OF THE BOARD OF TRUSTEE DIRECTORS

Professor Vince Emery is President of the University of Hertfordshire's branch campus in Egypt. He graduated with a first-class BSc in Biochemistry with Chemistry and PhD from the University of Southampton. He received his professorship at UCL in 2000. His research on infections has secured over £29 million in grants, has an H-index of 75 and his work has 20,000+ citations. Professor Emery is a Fellow of the Royal Society of Biology and the American Society of Transplantation.



### PROFESSOR MIKE TURNER DEPUTY CHAIR OF THE BOARD OF TRUSTEE DIRECTORS

Professor Mike Turner is a consultant, currently working for the World Health Organization, Honorary Professor at the University of Glasgow and a member of council at the London School of Hygiene and Tropical Medicine. Formerly, Mike was Director of Science at Wellcome, Europe's largest biomedical research foundation and, before that, Professor of Parasitology at Glasgow.



### **RONA CHESTER**

Rona is a fellow of the Institute of Chartered Accountants with over 30 years' experience in leading financial teams in both the public and private sector. More recently, Rona was the Chief Operating Officer at Sport England, the lottery distributor, where additional responsibilities included grants management, commercial and IT, as well as contributing to the development of the organisation's strategy.



#### JON COLES

Jon was a senior partner at Brunswick Group LLP, a leading international communications consultancy, where he advised the Boards of Directors of global groups on strategic communications and corporate reputation. His particular focus was on clients in the pharmaceutical, biotechnology and agriculture industries.



**EMMA GRIFFIN** 

Emma has over 25 years' professional experience across a multitude of sectors in cyber security, technology and regulatory compliance. She participates on several advisory boards to influence and drive cyber security development and solution innovation and regularly participates in industry and regulatory forums as an adviser and speaker. Emma is actively involved in promoting diversity and inclusion and seeks to encourage careers in science and technology to minority groups.



ALISON HARDY

Alison is a solicitor and partner with City law firm Ashurst LLP, where she leads the real estate dispute resolution practice. Alison is experienced in all aspects of commercial real estate. She is actively involved in diversity and inclusion and is the partner sponsor of Ashurst's social mobility and inclusion network, which is working to remove barriers to entry into, and progression within, the legal profession.



### **DR PAUL LOGAN**

Prior to his retirement in 2020, Paul was a senior civil servant in the Health and Safety Executive (HSE), which he had joined as a regulatory scientist. During his time in HSE, he chaired a number of industry/government committees. He was Director of the division in HSE with responsibility for regulation of major hazards industries, including chemical manufacturing, oil refineries, explosives manufacturing and storage, and high-containment laboratories.



**DR LINDA MAGEE OBE** Linda is a life sciences sector specialist in the UK Government's Department for Business and Trade. She supports the UK sector team and international network to identify opportunities for the UK economy and businesses in life sciences and healthcare. Linda was previously Chief Operations Officer of NIHR Manchester Academic Health Science Centre (MAHSC) and Commercial Director of Greater Manchester Academic Health Science Network (GMAHSN). She also co-founded Manchester Biotech and set up Bionow while working for the Northwest Development Agency. Linda established the National Biomanufacturing Centre at Speke. She was awarded an OBE in 2009 for services to biotechnology.



### **PROFESSOR DEENAN PILLAY**

Deenan is Emeritus Professor of Virology at University College London. He has been a clinical virologist for the last 30 years, working within the Public Health Laboratory Service, Health Protection Agency, NHS and academia. His main interest has been the use of antiviral therapy, and emergence of drug resistance, particularly regarding HIV. From 2013 to 2019, he was Director/CEO of the Wellcome Trust-funded Africa Health Research Institute. He is currently Non-Executive Director of an NHS Trust and until recently, chaired Independent SAGE, a scientific group focused on public engagement and discussion on COVID-19.



### JANE TIRARD

Jane has over 30 years of experience of all aspects of strategic financial planning, financial management, financial accounting, systems and processes. As a result of her roles, she has a working knowledge of government departments, funding councils, academia and the pharmaceutical industry. Her last position was as the Director of Finance and Corporate Services at the Diamond Light Source, the UK's national synchrotron science facility.



TAMSIN WEBSTER Tamsin has held a number of senior level roles in HR in SMEs and global corporates including BlackRock, UBS and Lloyds Banking Group. In her current role at Fulcrum Asset Management, she oversees the entire employee lifecycle, which includes recruitment, performance management, talent development, remuneration and learning and development. Tamsin works closely with the Diversity Project who are driving change across the Asset Management industry on all aspects of diversity, equity and inclusion.

Tamsin is an experienced leadership coach and brings knowledge of leadership development, employee engagement, organisation design and governance to create the structure and capability needed to support business transformation, at all stages of growth or transition. Tamsin has built a strong understanding of working in regulatory environments, having worked in Financial Services and the Telecoms industry during times of significant change. Tamsin is a qualified project manager, has a degree in Psychology from the University of Kent, an MA in Coaching and a MSc in Viticulture and Oenology.

### SENIOR LEADERSHIP BOARD

The Board of Trustee Directors considers that the Senior Leadership Board (SLB) is accountable for Institute strategy, risk mitigation and governance of day-to-day operational delivery. The SLB comprises the Institute Director and the Directorate heads; namely Director of Risk and Assurance, Director of Research and Director of Finance and Company Secretary. The remuneration and benefits of the SLB is based on the agreed and recognised salary banding for the Institute and is reviewed annually.



### PROFESSOR BRYAN CHARLESTON MRCVS FRS DIRECTOR AND CEO

Professor Charleston joined The Pirbright Institute (formally known as the Institute for Animal Health) in 1994 and focused on studies of the immune response to viral infections in cattle. His research group's efforts are focused on understanding the immune response to foot-and-mouth disease virus in cattle to develop novel vaccines.



PROFESSOR JOHN HAMMOND DIRECTOR OF RESEARCH

John contributes to all aspects of Institute senior management and focuses in particular on the science-operations interface and research culture at the Institute. He is also Head of Programme: Enhanced host responses for disease control and leads the Immunogenetics Group at the Institute.



### HELEN WATTS FCA DIRECTOR OF FINANCE AND COMPANY SECRETARY

As the Institute's Director of Finance and Company Secretary, Helen's remit includes all aspects of the Institute's finances as well as managing the IT and procurement functions. She is also a member of the Development Programme Board, as well as being a member of a number of working groups overseeing many aspects of the Institute's operations.



DR ANDREW WHITE DIRECTOR OF RISK & ASSURANCE Andy leads on all aspects of risk management including biosafety, health and safety, quality assurance, environment, crisis management and business continuity, biosecurity; and wider enterprise risks such as financial, informational, operational, reputational and strategic. Andy is a biochemist by training and holds a PhD in protein structure and chemistry.

### SCIENCE ADVISORY BOARD

The Institute's Science Advisory Board (SAB) provides valuable strategic oversight, input and advice on the Institute's science strategy and scientific directions.



### PROFESSOR GEOFFREY L. SMITH (CHAIR)

Professor Geoffrey L. Smith is Professor Emeritus and Research Group leader at the University of Oxford. His research studies the interactions of poxviruses with the host cell and immune system. As a postdoc in Bernard Moss's laboratory at NIAID, USA, together with Michael Mackett, he developed vaccinia virus (the smallpox vaccine) as an expression vector and established the principle of using genetically engineered viruses as live vaccines.



### **PROFESSOR DR MARTIN BEER** is Vice-President of the Friedrich-Loeffler-Institut (FLI) and head of the Institute of Diagnostic Virology, working with transboundary animal diseases, zoonosis and emerging diseases like avian

and emerging diseases like avian influenza virus, Schmallenberg virus and pestiviruses.



### PROFESSOR PERSEPHONE BORROW

is a viral immunologist whose research interests centre on understanding virus-immune system interactions and their roles in determining the balance between virus clearance versus viral persistence and associated pathogenesis.



### **PROFESSOR MARY CAMERON**

is a Professor of Medical Entomology in the Faculty of Infectious and Tropical Diseases, London School of Hygiene & Tropical Medicine (LSHTM). Mary has over 30 years' experience in delivering international-level field and laboratory research focusing on the surveillance and control of a wide range of vector-borne diseases, particularly leishmaniasis.



**PROFESSOR GARY ENTRICAN** is an immunologist who has specialised in the development of vaccines and diagnostic tests for the control of infectious diseases of ruminant livestock. He has developed many immunological tools and technologies, including kits for in vitro differentiation of ruminant dendritic cells and cytokine ELISAs.



### PROFESSOR DEIRDRE HOLLINGSWORTH is a professor of infectious disease epidemiology at the Big Data Institute in the University of Oxford. She develops mathematical, statistical, and computational models which inform disease dynamics for a range of viruses, bacteria and helminths. She is an expert at translating these analyses to inform public health policy at national and international policy levels, including for the World Health Organization.



PROFESSOR DEENAN PILLAY is Emeritus Professor of Virology at University College London and a clinical virologist with a focus on antiviral therapy, drug resistance and HIV. He is a Non-Executive Director of an NHS Trust and was the former Chair of Independent SAGE, which discusses COVID-19 with the public.



### **PROFESSOR ELEANOR RILEY CBE** is

Professor Emeritus of Immunology and Infectious Disease in the School of Biological Sciences at the University of Edinburgh. She was formerly Head of Department of Immunology and Infection at the London School of Hygiene and Tropical Medicine and Director of the BBSRC Roslin Institute.



PROFESSOR DAVID ROWLANDS is an emeritus Professor of Molecular Virology at the University of Leeds. He worked at the Animal Virus Research Institute (now the Pirbright Institute) before transferring to industry, holding positions at Wellcome Biotech and the Wellcome Foundation; and finally moved into academia at the University of Leeds. He has a lifetime of experience studying both human and animal viruses.



#### PROFESSOR HELEN SANG OBE

Professor Sang's main research focus at The Roslin Institute has been the development of technologies for genetic modification of the chicken, which are applied in basic biomedical research, biotechnology and investigating the potential for developing disease resistance in production chickens.



**DR SAMUEL THEVASAGAYAM** leads the Livestock initiative within the Agriculture Development Program at the Bill & Melinda Gates Foundation

where he oversees the implementation of the Foundation's strategy in animal health, animal production and livestock systems. Sam joined the Gates Foundation in 2012.

### FINANCE AND AUDIT COMMITTEE

This committee provides assurance and advice to the Board in relation to the Institute's finances and other assets; business planning and corporate reporting; the Institute's strategic risks; and the statutory external audit and the programme of internal audits covering the enabling functions.

RONA CHESTER (CHAIR) JON COLES JANE TIRARD

### NOMINATIONS AND GOVERNANCE COMMITTEE

This committee provides assurance to the Board in relation to all governance matters, with the aim of obtaining the highest possible standard of governance and compliance. The Institute has adopted the Charity Governance Code with this committee responsible for its implementation.

### JON COLES (CHAIR) ALISON HARDY DR LINDA MAGEE OBE TAMSIN WEBSTER

### **RISK AND ASSURANCE COMMITTEE**

This committee provides assurance to the Board on the arrangements to meet legal duties and to manage risk within the Institute, working in consort with the Risk and Assurance Strategy and Plan, to oversee all risk management systems, controls and processes that may have an impact on the Institute's ability to meet its objectives.

DR PAUL LOGAN (CHAIR) EMMA GRIFFIN PROFESSOR MIKE TURNER

### STATEMENT OF TRUSTEE DIRECTORS' RESPONSIBILITIES

The Trustees Directors, who are also Directors of the charitable company for the purposes of company law, are responsible for preparing the Trustees' Report, incorporating the Strategic Report in accordance with applicable law and regulations.

### COMPANY LAW REQUIRES THE BOARD OF TRUSTEE DIRECTORS TO PREPARE FINANCIAL STATEMENTS FOR EACH FINANCIAL YEAR.

Under that law, the Board of Trustee Directors has elected to prepare the financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable laws), including FRS102 (the Financial Reporting Standard applicable in the UK and Republic of Ireland). Under company law the Board of Trustee Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the Board of Trustee Directors is required to:

• select suitable accounting policies and then apply them consistently,

• observe the methods and principles in the Charities SORP (FRS102),

• make judgments and accounting estimates that are reasonable and prudent,

• state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements, and

• prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in business.

The Board of Trustee Directors is responsible for keeping adequate accounting records that are sufficient to show and explain the charitable company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006. It is also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Trustee Directors are satisfied that they have complied with their duty in section 4 of the Charities Act 2011 to have due regard to public benefit guidance published by the Charity Commission and, based on this guidance, the Trustee Directors believe the activities of the Institute to be charitable in nature.

The Trustee Directors recognise that they must act in a way they consider, in good faith, would be most likely to promote the success of the Institute for the benefit of its members as a whole, and in doing so have regard, among other matters to:

• the likely consequences of any decision in the long term,

• the interests of the Institute's employees and students,

• the need to foster the Institute's relationships with key stakeholders,

• the impact of the Institute's operations on the community and the environment,

• the desirability of the Institute to maintain a reputation for high standards of business conduct, and

• the ability to act fairly as between members of the Institute.

The Trustee Directors recognise that they have a responsibility to engage with the employees and students who work at the Institute. To fulfil this responsibility staff are invited to each meeting of the Board of Trustee Directors to give a presentation and answer questions on their area of expertise, Trustee Directors regularly undertake walk rounds of the new facilities on site, they attend official opening of new buildings and the Institute's celebration day and they undertake drop in sessions which staff are invited to attend ; all of these give the Trustee Directors the opportunity to meet staff and students and engage with them to better understand the Institute, the work it undertakes and any concerns that staff and students may have.

The Board of Trustee Directors confirms that:

• so far as each Trustee Director is aware, there is no relevant audit information of which the charitable company's auditor is unaware, and the Trustee Directors have taken all steps that they ought to have taken to make themselves aware of any relevant audit information and to establish that the auditor is aware of that information.

The Report of the Trustee Directors incorporating the Directors' Report and the Strategic Report was approved and signed on behalf of the Board of Trustee Directors.

### **PROFESSOR VINCE EMERY**

Chair of the Board of Trustee Directors Date: 25 July 2024

### INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF THE PIRBRIGHT INSTITUTE

### OPINION ON THE FINANCIAL STATEMENTS

In our opinion, the financial statements:

• give a true and fair view of the state of the Charitable Company's affairs as at 31 March 2024 and of its incoming resources and application of resources for the year then ended;

• have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and

• have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements of The Pirbright Institute ('the Charitable Company') for the year ended 31 March 2024 which comprise the statement of financial activities, the balance sheet, the cash flow statement, the principal accounting policies and notes to the financial statements. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

### BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Independence

We remain independent of the Charitable Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

### CONCLUSIONS RELATED TO GOING CONCERN

In auditing the financial statements, we have concluded that the Trustee Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate. Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Charitable Company's ability to continue as a going concern for a period of at least 12 months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the Trustee Directors with respect to going concern are described in the relevant sections of this report.

### **OTHER INFORMATION**

The Trustee Directors are responsible for the other information. The other information comprises the information included in the Annual Report and Accounts, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our

knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

### OTHER COMPANIES ACT 2006 REPORTING

In our opinion, based on the work undertaken in the course of the audit:

• the information given in the Trustee Directors' Report, which includes the Directors' Report and the Strategic Report prepared for the purposes of Company Law for the financial year for which the financial statements are prepared is consistent with the financial statements; and

• the Strategic Report and the Directors' Report, which are included in the Trustee Directors' Report, have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Charitable Company and its environment obtained in the course of the audit, we have not identified material misstatement in the Strategic Report or the Trustee Directors' Report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

• adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
• the financial statements are not in agreement with the accounting records and returns; or

• certain disclosures of Directors' remuneration specified by law are not made; or

• we have not received all the information and explanations we require for our audit.

## RESPONSIBILITIES OF TRUSTEE DIRECTORS

As explained more fully in the Trustee Directors' responsibilities statement, the Trustee Directors (who are also the directors of the charitable company for the purposes of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Trustee Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Trustee Directors are responsible for assessing the Charitable Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Trustee Directors either intend to liquidate the Charitable Company or to cease operations, or have no realistic alternative but to do so.

## AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

We have been appointed as auditor under the Companies Act 2006 and report in accordance with the Act and relevant regulations made or having effect thereunder.

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

# Extent to which the audit was capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below. Based on:

• our understanding of the Charitable Company and the sector in which it operates;

• discussion with management and those charged with governance; and

• obtaining an understanding of the Charitable Company's policies and procedures regarding compliance with laws and regulations,

we considered the significant laws and regulations to be the applicable accounting framework, UK tax legislation and the Animals (Scientific Procedures) Act 1986.

The Charitable Company is also subject to laws and regulations where the consequence of non-compliance could have a material effect on the amount or disclosures in the financial statements, for example, through the imposition of fines or litigations. We identified such laws and regulations to be health and safety legislation, data protection legislation and employment law.

Our procedures in respect of the above included:

- review of minutes of meeting of those charged with governance for any instances of non-compliance with laws and regulations;
- review of correspondence with regulatory and tax authorities for any instances of non-compliance with laws and regulations;
- review of financial statement disclosures and agreeing to supporting documentation; and
- review of legal expenditure accounts to understand the nature of expenditure incurred.

## Fraud

We assessed the susceptibility of the financial statements to material misstatement, including fraud. Our risk assessment procedures included:

• enquiry with management and those charged with governance regarding any known or suspected instances of fraud;

• obtaining an understanding of the Charitable Company's policies and procedures relating to:

- o detecting and responding to the risks of fraud; and
- o internal controls established to mitigate risks related to fraud.

• review of minutes of meeting of those charged with governance for any known or suspected instances of fraud;

• discussion amongst the engagement team as to how and where fraud might occur in the financial statements; and

• performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud. Based on our risk assessment, we considered the areas most susceptible to fraud to be posting of inappropriate journal entries and management bias in accounting estimates.

Our procedures in respect of the above included:

• testing a sample of journals which met a defined risk criteria, by agreeing to supporting documentation;

• assessing significant estimates made by management for bias, including:

- o the assessment of the useful economic lives of fixed assets;
- o the assessment of the risks and rewards of ownership of the leasehold land and buildings owned by third parties.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members and remained alert to any indications of fraud or noncompliance with laws and regulations throughout the audit.

Our audit procedures were designed to respond to risks of material misstatement in the financial statements, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery, misrepresentations or through collusion. There are inherent limitations in the audit procedures performed and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we are to become aware of it.

A further description of our responsibilities for the audit of the financial statements is located at the Financial Reporting Council's (FRC's) website at: https://www.frc.org.uk/ auditorsresponsibilities. This description forms part of our auditor's report.

## USE OF OUR REPORT

This report is made solely to the Charitable Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Charitable Company's members those matters we are required to state to them in an auditor's report and for no other purpose

To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Charitable Company and the Charitable Company's members as a body for our audit work, for this report or for the opinions we have formed.

Fiona Condron

## FIONA CONDRON

(Senior Statutory Auditor) For and on behalf of BDO LLP, statutory auditor Gatwick, UK Date: 30 July 2024

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127).

wildflowers at Pirbrighe provide insects and pollinators with food and shelter © Edward Brydor

## **STATEMENT OF FINANCIAL ACTIVITIES**

## For the year ended 31 March 2024

	Note	Unrestricted Funds £'000	Restricted Funds £'000	2024 Total Funds £'000	2023 Total Funds £'000
Income from					
Core Strategic Grant	1	-	19,846	19,846	18,619
Charitable Activities					
- Grants	2	17,622	3,752	21,374	25,013
- Other Charitable Income	2	1,566	-	1,566	1,942
- Investment Income	3	1,883	-	1,883	1,288
Total Income		21,071	23,598	44,669	46,862
Expenditure on					
Cost of Raising Funds					
- Rental Income & Tenant Services	4	352	395	747	711
- Investment Management Costs	4	24	-	24	22
Charitable Expenditure					
- Grants for Scientific Research	4	34,733	16,512	51,245	47,239
- Science Rental Income & Tenant Services	4	1,053	1,316	2,369	2,158
- Other Charitable Activities	4	541	60	601	472
Total Expenditure		36,703	18,283	54,986	50,602
Net Gains on Investments	10	0	220	220	150
Net (expenditure)/Income before transfers		(15,632)	5,535	(10,097)	(3,590)
Transfers between Funds	15	18,197	(18,197)	-	-
Net Movement in Funds		2,565	(12,662)	(10,097)	(3,590)
Balance Brought Forward		9,676	331,972	341,648	345,238
Balance Carried Forward		12,241	319,310	331,551	341,648

All income and expenditure derives from continuing activities. The accompanying notes on pages 46 to 56 form an integral part of these financial statements.

# **BALANCE SHEET**

## At 31 March 2024 Company number 00559784

	Note	£'000	2024 £'000	£'000	2023 £'000
Fixed Assets					
Tangible Fixed Assets	9	316,654		319,767	
Investment Property	10	2,370		2,150	
Investments	10	10	319,034	10	321,927
Current assets					
Stocks	11	452		187	
Debtors	12	4,831		4,936	
Term deposits over three months		5,382		15,121	
Cash at Bank & In hand		22,509		19,637	
		33,174		39,881	
Creditors: Amounts falling due within one year	13	(20,657)		(20,160)	
Net Current Assets			12,517		19,721
Total Assets less Current Liabilities			331,551		341,648
Net Assets			331,551		341,648
Financed by					
Unrestricted Reserves	15		12,241		9,676
Restricted Reserves					
- Fixed Asset Fund	15		314,370		325,844
- Investment Revaluation Reserve	15		2,370		2,150
- Other Restricted Reserves	15		2,570		3,978
Total Funds		-	331,551	_	341,648

Approved by the Board of Trustee Directors on 25 July 2024

Am -RPhills

**Professor Vince Emery** Trustee Director

Rona Chester Trustee Director

The accompanying notes on pages 46 to 56 form an integral part of these financial statements.

# **STATEMENT OF CASH FLOWS**

## For the year ended 31 March 2024

	Note £'000	2023 £'000	£'000	2022 £′000
Net Cash provided by Operating Activities				
Net Movement in Funds	(10,097)		(3,590)	
Interest & Rent Receivable	(1,883)		(1,288)	
Deprecation	11,525		10,525	
Increase in valuation of Investment Property	(220)		(150)	
Decrease/(Increase) in Stocks	(265)		172	
Decrease in Debtors	105		5,767	
Increase/(Decrease) in Creditors	1,989		(11)	
Total Net cash provided by Operating Activities		1,154		11,425
Cashflows from Investing Activities: Investment in Subsidiary	0		(10)	
Interest & Rents Received	1,883		1,288	
Decrease/(Increase) in Cash Deposits > 3 months	9,739		(10,105)	
Purchase of Property, Plant & Equipment	(9,904)		(12,456)	
Net Cash Use in Investing Activities		1,718		(21,283)
Change in Cash & Cash Equivalents in the year		2,872		(9,858)
Cash & Cash Equivalents at the Beginning of the Year		19,637		29,495
Cash & Cash Equivalents at the End of the Year		22,509		19,637
Cash & Cash Equivalents as above		22,509		19,637
Cash placed on Term Deposits > 3 months		5,382		15,121
Cash at Bank & In Hand		27,891		34,758
		As at 1 April 2023 £'000	Cashflow £'000	As at 31 March 2024 £'000
Net Cash at bank				
Cash at Bank		19,637	2,872	22,509
Total		19,637	2,872	22,509

The accompanying notes on pages 46 to 56 form an integral part of these financial statements.

# **PRINCIPLE ACCOUNTING POLICIES**

The financial statements have been prepared on the historical cost basis, except for the revaluation of certain properties and financial instruments that are measured at revalued amounts at the end of each reporting period, as explained in the accounting policies below. Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

The following accounting policies have been applied consistently in dealing with items which are considered material in relation to the Institute's financial statements.

## **BASIS OF ACCOUNTING**

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2019) - (Charities SORP (FRS 102), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

The Institute meets the definition of a public benefit entity under FRS102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy note(s).

## **GOING CONCERN**

The Trustee Directors have reviewed whether it is appropriate for the financial statements to be prepared on a going concern basis. The Institute has in principle received its five-year strategic grant funding from BBSRC, £17.6m per annum. This award originally runs from 1 April 2023 to 31 March 2028.

This source of funding, the consistent performance of attracting income from other funding bodies and the development of an operational plan that is built on an income stream that is very likely to be achievable, provides a high degree of confidence of future financial security. Having considered the risks in respect of future funding, financial forecasts for the period to November 2025 and the level of reserves, the Trustee Directors have concluded that it remains appropriate to prepare the financial statements on a going concern basis and there are no material uncertainties which the Trustee Directors have identified.

## **GROUP FINANCIAL STATEMENTS**

The Trustee Directors have considered whether the requirement to prepare consolidated financial statements by virtue of section 405(2) of the Companies Act 2006 is appropriate for the financial year. The Trustee Directors consider that the results of its' subsidiary, Pirbright Innovations Limited, are not material for the purposes of providing a true and fair view of The Pirbright Institute group. Accordingly, these financial statements present information about the Institute as an individual entity and not its group.

## INCOME

Income comprises unencumbered grants received from research councils, grant income from collaborative, commissioned, and competitively awarded research projects, income from miscellaneous charitable activities, commercial and residential rents from the letting of Institute controlled property, and interest earned on the temporary investment of surplus funds. Income is recognised when the Institute becomes legally entitled to the income and the amount can be quantified with reasonable accuracy.

For the grants related to collaborative, commissioned and competitively awarded research projects, income is recognised as the associated expenditure is incurred.

Some of the research grants are undertaken in collaboration with other research institutes. Where these arrangements have been entered into with Pirbright being the lead institute, the collaboration agreement entered into is solely between the funding body and the Institute. However, in the judgement of the Trustee Directors, such arrangements are entered into so the Pirbright acts as an agent to the other organisations named in the funding application. As a result, funds paid to collaborators are netted off the income received. If this judgement were not applied, both income and expenditure would be £2.1m (2023: £1.6m) higher than that stated in these financial statements.

All core BBSRC grants are recognised as revenue in the year they are received. Grant income including research grants received in advance of conditions being met is deferred until those conditions are fully satisfied. Rental and interest income is recognised based on the period to which it relates.

Capital grants are recognised in the statement of financial activities when entitlement passes, and once the criteria of certainty and measurement are met.

## EXPENDITURE

Costs of charitable activities comprises costs incurred directly or in support of scientific research whether carried out in the Institute's own facilities or in other laboratories. Raising funds represents the costs associated with trading and raising income including the Institute's rental activities and tenant services and investments.

All costs are allocated between the expenditure categories of the Statement of Financial Activities (SOFA) on a basis designed to reflect the use of the resource. Costs relating to a particular activity are allocated directly. Support costs, representing the staffing and associated costs of finance, personnel and general administration in supporting the operations of the Institute, are apportioned on an appropriate basis (see Note 5 to the financial statements – analysis of support costs for further details).

## RESTRICTED FUNDS

Income received by way of grants, sponsorship, donation, or legacy which is directed by the funder as to be applied for specific purposes is accounted for within restricted income.

Awards applied within the terms dictated by the awarding authority on the acquisition or improvement of tangible fixed assets are also accounted for within restricted income and funds. The balance of the restricted fixed asset fund is reduced by the depreciation charges over the expected useful life of the asset. This treatment has been applied to reflect the assets being on land owned by a third party, therefore at the end of the lease they will revert to that third party (see further explanation below regarding the ownership of land and buildings). In addition, as detailed in note 19, there is a contingent liability to account to BBSRC UKRI for the net proceeds of disposal of fixed assets acquired with grant assistance and for recurrent grant more than the financing requirements.

#### DESIGNATED FUNDS

Unrestricted designated funds comprise sums set aside by the Trustee Directors for specific purposes including the acquisition of scientific equipment, support of the Institute's Strategic Career Development Awards (SCDAs) which facilitate in-depth research and career progression, supporting earlycareer researchers in strategic projects, and support for the work required to occupy the new facility on site, the Brooksby Building.

#### UNRESTRICTED FUNDS

Income received which is not directed by the provider to be applied for specific purposes to an extent which exceeds the constraints of the Institute's constitution is accounted for within unrestricted general funds.

#### FIXED ASSETS

Fixed assets with a cost of £10,000 or more are capitalised and depreciated to their estimated residual values set out below. Assets with a cost of less than £10,000 are expensed in the year of purchase:

Land – 99 years being the length of the lease from BBSRC

Buildings – between 15 and 50 years Plant and machinery – five years on a straight-line basis

Fixtures, fittings, tools and equipment – five years on a straight-line basis No depreciation is provided on assets in the course of construction. Depreciation is charged from the date on which the asset becomes operational

The Institute includes in its financial statements leasehold land and buildings owned by third parties, that it occupies and enjoys through peppercorn leases, at their full value. The North side lease was renewed in December 2020 for 25 years and the South site lease for a term of 99 vears. The Trustee Directors consider that in substance the risks and rewards of ownership of the assets have passed to the Institute, and as such, follow a policy of recognising the assets on the balance sheet to reflect the continuing occupancy of these assets for the foreseeable future. The only circumstance under which the Institute could be asked to vacate the site is due to a failure to deliver the required Scientific programme, which, in the Trustee Directors view, is highly unlikely.

Individual freehold and leasehold properties at the Pirbright site were revalued to fair value upon transition to FRS 102 (1 April 2014) with the surplus on book value being transferred to the revaluation reserve. The fair value at the transition date was recognised as the deemed cost of the assets.

#### **INVESTMENT PROPERTY**

Investment property is included in the balance sheet at fair market value in accordance with FRS102 and, as such, no depreciation is charged in the year. Gains or losses arising from the revaluation are credited or charged respectively to the SOFA under net gains/(losses) on investments.

#### LEASED ASSETS

Rentals payable under operating leases are charged to the SOFA on a straightline basis over the lease term.

Assets acquired under finance leases are capitalised as tangible fixed assets and depreciated over their useful lives. Finance charges and interest are taken to the SOFA in proportion to the remaining balance of capital repayments or net obligations outstanding.

Lease obligations on investment properties are treated as finance leases. The lease obligation is quantified at the point of the lease inception or the property becoming an investment property, whichever occurs late, based on the present value of the minimum lease payments, and is included in creditors. Any adjustments to the rent payable under such leases due to periodic rent reviews is considered to be contingent rent. Contingent rent is treated as expenditure as it becomes payable.

#### STOCK

Laboratory consumables are valued at the lower of cost and net realisable value.

### TERM DEPOSITS OVER THREE MONTHS

Cash and terms deposits over three months comprise cash deposits held at the Institute's banks with a maturity of 3 months or more on the date of investment.

#### DEBTORS

Trade and other debtors are recognised at the settlement amount due after any trade discount offered. Prepayments are valued at the amount prepaid.

#### **CREDITORS AND PROVISIONS**

Creditors and provisions are recognised where the Institute has a present obligation resulting from a past event that will probably result in the transfer of funds to a third party and the amount due to settle the obligation can be measured or estimated reliably. Creditors and provisions are normally recognised at their settlement amount.

## FINANCIAL INSTRUMENTS

The Institute only has financial assets and financial liabilities of a kind that qualify as basic financial instruments. Basic financial instruments are initially recognised at transaction value and subsequently measured at their settlement value.

## FOREIGN CURRENCY TRANSLATION

Monetary assets and liabilities denominated in foreign currencies are translated into sterling at the rates of exchange ruling at the balance sheet date. Transactions in foreign currencies are recorded at the rate ruling at the date of the transaction.

## STAFF AND PENSION COSTS

Staff engaged at the Institute prior to April 2015 were previously employed by BBSRC and deployed back to the Institute.

Following the Transfer of Undertakings (Protection of Employment) exercise as of 1 January 2017, all BBSRC employees are now employed by Pirbright. The Institute therefore retains responsibility for paying employment costs in relation to all such employees, including basic pay and allowances, contractual payments, tax, national insurance, and pension contributions.

Employees engaged prior to April 2015 remain members of the Research Councils' Pension Scheme (RCPS), a defined benefit scheme for multiple employers. The BBSRC Employment Code remains applicable and frozen at the date of TUPE transfer.

The Institute does not have any liability for pensions other than for monthly employer contributions, the rate of which is determined by the Government Actuary's Department on a periodic basis. The cost of providing pension and related benefits is charged to the SOFA. Some payments are to a defined benefit scheme as explained above and in Note 8 but there are no separately identifiable assets and the actuarial cost to the Institute is not known. Consequently, it is not possible to supply the information referred to in Financial Reporting Standard 102, Section 28 and the Institute has accounted for the scheme as though it were a defined contribution scheme.

#### TAXATION

The Pirbright Institute is a registered charity within the meaning of the UK Taxes Acts and is, therefore, eligible to claim exemptions to income tax and capital gains tax.

#### JUDGEMENTS IN APPLYING ACCOUNTING POLICIES AND KEY SOURCES OF ESTIMATION UNCERTAINTY

Preparation of the financial statements requires the Trustee Directors and senior management to make significant judgements and estimates. The items in the financial statements where these judgements and estimates have been made include depreciation, which has been charged in line with the accounting policy above. The amount of depreciation charged, and net book value of the assets is included in Note 9.

The Institute includes in its financial statements leasehold land and buildings owned by third parties because the Trustee Directors consider that in substance the risks and rewards of ownership of the assets have passed to the Institute, and as such follow a policy of recognising the assets on the balance sheet to reflect the continuing occupancy of these assets for the foreseeable future. These assets are held at their deemed cost, being their fair value at the transition date of FRS 102. The judgements applied and the revaluation adjustments and net book value of the assets is included in Note 9.

## NOTES TO THE TRUSTEE DIRECTORS' REPORT AND FINANCIAL STATEMENTS

For the year ended 31 March 2024

1.INCOME FROM CORE STRATEGIC GRANTS	2024 £'000	2023 £'000
	1 000	1 000
BBSRC UKRI - Core Strategic Grant	17,539	16,163
Resource Contribution Grants	2,307	2,456
	19,846	18,619
All income from core strategic grants in the current and prior year was restricted.		
2. INCOME FROM CHARITABLE ACTIVITIES	2024	2023
	£'000	£'000
Grant Income		
BBSRC UKRI - Research Grants	3,189	3,340
BBSRC UKRI - Other Grants	3,752	9,011
Other Research Grants	14,433	12,662
	21,374	25,013
Other Charitable Activities	1,566	1,942
	22,940	26,955
Income from charitable activities included restricted income from grants of £3,752k (2023:£14,845k)		
All other income from charitable activities in the current and prior year was unrestricted.		
The analysis by region of funder is set out below:	2024	2023
	£'000	£'000
United Kingdom	17,703	21,638
Europe	257	339
North America	4,816	4,304
Others	104	674
	22,880	26,955

## 2. INCOME FROM CHARIATBLE ACTIVITIES (continued)

		Unrestricted £'000	Restricted £'000	2024 Total £'000
Current Year				
Analysis of Grants & Contracts Income BBSRC UKRI				
Competitive Project Grants - Research Grants		3,189	-	3,189
Other Grants		-	3,752	3,752
Total BBSRC UKRI		3,189	3,752	6,941
Other				
DEFRA "Umbrella" Commissioned Projects		3,247	-	3,247
DEFRA Surveillance		3,680	-	3,680
Other Government Departments		210	-	210
European Union		-	-	-
Industry & Levy Boards		987	-	987
Trusts, Foundations & Charities		529	-	529
Other Research Income		5,780		5,780
Total Other		14,433	<b>-</b>	14,433
Total Income Grants & Contracts		17,622	3,752	21,374
				2023
		Unrestricted	Restricted	Total
		£'000	£'000	£'000
Prior Year				
Analysis of Grants & Contracts Income				
BBSRC UKRI				
Competitive Project Grants - Research Grants		3,340	-	3,340
Other Grants			9,011	9,011
Total BBSRC UKRI		3,340	9,011	12,351
Other		0.010		0.010
DEFRA "Umbrella" Commissioned Projects		2,818	-	2,818
		2,752 214	-	2,752 214
Other Government Departments		339	-	339
European Union Industry & Levy Boards		1,561	-	1,561
Trusts, Foundations & Charities		674	-	674
Other Research Income		3,470	834	4,304
Total Other		11,828	834	12,662
Total Income Grants & Contracts		15,168	9,845	25,013
Other Income			2024	2023
	Unrestricted	Restricted	Total	Total
	£'000	£'000	£'000	£'000
Royalties	105	-	105	429
Diagnostic Testing	414	-	414	345
Supply of Reagents	157	-	157	325
Patent Reimbursement	119	-	119	254
Commercial Contract Research	99	-	99	141
Restaurant Revenue	105	-	105	88
Training & Lecture Fees	9	-	9	65
Other	558		558	295
Total Other Income	1,566		1,566	1,942

All other income in 2023 was unrestricted

## **3. INVESTMENT INCOME**

	£'000	£'000
Rental Income & Tenant Services	974	968
Bank Interest	909	320
	1,883	1,288

2024

2023

All Investment Income in the current and prior year was unrestricted.

4. ANALYSIS OF EXPENDITURE		Other	Allocated	2024
	Staff Costs	Direct Costs	Support Costs	Total
	£'000	£'000	£'000	£'000
Current Year				
Unrestricted Funds				
Cost of Raising Funds				
- Rental Income & Tenant Services	-	-	352	352
- Investment Management Costs	-	12	12	24
Charitable Expenditure				
- Grants for Scientific Research	13,397	8,855	12,481	34,733
- Science Rental Income & Tenant Services	-	-	1,053	1,053
- Other Charitable Activities		305	236	541
Total Unrestricted Expenditure	13,397	9,172	14,134	36,703
Restricted Funds				
Cost of Raising Funds				
- Rental Income & Tenant Services	-	-	395	395
Charitable Expenditure				
- Grants for Scientific Research	-	-	16,512	16,512
- Science Rental Income & Tenant Services	-	-	1,316	1,316
- Other Charitable Activities	-	-	60	60
Total Restricted Expenditure	-	-	18,283	18,283
Total Expenditure	13,397	9,172	32,417	54,986

Included in allocated support costs are staff costs of £5,778k.

## 4. ANALYSIS OF EXPENDITURE (continued)

		Other	Allocated	2023
	Staff Costs	Direct Costs	Support Costs	Total
	£'000	£'000	£'000	£'000
Prior Year				
Unrestricted Funds				
Cost of Raising Funds				
- Rental Income & Tenant Services	-	-	363	363
- Investment Management Costs	-	12	10	22
Charitable Expenditure				
- Grants for Scientific Research	12,848	8,283	13,489	34,620
- Science Rental Income & Tenant Services	-	-	1,093	1,093
- Other Charitable Activities	-	174	243	417
Total Unrestricted Expenditure	12,848	8,469	15,198	36,515
Restricted Funds				
Cost of Raising Funds				
- Rental Income & Tenant Services	-	-	348	348
Charitable Expenditure				
- Grants for Scientific Research	-	-	12,619	12,619
- Science Rental Income & Tenant Services	-	-	1,065	1,065
- Other Charitable Activities	-	-	55	55
Total Restricted Expenditure	-	-	14,087	14,087
Total Expenditure	12,848	8,469	29,285	50,602

Included in allocated support costs are staff costs of £5,404k.

#### 5. ANALYSIS OF SUPPORT COSTS

	Rental Income & Tenant Services	Investment Management Costs	Grants for Scientific Research	Science Rental Income & Tenant Services	Other Charitable Activities	Total 2024	Basis of Allocation
	£'000	£′000	£'000	£'000	£'000	£'000	
Current year							
Unrestricted Funds							
Premises	189	-	8,117	942	71	9,319	% of floor area
Finance	33	12	727	56	66	894	time spent
Management	22	-	543	9	17	591	time spent
Human Resources	88	-	640	-	25	753	time spent
Information Technology	8	-	1,694	19	28	1,749	time spent
Procurement	9	-	692	26	27	754	time spent
Governance	3	-	68	1	2	74	time spent
	352	12	12,481	1,053	236	14,134	
Restricted Funds							
Depreciation	360	-	10,145	960	60	11,525	
Repairs & maintenance	35	-	6,367	356	-	6,758	
	395	-	16,512	1,316	60	18,283	
Total Support Costs	747	12	28,993	2,369	296	32,417	

	Rental Income & Tenant Services	Investment Management Costs	Grants for Scientific Research	Science Rental Income & Tenant Services	Other Charitable Activities	Total 2023	Basis of Allocation
	£'000	£'000	£'000	£'000	£'000	£'000	
Prior Year							
Unrestricted Funds							
Premises	196	-	8,451	981	74	9,702	% of floor area
Finance	27	10	596	46	54	733	time spent
Management	48	-	1,163	20	36	1,267	time spent
Human Resources	70	-	511	-	21	602	time spent
Information Technology	10	-	2,088	23	34	2,155	time spent
Procurement	7	-	553	21	21	602	time spent
Governance	5	-	127	2	3	137	time spent
	363	10	13,489	1,093	243	15,198	
Restricted Funds							
Depreciation	329	-	9,264	877	55	10,525	
Repairs & maintenance	19	-	3,355	188	-	3,562	
	348	-	12,619	1,065	55	14,087	
Total Support Costs	711	10	26,108	2,158	298	29,285	

## 6. NET (EXPENDITURE)/INCOME

	2024 £'000	2023 £'000
Net (Expenditure)/Income is stated after charging:		
- Auditors' remuneration		
- Audit Services	77	124
- Non-Audit Services (Taxation Advice)	29	29
- Depreciation	11,525	10,525
- Loss on Foreign Exchange Translations	(173)	64
- Hire of Plant & Machinery	2	39
- Rental of Land & Buildings	55	58

## 7. REMUNERATION OF THE TRUSTEE DIRECTORS

None (2023:None) of the Trustee Directors received any remuneration from the Pirbright Institute or its' subsidiary, Pirbright Innovations Limited, during the year. Eleven Trustee Directors (2023:Eight Trustee Directors) had travel and subsistence expenses of £3,763 (2023:£2,654) reimbursed in the year.

#### 8.STAFF NUMBERS AND COSTS

The average number of people employed by the Institute during the year, analysed by category, was as follows:	Number of En	nployees
	2024	2023
Office, Management and Estate Support	134	119
Scientific	250	238
Total	384	357
The aggregate payroll costs of these people were as follows :	2024	2023
	£'000	£'000
Wages & Salaries	14,481	13,754
Social Security Costs	1,691	1,485
Pension Costs	2,428	2,412
Total	18,600	17,651
	2024	2023
	£'000	£'000
Termination Payments		
- Redundancy		86
Total	<u> </u>	86

At 31 March none (2023:None) of these payments were outstanding.

Some employees of the Institute are members of the Research Councils' Pension Schemes (RCPS), which are funded principally through employer and employee contributions. The pension schemes are defined benefit schemes and provide retirement and related benefits on final emoluments, redundancy, capability and ill health. The scheme is administered by the Research Councils' Joint Superannuation Services and the schemes' finances are administered by BBSRC UKRI.

It is an unfunded scheme, there are no separately identifiable assets and the actuarial cost to the Institute is not known. Consequently, it is not possible to to supply the information referred to in Financial Reporting Standard 102, Section28 and the Institute has accounted for the scheme as though it were a defined contribution scheme. The Institute pays employers' contributions at a percentage of scheme members' pensionable pay and emoluments as assessed by the Government Actuary's Department (GAD) on a periodical basis. The rate for the year was 26 per cent, which was established following GAD's most recent assessment. The pension cost represents contributions payable by the Institute to the scheme and amount to £790,396 (2023: £908,295).

Since April 2015, all new staff are members of The Pirbright Company Pension, a defined contribution scheme administered by Aviva on behalf of the Institute. The Institute contributes 10 per cent of scheme members' pensionable pay and emoluments. The pension cost represent contributions payable by the Institute to the scheme and amount to £1,988,319 (2023:£1,741,530).

Staff engaged at the Institute prior to April 2015 were previously employed by BBSRC UKRI and deployed back to the Institute.

Following the Transfer of Undertakings (Protection of Employment) (TUPE) exercise as of 1 January 2017, all BBSRC employees are now employed by the Institute. The Institute therefore retains responsibility for paying employment costs in relation to all employees, including basic pay and allowances, contractual payments, tax, national insurance and pension contributions. Employees engaged prior to April 2015 remain members of the RCPS). The BBSRC Employment Code remains applicable and frozen at the date of TUPE transfer. The Institute does not have any liability for pensions other than for monthly employer contributions, the rate of which is determined by the GAD on a periodic basis.

The key management of the Institute comprise the Senior Leadership Board and the Trustee Directors. The total employee benefits (including wages and salaries, employer's national insurance and pension costs) of the key management personnel of the Institute were £612,867 (2023:£549,734).

The number of staff with emoluments greater than £60,000 (excluding pensions costs) was:	Number of Employees	
	2024	2023
£60,000 - £69,999	16	16
£70,000 - £79,999	11	4
£80,000 - £89,999	3	4
£90,000 - £99,999	1	2
£100,000 - £109,999	3	1
£130,000 - £139,000	1	-
£140,000 - £149,999	-	1

The number of staff earning over £60,000 for whom retirement benefits are accruing under defined benefit schemes amounted to 12 (2023:12) and the amounts paid in the year were £218k (2023:£284k).

#### 9. TANGIBLE FIXED ASSETS

	Land & Buildings	Plant & Machinery	Fixtures & Fittings	Assets Under	Total
Cost/Revaluation	£'000	£′000	£'000	£'000	£'000
At 1 April 2023	249,181	32,625	1,283	130,556	413,645
Additions		90	-	8,322	8,412
Transfers	9,986	2,090	-	(12,076)	-
At 31 March 2024	259,167	34,805	1,283	126,802	422,057
Depreciation					
At 1 April 2023	72,834	19,761	1,283	-	93,878
Charge for year - Historic - Revaluation	7,317 1,200	3,008	- -	-	10,325 1,200
At 31 March 2024	81,351	22,769	1,283		105,403
Net Book Value At 31 March 2024 At 31 March 2023	177,816 176,347	12,036 12,864	-	126,802 130,556	316,654 319,767

Land and buildings include land with a book value of £12,779k (2023:£13,005k).

The Institute includes in its financial statements leasehold land and buildings owned by third parties, that it occupies and enjoys through peppercorn leases, at their full value. The North Side lease was renewed in December 2020 for 25years and the South Side lease for a term of 99 years. The Trustee Directors consider that in substance the risks and rewards of ownership of the assets have passed to the Institute, and as such follow a policy of recognising the assets on the balance sheet to reflect the continuing occupancy of these assets for the foreseeable future. The only circumstance under which the Institute could be asked to vacate the site is due to a failure to deliver the required scientific programme, which, in the Trustee Directors view, is highly unlikely.

The Institute used the option in FRS102 to use fair value at the date of transition to FRS102,(1 April2014), as deemed cost on transition. GVA Grimley Limited, Chartered Surveyors, and an independent valuer, provided these values through a professional valuation. The Institute derives a rental income from some of the buildings. This is included in these financial statements, with the leases associated with those buildings classified as investment properties , as per note 10 of these statements.

#### **10. INVESTMENTS & INVESTMENT PROPERTIES**

#### Investment in Subsidiary Undertaking

The Pirbright Institute owns the entire share capital of Pirbright Innovations Limited. During the year, the subsidiary continued to develop the UK Centre for Veterinary Vaccine Innovation and Manufacturing on the Pirbright site. The Trustee Directors consider that the activities of the subsidiary are not material to the financial position of The Pirbright Institute Group and have therefore elected not to produce consolidated financial statements

The assets and liabilities of the subsidiary were:	2024 £′000	2023 £'000
Current Assets - Debtors - VAT - Debtors - Amounts owed by the Pirbright Institute - Cash at Bank - Creditors - Trade - Creditors - Accruals - Creditors - Amounts owed to the Pirbright Institute Total Assets less Current Liabilities Share Capital Reserves Total Funds	8 133 89 (45) (167) (16) <b>2</b> <b>2</b> 0 <b>2</b>	23 108 35 (95) (61) (8) <b>2</b> 2 0 <b>2</b>
	-	-

#### Investment in Associated Undertaking

#### **10. INVESTMENTS & INVESTMENT PROPERTIES (Continued)**

Investment in Properties	2024 £'000	2023 £'000
The value of Investment Properties were:	2 000	2 000
At 1 April 2023	2,150	2,000
Change in valuation in the year	220	150
At 31 March 2024	2,370	2,150

Part of the site in Pirbright is sub let to a third party. In line with FRS102 this lease is therefore recognised as an investment property in these financial statements. The investment property was valued at 31 March 2024 by RICS Registered Valuers from Powis Hughes Ltd. The valuers are not employees or or offices of the Institute.

The valuation has been carried out in accordance with the RICS Valuation - Global Standards 2022 (which incorporate the International Valuation Standards) and FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland on the basis of Fair Value using an Income Approach.

11.STOCKS	2024 £'000	2023 £′000
Laboratory Consumables	452	187
The Institute's stock consists of laboratory supplies for research purposes.		
12. DEBTORS : AMOUNTS FALLING DUE WITHIN ONE YEAR	2024 £'000	2023 £'000
Trade Debtors	729	901
Prepayments	2,129	1,660
Accrued Income	822	1,654
Other Debtors	1,151	721
	4,831	4,936
13. CREDITORS : AMOUNTS FALLING DUE WITHIN ONE YEAR	2024 £'000	2023 £'000
Trade Creditors	1,867	2,487
Taxation & Social Security	-	46
Other Creditors	-	12
Accruals	4,217	5,435
Deferred Grant Income	14,573	12,180
	20,657	20,160
14. RECONCILIATION OF MOVEMENT IN ACCRUED & DEFERRED GRANT INCOME	2024	2023
14. RECONCILIATION OF MOVEMENT IN ACCRUED & DEFERRED GRANT INCOME	£'000	£'000
Accrued Income	822	1,654
Deferred Grant Income	(14,573)	(12,180)
	(13,751)	(10,526)
	(40 50()	(4.000)
Net Deferred Grant income at the beginning of the year	(10,526)	(4,098)
Research Grant income received during the year	(20,847)	(21,596)
Research Grant income released to the SOFA during the year	17,622	15,168
Net Deferred Grant income at the end of the year	(13,751)	(10,526)

#### 15. FUNDS

#### **Unrestricted Designated Funds**

Unrestricted designated funds comprise sums set aside for specific purposes including the acquisition and improvement of science equipment, the support up to three of our early career scientists via strategic career development awards, and funding support the occupation phase of the capital development programme on the Pirbright site. These funds total £2,248k (2023:£1,893k) compromising f8k (2023:£100k) to maintain scientific equipment capability , £613k (2023:Nil) for the career development awards and £1,627k (2023:£1,173k) to support the occupation costs associated with the development programme. The £620k brought forward from last year to support the Pirbright training programme is no longer required and has transferred to the strategic career development awards reserves

#### **Restricted Funds**

Restricted funds comprise grants received from funders specifically to be applied in the acquisition or improvement of tangible fixed assets or otherwise applied for such purpose as specified by the grants provided.

	Balance 1 April 2023 £'000	Net Income/ £'000	Transfer between Funds £'000	Balance 31 March 2024 £'000
Current Year Unrestricted Funds				
General	7,783	(15,534)	17,744	9,993
Designated	1,893	(13,334) (98)	453	2,248
Restricted Funds				
Fixed Asset Fund Fixed Asset Revaluation Fund	312,147 13,697	(11,474) -	1,200 (1,200)	301,873 12,497
	325,844	(11,474)	-	314,370
Other Restricted Funds				
Fixed Asset Project Support Costs	731	(375)	-	356
DP2 Phase Occupation Costs	1,154	(56)	-	1,098
BBSRC UKRI Core Grant Funding	-	17,539	(17,539)	-
Brooksby Support Costs	1,414	(157)	(205)	1,052
BBSRC Supplementary Energy Grant	615	(162)	(453)	-
Investment Property Revaluation	2,150	220		2,370
Other	64	0	-	64
Total	341,648	(10,097)	-	331,551
	Balance 1 April 2022	Net Income/	Transfer between Funds	Balance 31 March 2023
	£'000	£′000	£'000	£'000
Prior Year Unrestricted Funds				
General	7,504	(15,352)	15,263	731
Designated	2,493	(368)	250	1,154
Restricted Funds				1,414
Fixed Asset Fund	317,191	13,394	(342)	615
				2,150
Other Restricted Funds	520	(247)	520	64
Fixed Asset Project Support Costs	539	(346) 129	538	731 1,154
DP2 Phase Occupation Costs BBSRC UKRI Core Grant Funding	1,025	16,162	- (16,162)	1,134
Brooksby Support Costs	- 1,573	(159)	(10,102)	- 1,414
BBSRC Supplementary Energy Grant	-	2,456	- (1,841)	615
Investment Property Revaluation	2,000	2,430	(1,0+1)	2,150
Other	68	-4	-	64
Total	345,238	(3,590)		341,648

#### 15. FUNDS (continued)

Fixed Asset Fund	2024 £'000	2023 £'000
Balance brought forward at 1 April 2022	330,243	317,191
Grants Received	9,845	24,904
Depreciation	(10,525)	(9,684)
Revenue Spend	(3,181)	(1,826)
Transfers	(538)	(342)
Balance carried forward at 31 March 2023	325,844	330,243

The Fixed Asset Fund represents funding received from BBSRC, for the past and future acquisition of tangible fixed assets. These assets are built on land that is not owned by The Pirbright Institute. The capital fund has been set up to assist in identifying those funds that are not free funds and it represents the net book value of tangible fixed assets held by the Institute and amounts received for capital but not yet spent.

The unexpended balance of unrestricted designated funds and restricted funds is invested temporarily and appears in the balance sheet under current assets.

#### **Other Restricted Funds**

Fixed Asset Project Support Cost grants have been received from BBSRC to provide funding towards support costs and overrun costs relating to the development programme capital projects.

The BBSRC core grant funding is received from BBSRC to ensure that the Institute's facilities are maintained at the necessary cutting-edge high containment level that is essential to provide a national capability.

	Unrestricted General Funds	Restricted Funds BBSRC Core Funding	BBSRC Energy	BBSRC Brooksby
Transfer between Funds	£'000	£'000	Support £'000	Support £'000
Transfer of funds to General Reserves	18,197	17,539	453	205

The transfer of funds during the year are as follows:

In accordance with the original grant offer letter, core funding from BBSRC, is required to be shown as restricted income. The Institute subsequently received confirmation that the income could be applied for general purposes and therefore the transfer of income to unrestricted reserves has been made. Similarly, in accordance with the grant offer letter from BBSRC UKRI, the energy support grant can only be used for excess energy costs and therefore has been treated as restricted income. Of the total award of £2,307k, £1,854k was utilised during the financial year with the outstanding award of £453k being transferred, with approval from BBSRC, to designated reserves where it is included within the fund to support the occupation costs of development on site.

#### 16. ANALYSIS OF NET ASSETS BETWEEN FUNDS

16. ANALYSIS OF NET ASSETS BETWEEN FUNDS	Investments £'000	Fixed Assets £'000	Net Current Assets £'000	Total £'000
Current Year Unrestricted Funds	-	-	12,241	12,241
<b>Restricted Funds</b> Fixed Asset Capital Fund Fixed Asset Revaluation Fund Investment Property Revaluation Fund Other Restricted Funds	- 2,370 10	301,873 12,497 2,284	276	301,873 12,497 2,370 2,570
	2,380	316,654	12,517	331,551
Prior Year	Investments £'000	Fixed Assets £'000	Net Current Assets £'000	Total £'000
Unrestricted Funds	-	-	9,676	9,676
<b>Restricted Funds</b> Fixed Asset Capital Fund Fixed Asset Revaluation Fund Investment Property Revaluation Fund Other Restricted Funds	- 2,150 10	306,070 13,697 - -	6,077  3,968	312,147 13,697 2,150 3,978
	2,160	319,767	19,721	341,648

#### **17. FINANCIAL INSTRUMENTS**

	£'000	£'000
Financial assets measured at amortised cost	1,880	1,622
Financial liabilities measured at amortised cost	(1,867)	(2,545)
	13	(923)

2024

2023

Financial assets measured at amortised cost comprise trade debtor, amounts owed by related parties and other debtors.

Financial liabilities measured at amortised cost comprise trade creditors, taxation and social security creditors and other creditors.

#### **18. COMMITMENTS**

Capital commitments at the end of the financial year for which no provision has been made:	2024 £′000	2023 £'000
Authorised but not contracted for	5,009	9,331
Operating lease commitments		
Land & Buildings		
- Within one year	55	58
- In two to five years	220	234
- In over five years	417	248
Plant & Machinery		
- Within one year	8	8

#### **19. CONTINGENT LIABILITES**

There is a contingent liability to account to BBSRC for the net proceeds of disposal of fixed assets acquired with grant assistance and for recurrent and capital grants in excess of the financing requirements. No such liabilities existed at either 31 March 2024 or 31 March 2023.

#### 20. RELATED PARTY TRANSACTIONS

#### Biotechnology and Biological Sciences Research Council part of UK Research and Innovation (BBSRC UKRI).

BBSRC UKRI provides substantial funding to the Institute. The Institute is affiliated with BBSRC UKRI along with seven other institutes. Details of grants received from BBSRC UKRI are detailed in Notes 1 and 2 .During the year, BBSRC UKRI charged the Institute £Nil (2023: £Nil) for other costs and Engineering and Physical Sciences Research Council UKRI charged the Institute £31k (2023: £42k) for other costs.

#### **Pirbright Innovations Limited**

Pirbright Innovations Limited, a wholly owned subsidiary, acts a special purpose vehicle for the Institute with regard to the project of constructing the UK Centre for Veterinary Vaccine Innovation and Manufacturing on the Pirbright Site. During the year, Pirbright Innovations Limited charged the Institute £538k (2023: £292k) for this project. Details of the assets and liabilities of Pirbright Innovations Limited are detailed in Note 10.

## REFERENCE AND ADMINISTRATIVE DETAILS

## Trustee Directors:

Professor Vincent Emery: Chair Professor Mike Turner: Deputy Chair Rona Chester Jon Coles Alison Hardy Dr Paul Logan Dr Linda Magee OBE Professor Deenan Pillay Jane Tirard Tamsin Webster

## Director of the Institute:

Professor Bryan Charleston MRCVS FRS

## Company Secretary:

Helen Watts FCA

## Registered office of The Pirbright Institute and Pirbright Innovations Limited:

Ash Road, Pirbright, Woking, Surrey GU24 0NF

## Auditor:

BDO LLP, 2 City Place, Beehive Ring Road, Gatwick, West Sussex RH6 0PA

## Bankers:

Barclays Bank PLC, Wytham Court, 11 West Way, Oxford OX2 0JB Lloyds Bank PLC, 5 High Street, Swindon SN1 3EN

## Solicitors:

Charles Russell Speechlys LLP, 1 London Square, Cross Lanes, Guildford GU1 1UN Penningtons Manches LLP, 9400 Garsington Road, Oxford Business Park, Oxford OX4 2HN







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