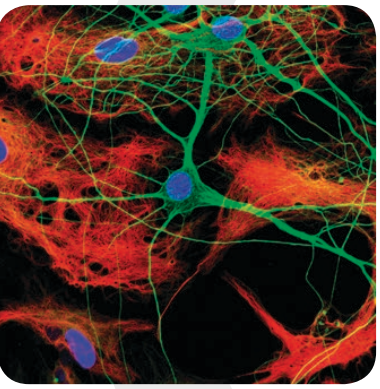
BBSRC
bioscience for the future



Biotechnology and Biological Sciences Research Council

Annual Report and Accounts 2012-2013

Any enquiries regarding this publication should be sent to us at external.relations@bbsrc.ac.uk

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Biotechnology and Biological Sciences Research Council (BBSRC)

Annual Report and Accounts 2012 - 2013

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Contents

This Report provides an overview of BBSRC's major activities during the period 1 April 2012 to 31 March 2013.

This Report is accessible at www.bbsrc.ac.uk/annualreport. Readers may wish to refer to previous Annual Reports also found on this page: the BBSRC Strategic Plan 2010-2015 at www.bbsrc.ac.uk/publications/policy/strategy/strategic-planindex.aspx; and the BBSRC Deliver Plan 2011-2015 at www.bbsrc.ac.uk/web/FILES/Publications/delivery_plan_2011_2015.pdf

BBSRC

The Biotechnology and Biological Sciences Research Council (BBSRC), established by Royal Charter in 1994, is the UK's principal funder of basic and strategic research across the biosciences, in universities and research centres throughout the UK. BBSRC is funded primarily by the Science Budget through the Department for Business, Innovation and Skills (BIS).

RESEARCH COUNCILS UK

BBSRC works collaboratively with its sister Research Councils through Research Councils UK (RCUK) in areas that include: cross-Council programmes of research; research training and careers development; knowledge exchange and economic impact; communications, public engagement and administrative harmonisation. www.rcuk.ac.uk

Updated information on BBSRC's policies, activities and impact is accessible at: www.bbsrc.ac.uk

Chair's statement

The pervasiveness of bioscience gives us the potential to answer questions relevant to diverse concerns about the health and wealth of humankind in an increasingly crowded world: How can we sustainably increase agricultural productivity? How do we improve health span? How can we create a low carbon economy? How can we produce high-value chemicals efficiently? How do we produce cheaper medicines? How can we prevent animal diseases spreading to humans? The list is endless!

Investing in bioscience today provides answers for tomorrow. Research funded now will generate crucial new data that will be translated over the coming decades into practical solutions for future generations.

Seventeen years ago, BBSRC awarded two grants for fundamental research exploring new ways for encoding libraries using molecular barcodes. Today, the recipients, Professor Shankar Balasubramanian and Professor David Klenerman, credit those early awards for paving the way for their invention of Solexa Sequencing – an ultrafast way to sequence DNA. That early public funding has had significant economic and social impact. Their idea dramatically reduced the cost of sequencing and their technology not only makes personalised medicine a possibility but makes many other aspects of the bioeconomy more accessible.

In his keynote speech at this year's meeting of the American Association for the Advancement of Science, AAAS President Dr William Press spoke of the 'tragedy of the commons' – whereby common land can be 'overgrazed and underplenished' as no one has responsibility for it, yet everyone wants the immediate returns offered by the communal grazing. This is a concept well known to environmentalists and one that I found very helpful in explaining issues when I chaired the Royal Commission on Environmental Pollution more than a decade ago. But, as Dr Press warns, it is equally applicable to fundamental research that could be seen as common land. Solexa Sequencing encapsulates the importance of nourishing the 'common' land in order to reap economic and societal benefits further down the line.

The role of BBSRC, and other funders nationally and internationally, is to keep investing in world-class science. By having strength in core disciplines, skills and infrastructure and by having mechanisms to translate it into useful applications, bioscience will be able to offer an agile response to emerging problems as well as the capacity to address major global challenges of the future.

In tough economic times, it is becoming increasingly important that return on investment can clearly be demonstrated, and basic science cannot be an exception. We should welcome the creation by the European Commission of a new 'EU bioeconomy observatory' to map progress and measure the impact of the EU's bioeconomy, using indicators such as employment, social wellbeing and productivity as well as developing a 'technology watch' and a 'policy watch', to follow the development of science and technology. Although the creation of new forms of bioenergy, new pharmaceuticals and biologics, and novel crops and pesticides often takes time due to the complexity of scientific, safety and regulatory issues, some applications provide improvements rather quickly, and spinouts and translation of our research create new jobs over relatively short periods of time that are central to our economy.

There is little doubt about the social and economic potential of fundamental bioscience research; however, it is the job of all of us, from individual researchers in the lab through to major funders like BBSRC, to ensure that there is no doubt as to the impact of bioscience, and how it permeates into all areas of life. Highlighting impact from bioscience today is the best way to ensure funding for bioscience research for the future.

BBSRC is at the forefront of translating world-class bioscience research into the ideas, products and processes that will drive the UK's bioeconomy to generate jobs, economic growth and improve wellbeing. The launch of 'Fostering Innovation', BBSRC's suite of culture change competitions, highlights BBSRC's commitment to recognising, rewarding and driving culture change within the bioscience community to ensure the impact of research is encapsulated, disseminated and built upon.

By working together, researchers and funders can help secure the substantial public and private investment needed to realise the full potential of bioscience – in economic and societal terms – and avoid a 'tragedy of the commons'.

With thanks

I am delighted to be reappointed Chair of BBSRC for another two years and am pleased to be joined by three new members to BBSRC Council: Professor Sarah Gurr, Professor David Richardson and Professor Tim Wheeler, and Professor Ian Boyd who has joined as an Observer for the Department for Environment, Food and Rural Affairs. I would like to thank Professor Peter Fryer and Professor Peter Grindrod for their considerable contribution during their time on BBSRC's Council.

As Professor Douglas Kell's time at the helm of BBSRC draws to a close, I would like acknowledge his leadership of BBSRC and thank him for the significant progress that has seen research priorities focused to maximise the social and economic benefits from investments, national bioscience capability continue to grow, and new beneficial alliances forged.

It is a privilege to work alongside such dedicated and committed Council Members, BBSRC staff, and of course researchers whose skill, tenacity and commitment ensures that the UK maintains its world-leading position in bioscience.

Professor Sir Tom Blundell FRS
BBSRC Chair
June 2013

Chief Executive's report

2012 will forever be synonymous with the success of Team GB's athletes at the London Olympics, where they competed with the world's elite to achieve Britain's best ever medal haul.

The last year will also go down as a year in which UK Bioscience continued to demonstrate world-beating achievements on the global stage. BBSRC investment has supported UK researchers in the publication of major plant and animal genome sequences, including pig and wheat, securing joint funding for the creation of an Industrial Biotechnology Catalyst in 2014 and continuing to advance our understanding of emerging areas of health such as epigenetics.

There was a welcome acknowledgement in the Olympic opening ceremony of the importance of technology in the agricultural revolution but it is modern bioscience that will be pivotal to delivering step changes in the future food system, and the UK bioscience community is well placed to play a central part in ensuring this happens.

BBSRC strongly believes (and there is much evidence) that investing in research and national research infrastructure is the best way to generate long term economic growth. Part of our role in helping maintain the UK's world-leading bioscience research base is to create the best possible environment for enterprise and innovation in the life sciences sector.

Olympic athletes are not turned into medal winners overnight; they require years of nurturing and development. Similarly, impacts created by bioscience are the product of long-term investment of time and money in people and facilities too. We believe that making such investment will drive the Bioeconomy as well as provide solutions for the grand challenges faced by society: feeding a growing global population, achieving a low-carbon economy and increasing the health expectancy of our rapidly ageing population.

I was delighted by the Chancellor's announcement in December that the Government would be investing an additional £600M to benefit research and innovation, £30M of which is earmarked for capital investment in BBSRC's world-leading Research and Innovation Campuses.

These innovation 'hot spots' are creating exciting and supportive environments for innovation. Our work continues apace developing the six UK Research and Innovation campuses in which our eight strategically funded institutes are embedded.

Milestones reached in the past twelve months include:

Babraham Research Campus

The Minister for Universities and Science officially opened a new bioincubator building, Moneta, in May, which is now 96 per cent occupied by 18 companies. He also cut the turf at the site of a new follow-on building (chemistry) that has now been completed and as of March was 50 per cent occupied.

Norwich Research Park (NRP)

A turf-cutting ceremony and burial of a time capsule in March marked the beginning of construction of the new Centrum building at Norwich Research Park following a £26M investment from BBSRC. Due to open next year, the Centrum building will provide 2,300m^2 of highly flexible laboratory and office accommodation, as well as providing meeting, exhibition and café space.

■ A new 'Farm Platform', launched in May at Rothamsted Research North Wyke in Devon, aims to help farmers optimise productivity in ways that are sustainable, whilst at the same time understanding the impact of farming methods on the environment.

The North Wyke Farm Platform will bring together scientists from across disciplines and countries to spark new ideas to meet the food security challenge.

As a new National Capability, the Farm Platform will provide an integrated set of core data for the farming and research communities, including the measurement of field and water chemistry and water flow rates, greenhouse gas emissions from soils, livestock data and farm management records.

One of fifteen automatic weather stations on the farm platform

Pirbright Research and Innovation Campus

In October, the Institute for Animal Health officially became The Pirbright Institute, marking an exciting new phase in the 100-year history of the world-leading centre for surveillance and research in virus diseases of livestock and viruses that spread from animals to humans.

Building on the success of 2011-12, we have continued to secure significant capital investment for phase 2 of The Pirbright Institute, with Government announcements leading to around £120M of new investment.

BBSRC is actively working with key partners and stakeholders of three other potential UK Research and Innovation Campus sites which are home to research institutes supported by BBSRC strategic funding. These are:

- The Roslin Institute, part of The University of Edinburgh
- Institute of Biological, Environmental and Rural Sciences, part of Aberystwyth University
- Rothamsted Research, Hertfordshire

In May, the Minister for Universities and Science announced BBSRC's allocation of £250M for the first phase of our five-year strategic investment programmes. This includes 26 strategic science programmes and 14 national research capabilities, to be delivered by the eight world-leading bioscience research institutes we strategically fund and their university partners: the Babraham Institute, the Institute of Food Research (IFR), the John Innes Centre (JIC), Rothamsted Research, The Genome Analysis Centre (TGAC), The Pirbright Institute, the Institute of Biological, Environmental and Rural Sciences (IBERS), part of Aberystwyth University, and The Roslin Institute, part of The University of Edinburgh.

Institute Strategic Grant Programmes include:

- The wheat pre-breeding programme at the JIC, Rothamsted Research and University partners – building on BBSRC funding in the UK's first wheat pre-breeding programme in two decades.
- Investment in a vector-borne diseases programme at The Pirbright Institute to investigate economically important diseases of livestock that are spread by insects to improve control strategies, including Bluetongue and African Horse Sickness.
- Funding for a programme in integrated gut health be led by IFR in partnership with two universities. It aims to improve food safety by increasing our understanding of the working of the intestinal tract and how food-borne bacteria can cause human disease.
- The immunology programme at the Babraham Institute studying the role of lymphocytes in the immune system and how a regulated state is maintained by the body. This will have important implications for supporting healthy longer lives as the population ages.
- Addressing the gap that has developed between the capacity to generate large volumes of genomics data and the capability to process and interpret them at TGAC.
- Developing energy grasses that are high yielding and can grow on marginal lands with low inputs. This IBERS programme aims to replace fossil fuels with 'next-generation' carbon- and nitrogen- efficient perennial crops that can grow on low-grade land.
- The Roslin Institute investigating how the underlying genetic makeup of an animal interacts with the environment it lives in. The research aims to improve animal fertility and post-conception survival leading to the life-long well-being of livestock and improved food security.

The NPPC will be fully operational in 2013

- The National Plant Phenomics Centre (NPPC) was opened last May at Aberystwyth University's Institute of Biological, Environmental and Rural Sciences (IBERS).

The NPPC, a BBSRC-supported national facility, features a state-of-the-art greenhouse, the only one of its kind in the UK and one of only seven in the world. The greenhouse has the capacity to house up to 850 individually potted plants on a series of conveyer belts measuring 300 metres. Ten computer-controlled cameras use fluorescence, infra-red and near-infra-red, laser and root imaging technology to provide 3D images of the plants and monitor their growth daily.

This level of detail, which cannot be achieved using current research methods, will enable researchers to speed up the process of identifying potentially beneficial genes.

Following the completion of the five-yearly Institute Assessment Exercise, BBSRC published a report last autumn outlining the outcomes. The rigorous assessment, conducted by expert panels, confirmed that BBSRC-funded research across its eight institutes is of the highest quality, is internationally competitive, and collectively addresses all of BBSRC's strategic research priorities.

BBSRC is developing and maintaining 14 National Capabilities – unique facilities essential to the infrastructure, delivery and development of world-class bioscience in the UK.

In May, a protest was held near Rothamsted Research over a BBSRC-funded genetically modified (GM) wheat field trial at the institute. The protest day was attended by anti-GM protestors as well as pro-science supporters and I was delighted that the event passed peacefully. The trial was able to go ahead and has completed its first year of data collection. As scientists, we do not claim to have all the answers; however, our scientific community must be able to conduct regulated and approved trials and experiments without the threat of vandalism. Everyone involved in all sides of the debate wants answers and we will only get these by carrying out research.

I represented UK bioscience research at a Global Hunger Event hosted by Prime Minister David Cameron and Brazilian Vice President Michel Temer. They used the closing of the Olympic Games to call on the world to help eradicate undernutrition in the world's poorest countries in the next four years. On behalf of BBSRC and other Research Councils, I joined representatives from international governments, charities and commerce to highlight the key role science can play and is playing in enabling agricultural innovations to improve nutrition.

Bioscience has a long lead time, but by ensuring UK bioscience has a robust and broad base, BBSRC is helping to ensure that the research we fund is agile and the techniques and data transferable, so that it can be used to tackle the crises of today as well as the challenges of tomorrow. Ash dieback illustrates this.

In the last few years, several new pests and pathogens have emerged as significant risks to the UK's woodlands, commercial forests and urban trees.

The outbreak of ash dieback at the end of 2012 illustrates how rapidly new diseases can take hold, and the scale of the threat they can pose to trees.

We have awarded £2.4M of fast-track research funding to two projects that will gather an in-depth understanding of the ash dieback fungus and provide genetic clues about some ash trees' natural resistance to attack. One is a consortium led by JIC on the genomics of host and pathogen and the other is a grant to the University of Cambridge with Rothamsted Research looking at epidemiological modelling. These grants are co-funded by the Department for Environment, Food and Rural Affairs (Defra).

BBSRC is also leading a consortium of six funders in a wider £9M tree health and associated plant biosecurity initiative under the Living With Environmental Change (LWEC) cross-Research Council theme. The first phase of the initiative last September involved building research capacity by bringing scientists together to explore opportunities for collaborative working. The second phase will be a call to submit proposals for research grants, due to be launched shortly.

In January, work began on the construction of the £14M National Avian Research Facility (NARF) at the University of Edinburgh's Easter Bush Campus. The resources at NARF will be made available to national and international researchers and the facility will provide The Roslin Institute and its partners with an outstanding environment for undertaking studies that will lead to major improvements in poultry production.

Key aims for the facility include addressing the need for improved sustainability in poultry production in light of an increasing global population and benefitting human health through reducing food-borne diseases.

The initiative involves collaboration between The Roslin Institute and The Pirbright Institute and construction is being funded by BBSRC, the Roslin Foundation and The University of Edinburgh. NARF also receives Wellcome Trust funding for management of the facility.

In February, BBSRC held a workshop on bovine tuberculosis (TB) to identify bottlenecks that are limiting research into next generation vaccines and other strategies. We are now looking to prioritise the basic research that will underpin the evidence gaps.

2012-13 has been a significant year for synthetic biology, an exciting emerging technology with huge potential – from medicines to biofuels. Synthetic biology applies the principles of engineering design to biological systems and processes. BBSRC is working hard, in partnership with others, to shape and encourage the growth of this field.

As a major public funder of cutting edge research and technologies, it is vital that, as well as having a clear vision, we also have clear channels for listening.

We are now halfway through our five-year strategic plan – *The Age of Bioscience*, which sets out our vision to lead 21st century bioscience. We sought views on it and are currently conducting a 'light-touch' refresh to make sure we seize emerging opportunities and remain at the cutting edge of bioscience.

In the autumn, we ran a series of roadshows where BBSRC directors and I travelled around Britain to listen to our community's views on all areas of our remit, in particular BBSRC's peer review system and current committee structures. Over 450 researchers and stakeholders attended the five roadshows in Cambridge, Bristol, Manchester, Glasgow and London.

Major scientific breakthroughs are usually the accumulation of small discoveries made by dedicated bioscience researchers over years. But each tiny discovery has a vital role to play, just as 'marginal gains' did for Team GB's cyclists. It is for this reason that BBSRC is driving significant change in how impacts from bioscience research are recognised and rewarded. This year marked our fifth *Innovator of the Year* competition, and also saw us launch a suite of 'culture change' competitions, to recognising individuals, departments and institutions.

In 2012-13, BBSRC funded nine strategic longer larger grants (sLoLas), totalling nearly £40M. Six of these were supported by around £3M of industry funding and three were co-funded for £2M by the Engineering and Physical Sciences Research Council (EPSRC). The call had a particular focus on the knowledge-based bioeconomy areas of industrial biotechnology, bioenergy and synthetic biology for 'white' biotechnology (see page 15).

In total, over this period we invested over £467M in world class bioscience, of which £308M was for research, £107M in the form of capital funding to UK science infrastructure and a further £52M on people, skills and training.

Here is a snapshot of some of the science we funded in 2012-13 in our three strategic priority areas and enabling themes of food security, bioenergy and industrial biotechnology, and basic bioscience underpinning health.

■ In May 2011, a new strain of *E.coli* bacteria claimed over 50 lives as it spread around Europe. The event mobilised researchers across biological disciplines to find the source of this deadly epidemic.

The effort highlighted a new form of scientific cooperation – crowdsourcing – in which a genetic sequence of *E.coli* was released into the public domain allowing all scientists to join in the race to decode the organisms' DNA to work out how, where and why a usually harmless microbe that lives in our guts had evolved into an efficient killer.

Now a new crowdsourcing effort is underway to tackle the ash dieback disease declared endemic in the UK. BBSRC-funded scientists, including some from TGAC, who were involved in the original *E.coli* outbreak, are revising what was learned and looking at what more can be done to control outbreaks of human disease as well as plant pathogens.

© TGAC

TGAC researchers are using state-of-the-art sequencing and computational analysis to help investigate the molecular and cellular basis of interactions between the ash dieback fungus *(Chalara fraxinea)* and ash trees.

Food security

BBSRC funding has played a crucial part in some of the biggest genome sequencing announcements of the past twelve months, including tomato, barley and wheat. All three breakthroughs were published in *Nature* and lay the foundations for accelerating the improvement of these plants and developing new varieties better able to cope with disease, drought and other stresses that cause crop loss.

Three BBSRC-funded institutes were also part of the international team that published a high quality analysis of the pig genome in *Nature* in November, the findings from which will inform future breeding programmes and help improve animal and human health.

BBSRC funding is continuing to ensure that the UK is a global leader in wheat research. BBSRC is jointly leading on the development of the International Wheat Initiative, alongside INRA (France) and CIMMYT (Mexico). The aim of this is to coordinate global research efforts and encourage data sharing to ensure outputs are maximised.

In June, Rothamsted Research launched a programme to increase realisable wheat yields in the UK to 20 tonnes per hectare within the next 20 years. This is the basis for one of Rothamsted's BBSRC Institute Strategic Programme Grants. By making the best use of all available tools and technologies, including GM approaches, researchers hope that this ambitious target will help focus efforts to create multiple technologies that could benefit the quantity, quality and sustainability of wheat harvests around the world.

In July BBSRC hosted the third in a series of food security seminars for food security leaders on 'food security, nutrition and health', and our 'basic bioscience underpinning health' and 'food security' panels are convening a joint working group to provide advice on opportunities and challenges for BBSRC in the area of nutrition and health, alongside analysing BBSRC's funding portfolio.

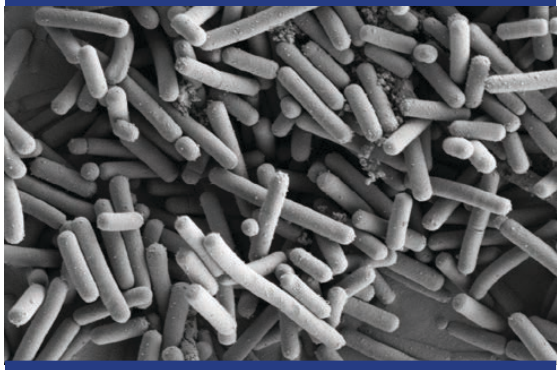
In January, we invested over £1.1M in ARK Genomics, a high-throughput DNA sequencing facility based at the Roslin Institute, focused on the genetics and genomics of livestock species. ARK Genomics is one of the BBSRC-funded 'National Capabilities'.

Working closely with our partners in the cross-Government Global Food Security programme, BBSRC developed an interactive exhibition for the general public – *From Field to Fork*, which has been to eight venues since its inception last year, including the Royal Highland Show and Royal Welsh Show. During its tour the exhibition reached over half a million visitors.

A strain of probiotic bacteria that can fight harmful bacterial infections in poultry has the ability to change its coat, according to new findings from the Institute of Food Research.

The probiotic is currently being taken forward through farm-scale trials to evaluate how well it combats *Clostridium perfringens* – a cause of necrotic enteritis in poultry and the second most common cause of food poisoning in the UK.

The researchers at IFR had previously found that the probiotic *Lactobacillus johnsonsii*, when given to young chicks, prevents colonisation by *C. perfringens*. Now, in research published in the journal PLOS ONE, they have found that the probiotic bacteria have the ability to alter their coat.



A strain of probiotic bacteria

Researchers based at St Andrew's University have launched a spin-out company focused on improving the quality of fish we eat by developing genetic markers which will pinpoint the most valuable of the natural variations which occur in all fish.

Professor Ian Johnston and Dr Thomas Ashton founded Xelect in March with the help of BBSRC follow-on funding, which has supported the research through to commercialisation.

Their first products are markers for superior meat yield and flesh quality in Atlantic salmon, which are now available for licensing worldwide. The company also has a strong pipeline of markers in development for other traits and species, and can offer other genetic services such as sex determination, stock tracing and disease identification.

Salmon eggs in hatchery

Other calls and initiatives launched under this strategic priority in 2012-13:

- A £9.5M Animal Health and Research Club to bring together farmers, breeders and pharmaceutical companies in fight against animal diseases.
- A joint call for UK–India collaborative research proposals in the area of crop genomics and technologies, following a successful joint workshop last May – £5M is being put forward by BBSRC and the Indian Department of Biotechnology (DBT India).
- $12M BBSRC and National Science Foundation (NSF) funding for research looking at ways to reduce reliance on nitrogen fertilisers.
- Nine new industry-relevant crop science projects announced in April as part of the Crop Improvement Research Club (CIRC), including an investigation into how we can breed UK wheat to produce better bread that would also have lower levels of salt, fats and emulsifiers.
- ERA-CAPS (European Research Area Coordinating Action in Plant Sciences) closed its first joint call in February. BBSRC is one of 15 countries contributing to the call, committing up to £6M of the €20M available for collaborative transnational research in fundamental molecular plant science.
- A £10M joint call with DBT India looking at Farmed Animal Diseases and Health.

Scientists have developed a new way to produce a vaccine for foot-and-mouth disease virus (FMDV) which is safer to produce, can be transported more easily and could be used to produce vaccines for human diseases, such as polio.

The research was led by Professor David Stuart from the Diamond Light Source and the University of Oxford, Professor Ian Jones from the University of Reading and Dr Bryan Charleston from The Pirbright Institute.

The vaccine is totally synthetic, made up of tiny protein shells designed to trigger optimum immune response; it doesn't rely on growing live infectious virus and is therefore much safer to produce. The empty shells have been engineered to be more stable, making the vaccine much easier to store and reducing the need for a cold chain.

The work was funded by Defra and the Wellcome Trust, with strategic funding from BBSRC.

Scientists have discovered 100-million-year-old regions in the DNA of several plant species which could hold secrets about how specific genes are turned 'on' or 'off'. The research was supported by BBSRC and EPSRC.

By running a computational analysis of the genomes of the papaya, poplar, *Arabidopsis* and grape species researchers from the University of Warwick have uncovered hundreds of conserved non-coding sequences which are found in the DNA of all four species.

These non-coding sequences are not genes, but are located upstream of genes and are around 100 DNA base pairs in length. As the four species have evolved separately for around 100 million years, the fact that these regions have been conserved suggests they play an important role in the plants' development and functioning.

Arabidopsis being grown for researchers to test the function of conserved DNA

Industrial biotechnology and bioenergy

In January, the Minister for Universities and Science announced £35M of funding for two new BBSRC schemes to develop the UK's industrial biotechnology and bioenergy research community. The new schemes form the central part of our initial strategy to support the development of industrial biotechnology and bioenergy (IBBE) as a key component of the UK bioeconomy.

The first phase is a £15M call for Networks in Industrial Biotechnology, to foster collaboration between academics and business as well as between disciplines, both in emerging and established areas of importance to IBBE. BBSRC with EPSRC, the Technology Strategy Board (TSB) and the BioKTN, CIKTN and HealthKTN have up to £15M for around 10 networks of varying scales.

A further £25M has been earmarked by BBSRC and TSB to develop Industrial Biotechnology Catalysts that will support major challenge-led research projects derived from the networking activities. This second phase will be launched officially in 2014.

We are also committed to funding research to develop tools and methods to accelerate and reduce the cost of large-scale manufacturing of biopharmaceuticals through bioprocessing. In February this year, we awarded £6.5M to 12 projects looking to deliver commercially important results, such as industrial-scale production of antibodies and commercial-scale stem cell therapy. The funding is the second phase of the Bioprocessing Research Industry Club (BRIC), a partnership between BBSRC, EPSRC and a consortium of leading companies to support innovative bioprocess-related research.

The UK, like many countries, needs to become a 'low-carbon' sustainable economy and bioenergy has a crucial role to play in achieving this. BBSRC welcomed the publication of the Government's Bioenergy Strategy [1] last year, setting a framework of principles to guide UK bioenergy policy. BBSRC's Sustainable Bioenergy Centre (BSBEC) – a virtual centre consisting of six research programmes across 12 universities and institutes – is helping position the UK as a source of leading technologies and expertise.

■ Researchers from IBERS working on the biofuel crop *Miscanthus sacchariflorus*, also known as Asian Elephant Grass, have shown that delaying flowering in the plant can result in a 50 per cent growth increase.

The discovery could have important implications for biofuel production, leading to higher yields and increased productivity from the crop – helping increase its commercial viability and reduce carbon emissions for energy and fuel production.

The researchers grew six varieties of the C4 grass, representing a range of latitudes from their origin in Asia. The use of different temperature and light treatments showed that delaying flowering by an average of 61 days resulted in an average growth increase of 52 per cent.

© Elaine Jensen

© JIC, Dr Findlay and Dr Clarke

Shewanella oneidensis bacteria interacting with the surface of an electrode.

■ Scientists at the University of East Anglia have made an important breakthrough in the quest to generate clean electricity from bacteria. Findings published the journal *Proceedings of the National Academy of Sciences* (PNAS) show that it is possible for bacteria to lie directly on the surface of a metal or mineral and transfer electrical charge through their cell membranes. This means that it is possible to 'tether' bacteria directly to electrodes - bringing scientists a step closer to creating efficient microbial fuel cells or 'bio-batteries'.

The team collaborated with researchers at Pacific Northwest National Laboratory in Washington State in the US. The project was funded by BBSRC and the US Department of Energy.

1. *UK Bioenergy Strategy*, 2012, Department of Energy and Climate Change, UK.

Other calls and initiatives launched under this strategic priority in 2012-13:

- The Integrated Biorefining Research and Technology Club (IBTI), a £6M, five-year partnership between BBSRC, EPSRC and a consortium of leading companies aimed at developing biological processes and feedstocks to reduce our current dependence on fossil fuels as a source of chemicals, materials and fuel.
- In July, BBSRC and DBT India announced a joint call for proposals underpinning sustainable, advanced, bioenergy and biofuels.
- Ten Bioprocessing Research Industry Club (BRIC) studentships funded by BBSRC to help develop bioprocessing researchers of the future.
- £800,000 awarded to researchers from the University of East Anglia to look at artificially replicating photosynthesis to develop more efficient renewable energy. The energy created will be used to produce hydrogen – a zero-emission fuel.

- Findings from the University of Reading could lead to cheaper, wider and more effective stem cell research and treatment of disease.

Dr Che Connon, who led the work, found that stem cells which are typically shipped frozen using dry ice or liquid nitrogen, could instead be stored using a semi-permeable hydrogel at room temperature. Not only was the method cheaper than current cryogenic processes, it even meant that stem cells could be sent between labs in the post. Crucially, it also allows the cells to be used immediately upon arrival.

This project was funded via the Bioprocessing Research Industry Club (BRIC), a partnership between BBSRC, EPSRC and a consortium of leading companies to support innovative bioprocess-related research, including that needed for the manufacture of complex biopharmaceuticals.

Dr Connon has been awarded a BBSRC grant, co-funded by EPSRC, which will enable him to work in collaboration with the bioprocessing community and scale up the hydrogel encapsulation approach to industrially relevant levels.

© Che J Connon

Hydrogels at different pH (indicated by colour). Such hydrogels are used to encapsulate millions of stem cells.

- Scientists at Rothamsted Research, Imperial College London and the University of the Highlands and Islands' Agronomy Institute have discovered the differences in the ease with which sugars can be extracted from willow can be explained by differences in their wood composition in response to conditions that induce growth stress.

They found that growing some willow varieties in environments with strong winds can result in changes in the wood which improve their ability to be used as a renewable biomass resource.

This work links with other research from the BSBEC and confirms another benefit of willow is that it can be grown in climatically challenging conditions where the options for growing food crops are limited.

© Rothamsted Research

Basic bioscience underpinning health

We continue to fund fundamental bioscience for better health and improved quality of life across the life course. In August, BBSRC and the US National Institute on Ageing established a £2M co-funding scheme for collaborative UK/ US research projects in the biology of ageing.

The Babraham Institute opened a new BBSRC-funded £7.8M state-of-the-art research building, uniting all of the Institute's academic research groups under one roof. This will enable greater interplay between the new computational biology research groups and the excellent existing research base at Babraham – driving forward our understanding of the basic bioscience underpinning lifelong health and ageing.

Following the unveiling of our joint roadmap for UK regenerative medicine research with EPSRC, the Economic and Social Sciences Research Council (ESRC), the Medical Research Council (MRC) and TSB, we jointly launched a £20M call to fund a limited number of research hubs to undertake major programmes of work in the area.

Last autumn we held three showcase for pharmaceuticals /biopharma industry events to raise awareness of BBSRC and the relevant research we fund as well as to elicit feedback from industry about how it views interactions with BBSRC. Around 200 people attended.

BBSRC-supported science has led to a new variety of broccoli, with higher levels of an important phytonutrient, being sold across all major supermarkets from June 2012. Beneforté broccoli was developed from publicly-funded research at IFR and JIC.

For the first time, biomedical PhD and early career researchers had the chance to sharpen their business skills in a new focused national competition – the Biomedical Young Entrepreneurs Scheme (Biomedical YES), organised by the University of Nottingham Institute for Enterprise and Innovation (UNIEI) and BBSRC, with support from GlaxoSmithKline (GSK), MRC, the Wellcome Trust and the Stevenage Bioscience Catalyst. The competition runs alongside the main scheme Biotechnology YES.

BBSRC had a joint call with the National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3Rs) for research to develop new ways of measuring and assessing animal welfare, with NC3Rs considering proposals involving lab animals and BBSRC those involving livestock and companion animals. The BBSRC provided an additional £900k to NC3Rs to allow eight awards to be made totaling more than £2.3M. In addition, BBSRC awarded around £3.8M to eight livestock and companion animal projects.

The 'one biology, one health' agenda seeks to achieve improvements to both human and animal health through greater synergy between human and animal health research including areas such as zoonotic diseases and addressing the increasing problem of antimicrobial resistance.

New calls in this area included:

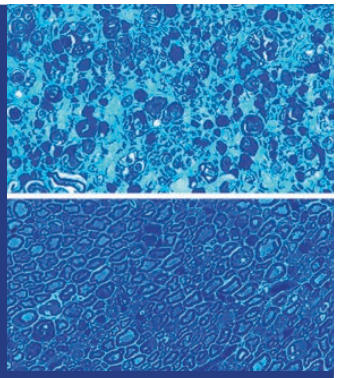
- The Zoonoses and Emerging Livestock Systems (ZELS) initiative – an £18M initiative, including a £2M contribution from BBSRC, supported by the Department for International Development (DfID), ESRC, MRC, the Natural Environment Research Council (NERC) and the Defence Science and Technology Laboratory (DTSL).
- The first joint call of the European Research Area Network (ERA-NET) in Animal Health and Welfare was launched in September. Topics include diagnostics and disease prevention, antimicrobial and anthelmintic resistance, and the interface between animal health and welfare.
- The Joint UK-US Ecology and Evolution of Infectious Diseases Programme – BBSRC has committed £1M to this programme looking to address transmission dynamics of infectious diseases.

A final report of the four Integrative Mammalian Biology (IMB) centres (London at Imperial College and King's College, and two joint consortia between the Universities of Manchester and Liverpool, and the Universities of Glasgow and Strathclyde), highlights that the training outputs from the centres has exceeded expectations. The IMB centres were funded for five years as part of a £12.3M partnership to build capacity in integrative mammalian biology.

- Scientists at the Babraham Institute, together with collaborators in the USA, have made a breakthrough in understanding how axons self-destruct in injury, ageing and disease.

By unravelling the factors governing axon longevity, this work - supported in the UK by the BBSRC and Alzheimer's Research UK - will increase understanding of both the normal ageing process in nerves and degenerative mechanisms widespread in disease. This breakthrough paves the way for research into new therapies to tackle axon loss in ageing-related conditions like Alzheimer's Disease.

We lose axons in normal ageing and in neurodegenerative disease but the factors driving this, and whether the mechanisms are related, have until recently remained elusive. This research pinpoints a protein called Sarm1 as having a pivotal role in axon degeneration.



Axons 14 days after being cut with (top) and without Sarm 1

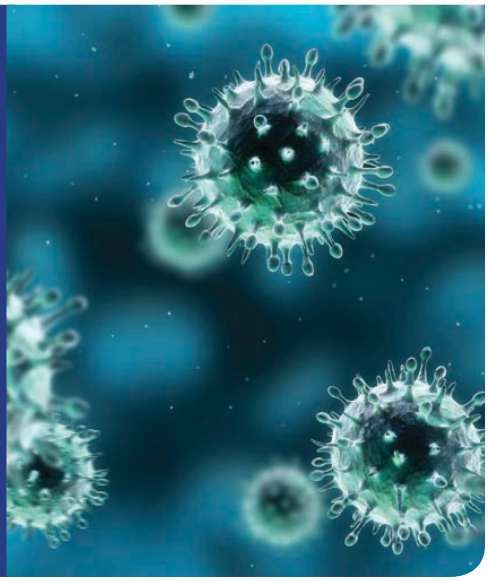
Other calls and initiatives launched under this strategic priority in 2012-13:

- In December we joined with MRC to announce a joint £4M call in Systems Immunology of the Human Life Course to fund research that will support large systems programs in immunology.
- Promoting physical activity in older age and Extending working lives were two new calls launched in September under the cross-council Lifelong Health and Wellbeing programme. Five grants have been funded under the Physical activity call, totalling £3.9M, with BBSRC contributing £1M.
- Alongside Scottish Enterprise, BBSRC has awarded £1.5M to a drug development team at the University of Aberdeen, to accelerate the progress of multiple novel drug leads to tackle cancer and diseases such as debilitating inflammatory conditions.
- BBSRC is co-funding one of six multinational, multi-disciplinary research projects as part of the European Research Area on Ageing's first joint research programme in the ageing field (ERA-AGE).
- £1.4M has been awarded to three projects looking specifically at athletes' vision and movements at a physiological level, which could lead to improved training methods for elite athletes across all sports as well as providing vital information about how best to train or retrain people who have lost everyday skills due to ageing or disease. UK Sport has co-funded the research with additional money from the ESRC.
- BBSRC invested £2.4M as part of a £25M Next Generation Optical Microscopy Initiative, co-funded by MRC and EPSRC, to establish 17 microscopy platforms that will bring about ground–breaking advances in biological and biomedical research.

Researchers funded by BBSRC and others are developing a way to 'barcode' viral diseases to rapidly test new outbreaks for potentially lethal mutations.

Researchers from the Universities of Leeds and Liverpool are working with Public Health England to build a bank of molecular signatures that will help identify the severity of virus infection from characteristic changes seen in cells. Currently the team is barcoding different strains of influenza virus and human respiratory syncytial virus (HRSV) – a virus associated with the onset of asthma in young children.

The research, published in *Proteomics*, investigates changes in lung cells infected with swine flu from the 2009 outbreak compared with seasonal flu. Using cutting-edge techniques to identify the proteins most affected by viral infection the researchers were able to build molecular signatures to provide the 'barcode' of disease.



Caterpillar fungi sliced

Caterpillar fungi *(Cordyceps)* are rare parasites found on hibernating caterpillars in the mountains of Tibet. For centuries they have been highly prized as a traditional Chinese medicine.

Scientists at The University of Nottingham, co-funded by BBSRC, have been studying how this fungus could work by studying cordycepin, one of the drugs found in these mushrooms. They have already discovered that cordycepin has potential as a cancer drug. Their new work indicates that it could also have anti-inflammatory characteristics with the potential to help sufferers of asthma, rheumatoid arthritis, renal failure and stroke damage.

The research shows that cordycepin reduces inflammatory gene products in airway smooth muscle cells – the cells that contract during an asthma attack.

Enabling impact

Maximising the impact of our science, socially and economically, is dependent on highly skilled researchers and the translation of ideas, knowledge, skills and technology. BBSRC works hard across its remit to promote and facilitate these areas:

One way in which we continue to increase the range and depth of our interactions with business is through expanding our Research and Technology Clubs. We now have five such clubs established to address research development in key areas,

- Animal Health Research Club (ARC)
- Bioprocessing Research Industry Club (BRIC)
- Crop Improvement Research Club (CIRC)
- Diet and Health Research and Industry Club (DRINC)
- Integrated Biorefining Research and Technology Club (IBTI)

FOSTERING INNOVATION 2013

To mark our commitment to encouraging culture change in research organisations around the recognition of impact arising from research, we marked the fifth year of our *Innovator of the Year* competition with the launch of a suite of competitions to recognise the full breadth of impacts from the research and capabilities that we fund. The Fostering Innovation competitions aim to promote excellence amongst researchers, knowledge exchange practitioners, departments and institutions by recognising successful approaches to innovation and impact in the biosciences.

The suite of competitions included:

- Innovator of the Year – an annual competition rewarding bioscience researchers for outstanding impact – with three categories: commercial, social, and most promising, as well as overall Innovator of the year.
- Activating Impact – a new competition acknowledging, raising awareness of, and celebrating the activities of successful Knowledge Exchange and Commercialisation (KEC) teams or individuals.
- Excellence with Impact – a three-year-long competition, acknowledging research organisations for actively embedding a culture that recognises the importance of economic and social impact, alongside excellent research. Building on the success of the inaugural awards in 2011, Excellence with Impact will run from 2013 to 2016. Thirty-one institutions have submitted entries.

The winners of the Innovator of the Year and Activating Impact competitions were announced in March. They were:

- Dr Ryan Donnelly – Innovator of the Year work on hydrogel-forming microneedle arrays
- The University of Edinburgh and The Roslin Institute (Edinburgh Research and Innovation Ltd.) – Activating Impact award for translating bioscience research into real-world impacts
- Commercial Innovator and Social Innovator, were won by Dr Anna Hine, Aston University, and the team of Professor Peter Mertens, Dr Simon Carpenter, Dr Simon Gubbins and Dr Carrie Batten, The Pirbright Institute, respectively

Foods including eggs and oily fish contain vitamin D3

Research funded through the Diet and Health Research Industry Club (DRINC) has shown that vitamin D3, when given as a supplement, could provide more benefit to raising vitamin D levels in the body than the close relative vitamin D2.

The findings, published in the *American Journal of Clinical Nutrition*, could potentially lead to changes in the food industry when it comes to fortification. The research, carried out by scientists from the University of Surrey, is the first meta-analysis ever undertaken, pulling together all available published data and strongly suggests that vitamin D3, when given at higher supplement doses, results in a higher vitamin D status than vitamin D2.

DRINC is a £12M, five-year partnership between BBSRC, EPSRC, MRC and a consortium of leading companies (£1M), aimed at helping the food industry develop products that deliver enhanced health benefits for consumers.

Other calls and initiatives launched under this strategic priority in 2012-13:

- The first three awards have been made under BBSRC's new Flexible Interchange Programme (FLIP), which offers researchers the opportunity to move between different organisations, disciplines and sectors in all stages in their careers, to exchange knowledge, technology and skills.
- Following a record number of applications, BBSRC awarded £8.8M to 93 Industrial CASE studentships.
- We have extended our follow-on-fund to deliver larger awards (FoFs) for the duration of up to two years, for £250K to £2M, to help researchers take forward ideas with commercial potential that have arisen from BBSRC funded research. Eighteen standard and five 'Super' FoFs were awarded in 2012-13.
- 15 early career scientists went back to school for an intensive, week-long course to help them gain the necessary skills to drive growth of the bioprocessing industry. This was the second skills development scheme run by BRIC.

- Dr Joanne Bailey, a BBSRC CASE student, was awarded the Mark A Smith prize by the editors of the *Journal of Neurochemistry*. The prize recognises the contribution of an outstanding young scientist to an exceptional research paper. Joanne won the prize for work she conducted during her PhD at the University of Southampton. The award was in competition with over 150 eligible papers submitted to this prestigious journal in 2011.

The paper, 'In vitro CNS tissue analogues formed by self-organization of reaggregated post-natal brain tissue', describes some of the research performed while Joanne was working for her PhD under the supervision of Dr Vincent O'Connor, Dr John Chad, Dr Thelma Biggs and Professor Hugh Perry. This was part of a project funded by a BBSRC CASE award. This work involved an industrial collaboration with Capsant Neurotechnologies, which was originally spun out of the University of Southampton in 2002.

© University of Southampton

BBSRC CASE student Joanne Bailey

- A postgraduate course being provided by one of BBSRC's Agri-Food Advanced Training Partnerships (ATP) was named 'Training Scheme of the Year' by *Meat Management* magazine.

The Harper Adams University Postgraduate Certificate in Meat Business Management was developed as part of the Agri-Food ATP based at the University of Nottingham, and is one of four ATPs funded by BBSRC. These partnerships are formal, sustainable collaborations between users and providers of high-level skills in the agri-food sector, bringing together companies with research and training organisations.

Courses from the Agri-Food ATP have been designed in response to feedback from industry about training needs, and span the entire agri-food chain, including soils, water, crops, animals, post-harvest, food and nutrition.

© Harper Adams University

Course Manager, Martin Anderson; ATP Short Course Development Administrator, Zoey Sermon; guest speaker, Martin Bayfield and Lecturer, Richard Taylor

Exploiting new ways of working

World-class bioscience is critically dependent on new technologies, methodologies and resources, not least because research generates massive amounts of useful and valuable data. Handling, storing and interpreting these large volumes of data is a big priority when translating science out of the lab and into the wider world.

Last June, work officially began on a new bioinformatics hub at the European Bioinformatics Institute, Hinxton, Cambridge, part funded by BBSRC. The new three storey Technical Hub will feature a training centre, office space for an industry-led clinical translation suite for bioinformatics and is part of a £75M capital project funded by the UK government, kick started by an additional £10M from BBSRC.

BBSRC remains committed to improving access to the rich data sets being generated by our bioscience community. Through Research Councils UK (RCUK), BBSRC has been working on the transition to greater open access. Having accepted all the recommendations from the Finch report, with RCUK, we are now working together to implement them. As of the next financial year (2013-14) RCUK's Open Access policy will expect all publicly funded research to be open access.

As RCUK's Open Access Champion, I regularly blog about the topic especially encouraging our community to exploit the opportunities that open access brings for innovation.

Last summer we invited our community to help guide the development of our new 'digital organisms' strategy, which we will use to shape our future funding strategy in predictive biology.

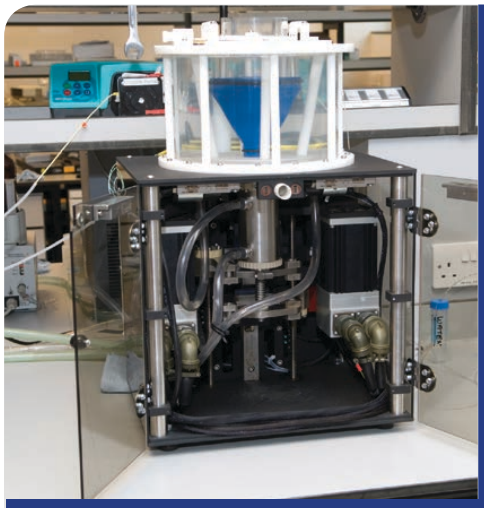
In July, BBSRC welcomed the publication of the Government's *UK Roadmap for Synthetic Biology*. The roadmap, produced by an independent panel of experts for BIS, sets out a shared vision for realising the potential of synthetic biology in the UK. BBSRC formed part of the coordination group steering the development of the roadmap and we are also representing all the Research Councils on the UK's Synthetic Biology Leadership Council, which met for the first time last autumn.

Since 2007, our synthetic biology portfolio has grown to £73M. We have created numerous opportunities over the past year to invest in research that will expand the field through the development of knowledge, tools and technologies, capacity building and strengthened networks of researchers in academia and industry.

£20M of funding was announced in November (in the form of sLoLas) for six collaborative projects using synthetic biology to investigate major global challenges, including:

- £4.5M to Professor Greg Challis from the University of Warwick to understand natural biological 'factories' and their role in producing novel agrochemicals
- £4.0M to Professor Marshall Stark from the University of Glasgow to establish a sophisticated new methodology for creating useful microorganism strains
- £2.5M to Professor Giles Oldroyd from the John Innes Centre to look at the first steps in engineering cereals that are less reliant on fertiliser

In May, a joint programme was launched alongside TSB, EPSRC and ESRC to fund feasibility studies looking at using synthetic biology in commercial settings. BBSRC are co-funding 14 of the 15 projects funded by the Advancing the Industrial Application of Synthetic Biology programme – contributing over £1.5M of the £5.3M.



The DGM is based on 15 years of research between IFR and PBL

The Dynamic Gastric Model (DGM), developed from years of research at the IFR, has taken significant steps towards improving its commercial use by food and drug companies worldwide following over £900K from BBSRC's Super Follow on Fund scheme.

The money will be used to further validate and improve how well it simulates the release of nutrients or drugs in humans. As well as securing this new funding, the technology management company Plant Bioscience Limited (PBL), who are working on the DGM with IFR, have also signed an exclusive license agreement with Bioneer regarding the use of the DGM.

The DGM is the world's first computer controlled, mechanical simulator of gastric digestion that works in real time to process real chewed food and oral pharmaceutical and nutraceutical products.

Other opportunities announced in 2012-13 to help build a world-leading synthetic biology research community in the UK included:

- Fourteen projects funded in June under the Joint Synthetic Biology Initiative, developed by BBSRC, EPSRC, MRC and DSTL to explore the applicability of SynBio to national security and defence needs. Of £1.6M for the new projects, £800K came from BBSRC.
- An integrated £50M Synthetic Biology for Growth package led by BBSRC with EPSRC, in association with ESRC, MRC and TSB. This is part of £600m funding announced in the 2012 autumn statement.
- A joint call by BBSRC, EPSRC and TSB to establish an Innovation and Knowledge Centre (IKC) in Synthetic Biology. The call addresses one of the recommendations of the *UK Roadmap for Synthetic Biology*, and will provide up to £10M over five years to help commercialise synthetic biology technologies.
- The Synthetic Biology ERA-NET, in which BBSRC is a major partner, preannounced its first call for proposals in December. It will provide over €15M for multidisciplinary projects involving European and US researchers, to strengthen capacity in synthetic biology. ERASynBio also held its first strategic conference in January where 85 of Europe's leading researchers and policy makers debated the future direction of the field.

Other calls and initiatives launched under this enabling theme in 2012-13 included:

- Up to £2M to support crowd sourcing projects for biological sciences, for projects looking for instance to develop software, organising and conducting crowdsourcing, the generation of high quality bioscience data and creation of new knowledge.
- £5.5M awarded to 10 projects through the Bioinformatics and Biological Resources Fund the projects will ensure our community has the essential tools for modern, data-driven technology.

- Scientists at the University of Cambridge and the Babraham Institute have demonstrated a new technique that will significantly improve scientists' ability to perform epigenetics research and help understand how cells and organisms develop, function and age.

Epigenetic changes control how a DNA sequence is interpreted, specifically how different genes are switched on and off in different cell types. One of the most studied epigenetic marks is the addition of a small modification called a methyl group to DNA, which turns associated genes off.

The Babraham Institute is researching the role of a DNA chemical modification in mammals called 5hmC, believed to be important in stem cell function. Using a sequencing method developed by Cambridge researchers, the fruitful partnership has resulted in a new technique which enables 5hmC to be sequenced in DNA at single base resolution. This research was also supported by the MRC, the Wellcome Trust and the EU.

The technology has been commercialised via a Cambridge based start-up company called Cambridge EpiGenetix Ltd.

Partnerships

The challenges we face are too big for any one agency or country to meet. Sharing infrastructure, results and expertise is essential to drive forward bioscience. This year we have continued to strengthen new relationships nationally and internationally, as well as forging new ones.

We continue to work closely with our sister Research Councils, and contribute to five major cross-Council programmes, leading on the Global Food Security programme.

A report published in July concluded that the Rural Economy and Land Use programme (Relu) significantly helped to change policies and practice concerning rural economy and land use. Relu was a £26.5M programme supported by BBSRC, ESRC and NERC with additional funding from Defra and the Scottish Government.

Continuing to work in partnership with the university sector is also key to the delivery of our vision for UK bioscience. While we value all interactions with all universities we also recognise that certain universities, based on their volume of BBSRC competitive funding and/or strength in our strategic priority areas, are particularly important for us to forge closer working relationships with. As part of this we have developed strategic partnerships with nine universities (see page 71).

In November, £16M was awarded to 11 new research projects, involving over 40 international research organisations, under the Sustainable Crop Production Research for International Development (SCPRID) programme, a joint multi-national initiative of BBSRC and DFID, together with (through a grant awarded to BBSRC) the Bill & Melinda Gates Foundation (BMGF), and the DBT of India's Ministry of Science and Technology. The projects will develop ways to improve the sustainability of vital food crops in Africa and Asia.

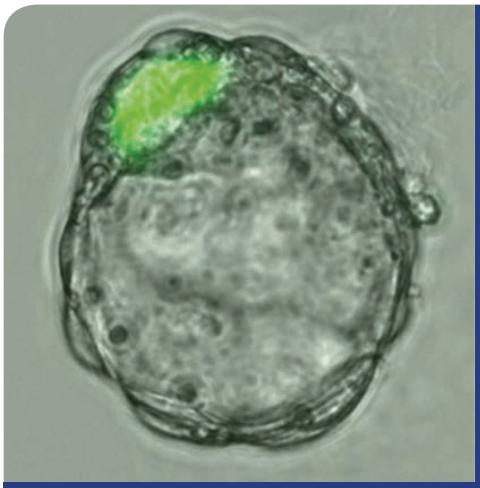
BBSRC has played a significant role in developing the Wheat Yield Network (WYN) which builds on the work of the Wheat Yield Consortium, originally established by CIMMYT (Mexico). The WYN aims to bring together scientists from across the globe to focus on new strategic and sustainable approaches to increasing genetic wheat yield potential by up to 50 per cent over the next 20 years. This approach was endorsed by the signing of a communiqué by funders and research organisations from 16 countries in November.

RCUK and China's Ministry of Science and Technology piloted a joint funding initiative with BBSRC, EPSRC and MRC. We are co-funding three projects on food security, out of five projects in total.

BBSRC is jointly coordinating a European strategy to tackle the great challenges of agriculture and food security under climate change – the Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE JPI) Strategic Research Agenda.

Other calls and initiatives launched under this enabling theme in 2012-13 included:

- Sixteen awards made under the 2012 International Partnership Award competitions for China, India, Japan, the US and Brazil. These awards support links between the UK and overseas laboratories.
- Three awards made under our joint pump-priming awards with FAPESP – São Paulo's State Research Council, totalling over £1M.
- A new International Partnering Award scheme established with BBSRC and the National Science Council of Taiwan (NSC).



Mouse embryonic stem cells (green) re-enter development after being introduced in an early embryo.

- A Japan partnering award from BBSRC has helped enable an international collaboration of researchers uncover a previously unrecognized regulatory pathway at the heart of embryonic stem (ES) cell biology.

ES cells can give rise to every cell type of the body, an ability called pluripotency. For this reason they hold great promise as tools for drug development and regenerative medicine. But how self-renewal is controlled has been something of a mystery.

Now researchers involving teams at the Wellcome Trust - MRC Cambridge Stem Cell Institute, and Dr Hitoshi Niwa from the RIKEN Center for Developmental Biology in Kobe, Japan, have found that a transcription factor called *Esrrb* maintains pluripotency in ES cells and is connected directly to a cellular signaling pathway.

Bioscience holds great promise, but with this come challenging questions for society to ponder. Through public engagement we strive to create opportunities to discuss, listen and respond to public views on emerging bioscience areas.

To help our scientists understand and value two-way dialogue, we have developed a one-day Public Engagement training course, designed to inspire and support researchers to carry out effective public engagement that reflects upon the social and ethical perspectives of their work. Three courses were run during 2012-13.

In June, BBSRC, with support from Sciencewise-ERC, launched a dialogue and engagement project to help ensure contemporary public views, concerns and aspirations are taken into account by funders and researchers around developing sustainable bioenergy solutions. Through this dialogue, BBSRC is exploring different ways of conducting public engagement to ensure the most effective dialogue takes place.

In November, BBSRC published findings from a public dialogue project which piloted a mechanism for exploring public views around BBSRC's Basic Bioscience Underpinning Health theme. The results of the dialogue have been considered by BBSRC's strategy advisory panels.

Through our Inspiring Young Scientists Co-ordinator, we work hard to enthuse children of all ages about the wonders and scope of bioscience. This year the BBSRC-supported GROW (Genetic Research On Wheat) project is enabling pupils at schools across the country to get involved in authentic scientific research by helping to develop drought resistant wheat. The GROW project allows schoolchildren to contribute to genetic research into one of the world's most important food crops and they are involved in every step of the discovery process from physically crossing wheat varieties in the greenhouse to gene mapping workshops in the laboratory.

We continue to work with our sister councils and through RCUK to support researchers to engage with the public. Examples of this include two large programmes: Catalysts – which aim to embed a culture of public engagement in HEIs – and the Schools-University Partnership Initiative – which saw the establishment of 12 strategic and structured partnerships between HEIs and secondary schools and FE colleges to foster closer links between research and pupils.

We are continually looking for new and effective ways to engage and communicate our science to the research community, policy makers, business and industry leaders as well as the public. Social media is becoming an increasingly important way for us to do this. We have uploaded 65 videos on our dedicated YouTube site which have been viewed over 156,000 times.

We have developed our twitter feed @BBSRC and now have over 7,000 followers. Our website is constantly updated and during 2012-13 we received nearly 2.5M visitors, an increase of 13 per cent.

The website we manage on behalf of all the GFS partners – foodsecurity.ac.uk, has seen a 50 per cent increase in visitors over the past year to 175,000 and @FoodSecurityUK has over 3,500 followers.

Last year BBSRC had a presence at 10 events and exhibitions across the UK which enabled us to meet face to face with our key stakeholders, including *Cereals*, the *National Farmers Union Annual Conference*, *Innovate* and the *BIA Bioscience Forum*.

Through close working relationships with researchers and their university and institution communications teams, we disseminated over 350 articles about BBSRC-funded science, showcasing the best of UK bioscience to a national and international audience. This has resulted in over 700 articles per month appearing on a range of media channels. BBSRC also ran five media training events to help researchers develop the skills and confidence in talking to the media about their science.

■ A new network has been set up by an international collaboration of researchers looking at midge monitoring and control as a low-cost way of tackling bluetongue virus (BTV) outbreaks in India where the virus is endemic. The India Bluetongue Vector Network (IBVNet) has been developed with joint funding from BBSRC and the Department for International Development (DfID) with contributions from the Scottish Government as part of a £13M initiative looking at combating infectious diseases of livestock for international development (CIDLID).

IBVNet is being led and coordinated by The Pirbright Institute in the UK and is part of the All India Network Programme on BTV within the Indian ral Research.

Bluetongue is a major challenge for farmers across the world, having a major impact on animal productivity and an up to 30 per cent fatality rate in sheep flocks during epidemics.

© Lara Harrup

Bluetongue virus is spread by biting midges

Reflections

Fulfilling our vision for *The Age of Bioscience* requires commitment and in some instances, cultural change within the science community, as well as within BBSRC.

To maximise our delivery of our strategic plan, we regularly review our funding mechanisms and decision-making structures to ensure we are able to respond quickly and flexibly to scientific developments. BBSRC's new Research Advisory Panel met for the first time in 2012-13, bringing together heads of strategy panels and responsive mode committee chairs to ensure that strategy and funding are joined up internally. The role of the panel is to advise BBSRC on the overall balance and direction of our research funding across our portfolio.

Our current processes and systems to review grant applications are under pressure. There are issues around getting enough high-quality referee comments and committee members are shouldering a huge workload. With the help of our community, we are examining alternative approaches.

At the start of 2013, we made a number of changes to the requirements for responsive mode grant applications to help simplify them for applicants and to help standardise application supporting documentation.

I was pleased that in January a review by Deloitte, commissioned by BIS, of our financial management found that across the board we are operating at an 'advanced to leading' level.

BBSRC is continuing to work in partnership with other Research Councils and RCUK Shared Business Services Ltd to get added value from shared services, and to deliver continuous improvement and efficiency savings. We are leading on the development of harmonised terms and conditions of employment (to be implemented from January 2014) and looking at further opportunities to share expertise (for example in management information) across the Research Councils.

It is only by working together that we are able to tackle the large-scale challenges we face, externally, as has been shown throughout my report, but also internally, within BBSRC and our strategically funded institutes.

Thank you to everyone for sharing BBSRC's vision and for their commitment and dedication in making it a reality, in stringent economic times.

I would like to thank Professor Jane Rogers, who stepped down as Director of TGAC in October, for her hard work and dedication over the past five years in successfully launching TGAC. Dr Mario Caccamo will continue her good work as he takes on the role of Acting Director while a new Director is recruited.

In March we said a fond farewell to Peter Swinburne who retired after more than 20 years working within BBSRC and our predecessor organisation, 10 years of which were as BBSRC's Director of Human Resources.

I would also like to offer a warm welcome to Professor Melanie Welham who joined BBSRC as Director of Science in October. She was previously Professor of Molecular Signalling at the University of Bath.

My warmest congratulations go to BBSRC's Deputy Chief Executive and Chief Operating Officer, Steve Visscher, who was made a Commander of the Order of the British Empire (CBE) in Her Majesty's New Year 2013 Honours. In the citation, Steve was recognised for his Services to the Support of Scientific Research.

I was delighted to be reappointed for another year by the Minister for Universities and Science, taking my term to October 2013. In this, my last annual report, I would thus like to take the opportunity to record my gratitude for the commitment and dedication of our Chairman, members of our Council, Panels, Boards and Committees, BBSRC staff based in our Swindon office and in our world-class institutes, to the researchers who work tirelessly in the pursuit of rigorous science and answers to benefit us all and lastly, the general public for their continued support of science. I am confident that BBSRC is steering a clear and beneficial path for UK bioscience. Despite challenging times for public sector investment, there is a recognition at all levels of the vital role bioscience has to play socially and economically.

Perhaps if the Olympic Games return to London in another 64 years, the opening ceremony will be telling the story of a biological revolution, celebrating the achievements of UK Bioscience and the Bioeconomy. That would be a legacy to make us all proud.

Professor Douglas Kell
BBSRC Chief Executive
26 June 2013

© Max Alexander

On the 4th June 2013, the Minister for Universities and Science, David Willetts, announced the appointment of Dr Jackie Hunter CBE *(pictured above)* as the next Chief Executive of BBSRC. Dr Hunter will take up her new role with BBSRC on 21 October 2013 on a four year appointment. She succeeds Professor Douglas Kell who leaves the Research Council after five years to return to the University of Manchester.

Key funding data

Summary of grant applications and success rates

	2009-10	2010-11	2011-12
Number of applications (excluding Fellowships)	1,865	1,832	1,469
Success rate by number (%)	22	28	30
Equivalent success rate by value (%)	23	26	29

Applications and success rates by gender

Success rate by number (%)

	2009-10		2010-11		2011-12	
	Male	Female	Male	Female	Male	Female
Project grants	19.6	18.9	23.0	21.0	29.0	24.0
Programme grants	37.9	39.7	46.7	40.8	53.4	33.3
New investigators	33.0	41.3	23.6	17.5	38.2	24.1
Fellowships	18.2	6.9	7.8*	N/A**	8.6***	6.3****

Percentage of female applicants from total applications and from successful applications for peer-reviewed funding

	2009-10		2010-11		2011-12	
	Total	Successful	Total	Successful	Total	Successful
Project grants	23.6	23.0	21.3	19.8	22.5	20.0
Programme grants	19.5	20.2	18.6	16.7	20.5	13.9
New investigators	32.9	38.0	31.0	25.0	29.9	21.2
Fellowships	27.4	12.5	29.4	N/A**	31.4	25.0****

Dates indicate session of application

* In 2010-11 a total of six awards were available, compared to 16 awards in the previous sessions

** Fellowships were offered to three female applicants, all of whom declined

*** In 2011/12 a total of four awards were available

**** Fellowships were offered to two female applicants, of whom one delined

BBSRC Funding to Funded Institutes in 2012-13 (£M)

Institute	BBSRC Strategic Grants	BBSRC Other Funding	BBSRC Capital Funding	Total BBSRC Funding
Babraham Institute (BI)	12.8	4.2	15.1	32.1
Pirbright Institute (PI)*	11.7	5.9	49.2	66.8
Institute of Food Research (IFR)	9.6	2.0	1.1	12.7
John Innes Centre (JIC)	14.0	11.3	7.3	32.6
Rothamsted Research (RRes)	13.9	8.3	5.0	27.2
The Genome Analysis Centre (TGAC)	6.8	2.4	-	9.2
Roslin Institute at the University of Edinburgh (RI)**	7.6	0.1	3.9	11.6
Institute of Biological,Environmental and Rural Sciences at Aberystwyth University (IBERS)**	4.4	1.0	3.0	8.4
2012-13 Totals	**80.8**	**35.2**	**84.6**	**200.6**
2011-12 Totals	**79.3**	**19.5**	**117.0**	**215.8**

* Formerly the Institute for Animal Health (IAH)

** Two BBSRC funded institutes, the Institute of Biological, Environmental and Rural Sciences (IBERS) and the Roslin Institute (RI), are embedded in Aberystwyth University and the University of Edinburgh respectively. Competitive Research Grant funding, provided under the "Other Funding" category is provided direct to the Universities and not included here.

Top 25 Universities by Grant Funding						
2012-13				2011-12		
	University	**£M**	**Trend**		**University**	**£M**
1	The University of Manchester	17.51	↔	1	The University of Manchester	16.69
2	University of Cambridge	14.89	↔	2	University of Cambridge	13.81
3	The University of Edinburgh*	13.41	↔	3	The University of Edinburgh*	13.75
4	University College London	12.52	↑	4	University of Nottingham	12.44
5	Imperial College London	11.66	↔	5	Imperial College London	11.69
6	University of Nottingham	11.46	↓	6	University of Oxford	10.99
7	University of Oxford	10.65	↓	7	University College London	10.65
8	University of Bristol	8.42	↔	8	University of Bristol	7.60
9	University of Glasgow	6.89	↑	9	University of Leeds	7.03
10	University of Warwick	6.85	↔	10	University of Warwick	6.70
11	University of Sheffield	5.74	↑	11	University of Glasgow	6.58
12	Newcastle University	5.52	↔	12	Newcastle University	5.33
13	University of Leeds	5.40	↓	13	University of Sheffield	5.30
14	King's College London	5.24	↑	14	University of Birmingham	4.92
15	University of Liverpool	5.08	↔	15	University of Liverpool	4.70
16	University of Birmingham	4.43	↓	16	University of Dundee	4.36
17	University of Dundee	4.21	↓	17	King's College London	4.33
18	University of East Anglia	3.90	↔	18	University of East Anglia	3.98
19	Cardiff University	3.82	↑	19	University of York	3.87
20	University of Exeter	3.78	↑	20	University of Aberdeen	3.77
21	University of York	3.71	↓	21	Royal Veterinary College	3.67
22	Royal Veterinary College	3.68	↓	22	University of Exeter	3.07
23	University of Aberdeen	3.57	↓	23	Cardiff University	2.98
24	University of Southampton	3.38	↑	4	University of Reading	2.74
25	University of St Andrews	2.71	↑	25	University of Sussex	2.46

*Two BBSRC funded institutes, the Institute of Biological, Environmental and Rural Science (IBERS) and the Roslin Institute (RI), are now embedded in Aberystwyth University and the University of Edinburgh (see the table above 'BBSRC Funding to Funded Institutes', respectively. Core Strategic Grants of £4.4M (2010-11: £4.5M) to IBERS and £7.6M (2010-11: £8.5M) to RI are excluded from the 'Top 25 Universities by Grant Funding'.

An analysis of research funding can be found in note 2 of the Accounts.

The tables titled 'Publications from BBSRC Funded Institutes' and 'Transferring Knowledge – BBSRC Funded Institutes' were included in previous years, but the data is not available prior to the publication of the accounts in 2012-13. This data will, instead, be made available via BBSRC's website.

Corporate Information

Governance

BBSRC is an independent non-departmental public body of BIS, established by Royal Charter. BBSRC's working relationship and lines of accountability with its sponsor department BIS are defined through a Management Statement and Financial Memorandum, which are subject to periodic review.

BBSRC's Chief Executive, in his role as Accounting Officer, is accountable to the public via Parliament. Parliament monitors and influences BBSRC's work through its Select Committees and the Parliamentary Ombudsman.

Council

The Governance Statement in the Accounts (page 35) describes the role of Council within BBSRC's governance framework and provides information about Council's membership, performance and attendance. Information about Council's Boards is also contained within the Governance Statement.

Note 25 in the Accounts contains details of related party transactions. Registers of interest for Council can be found at: http://www.bbsrc.ac.uk/web/FILES/Conflicts/council_conflicts.pdf

Panels and Committees

BBSRC's strategy advisory structure comprises the panels listed below. Membership can be found on BBSRC's website at: www.bbsrc.ac.uk/organisation/structures/panels

- Basic Bioscience Underpinning Health Strategy Advisory Panel
- Bioscience for Industry Strategy Panel
- Bioscience for Society Strategy Panel
- Bioscience Skills and Careers Strategy Panel
- Exploiting New Ways of Working Strategy Advisory Panel
- Food Security Strategy Advisory Panel
- Industrial Biotechnology and Bioenergy Strategy Advisory Panel
- Research Advisory Panel

BBSRC has a number of committees which assess applications for responsive mode grant funding and assess studentship and fellowship applications. BBSRC's committees are listed below and membership can be found on BBSRC's website at: www.bbsrc.ac.uk/organisation/structures/committees. A list of members in BBSRC's peer review and strategy pool of experts is also available at this webpage.

- Committee A – animal disease, health and welfare
- Committee B – plants, microbes, food and sustainability
- Committee C – genes, development and science, technology, engineering and mathematics (STEM) approaches to biology
- Committee D – molecules, cells and industrial biotechnology
- Training Awards Committee – studentships, fellowships and other training awards

Organisational developments

Efficiency Programme

As set out as part of the 2010 spending review settlement, the Research Councils have implemented an efficiency programme to drive down the costs and overheads associated with research. The efficiency savings derived from this programme are being re-invested in research.

In the spring of 2011, RCUK published *Efficiency 2011-15: Ensuring Excellence with Impact*, describing how the Research Councils would implement the recommendations in Sir William Wakeham's report *Financial Sustainability and Efficiency in Full Economic Costing of Research in UK Higher Education Institutions*. The efficiency savings are being applied to both research grants and fellowships awarded via competitive route to Research Organisations and also to Research Council institutes. The combined savings for the first year (2011-12) exceeded the planned £30.5M with details provided in the programme's annual report at http://www.rcuk.ac.uk/documents/publications/RCUK_Efficiency_Savings_Report_2011-12_July2012.pdf
The combined saving for the second year (2012-13) were planned to be £82.2M rising over the four-year Spending Review period to reach a total of £428M over the full period. At the time of writing, savings totals for 2012-13 were not available from all Research Councils. However, the combined total is expected to exceed target.

Alongside these measures, the Research Councils also introduced changes to the requests for equipment on grants, including asking applicants to demonstrate how the usage of the equipment will be maximised. RCUK is currently working with university partners to develop and implement options to promote and assist equipment sharing, including exploring the issues around asset registers. There is good anecdotal evidence of significant progress by universities to promote sharing, and of very efficient usage of large pieces of experimental equipment.

In 2012-13, BBSRC successfully delivered £11.4M of savings on competitive grants and fellowships under the Wakeham programme, which were reinvested in bioscience research. Further to this, BBSRC strategically funded institutes delivered £4.5M of savings against a target of £3.45M.

Staff report

On 1 April 2013, 1582 staff were employed in institutes funded by BBSRC and in the BBSRC Office, compared to 1732 on 1 April 2012. Of the 1582 staff, 1282 were in BBSRC-funded institutes and 300 were in BBSRC Office (which includes staff in Joint Service Units which BBSRC hosts on behalf of all of the Research Councils). As at 1 April 2013, 648 staff were in the science category, which represents 40.1 per cent of all staff. Women occupied 26 per cent of senior posts in BBSRC (pay band PC1-F). The comparable figure for 2011-12 was 26 per cent.

Under the new governance arrangements for BBSRC-funded institutes, existing staff at institutes will remain BBSRC employees working under a deployment agreement. Such staff will therefore continue to be included in BBSRC data. However, staff employed locally by institutes on different terms and conditions will be excluded from BBSRC statistics.

BBSRC's employment policies, strategies and guidance are set out in the BBSRC Employment Code, which can be found on our website: www.bbsrc.ac.uk/organisation/policies/employment/code.

Diversity and Equality

BBSRC is committed to creating a culture that values dignity at work, mutual respect and inclusivity, where diversity is embedded in all business activities, unlawful discrimination is eliminated and individuals can achieve their potential. We aim to: attract and retain high-quality staff and increase the representation of those from minority groups throughout our organisation. These aims are underpinned by our Diversity Strategy 2010-2013 and our annual Diversity Action Plan.

Our achievements during this year include:

- Signatory of the Concordat to support the career development of researchers – principle 6 of the concordat states: Diversity and Equality must be promoted in all aspects of the recruitment and career management of researchers. BBSRC are contributing to an RCUK action plan to support equality and diversity across the research base.

- Accreditation and Assurance – BBSRC is contributing to a review of current approaches to equality and diversity within research at all levels and to explore ways in which accreditation and assurance will support change. Two BBSRC strategically funded institutes are signing up to the Athena SWAN Charter. BBSRC is also undertaking an assessment of the impact of introducing prerequisite criteria into its grant awarding processes so that fair and achievable conditions can be met by all, including small grant holders, industry and international recipients. The recent Institute Assessment Exercise recommended that institutes embed people and management practices which are able to be benchmarked with the Athena SWAN Silver award.

- Policy harmonisation – a revised draft harmonised Research Council Equality and Diversity Policy has been developed as part of a cross-council project to harmonise some terms and conditions and associated policies (and will be included in the cross-council negotiation process) Progress is being made on producing a set of guidance notes on managing and working with each of the protected groups.

- Increasing diversity in public appointments – BIS is running a pilot with the MRC, BBSRC and STFC to look at issues of diversity and how we can increase diversity in appointments to Council. This will run until the end of March 2013. Good practice/learning will be shared with the other Research Councils and a longer-term action plan.

- Where an entity has more than 250 employees, certain disclosures are required. This includes the policy in respect of the employment, training, career development and promotion of disabled persons, action taken to maintain or develop arrangements for providing information to, and consulting with, employees, encouraging employee involvement in the entity's performance, and achieving employee awareness of the financial and economic factors affecting the entity and information about the entity's employees. The entity should also disclose its policies on employee matters, and the effectiveness of those policies. This information can be found in the BBSRC Employment Code: www.bbsrc.ac.uk/organisation/policies/employment/code/code.

Health and Safety

A safe, healthy and secure environment is vital to the attainment of BBSRC's research mission. We wish to maintain and build on our reputation as a positive place to work and carry out research. We recognise that this cannot happen unless we promote the wellbeing of staff and others affected by our work activities. This commitment recognises our staff as key and valued partners.

In 2012-13, we continued to see an overall improvement in our safety performance. Typically, the incidents that we experience include slips, trips and falls on the same level, or handling, lifting and carrying. These two areas will remain our priority safety areas in 2013-14. We have continued to develop and deliver our occupational Health, Safety, Biosafety and Security (HSBS) strategy which provides a clear framework and will ensure that good occupational HSBS is embedded across the organisation. We encourage the reporting and investigation of 'near miss' events – unplanned events which do not cause injury or damage, but could have done so under different circumstances. These are important 'learning events' and they are a key part of our process of continuous improvement. We recognise the importance of human factors as contributors to incidents and will continue to focus on improving our culture as a key objective.

It is a legal requirement to report certain incidents and ill health at work (as shown over the page). As of 6 April 2012, this reporting requirement has changed. The trigger point has increased from over three days' to over seven days' incapacitation (not counting the day on which the accident happened). It is therefore not possible to compare this year's figures with previous years.

Annual Occurrence Reportable Incident Category (defined as in RIDDOR 1995)	2012-13	2011-12	2010-11
Contact with moving machinery or material being machined	0	0	0
Hit by a moving, flying or falling object	0	0	2
Hit by a moving vehicle	0	0	0
Hit by something fixed or stationary	1	2	1 (visitor)
Injured while handling, lifting or carrying	0	3	3
Slipped, tripped or fell on the same level	3	4 (including 1 visitor)	2 (including 1 contractor)
Fell from a height	1	1	0
Trapped by something collapsing	0	0	0
Drowned or asphyxiated	0	0	0
Exposed to, or in contact with, a harmful substance	0	0	1
Exposed to fire	0	0	0
Exposed to an explosion	0	0	0
Contact with electricity or an electrical discharge	0	0	0
Injured by an animal	0	4	1
Physically assaulted by a person	0	0	0
Another kind of accident	1	3	2
Total accidents	**6**	**17 (including 1 visitor)**	**12 (including 1 visitor and 1 contractor)**
Cases of occupational disease	2	0	1
Dangerous occurrence	1	1	2
Overall total	**9**	**18**	**15**

Sickness absence: BBSRC office (including BITS)	2012-13	2011-12	2010-11
Total days of absence	1526	1778	2609
Frequency of absences lasting longer than 28 days	23	9	20
Total days of long-term sickness	536	594	1297
Average days of sick absence per person at BBSRC Swindon Office	5.29	5.93	7.88

Protected personal data related incidents

BBSRC recognises and fully supports the need for effective information governance in protecting its information and the information entrusted to it in the course of its business. Compliance with data protection law is taken very seriously and as such, BBSRC provides all employees with annual basic training on their responsibilities. BBSRC continues to monitor and assess its information risks in order to identify and address any weaknesses, and ensure continuous improvements of its systems and procedures.

There have been no personal data related incidents in 2012-13 requiring reporting to the Information Commissioner's Office.

TABLE 1: SUMMARY OF PROTECTED PERSONAL DATA RELATED INCIDENTS FORMALLY REPORTED TO THE INFORMATION COMISSIONERS OFFICE IN 2012-13

Statement on Information risk	- All staff have completed data protection awareness training which included guidance on information assurance. - Audits of BBSRC on the following areas were carried out in 2012-13 and received substantial assurance: • Information Security and Assurance • Audit of Physical Security and Biosecurity • Social Media - An audit of disaster recovery planning is due to report in May 2013. - Audits of activities carried out on behalf of the Research Councils by RCUK Shared Services Ltd highlighted several areas of operation that are receiving attention. Areas such as application security received substantial assurance. - Privacy Impact Assessments are routinely carried out on new systems to ensure that BBSRC remains compliant with data protection legislation and put in necessary security controls. - The Data Protection Policy was reviewed and updated in October 2012.

Date of incident (month)	Nature of incident	Nature of data involved	Number of people potentially affected	Notification Steps
None	0	0	0	0

Further action on information risk	Revision of the Data Protection Policy is in progress.

TABLE 2: SUMMARY OF OTHER PROTECTED PERSONAL DATA RELATED INCIDENTS IN 2012-13

Incidents deemed by the Data Controller not to fall within the criteria for report to the Information Commissioner's office but recorded centrally within the Department are set out in the table below

Category	Nature of incident	Total
I	Loss of inadequately protected electronic equipment, devices or paper documents from secured Government premises	0
II	Loss of inadequately protected electronic equipment, devices or paper documents from outside secured Government premises	0
III	Insecure disposal of inadequately protected electronic equipment, devices or paper documents	0
IV	Unauthorised disclosure	1
V	Other	0

Total number of protected personal data related incidents formally reported to the Information Commissioner's Office, by category number.

	I	II	III	IV	V	Total
2012-13	0	0	0	0	0	0
2011-12	0	0	0	0	0	0
2010-11	0	0	0	0	0	0
2009-10	0	0	0	0	0	0

Total number of other protected personal data related incidents by category number.

	I	II	III	IV	V	Total
2012-13	0	0	0	1	0	1
2011-12	0	0	0	1	0	1
2010-11	0	6	0	2	1	9
2009-10	0	0	0	0	3	3

Public Sector Information Holder

BBSRC does not sell data and therefore is not making a statement with regard to the requirements set out in HM Treasury and Office of Public Sector Information guidance.

Sustainability

Environmental Policy

BBSRC has formalised and strengthened its corporate Environmental Policy which confirms its commitment to promote environmental best practice. Energy efficiency is an important element of the policy.

BBSRC-funded Institutes occupying BBSRC sites have fully supported the corporate Environmental Policy and have formulated their individual environmental policies, specific to their own activities, to reflect the framework of the BBSRC policy. Specifically BBSRC is committed to:

- Understanding its environmental impacts, including the direct environmental impacts of the research that it sponsors. It requires recipients of BBSRC funding to monitor and minimise any adverse impacts on the environment and local communities.
- Compliance with relevant environmental legislation, and, where appropriate, adoption of current standards of best practice.
- Continual development of objectives and targets to reduce environmental impacts through the application of realistic, measurable and achievable performance indicators.
- The efficient use of energy and natural resources, minimising waste and encouraging effective re-use and recycling.
- Minimising the environmental impacts of new buildings and structures through good specification and design whilst supporting their primary function.
- Working with suppliers and contractors to promote approaches to supply chain management and product sourcing that minimise adverse environmental impacts.
- Raising awareness and training staff in best practice in order to ensure effective resource management.
- Raising awareness and maintaining dialogue with external stakeholders, including commercial and domestic tenants, contractors, suppliers, local communities, local authorities and other organisations, to identify key environmental issues and to ensure standards of best practice on site.
- Regularly reviewing its environmental impacts and environmental management practices.

Energy Policy

BBSRC is committed to reducing energy consumption to the lowest practical level commensurate with the realistic needs of the research programme. The policy commitments are:

- To promote best practice in energy and environmental conservation and to implement strategies to reduce energy consumption and cost.
- To promote energy and environmental conservation and to encourage all staff to be efficient with their use of energy.
- To ensure, as far as possible, that new buildings, plant and equipment are designed to provide for a high but cost-effective standard of energy and environmental conservation.
- To implement energy-efficient capital schemes at institutes.
- To adopt energy-purchasing strategies to achieve the best prices from the marketplace and to seek opportunities for purchasing renewable energy.
- To measure and reduce carbon emissions.

Environmental management and implementation

RCUK, the body that hosts the seven research councils within Polaris House, has been awarded and implements an Environmental Management system (EMS) via ISO 14001.

BBSRC is active in promoting and supporting its associated Institutes in attaining accreditation for Environmental Management systems under ISO 14001 and can report that Rothamsted Research at Harpenden has been awarded ISO 14001 accreditation during this reporting year.

The environmental impact, together with the monitoring and usage of resources within Polaris House is managed by the building operations department (JBOS) which has set a target of reducing waste disposal to landfill to five per cent by 2014.

JBOS has continued to implement and integrate energy-saving and carbon-reducing technologies into the building systems. There are various technologies available for future consideration, such as:

- Photovoltaic electrical generation
- Combined heat and power generation
- Free cooling to serve the IT server room
- Installation of low-energy lighting
- Borehole water supply

The above are technologies that require substantial capital investment, together with extended payback periods that in many cases extend beyond the expected efficient operational life of the integrated components. These technologies require careful examination prior to the commitment of funds to these sizeable investments.

Sustainability

BBSRC is fully committed to a programme of review and reduction in the use of energy, finite resources and waste disposal.

The majority of BBSRC's carbon emissions emanate from the use of mains supplied electricity within its head office, Polaris House, and it is this resource that, when targeted with energy saving technologies, will return the highest level of reductions.

Financial review

- In 2012-13 BBSRC had a working budget of £500M (£526M in 2011-12), comprising £397M resource and £103M capital. Resource fell by over £10M due mainly to a reduction in restructuring of £6M and administration of £4M. The Capital Programme profile for large projects fell by £16M. The table below sets out BBSRC's financial outturn against the budget.

£'000	Resource	Capital	Total
Allocation	396,687	103,300	499,987
Outturn	395,404	103,207	498,611
Underspend / (overspend)	1,283	93	1,376
Underspend / (overspend) %	0.32%	0.09%	0.28%

- There were three constituent and separate allocations within the resource budget: Programme, Administration and Restructuring.

£'000	Programme	Administration	Restructuring	Total
Allocation	362,571	26,116	8,000	396,687
Outturn	359,669	27,886	7,849	395,404
Underspend / (overspend)	2,902	-1,770	151	1,283
Underspend / (overspend) %	0.80%	-6.78%	1.89%	0.32%

nb: the administration is an agreed overspend directly and entirely related to two specific restructuring items: the transfer of the RCUK Shared Service Centre to BIS ownership, and changes in accounting treatment of the Pirbright Institute (this is not additional spend and is matched by corresponding underspend on Programme.

BBSRC budget outturn set out in the table above is based on government budgeting rules and is aligned to the budget results recorded by BIS for BBSRC and differs to the figures reported in the financial statements.

Programme budget

- During the year BBSRC spent £414.6M on research and capital grants (compared to £408.0M in 2011-12). The increase in grant expenditure reflects BBSRC's continued commitment to invest in high-quality bioscience research and facilitates. An analysis of research funding is included in note 2 to the accounts.
- In 2012-13 BBSRC provided £52.3M for training and fellowship awards (compared with £63.7M in 2011-12). There were additional one-off spends in 2011-12 for Research Training Support Grants (RTSG) and Doctoral Training Partnerships (DTP) totalling £7.8M.
- BBSRC's capital allocation in 2012-13 was comprised as follows:

Capital Budget 2012-13	£'000
Base capital allocation	29,700
Research facilities at the Pirbright Institute	30,000
Research campus development at Babraham and Norwich	30,000
The ELIXIR European biological data storage hub	12,000
e-infrastructure	1,600
TOTAL	**103,300**

- In the Chancellor's Autumn Statement on 5th December 2012, £600M was awarded across Research Councils for investment in research and innovation. BBSRC will be responsible for the investment of £101.4M of this award from 1st April 2013.
- The major part of the investment at the Pirbright Institute (formerly known as the Institute of Animal Health) was in the first phase of construction of new High Containment virology laboratories. The construction was virtually completed during 2012-13 in readiness for commissioning and validation during 2013-14, the project remains on target for cost, time and quality. During 2012-13 the business case was approved for the second major phase, and the project moved into its design and planning phase, construction will commence during 2013-14. Investment continued during the year in the ELIXIR programme and also in the Campus development programmes at Norwich and Babraham, at the latter a second major science building was completed, following the delivery of the first during March 2012.
- The net book value of BBSRC's tangible fixed asset base increased by £46.6M from £305.5M in 2011-12 to £352.1M in 2012-13.

- During the year, the remainder of the IT equipment at the Biosciences IT Service (BITS) was disposed of, resulting in a loss of disposal of £246K following the closure of BITS; BITS was the common service provider of Information Communication Technology (ICT) services to BBSRC. BITS closed its operations in April 2012, following completion of Institute governance changes and harmonisation with other Research Councils.
- Impairments amounted to £8.9M in 2012-13 compared to £14.0M in 2011-12. The large majority of impairments relate to land and buildings on the two sites leased to the Pirbright Institute at Compton and Pirbright. The Compton site is planned for closure with the Pirbright Institute moving entirely to the Pirbright site, which is currently undergoing major development. As a result, several buildings have been taken out of use at Compton as they become vacant, and some of buildings at Pirbright have been taken out of service to facilitate work on the new development

Administration budget

- In 2012-13 BBSRC received admin funding £3.6M less than the 2011-12 allocation, £2.9M of which was related to governance changes at Institutes. BBSRC was advised by BIS to overspend its allocation by up to £2.850M for unfunded Pirbright costs. BBSRC's final position was less by £1.079M remaining within budget through a combination of a pay freeze, a reduction in recruitment and other internal efficiencies such as the closure of BITS noted above.

Clear Line of Sight

In 2012-13 BBSRC again worked within the HM Treasury's 'Clear Line of Sight' accounting environment, which aims to simplify the reporting of public finances, and improve transparency and accountability. As part of this cross-Government initiative, BBSRC's sponsoring Government Department, BIS, has a legal requirement to produce consolidated resource accounts for 2012-13 incorporating the financial results of its partner organisations. BBSRC, along with around 40 other BIS partner organisations, was required to produce draft accounts information and financial outturn figures to BIS in April 2013 to support the consolidation exercise.

UK Shared Business Services Ltd (UK SBS Ltd)

UKSBS Ltd provides processing services in human resources, procurement, payroll, finance, grants, and IT to all seven Research Councils.

Creditor payment policy

BBSRC observes HM Treasury Guidance and makes every effort to pay creditors within 5 days of receipt of invoice. Where this is not possible, BBSRC observes the CBI's Prompt Payers' Guide, and adheres to the principles of the Prompt Payers' Code, endeavouring to ensure compliance with the agreed terms of payment of creditors' invoices and to pay them within 30 days of receipt of invoice. During 2012-13, 82.5% of undisputed invoices were paid within 5 working days (72.9% in 2011-12). During 2012-13, 98.5% of undisputed invoices were paid within 30 calendar days (96.9% in 2011-12).

Auditors

BBSRC's Accounts are audited by the Comptroller and Auditor General in accordance with Section 2(2) of the Science and Technology Act 1965. The audit fee for the year was £85,000 (2011-12: £90,000). No non-audit work was performed by the Auditors during the year. In so far as the Accounting Officer is aware, there is no relevant audit information of which BBSRC's auditors are unaware, and the Accounting Officer has taken all the steps that he ought to have taken to make himself aware of any relevant audit information and to establish that the BBSRC's auditors are aware of that information.

Professor Douglas Kell
Chief Executive and Accounting Officer

Date: 26 June 2013

Remuneration report

Council Chair and Council members except Chief Executive

Policy (unaudited information)

Remuneration rates are the same across the Research Councils. The rates are reviewed each year by the Department for Business, Innovation and Skills (BIS). In considering the new rates, BIS may take into account the increase given to the senior civil service. BIS consults with the Research Councils and the agreed change is implemented in October.

Appointments are non-pensionable and there is no entitlement to compensation for loss of office. No fee is payable in respect of Civil Servants, employees of Research Councils and other Non-Departmental Public Bodies and Agencies.

Remuneration (audited information)

Standard Fee Paid to Council Members (£ per annum)	2012-13	2011-12
Council Chair	16,430	16,430
Council Members who also chair Committees	9,110	9,110
Council Members	6,850	6,850

	Appointments		Remuneration £000s	
	From	To	2012-13	2011-12
Chair – Professor Sir Tom Blundell	01/07/2009	30/06/2015	16	16
Deputy Chair and Chief Executive – Professor Douglas Kell	01/10/2008	18/10/2013	0	0
Professor Sir David Baulcombe FRS	01/04/2009	31/03/2013	7	7
Professor John Coggins FRSE	01/04/2008	31/03/2014	9	7
Professor Anne Dell CBE FRS	01/04/2007	31/03/2014	7	7
Professor Russell Foster FRS	01/04/2011	31/03/2015	7	7
Mr Jim Godfrey OBE	01/04/2009	31/03/2013	7	7
Dr Mike Goosey	01/04/2011	31/03/2015	7	7
Mr David Gregory	01/04/2010	31/03/2014	9	7
Professor Peter Grindrod CBE	01/04/2009	31/03/2013	7	7
Professor Sarah Gurr	01/04/2012	31/03/2016	7	0
Dr David Lawrence	01/04/2008	31/03/2014	7	7
Professor Keith Lindsey	01/04/2010	31/03/2014	7	7
Professor Christopher Pollock	01/04/2008	31/03/2014	7	7
Dr Andrew Richards	01/04/2008	31/03/2014	7	9
Professor David Richardson	01/04/2012	31/03/2016	7	0
Dr John Stageman	01/04/2008	31/03/2014	7	7
Dr Will West	01/04/2011	31/03/2015	7	7
Professor Tim Wheeler	01/04/2012	31/03/2016	0	0

The total emoluments of the Chairman were honoraria of £16,430 (2011-12: £16,430). The Chairman's appointment is non-pensionable and there is no entitlement to compensation for loss of office.

As noted in the policy section above, no fees are payable to Professor Kell, see renumeration of senior employees for details of his renumeration.

Committee Chairs and Members (unaudited information)

The remuneration of Committee Chairs and Members is set by the Financial Management Group of the Research Councils. Committee remuneration rates are reviewed every two years by the Research Councils' Finance Directors Group. It was decided to maintain the remuneration rates at their current level for 2012-13.

Committee Rates (£ per day)	2012-13	2011-12
Committee Chairman	230	230
Committee Members	170	170

Hutton Review of Fair Pay (audited information)

Reporting bodies are required to disclose the relationship between the remuneration of the highest-paid director in their organisation and the median remuneration of the organisation's workforce.

The banded remuneration of the highest-paid director in BBSRC in the financial year 2012-13 was £170,000-£175,000 (2011-12: £165,000-£170,000). This was 4.63 times (2011-12: 5.50) the median remuneration of the workforce, which was £37,248 (2011-12: £30,432). Remuneration ranged from £1,161 to £172,576, (2011-12: £9906 to £168,076).

In 2012-13, 0 (2011-12: 0) employees received remuneration in excess of the highest-paid director. There is a difference between the figure of the highest paid director in the above note and the remuneration report as Professor Douglas Kell is employed for four days a week and the Hutton disclosures require all staff salaries to be calculated at the full-time equivalent rate.

Total remuneration includes salary, non-consolidated performance-related pay, benefits in kind, but excludes severance payments. It does not include employer pension contributions and the cash-equivalent transfer value of pensions.

Chief Executive and BBSRC Directors (audited information)

Remuneration Committee

The Chief Executive's remuneration is determined by the Permanent Secretary of BIS. The Permanent Secretary is advised by a Remuneration Committee chaired by the Director General of Research Councils. The Chair of BBSRC Council is consulted.

BBSRC Remuneration Board

The remuneration of BBSRC Directors is reviewed and adjusted annually by the Council Remuneration Board. The Board is chaired by the Chair of Council and other membership comprises the Chief Executive and three Council Members, at least one of whom must have an industry background. Members of the Remuneration Board are listed within the Governance Statement in the Accounts.

Policy

Subject to successful performance, the Chief Executive's salary rises by a cost of living increase and a pre-determined incremental increase up to a salary ceiling. In addition, non-consolidated, non-pensionable annual performance-related pay may be awarded for performance towards objectives agreed by BBSRC and the Chief Executive.

The BBSRC Remuneration Board reviews performance against a series of objectives, categorised between fundamental, value-added or breakthrough, in determining each Director's annual salary level and any performance related pay award. The Board will also take account of public sector pay constraints, relativities, job weight and any special factors. Increases are normally awarded from 1 July annually.

Contractual Policy

Professor Douglas Kell was appointed BBSRC Chief Executive on 1 October 2008 on a four-year fixed-term contract, with the option for extension. His contract has been extended to 18 October 2013. Professor Kell is employed with BBSRC for four days a week and continues to be employed one day a week with the University of Manchester.

BBSRC Directors are members of the BBSRC Executive Group. The Directors are on indefinite contracts, similar to the majority of BBSRC staff, with notice periods of three months. Directors' remuneration for 2012-13 is detailed in the table below. No Director is in receipt of benefits in kind.

Employee Name	Start Date	Expired Term	Notice Period
Paul Burrows	26/11/2001	Open Ended no Expired Term	13 weeks
Paul Gemmill	15/12/2003	Open Ended no Expired Term	13 weeks
Steve Visscher	01/05/1982	Open Ended no Expired Term	13 weeks
David Parfrey	01/11/2008	Open Ended no Expired Term	13 weeks
Jan Juillerat	19/09/2005	Open Ended no Expired Term	13 weeks
Doug Kell	01/10/2008	18th October 2013	3 months
Celia Caulcott	15/09/2008	Open Ended no Expired Term	13 weeks
Melanie Welham	01/10/2012	Open Ended no Expired Term	13 weeks

Remuneration of Senior Employees (audited information)

	Director of Corporate Policy and Strategy	Director of Communications and Information Management	Deputy Chief Executive	Director of Finance	Director of Human Resources	Director of Operations and Improvement	Chief Executive*	Director of Innovation and Skills	Director of Science
	Mr Paul Burrows	Mr Paul Gemmill	Mr Steve Visscher	Mr David Parfrey	Ms. Janet Juillerat**	Mr Peter Swinburne***	Professor Douglas Kell	Dr Celia Caulcott	Professor Melanie Welham****
Date of appointment	From 1 July 2009	From 1 Nov 2008	From 1 Oct 2008	From 1 Nov 2008	From 1 Mar 2012	From 1 Mar 2012	From 1 Oct 2008	From 15 Sept 2008	From 1 Oct 2012
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Salary and allowances in 2012-13	70-75	95-100	145-150	90-95	75-80	100-105	130-135	105-110	45-50
Performance Related Pay in 2012-13	0-5	5-10	5-10	5-10	5-10	0-5	0-5	10-15	0
Salary and allowances in 2011-12	65-70	90-95	145-150	90-95	70-75	90-95	130-135	105-110	n/a
Performance Related Pay in 2011-12	0-5	5-10	10-15	0-5	0-5	0-5	0	5-10	n/a
Real increase in pension and lump sum at age 60	12.5-15	0-2.5	5-10	0-2.5	2.5-5	10.0-12.5	0-2.5	0-2.5	0-2.5
Total accrued pension and lump sum at age 60 as at 31 March 2013/ leaving date	120-125	15-20	310-315	15-20	25-30	85-90	15-20	10-15	0-5
Cash equivalent transfer value as at 31 March 2013	567	291	1,694	283	365	699	228	188	12
Cash equivalent transfer value as at 31 March 2012	481	238	1,609	249	313	597	175	149	n/a
Real increase in cash equivalent transfer value 2012-13	59	34	0	16	31	95	30	20	9

* Based on a four-day working week.
** Acting Director of Human Resources from 12 Oct 2009 to 26 Apr 2010 and Deputy Director of Human Resources Group from 27 Apr 2010 to 29 Feb 2012.
*** Director of Human Resources from 1 Oct 2002 to 1 Mar 2012 and Director of Operations and Improvement from 1 Mar 2012.
**** Professor Melanie Welham's full year equivalent salary is £95,000 - £100,000.

Salary and Allowances

Salary and allowances covers both pensionable and non-pensionable amounts and includes gross salaries, performance related pay, over-time, allowances and any ex-gratia payments. It does not include amounts which are a reimbursement of expenses directly incurred in the performance of an individual's duties.

Benefits in Kind

The monetary value of benefits in kind covers any benefits provided by the employer and treated by HM Revenue and Customs as a taxable emolument. There were no benefits in kind for any of the senior management during the year.

Bonuses

Bonuses are based on performance levels attained and are made as part of the appraisal process. Bonuses relate to the performance in the year in which they become payable to the individual. The performance-related pay awards reported in 2012-13 relate to performance in 2012-13 and the comparative awards reported for 2011-12 relate to the performance in 2011-12.

Details of Pension Scheme

The employees of the Council are members of the Research Councils' Pension Schemes (RCPS) which are defined benefit schemes funded from annual grant-in-aid on a pay-as-you-go basis. The benefits are by analogy to the Principal Civil Service Pension Scheme, except that while the schemes provide retirement and related benefits based on final or average emoluments, redundancy and injury benefits are administered and funded by the Council. The scheme is administered by the Research Councils' Joint Superannuation Service with the associated grant-in-aid managed by BBSRC.

From 30 July 2007, employees may be in one of four defined schemes; either a 'final salary' scheme (classic, classic plus or premium), or a career average scheme (nuvos). Pensions payable are increased annually in line with changes in the Retail Prices Index (RPI). Employees' contributions vary between 1.5% and 5.9% depending on scheme. The employer's contribution is agreed by the RCPS Board of Management on the recommendation of the Government Actuary's Department (GAD) and is set at 26.0% of pensionable pay.

As part of the pension reform process, the Government is increasing member contributions to the main public service pension schemes by an average of 3.2% of pay over three years from 2012. The Government has announced the further increases to the contribution rates that some civil servants will pay to their Civil Service pension from April 2013. The Research Councils Pension Scheme (RCPS) is a 'by-analogy' scheme to the Principal Civil Service Pension Scheme (PCSPS) and as a result any changes made to the PCSPS, including member contribution rates, are automatically applied to the RCPS.

Members of the classic, premium, classic plus and nuvos schemes will be affected. These increases do not apply to those who earn less than £15,000 (salary and pensionable allowances on a full-time equivalent basis).

A table of the increases by pay band and scheme is provided below.

Annual Pensionable Earnings (full-time equivalent basis)	CLASSIC SCHEME		PREMIUM, CLASSIC PLUS AND NUVOS	
	Current Contribution Rate	New 2013 Contribution	Current Contribution Rate	New 2013 Contribution
Up to £15,000	1.50	1.50	3.50	3.50
£15,001 - £21,000	2.10	2.70	4.10	4.70
£21,001 - £30,000	2.70	3.88	4.70	5.88
£30,001 - £50,000	3.10	4.67	5.10	6.67
£50,001 - £60,000	3.50	5.46	5.50	7.46
Over £60,000	3.90	6.25	5.90	8.25

A Partnership Pension Account was made available to new staff from 1 October 2002, based on the portable Stakeholder Pension introduced by the Government in 2001. This is a defined contribution scheme. The employers pay the RCPS 0.8 per cent of pensionable pay to cover death-in-service and ill-health benefits. The employers pay the balance to the employee's private pension provider.

The accrued pension quoted is the pension the member is entitled to receive when they reach pension age or immediately on ceasing to be an active member of the scheme if they are already at or over pensionable age. Pensionable age is 60 for members of classic, classic plus and premium and 65 for members of Nuvos.

For further details about the Research Councils' Pension Scheme pension arrangements can be found at the website http://jsspensions.nerc.ac.uk/

Compensation for loss of office

There has been no compensation for loss of office of senior managers in 2012-13 or 2011-12.

Cash Equivalent Transfer Value (CETV)

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in the former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. The CETV figures include the value of any pension benefit in another scheme or arrangement which the individual has transferred to the Research Councils' pension arrangement and for which the RCPS has received a transfer payment commensurate with the additional pension liabilities being assumed. They also include any additional pension benefit accrued to the member as a result of their purchasing additional years of pension service in the scheme at their own cost.

Real increase in the value of the CETV

The real increase in the value of the CETV reflects the increase effectively funded by the employer. It takes account of the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

Professor Douglas Kell Date: 26 June 2013
Chief Executive and Accounting Officer

Annual Accounts 2012-2013

Statement of Responsibility of Council and Chief Executive as Accounting Officer

Under Section 2(2) of the Science and Technology Act 1965, the Secretary of State with the consent of HM Treasury has directed BBSRC to prepare for each financial year a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of BBSRC and its net expenditure, changes in taxpayers' equity, and cash flows for the financial year.

In preparing the Accounts, the Accounting Officer is required to comply with the requirements of the Government Financial Reporting Manual (www.financial-reporting.gov.uk) and in particular to:

- Observe the Accounts Direction issued by the Secretary of State including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis.
- Make judgments and estimates on a reasonable basis.
- State whether applicable accounting standards as set out in the Government Financial Reporting Manual have been followed, and disclose and explain any material departures in the financial statements
- Prepare the financial statements on a going concern basis, unless it is inappropriate to presume that the Council will continue to operate.

The Department for Business, Innovation and Skills (BIS) has appointed the Chief Executive as Accounting Officer of BBSRC. The responsibilities of an Accounting Officer, including responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping proper records and for safeguarding BBSRC's assets, are set out in the NDPB Accounting Officers' Memorandum issued by HM Treasury and published in *Managing Public Money*.

Governance Statement by Chief Executive

1. Scope of Responsibility

As Accounting Officer, I have responsibility for maintaining a sound system of internal control that supports the achievement of BBSRC's policies, aims and objectives, whilst safeguarding the public funds and departmental assets for which I am personally responsible, in accordance with the responsibilities assigned to me and disclosed in *Managing Public Money*.

The BIS Accounting Officer has designated me as the Accounting Officer of BBSRC, responsible for the effective, safe and efficient operation of the Council in accordance with the Management Statement and Financial Memorandum agreed between BBSRC and it's sponsoring department, the Department for Business, Innovation and Skills (BIS).

BBSRC together with other Research Councils is reliant on the UK Shared Business Services Ltd (SBS) formerly called Research Council UK Shared Service Centre (SSC), for the provision of administration systems and this statement also explains the oversight and assurance process and results for the service supplied.

2. The Purpose of the Governance Statement

The Governance statement, for which I take personal responsibility, gives a clear understanding of the dynamics of BBSRC and its control structure. It records the stewardship of BBSRC, and provides a sense of BBSRC's performance during the year and how successfully it has coped with the challenge it faces. The statement explains how BBSRC has complied with the principles of Good Governance, reviews the effectiveness of these arrangements, and complies fully with the Corporate Governance Code.

3. Governance Framework

BBSRC is an independent non-departmental public body of BIS, established by Royal Charter. BBSRC's working relationship and lines of accountability with its sponsor department BIS are defined through a Management Statement, Code of Practice and Financial Memorandum. These documents are currently under review through a cross Research Council Governance Group operating under the auspices of the Efficiency and Reform Group. Updated and revised versions have been reviewed by BIS and are expected to be issued in early 2013-14.

In my role as BBSRC's Accounting Officer, I am supported by BBSRC's Council, its Boards, and the Executive team within BBSRC.

BBSRC Council

Council is BBSRC's top-level decision-making body, and comprises the Chair, me, and 10-18 other members, at least half of whom are appointed for their qualification in relevant science. Users of research, in Government and industry, are also represented. All members are appointed by the Secretary of State for Business Innovation and Skills, and are required to abide by a code of practice that covers conflicts of interests and general conduct.

Council is a body corporate with executive responsibilities set up under the Science and Technology Act of 1965 and by Royal Charter (amended 1993) thus ensuring that it has separate legal status. Council members have corporate responsibility for the actions of Council and BBSRC staff. Council meets at regular intervals throughout the year and exercises full and effective control over the activities of BBSRC and its staff. Council decides all issues of major importance, including issues of corporate strategy, key strategic objectives and targets, major decisions involving the use of financial and other resources, and substantive personnel issues, including key appointments. Nevertheless, Council delegates responsibility to me, as Chief Executive, and BBSRC staff to the maximum extent possible.

Examples of recent Council meeting agenda items for discussion include:

- BBSRC Forward Strategy and Budget
- Industrial Biotechnology and Bioenergy Strategy
- Collaborations and Partnerships
- Competitive Research Funding
- Strategically Funded Institutes, Centres and Campuses
- Institute Assessment Exercise

The table below shows Council membership and number of meetings attended during 2012-2013:

Professor Sir Tom Blundell FRS (Chair) – BBSRC Chairman	4
Professor Sir David Baulcombe FRS – Academic	4
Professor John Coggins OBE FRSE – Academic	4
Professor Anne Dell CBE FRS – Academic	4
Professor Russell Foster FRS – Academic	2
Mr David Gregory – Industry/User	4
Professor Peter Grindrod CBE – Academic	3
Mr Jim Godfrey OBE – Industry/User	4
Dr Mike Goosey – Industry/User	4
Professor Sarah Gurr – Academic	3
Professor Douglas Kell FSB – BBSRC Chief Executive	4
Dr David Lawrence – Industry/User	3
Professor Keith Lindsey – Academic	4
Professor Chris Pollock CBE – Independent	3
Dr Andy Richards – Industry/User	4
Professor David Richardson – Academic	4
Dr John Stageman OBE – Industry/User	3
Dr Will West – Industry/User	4
Professor Tim Wheeler – Government User	4

In line with good corporate governance practice, each year BBSRC carries out a formal appraisal of the performance of Council. Collective appraisal provides Council with an opportunity to consider its own effectiveness and to comment on issues which are not normally part of its usual business.

Members of Council (excluding the Chair and myself) are required to complete an online questionnaire which provides information for an anonymous and confidential collective report. It is then presented to Council for an open discussion on issues of significant note. There were a number of themes in the responses to this year's appraisal of Council:

- The amount of information Council receives, its timeliness and the level of detail in presentations to Council.
- The format of annual theme sessions and Council's input in the discussion.
- The fact there has been a great improvement in the communication exchange between Council and the BBSRC Executive Group leading to a constructive relationship between them.

BBSRC also has in place annual appraisals of individual Council members. The resulting reports are used in the process for considering Council re-appointments.

Council's Boards

Council approves the membership of the three Boards that report to it, namely the Appointments Board, Audit Board and Remuneration Board. The Chair of each Board is required to report regularly on the work of their respective Board and to take forward specific tasks as directed by Council.

Appointments Board

Appointments Board is responsible for the open and transparent selection processes for the appointment of members to BBSRC Panels and Committees. BBSRC Panels advise on strategy development and Committees assess funding applications. Appointments are made on the basis of quality and suitability to carry out in full the responsibilities of the Panel or Committee to which the appointments are being made, with due regard to; the balance of expertise, appropriate representation of 'user community' on each Panel and Committee, achieving a balance of members in terms of location at both institutional and regional levels on each Panel or Committee, and diversity issues.

Appointments Board meets twice per year, although it also deals with appointments by correspondence throughout the year. The table below shows Appointments Board membership and number of meetings attended during 2012-2013:

Professor J Coggins OBE FRSE (Chair) – BBSRC Council Member	2
Professor K Lindsey (Deputy Chair) – BBSRC Council Member	2
Professor R Bardgett – BBSRC Committee	2
Dr J Burke – Independent	1
Professor A Hetherington – Chair of BBSRC Strategy Panel	1
Professor R Hubbard – Independent	1
Professor J Hurst – Independent	1
Professor A Osborne	0
Professor C Rawlings – Independent	2
Professor A Willis	0

Council is provided with the minutes of Appointments Board and is asked to approve appointments to Panel and Committee Chairs. During 2012-13, the Appointments Board Chair highlighted the following to Council:

- An increase in applications and appointments from female members of BBSRC.
- Community thanks largely to the work carried out in the Swindon Office who had been active in contacting relevant people with the aim of encouraging them to apply.
- The need for a similar strategy to increase the number of applications from BBSRC's user community.
- An agreement that increasing the referees' response rate was important and a request that Council be kept informed of progress in this area.

Audit Board

The Audit Board Chair and at least three non-executive members are appointed by the Council, being members independent of management and free of any relationship that, in the opinion of the Council, would interfere with the exercise of independent judgement as Board members.

Audit Board meets at least three times a year to monitor standards of risk management, corporate governance, internal control reports from the Audit and Assurance Services Group (AASG), previously the Research Councils' Internal Audit Service (RCIAS), external audit reports and to review the annual statutory accounts of BBSRC and the BBSRC-hosted Research Councils' Pension Schemes. Audit Board approves BBSRC's internal audit programme plan for the year in the light of the key risks identified as part of the risk management framework. In particular, business critical projects are picked out for special assessment by the Audit Board on an on-going basis.

The table below shows Audit Board membership and number of meetings attended during 2012-2013:

Audit Board Members	No. of meetings attended 2012-13 (max 4)
Dr D Gregory (Chair) – Council Member	4
Professor A Dell – Council Member	4
Mr D Mann – Independent	4
Mr P Ratcliffe – Independent	3
Dr A Richards – Council Member	4
Mr M Samuel – Independent	2

Council is provided with the minutes of Audit Board and is given an oral update by the Audit Board Chair. During 2012-13 the following points were highlighted to Council:

- An update on the progress of the 2012-13 annual report and accounts for BBSRC and the 2012-13 statutory accounts of the Research Councils' Pension Schemes which BBSRC hosts.
- The effect of, and how BBSRC would manage, the shorter timescales for providing the 2012-13 annual accounts.
- Audit Board's approval of BBSRC's risk management reporting.
- The positive assurance provided from the BBSRC Financial Management Capability Review sponsored by BIS and carried out by Deloitte.

Audit Board also felt that Council should have greater involvement in some of the key issues. A subgroup of Council members (industrial and academic) has been set up with a responsibility to examine financial issues in more detail on behalf of Council as a whole. In addition, Audit Board agreed that in accordance with HM Treasury's Audit Committee Handbook, members should be given the opportunity of undertaking a written self-appraisal. Individual appraisal provides the Chair of Audit Board with an opportunity to consider how members each see their performance contributing to the overall performance of the Board.

Audit Board members also complete a self-assessment questionnaire. The main points raised this year were:

- The length and complexity of some of the paperwork, especially when they are received relatively close to the meeting.
- That newly appointed Board members brought a new and interesting dynamic due to their past experience and expertise.
- The Board was effective in meeting its terms and conditions.

Remuneration Board

The Remuneration Board is responsible for ensuring compliance with public sector pay guidance and promoting the aims of the BIS and Government Policy on Senior Remuneration. The Board is responsible for evaluating the performance of the Directors in BBSRC Office and determining their remuneration. Remuneration Board also has a review role as follows:

- Review reports from Institute Chairs (local Remuneration Boards).
- Monitor local procedures to confirm they are in line with good practice.
- Monitor outcomes and identify possible inconsistency of standards.
- Identify any diversity issues.
- Alert Chairs of Governing Boards to cases where apparent inconsistencies or diversity issues may require a reappraisal of standards or procedures.

Remuneration Board meets once per year. The table below shows Remuneration Board membership and number of meetings attended during 2012-2013:

Renumeration Board Members	No. of meetings attended 2012-13 (max 1)
Professor Sir Tom Blundell FRS (Chair) – BBSRC Chairman	1
Professor J Coggins OBE FRSE – BBSRC Council Member	1
Professor P Fryer – BBSRC Council Member	1
Professor D Kell – BBSRC Chief Executive	1
Dr D Lawrence – BBSRC Council Member	0
Professor P Grindrod – BBSRC Council Member	1

Executive

BBSRC Executive Group comprises me, the Deputy Chief Executive and Directors. Executive Group meets fortnightly, alternating between operational issues and strategic issues. Executive Group is responsible for taking forward actions on all matters emanating from Council and its Boards. It also ensures that relevant business is laid before Council in a timely manner, and reviews business associated with BIS and RCUK.

It is the role of all Directors to support and advise me regarding my responsibility to ensure the effective, safe and efficient operation of BBSRC. Directors' Stewardship Statements are completed by each BBSRC Group Director and the Deputy Chief Executive on an annual basis, and the results are discussed at an Executive Group meeting. These statements provide assurance to me, in my role as Accounting Officer, that a sound system of internal control has been in place throughout BBSRC for the year.

For 2012-13, the combined view from the Stewardships Statements was that all of BBSRC's business areas were given full or substantial assurance ratings. Directors discussed the areas where weaknesses or improvements were identified, and agreed that adequate mitigating actions were in place. This provided me with a satisfactory level of assurance.

Institutes

BBSRC's scientific remit requires research that is most appropriately delivered at mission-oriented Institutes with specialist facilities, alongside that conducted in university research departments, and new multi-disciplinary and 'virtual' centres.

In 2011-12, revised governance arrangements were implemented for Institutes previously sponsored by BBSRC, which resulted in independence of these bodies from BBSRC. BBSRC Executive Directors continue to meet regularly with Institutes to discuss high level policy and strategic issues. In terms of BBSRC's assurance regarding Institutes, BBSRC's Audit Board focuses on the following:

- BBSRC grant funding, where no changes are proposed to the current RCUK Assurance programme which provides an annual report to the BBSRC Audit Board.
- BBSRC's owned estate, where Audit Board will be presented with an annual review, and associated risks will be managed via BBSRC Corporate Risk Register, which Audit Board reviews regularly.
- BBSRC's capital developments, which are included within Audit Board's regular reports on business critical projects, as well as in the BBSRC Corporate Risk Register.
- Reputational risks to BBSRC from Institute activities, which are again managed via the BBSRC Corporate Risk Register as appropriate.

4. System of Internal Control

The system of internal control is designed to manage risk to a reasonable level rather than eliminate all risk of failure to achieve policies, aims and objectives; it can therefore only provide reasonable and not absolute assurance of effectiveness. The system of internal control is based on an on-going process designed to identify and prioritise the risks to the achievement of BBSRC's policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically. The system of internal control has been in place in BBSRC for the year ended 31 March 2013 and up to the date of approval of the annual report and accounts, and accords with HM Treasury guidance.

5. The Risk and Control Framework

Overall responsibility for risk management in BBSRC rests with me as the Chief Executive and Accounting Officer. I sign this annual Governance Statement as part of the audited Annual Accounts. The task of implementing and maintaining the risk management policy and strategy is delegated to the Director of Finance who fulfils the role of the Director responsible for risk. However, all BBSRC Directors share the responsibility to ensure the effective application of BBSRC's risk management strategy and policy. Within this established structure, BBSRC gives leadership to the process by a number of means, including:

- Setting out a risk management policy and strategy and defining the BBSRC level of risk appetite.
- Signing up to risk management assurance statements at the most senior levels within BBSRC.
- Updating and reviewing the corporate register of key risks at least monthly by senior management and at every Audit Board meeting.
- Reinforcing risk management at staff level through the development and implementation of group-level risk registers in support of those at corporate level.
- Appointing risk "owners" for all risks identified. These will typically be middle/senior managers within BBSRC who will be responsible for the day-to-day management of risk. They will lead the development of appropriate risk management plans and ensuring that risk response actions are carried out as required.
- A formal PRINCE 2 based project management approach with embedded risk management is used for major activities, including the business critical projects listed below.
- Hosting the RCUK Audit and Assurance Services Group (AASG) which is responsible for providing an assessment of internal control to Chief Executives, through a carefully determined and managed internal audit programme. In 2012 the RCUK Assurance unit, which is responsible for managing and undertaking the Research Councils Assurance Programme, was incorporated, together with the Research Council Internal Audit Service, into the Audit and Assurance Services Group (AASG) In BBSRC, the AASG programme forms a key part of an overall Assurance Map, which brings activities, risks and assurance together.
- Considering the interests of key stakeholders and operational partners in the formation and delivery of risk management policy and strategy.
- Using the Office of Government Commerce Gateway review process for significant programmes, including the business critical projects on page 40.
- A formal whistle-blowing procedure set out in BBSRC's Employment Code, with the Chair of BBSRC's Audit Board acting as a confidential, external contact.

BBSRC actively encourages a culture of effective risk management. This recognises that effective risk management is an essential component of successful business operations, rather than simple risk avoidance.

BBSRC adopts HM Treasury best practice on corporate governance and risk management. Risk management and internal control are considered on a regular basis by BBSRC Executive and Audit Board during the year. Both groups regularly review the strategic and operational risk management registers and framework, and receive reports on business critical projects through the year.

The activities of the Audit and Assurance Services Group (AASG) in respect of BBSRC are reviewed by Audit Board and the scope of the internal audit plan for the coming year, which is based on the overall assessment of risk, is agreed. With this overarching view of audit activities, Audit Board plays a pivotal role in evaluating and reviewing the evidence supporting the Chief Executive's assurance statement on internal control.

The Council's role, in terms of risk management, is to oversee the work of Audit Board through review of Audit Board minutes and key risks highlighted by the Audit Board Chair.

Risk Assessment

BBSRC's Corporate Risk Register identifies key risks and the possible threat/opportunity should these risks crystallise. It assesses risks' probability, impact and proximity, and considers the inherent, current and target exposure levels. Existing controls and mitigation plans are noted alongside an indication of the current trajectory of the risk. If risks materialise, they are transferred to the Corporate Issues Register, which is managed alongside the Corporate Risk Register.

The Corporate Risk Register is formally monitored on a quarterly basis by BBSRC's Executive Group and is circulated to every Audit Board meeting. The Corporate Risk Register is supported by Group Risk Registers, which enable the effective escalation of risks for consideration by BBSRC's Executive.

As an indicative benchmark, BBSRC's Audit Board and Executive agreed that around 15 corporate risks fit within our appetite and our ability to manage the risk profile. At 31 March 2013, the Corporate Risk Register had 18 risks which had been agreed and were being monitored. Of the 18 risks, 6 risks are rated with a red current risk score. The successful delivery of mitigation plans will reduce this exposure to zero risks with a red score. I believe that this supports the view that active risk management is having a strong influence and impact on BBSRC operations.

During 2012-13, some of the key risks for BBSRC related to: the sustainability of BBSRC-funded institutes and the implementation of governance changes; the ability to invest in and manage UK based data storage capabilities; the efficient use of resources and delivery of savings; the need for proactive change management within the organisation; the delivery of the BIS requirements for the Clear Line of Sight initiative; and the inadequacy of management information reporting currently available from our finance and grants systems. For all of these risks, mitigating actions were identified and BBSRC's Executive and Audit Board continue to monitor and manage these actively.

BBSRC Financial Management Capability Review

A Financial Management review project in BBSRC was carried out at the request of BIS in October and November 2012 by Deloitte. BBSRC was one of a number of BIS Partner Organisations (PO) selected for review. The review assessed the maturity of key financial activities against best practice. The scale used to identify the quality of financial management identified the systems and processes as developing, defined, advanced and leading. The areas reviewed included: transactions, reporting, risk and capital, talent and people, policies, and finance organisation. The review found that in all areas BBSRC was assessed as 'advanced to leading' and can be considered an exemplar of good practice in the BIS family. BBSRC can take significant assurance from this review for the robustness of our financial management systems and processes.

New Risk Management System

As part of the on-going process of improving and further embedding risk management within BBSRC working practices, Finance Group is engaged in procuring a New Risk Management System (NRMS). The aim is to establish a robust platform to manage BBSRC's risks, which are currently controlled through a series of Excel spreadsheets. While this system has worked well, it was thought by Finance Group that there was an opportunity to develop a more robust platform to manage risk which would provide better cross-group collaboration and Council-wide information on risk.

A Project Board was set up which reviewed the technical requirements for a new system. Membership of the Board included IT technical expertise and representation from the operational groups within BBSRC. An initial examination of the market was made and a standard procurement process undertaken with SBS. This procurement process is, at the time of the writing of the Governance Statement, underway and is expected to be concluded in 2013-14.

Managing the Risk of Financial Loss

The Managing the Risk of Financial Loss (MRoFL) initiative was introduced by BIS/HMT during 2011-12 and applied to all transaction processing systems that result in payments or receipts. It covered six core financial systems:

- Procurement
- Payroll
- Expenses
- Funding
- Grants
- Taxation receipts (relates to commercial income in the Research Councils context)

Good progress has been made to address the issues raised with a range of governance related actions embedded within business as usual activities. There are workshops planned in conjunction with AASG to review the end-to-end processes from an MRoFL perspective and these will take place in 2013-14. Further action is in hand to better clarify the approvals management required to process transactions/ actions submitted to UK Shared Business Services Ltd (SBS).

The Research Councils agreed with AASG to embed the MRoFL work into the approved assurance strategy for 2012-13. This approach was made up of three elements including:

- **STB01 – UK SBS Stabilisation Final Report**, issued in October 2012, which provided an evidenced-based validation of outstanding recommendations. Of the 112 recommendations raised in 2011-12, 16 were outstanding in October 2012. Of these, 5 medium-priority recommendations related to the risk of financial loss and action plans were in place for their resolution.
- **BPAD04 – Control Design Assessments**, performed for each of the end-to-end processes, which took into account the risks of financial loss and associated controls. There were no recommendations arising from this work. All 123 identified risks of financial loss had associated controls. The reports were issued to the SBS on 15 March.
- **BPAD01, 02, 03 – Periodic Control Effectiveness Dashboards**, to provide assurance over the effectiveness of the key controls in operation. 70 controls were tested in Q3 which were associated with financial risk. Of these, there were 46 exceptions, 6 high, 12 medium and 18 low. The final dashboard, issued on 15 March to the SBS, provides a breakdown of the exceptions by Research Council.

Each of these reports extended beyond MRoFL and formed part of the assurance framework applied to cover the whole of the UK SBS Service Delivery Operations. As part of the UK SBS assurance strategy there is also a suite of Control and Security Framework audits that have been performed. However these were not a part of MRoFL.

The reports listed above, when combined, provide BBSRC and the other Research Councils with comprehensive, evidence-based, independent assessments of the risks of financial loss across the SBS service delivery processes as required to support me in delivering our annual return to BIS.

Transparency of Spend

In support of the government's transparency agenda, with effect from 1 December 2012, we are publishing details of all of our spend, including Government Procurement Card (GPC) transactions regardless of value. Prior to this date we published details of our spend over £25,000 and all GPC transactions of £500 and over.

Details of BBSRC transactions are published on both our website and the government site data.gov.uk.

Business Critical Projects

Business Critical Projects are defined as projects that could have a major and pervasive effect across one or more of BBSRC's principal areas of activity. Failure of any of these projects could adversely affect the Council's operation and reputation or financial position.

The business critical projects at 31 March 2013 were as follows:

- Campus Funding totalling £70M for the development of the Norwich and Babraham research campuses.
- The ELIXIR programme totalling £75M, with an additional £10M from BBSRC, which plans to expand facilities for biological data storage at the European Bioinformatics Institute in Cambridge and deliver a new technical hub, in support of life sciences research and its translation.
- The redevelopment projects at The Pirbright Institute totalling £255M for the first two phases to construct truly world class facilities.

UK Shared Business Services Ltd (SBS), formerly RCUK Shared Services Centre (SSC)

The SBS provides processing services in human resources, procurement, payroll, finance, grants, and IT to all seven Research Councils. During 2012-13, work was on-going to develop further the security and controls framework operating between the Research Councils and the SBS.

Client Services Group (CSG) Annual Assurance Statement 2012-13

The Client Services Group (CSG) represents all seven Research Councils in their relationship with the SBS as clients. The following statement represents an overview of the assurance provided to the councils by the work of the CSG and its subgroups (the Practitioner Service Groups).

The RCUK Shared Services project ended on 31 March 2011. Since that date, the body responsible for co-ordinating the Councils' collective engagement with the SBS as clients has been the CSG. This role has been fulfilled alongside a range of assurance mechanisms established by BIS as part of an SSC stabilisation process and move toward on boarding new clients into the SBS. For example, from January 2012, a joint SBS/CSG assurance reporting framework was established to report to the BIS Assurance Board, set up to monitor stability for the services provided by the SBS.

The CSG has taken responsibility for, inter alia: the negotiation of annual service charges and development funding; the development of business improvement activities in each of the main functional areas covered by SBS service delivery; and oversight of an end-to-end audit assurance programme. Formal approval of funding is, however, made by the Efficiency and Reform Group, advised by CSG.

Overall Assurance

Overall, the current level of assurance is green/amber. During the year, CSG emphasis has been placed on seeing SBS through to stabilisation. As part of this process, BIS has taken an active role in establishing robust structures with cross-Council representation to oversee progress and input from AASG. The purpose of this framework was to ensure that the control structures surrounding the end-to-end shared business processes are suitably designed and established (control design), and operating as intended (control effectiveness and fit for purpose).

During 2011-12, RCIAS (now AASG) carried out 20 audits covering SBS Service Delivery End-to-End Processes, (15 Business Process Assurance audits and 5 underlying Control and Security Framework audits). During 2012-13, AASG reviewed all outstanding recommendations seeking evidence of both implementation and effectiveness. All recommendations prioritised by the Research Councils and SBS as critical to stabilisation were validated as being closed by October 2012. However, their effectiveness continues to be monitored as part of the on-going review process.

In additions a revised suite of performance indicators has been put in place (Critical Performance Indicators – CPIs). Latest analysis indicates that the overall direction of travel for each of the areas is positive.

Stabilisation was formally signed off, albeit with a few caveats. Nevertheless, CSG continues to monitor progress and stress the importance of making sure that SBS performance, not just maintains these standards, but continues to improve, particularly as new clients come on board.

Key Areas

As above, particular attention has been given to stabilisation over the past year. Going forward, the governance arrangements will evolve as new clients come on board and discussions are in hand to formalise these arrangements. CSG continues to monitor progress and a range of key areas include:

- Post stabilisation, manual workarounds
- Grants service provision
- Fixed assets and impact of Modified Historic Cost Accounting (MHCA) calculations
- Error count, accuracy, duplication, and timeliness of activities
- Management Information (MI) for project managers
- Systems availability and security

A number of areas have been highlighted in the AASG annual reports related to the Controls and Security Framework (CSF) with five significant control weaknesses highlighted. The responsibility for addressing these areas rests primarily with the SBS rather than the Councils.

Looking ahead, a revised governance model will be rolled out as BIS and Partner Organisations begin to take service from the SBS and this will replace the current CSG structure during 2013-14. The Research Councils will participate within (and influence the shape of) this governance structure, but will need collectively to continue to:

- Assess the relevance of governance arrangements, charging models and CPIs to Research Council business needs
- Ensure mitigations are in place to minimise any disruptive service impacts resulting from expansion of SBS customer base

Audit and Assurance Services Group (AASG)

The Director of Internal Audit (DIA) is required to provide me with an opinion on the overall adequacy and effectiveness of the BBSRC's framework of governance, risk management and control. This opinion is provided in accordance with Governance Internal Audit Standards and is informed through the work of internal audit completed during the year in line with the internal audit plan agreed by management and the Audit Board. The internal audit plan covers three assurance components:

- BBSRC core activities;
- SBS Shared Assurance; and
- Cross-Council assurance.

Based on the work of internal audit, the DIA was able to provide the following assurance that the system of internal control in place at the BBSRC for the year ended 31 March 2013 was operating effectively.

The overall opinion

Sufficient internal work has been undertaken to allow the DIA to provide a positively stated (evidence- based) and reasonable (not absolute) assurance opinion on the overall adequacy and effectiveness of BBSRC's system of internal control. The overall opinion is:

► Substantial Assurance

A basically sound system of internal control, but where there are a few weaknesses that may put achievement of some system objectives at risk. There are no qualifications to this opinion.

The basis for the overall opinion

The overall opinion is the professional judgement of the DIA based on the results of **34** individual assurance engagements completed in line with the approved risk-based internal audit plan for 2012-13. This excludes the **1** assignment still to report (CCA IT Disaster Recovery Planning), the **10** advisory assignments and the **5** cancellations/deferrals.

Of the **34** assurances provided, **85% (29)** reflect substantial assurance. In determining the overall opinion, an **assurance weighting** is applied to each element of the internal audit plan to take account of its significance to the organisation's complete system of internal control. Greater significance is attached to assurances within BBSRC's core client activity because of their closer alignment and relevance to BBSRC's objectives and risk priorities. The totality of BBSRC's complete system of internal control is therefore **92% substantially assured.**

Counter fraud

There were no instances of fraud identified within the BBSRC during 2012-13. However, as noted below under the section on significant audit findings, in April 2013 UK SBS Ltd informed me that it had been the subject of a number of instances of attempted fraud, which had been identified and avoided and were now subject to an investigation.

UK SBS Ltd has provided me with assurance that it is dealing with the matter appropriately, with regards to both the fraud attempts and necessary improvements to control frameworks, and that it is not aware of any fraud or suspected fraud affecting BBSRC.

Significant audit findings

There were no significant findings relating to core and cross-council assurance work. The 16 assurances were 100% substantial assurance.

Results from the SBS Shared Assurance showed a marked improvement with 86% (12) of the processes examined in 2012-13 receiving substantial assurance, compared to 36% (5) in 2011-12. There were some areas within the control and risk management framework where improvements were required. Specifically, there are 5 significant control weaknesses that remain open at year end. These 5 areas cover network security, master data maintenance and E2E process governance.

As noted in the section on Counter Fraud, in April 2013 UK SBS Ltd informed me that it had been the subject of a number of instances of attempted fraud which had been identified and avoided, and were now subject to an investigation. Follow up work by AASG in May 2013 concluded that the control framework for Master Data Maintenance had some identified risk exposures which were being addressed to reduce vulnerability.

Although the fraud attempts were detected before any financial loss, they did represent a failure of the controls framework operating within RCUK SSC Ltd (now UK SBS Ltd) due to specific weaknesses identified by the internal audit report into Master Data Maintenance delivered by AASG earlier in the year. In addition, these weaknesses had been identified by internal audit reports in earlier years and measures to address them had been recommended previously by AASG.

I consider the level of risk of financial loss to which BBSRC has been exposed to be low. However, I am concerned that the limited assurance provided by internal audit work with regard to some elements of the controls and security framework within RCUK SSC Ltd (now UK SBS Ltd), not just Master Data Maintenance, represents an area of risk for BBSRC which I am not able to directly manage.

UK SBS Ltd has provided me with assurance that it is dealing with the matter appropriately, with regards to both the fraud attempts and necessary improvements to control frameworks, and that it is not aware of any fraud or suspected fraud affecting BBSRC. In the coming year the BBSRC Audit Board will review the outcomes of internal audit work by the AASG to check that improved control frameworks have been implemented and assess the evidence that they are adequate and effective.

The weaknesses noted above were identified through the AASG work on the SBS end-to-end shared business processes where responsibility for addressing identified weaknesses is shared between the SBS and Research Councils. Over the coming year, BBSRC, collectively with the other Research Councils and the SBS, will pursue resolution of these issues.

From the internal audit programme as a whole, I am able to gain the necessary confidence and assurance on the workings of the audit framework, but note that progress on the resulting actions needs to continue.

RCUK Assurance

Assurance activities focus on the control environment and its effectiveness in ensuring compliance with the Research Councils' terms and conditions which accompany grant funding, with a further strand of work focusing on the scrutiny of the costing methodology used in research organisations, which for universities is the Transparent Approach to Costing (TRAC). The programme is an important element of the risk management framework for the BBSRC with an annual report produced for me, as the Accounting Officer, which reports on activities undertaken in the year as well as proposed activities for the following year.

The Research Councils' UK Assurance Unit is hosted by BBSRC and acts on behalf of the Research Councils by reviewing the regularity of expenditure on Research Council grants at all eligible Research Organisations. The programme has typically involved 15-20 visits per annum to the research intensive organisations, supplemented by 15 desk based reviews for the less research intensive bodies. The Unit was amalgamated with RCIAS in April 2012 to create AASG.

In 2012-13 AASG conducted an independent Review of Funding Assurance Delivery Methodology (AASB Orange Paper 44). This review was presented to the AASG Supervisory Board in January 2013. The shift of emphasis would be from an AASG assessment of a Research Organisation's (RO) control environment to an evidence-based self-assessment completed by the RO. The end result would be a more targeted scrutiny of awards. The review had a number of recommendations including:

- Ensuring that in major research organisations (Tier1) at least one grant funded from each Research Council would be checked.
- Up-skilling and development of Assurance Team members.
- AASG auditors developing capabilities in Assurance.

The overall conclusion of the review was that Assurance activity needed to be targeted more effectively and refocused to better provide a robust Assurance opinion.

The AASB Supervisory Board accepted the findings in principle but requested some additional work by AASG to demonstrate how all AASG Supervisory Board members could place reliance on the new methodology and also identified a requirement for additional communication with the research community to ensure the introduction of new methodology worked effectively. The amendments will be reported back to AASG Supervisory Board at the next meeting in May 2013.

6. Review of Effectiveness and Conclusion

As Accounting Officer, I have responsibility for conducting an annual review of the effectiveness of BBSRC's governance, risk management and internal control. My review is informed by the work of the internal auditors and the Executive Directors within BBSRC, and comments made by the external auditors in their management letter and other reports. The Governance Statement represents the end product of the review of the effectiveness of the governance framework, risk management and internal control.

The principal elements of support for the Accounting Officer's assurance statement are the work of Audit Board and the BBSRC Executive, including the review of business critical projects, the annual report from the Head of AASG, BBSRC Directors' stewardship statements, the risk management frameworks developed by BBSRC, and responses to external management letters which identify where control gaps exist.

As disclosed within the related party transactions note in the annual accounts (note 25), I retain an interest in the Manchester Interdisciplinary Biocentre (MIB), which forms part of the University of Manchester. I continue to work one day a week for MIB, and to avoid any conflict of interest I abstain from any BBSRC discussions with relation to the University of Manchester.

I have been advised on the implications of the result of my review of the effectiveness of the system of governance, internal control and risk management by Council and Audit Board, and a plan to address weaknesses and ensure continuous improvement of the system is in place. I highlight the following significant issues which require close scrutiny going forwards:

- SBS service delivery – BBSRC continues to work closely with SBS to achieve stabilisation and improve the management information available. In line with Government directives, there is a need for SBS to develop a wider client base to realise the full benefits to be derived from bulk transactional processing. I remain concerned by the risk associated with this growth; that the priorities for the SBS introduced by new clients may divert resources away from service improvement and benefit delivery for the Research Councils at a critical time. BBSRC will continue to work collaboratively with other Research Councils to monitor and engage with SBS to achieve a reliable service.
- Capital funding – BBSRC has a number of large estates which require considerable capital investment to maintain. In 2011-12, BBSRC was delighted to receive significant capital injections which provided a great deal of opportunity to develop and enhance world-class scientific facilities. Similarly, it was announced by Government in 2012-13 that BBSRC would receive further one-off funding. BBSRC maintains capital strategies and plans enabling an effective response to these cash injections.
- Efficiencies and savings – like all public sector bodies, in this period of austerity and economic uncertainty, BBSRC will continue to face cost challenges. BBSRC will continue to focus on delivering efficiencies and administration cost savings, and will work collaboratively with other Research Councils to explore the opportunity for greater process harmonisation.

I have considered the evidence provided with regards to the production of the Annual Governance Statement. The conclusion of the review is that BBSRC's overall governance and internal control structures result in risk being managed to a reasonable level and I can provide assurance that it supports the achievement of BBSRC's policies, aims and objectives.

Professor Douglas Kell Date: 26 June 2013
Chief Executive and Accounting Officer

The Certificate and Report of the Comptroller and Auditor General to the Houses Of Parliament

I certify that I have audited the financial statements of the Biotechnology and Biological Sciences Research Council for the year ended 31 March 2013 under the Science and Technology Act 1965. The financial statements comprise: the Statements of Comprehensive Net Expenditure, Financial Position, Cash Flows, Changes in Taxpayers' Equity; and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

Respective responsibilities of the Council, Accounting Officer and Auditor

As explained more fully in the Statement of Council's and Chief Executive's Responsibilities, the Council and the Accounting Officer are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. My responsibility is to audit, certify and report on the financial statements in accordance with the Science and Technology Act 1965. I conducted my audit in accordance with International Standards on Auditing (UK and Ireland). Those standards require me and my staff to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Biotechnology and Biological Sciences Research Council's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Biotechnology and Biological Sciences Research Council; and the overall presentation of the financial statements. In addition I read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my certificate.

I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Opinion on regularity

In my opinion, in all material respects the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

Opinion on financial statements

In my opinion:

- the financial statements give a true and fair view of the state of the Biotechnology and Biological Sciences Research Council's affairs as at 31 March 2013 and of it's net expenditure after interest for the year then ended; and
- the financial statements have been properly prepared in accordance with the Science and Technology Act 1965 and Secretary of State directions issued thereunder.

Opinion on other matters

In my opinion:

- the part of the Remuneration Report to be audited has been properly prepared in accordance with Secretary of State directions made under the Science and Technology Act 1965; and
- the information given in Management Commentary for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which I report by exception

I have nothing to report in respect of the following matters which I report to you if, in my opinion:

- adequate accounting records have not been kept or returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the part of the Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

Report

I have no observations to make on these financial statements.

Amyas CE Morse
Comptroller and Auditor General
Date: 28 June 2013

National Audit Office
157-197 Buckingham Palace Road
Victoria
London SW1W 9SP

Statement of Comprehensive Net Expenditure for the period ended 31 March 2013

	NOTE	2012-13 £'000	2012-13 £'000	2011-12 £'000
EXPENDITURE				
Research and Capital Grants	2	**414,649**		408,038
Training Awards and Fellowships	2	**52,281**		63,749
Staff Costs	3	**11,393**		12,796
Other Operating Costs	6	**17,636**		17,364
Research Institute Staff Restructuring	9	**6,273**		14,794
Depreciation and Amortisation	13,15	**8,053**		9,601
Loss on Disposals and Demolition of Non-Current Assets	11	**160**		435
Impairment	14	**8,940**		14,011
Loss on Joint Ventures	12	**1,864**		1,736
TOTAL EXPENDITURE			**521,249**	542,524
INCOME				
Other Operating Income	7		**(671)**	(2,392)
Recovery of IT Service to Institutes			**-**	(988)
Other Recoveries	7		**(530)**	(483)
VAT Recovered			**(40)**	(41)
Other Grant Income	7		**(18,382)**	(14,846)
TOTAL OPERATING INCOME			**(19,623)**	(18,750)
NET EXPENDITURE			**501,626**	523,774
Interest Payable			-	-
Net Expenditure after interest			**501,626**	523,774

	2012-13 £'000	2011-12 £'000
Other Comprehensive Expenditure		
Net (gain)/loss on Revaluation of Property, Plant and Equipment	**(63,807)**	(64,926)
Net gain/(loss) on Revaluation of Assets Held for Sale	**-**	(182)
	(63,807)	(65,108)
Total Comprehensive Expenditure for the period ended 31 March 2013	**437,819**	458,666

All activities are regarded as continuing.

The notes on pages 50 to 70 form part of these accounts.

Statement of Financial Position as at 31 March 2013

	NOTE	2012-13 £'000	2011-12 £'000
NON-CURRENT ASSETS			
Property, Plant and Equipment	13	**352,161**	305,479
Intangible Assets	15	**69**	57
Financial Assets	12	**1,465**	11,184
Non Current Receivables	17	**11,228**	13,185
TOTAL NON-CURRENT ASSETS		**364,923**	329,905
CURRENT ASSETS			
Assets Classified as Held for Sale	16	**3,933**	3,933
Inventories		**-**	-
Trade and Other Receivables	17	**29,621**	28,160
Cash and Cash Equivalents	20	**56,950**	5,784
TOTAL CURRENT ASSETS		**90,504**	37,877
TOTAL ASSETS		**455,427**	367,782
CURRENT LIABILITIES			
Trade and Other Payables	18	**(62,261)**	(61,207)
Provisions	10	**(587)**	(561)
TOTAL CURRENT LIABILITIES		**(62,848)**	(61,768)
NON-CURRENT ASSETS LESS CURRENT LIABILITIES		**392,579**	306,014
NON-CURRENT LIABILITIES			
Provisions	10	**(6,194)**	(6,656)
TOTAL NON-CURRENT LIABILITIES		**(6,194)**	(6,656)
ASSETS LESS LIABILITIES		**386,385**	299,358
TAXPAYERS' EQUITY			
Revaluation Reserve		**330,471**	274,520
General Reserve		**53,890**	23,601
Gates Reserve		**2,024**	1,237
TOTAL TAXPAYERS' EQUITY		**386,385**	**299,358**

Professor Douglas Kell Date: 26 June 2013
Chief Executive and Accounting Officer

The notes on pages 50 to 70 form part of these accounts

Statement of Cash Flows for the period ended 31 March 2013

	NOTE	31 March 2013 £'000	31 March 2013 £'000	31 March 2012 £'000	31 March 2012 £'000
CASH FLOWS FROM OPERATING ACTIVITIES					
Net Expenditure for Year		**(501,626)**		(523,774)	
Adjustment for Depreciation and Amortisation		**8,053**		9,601	
Adjustment for Impairment Charge		**8,940**		14,011	
Adjustment for Loss on Joint Venture		**1,864**		1,736	
Adjustment for Loss on Disposal and Demolition of Property, Plant and Equipment		**160**		435	
Decrease in Provision for Liabilities and Charges		**(436)**		(3,865)	
Decrease in Trade and Other Receivables Excluding those for Property, Plant and Equipment		**496**		12,417	
(Decrease)/Increase in Trade and Other Payables Excluding those for Property, Plant and Equipment		**1,054**		4,026	
Decrease in Inventory		**-**		11	
NET CASH OUTFLOW FROM OPERATING ACTIVITIES			**(481,495)**		(485,402)
CASH FLOWS FROM INVESTING ACTIVITIES					
Payments to Acquire Property, Plant and Equipment	13,15	**(126)**		(42)	
Purchase of Financial Assets	12	**-**		(833)	
Disposal of Financial Assets	12	**7,855**		-	
Receipts from Sale of Property, Plant and Equipment		**86**		-	
Movement on Currency Hedge Funds	26	**71**			
NET CASH OUTFLOW FROM INVESTING ACTIVITIES			**7,886**		(875)
NET CASH OUTFLOW BEFORE FINANCING			**(473,609)**		(486,277)
CASH FLOWS FROM FINANCING ACTIVITIES					
Capital Grants from BIS		**103,300**		123,893	
Revenue Grants from BIS	19	**421,475**		357,685	
Funding from Other Bodies					
NET CASH INFLOW FROM FINANCING ACTIVITIES			**524,775**		481,578
(DECREASE)/ INCREASE IN CASH AND CASH EQUIVALENTS IN THE PERIOD			**51,166**		(4,699)
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD			**5,784**		10,483
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD			**56,950**		5,784

The notes on pages 50 to 70 form part of these accounts

Statement of Changes in Taxpayers' Equity for the period ended 31 March 2013

	NOTE	Revaluation Reserve £'000	General Reserve £'000	Gates Reserve £'000	Total Reserves £'000
Balance at 1 April 2012		274,520	23,601	1,237	299,358
Comprehensive Expenditure for the Year		-	(501,626)	-	(501,626)
Grants from BIS	19	-	524,775	-	524,775
Valuation Additions		55,464	-	-	55,464
Transfers between Reserves		-	(787)	787	-
Transfers between Reserves – movements on fixed assets		(7,856)	7,856	-	-
Gains/Losses Recognised in the Statement of Comprehensive Expenditure		8,343	-	-	8,343
Movement on Financial Instruments	26	-	71	-	71
At 31 March 2013		**330,471**	**53,890**	**2,024**	**386,385**

	NOTE	Revaluation Reserve £'000	General Reserve £'000	Gates Reserve £'000	Total Reserves £'000
Balance at 1 April 2011		253,932	21,280	1,235	276,447
Comprehensive Expenditure for the Year		-	(523,774)	-	(523,774)
Grants from BIS	19	-	481,578	-	481,578
Valuation Additions		51,577	-	-	51,577
Transfers between Reserves		(7,054)	7,052	2	-
Transfers between Reserves – movements on fixed assets		(37,465)	37,465	-	-
Gains/Losses Recognised in the Statement of Comprehensive Expenditure		13,530	-	-	13,530
At 31 March 2012		**274,520**	**23,601**	**1,237**	**299,358**

The notes on pages 50 to 70 form part of these accounts.

The sum of the valuation additions and the gains/losses recognised in the Statement of Comprehensive Net Expenditure is shown in the Statement of Comprehensive Net Expenditure as the net gain/loss on revaluation of Property, Plant and Equipment.

1. STATEMENT OF ACCOUNTING POLICIES

a) Basis of Accounting

i) These financial statements have been prepared in accordance with the Accounts Direction issued by the Secretary of State for the Department for Business, Innovation, and Skills (BIS), pursuant to Section 2(2) of the Science and Technology Act 1965.

These financial statements have been prepared in accordance with the 2012-13 Government Financial Reporting Manual (FReM). The accounting policies contained in the FReM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context.

Where the FReM permits a choice in accounting policy, the accounting policy judged to be the most appropriate to the particular circumstances of BBSRC for the purpose of giving a true and fair view have been selected. The particular policies adopted by BBSRC are described below. They have been applied consistently in dealing with items that are considered material to the accounts.

ii) Going Concern

BBSRC is dependent on funding from BIS to meet liabilities falling due within future years. Funding for 2013-14 has been agreed at £493,510M.

BBSRC has no reason to believe that future funding from BIS will not be forthcoming after this spending review period, and therefore the accounts are produced on a going-concern basis.

iii) Adoption of new or amended standards effective in 2012-13

There are no revised standards and interpretations applied by the Council from 1 April 2012.

b) Measurement Convention

These financial statements have been prepared under the historical cost convention modified to account for the revaluation of land, buildings and other fixed assets. Non-current assets held for sale are stated at the lower of previous carrying amount and fair value less costs to sell.

The financial statements are presented in pounds sterling, BBSRC's functional currency, and all amounts have been rounded to the nearest thousand unless otherwise stated.

c) Non-Current Assets

i) Intangible Assets

Intangible Assets comprise purchased and developed specialist computer software and the BBSRC website and are carried at fair value. Intangibles are given definite useful lives and are amortised on a straight line basis over the useful life of the asset from the date of use based on nil residual value. The average expected useful life is 5 years for software and 3 years for website costs.

Intangible assets are reviewed for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised in the Statement of Changes in Net Expenditure based on the amount by which the carrying amount exceeds the recoverable amount.

ii) Land and Buildings

Land and buildings are carried at valuation at the reporting date. The basis of valuation for specialised scientific buildings is depreciated replacement cost and at open market value for non-specialised buildings. Valuations are adjusted annually at the reporting date by using the appropriate published indices and statistics. A full revaluation of land and buildings is carried out at least every five years, except for buildings under construction or sites being prepared for sale.

Some buildings with similar remaining lives have been grouped together for valuation and depreciation purposes.

The Council owns land and buildings which are leased to a number of funded institutes, all of whom are constituted as companies limited by guarantee and as registered charities and who prepare separate audited accounts. Additions to these assets may be funded wholly or in part from sources other than BBSRC.

Where funded institutes carry out development funded by sources other than BBSRC that results in a material change in the value of the Council's owned assets, this is disclosed as a fixed asset valuation addition within the Property, Plant and Equipment note, with the contra to Reserves.

Any capital funding provided by the BBSRC to funded institutes in the form of capital grants is included within Research Grants in the Statement of Comprehensive Net Expenditure. Where these contributions result in a change in value of BBSRC's owned assets, this is also disclosed as a fixed asset valuation addition in the Property, Plant and Equipment note based on the construction costs during the year up to the Statement of Financial Position date, with the contra to Reserves.

iii) Information Technology, Plant and Equipment

Capital expenditure includes purchases valued at £10,000 or more. Assets are included in the Statement of Financial Position at depreciated historical cost which approximates to fair value.

iv) Revaluation

Increases in valuation are credited to the revaluation reserve.

Losses on revaluation are debited to the revaluation reserve to the extent of the gains previously recorded and then to the Statement of Comprehensive Net Expenditure.

In the opinion of BBSRC, there is no material difference between the historic cost of equipment, fixtures and fittings and their current cost. Accordingly these assets have not been revalued and this position is kept under review.

v) Depreciation

Provision is made for depreciation on all non-current assets at rates calculated to write off the valuation of each asset (or group of assets) to its estimated residual value evenly over its expected useful life from the date the asset is brought into use. An expected useful life is assessed at each location by the valuer.

Expected useful lives are as follows:

Freehold Land	-	not depreciated
Depreciated replacement cost buildings	-	up to 60 years
Agriculture buildings	-	up to 60 years
Dwellings	-	up to 60 years
Office and computing equipment	-	3 to 5 years
System Software	-	5 years
BBSRC website	-	3 years
Motor vehicles	-	up to 4 years
Assets under construction	-	not depreciated until available for use

Increased depreciation charges arising from revaluation are matched by annual transfers from the revaluation reserve to the general reserve. On disposal of a revalued asset, that element of the revaluation reserve that becomes realised as a result is also transferred to the general reserve.

d) Financial Assets

Investments are financial assets and are carried at cost less provision for any impairment in value, where there is no material difference between cost and fair value or where value information is not available.

e) Joint Ventures

Those investments that are held as Joint Ventures are accounted for under the equity method.

f) Investment Properties

Properties that BBSRC subleases to other Councils are not deemed to be investment properties. In its capacity as host of the Joint Building and Office Services unit (JBOS), BBSRC leases buildings for administration space on behalf of the Research Councils and recovers the full cost from them.

Assets leased to institutes are deemed not to be investment properties as the assets are provided to fulfil the BBSRC business principle to further science. If the assets were not provided to the institutes, BBSRC would incur additional grant expenditure to fund the institutes' rent of properties commercially. Accordingly the asset is held for the business of sponsoring research rather than for capital appreciation.

Impairment

The carrying amounts of the Council's assets are reviewed at each statement of financial position date to determine whether there is any indication of impairment; an asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset. If any such indication exists, the asset's recoverable amount is estimated.

An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in the Statement of Comprehensive Net Expenditure.

g) Non-Current Assets Held for Sale

Where a non-current asset's carrying amount will be recovered principally through a sales transaction rather than through continuing use, it is available for immediate sale in its present condition and its sale is highly probable, then the asset is classified as held for sale.

A sale is highly probable where there is evidence of management commitment to sell, there is an activity programme to locate a buyer, the asset is actively marketed for sale at a reasonable price, and the sale will be completed within 12 months from the date of classification.

The asset is measured at the lower of carrying amount and fair value less costs to sell, unless the asset is outside the measurement provisions of IFRS 5 *Non current Assets Held for Sale and Discontinued Operations*.

Depreciation ceases on assets classified as held for sale from the date the re-classification is made.

h) Derivatives and Financial Instruments

As the cash requirements of BBSRC are met through grant-in-aid provided by BIS, financial instruments play a more limited role in creating and managing risk than would apply to a non-public sector body. The majority of financial instruments relate to contracts to buy non-financial items in line with BBSRC's expected purchase and usage requirements and BBSRC is therefore exposed to little credit, liquidity or market risk.

Trade receivables

Trade receivables are not interest bearing and are carried at original invoice amount less allowance for impairment. Provision for impairment is established when there is objective evidence that the Council will not be able to collect all amounts due according to the original terms of the receivable. The amount of provision is the difference between the carrying amount and recoverable amount and is recognised in the Statement of Comprehensive Income.

Trade and other payables

Trade and other payables are recognised in the period in which related money, goods or services are received or when a legally enforceable claim against the Council is established or when the corresponding assets or expenses are recognised.

i) Cash and Cash Equivalents

Cash and cash equivalents comprise cash balances and call deposits.

j) Employee Benefits

Under IAS 19 *Employee Benefits*, an entity is required to recognised short term employee benefits when an employee has rendered service in exchange for those benefits. Included in the financial statements under other accruals is an accrual for the outstanding employee holiday and flexitime entitlement at the year end on an undiscounted basis.

k) Pension Scheme and Retirement Costs

The employees of the Council are members of the Research Councils' Pension Scheme (RCPS) which is a defined benefit scheme funded from annual grant-in-aid on a pay-as-you-go basis. The benefits are by analogy to the Principal Civil Service Pension Scheme, except that while the schemes provide retirement and related benefits based on final emoluments, redundancy and injury benefits are administered and funded by the Council. As permitted by paragraph 31 of IAS 19, the Company has recorded the pension contributions payable for the period as its charge to the Statement of Changes in Net Expenditure.

l) Provisions

Provisions are recognised when: the Council has a present legal or constructive obligation as a result of past events; it is more likely than not that an outflow of resources will be required to settle the obligation; and the amount can be reliably estimated.

When BBSRC has taken a decision to fund a programme of redundancies, then the associated costs are provided for. The provision for the ongoing Annual Compensation Payments is transferred from the Major Institute Restructuring provision and any remaining balance released once the redundancies are complete.

Where the time value of money is material, the amount of the provision will be the present value of the expenditures expected to be required to settle the obligation.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate.

The discount rate used for post- employment benefits is 2.2% which is the real rate set by HM Treasury.

m) Contingent Liabilities

Contingent liabilities, including letters of comfort and financial guarantees, where obligations due cannot be measured reliably are not recognised as liabilities in the Financial Statements but are disclosed by way of a note in accordance with IAS 37.

n) Leases

Operating lease rental payments are charged to the operating cost statement on a straight line basis over the term of the lease.

Operating lease receipts are posted to the operating cost statement on a straight line basis or the term of the leases. BBSRC also has leases with sponsored institutes where peppercorn receipts are due.

BBSRC holds no finance leases.

o) Foreign Currencies

Transactions in foreign currencies are translated at the foreign exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies at the balance sheet date are translated at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in the Statement of Changes in Net Expenditure, except where a hedging relationship is designated and where it qualifies for hedge accounting under IAS 39.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated at foreign exchange rates ruling at the dates the fair value was determined.

p) Value Added Tax

As the Council is partially exempt for VAT purposes, all expenditure and fixed asset additions are shown inclusive of VAT where applicable. Residual input tax reclaimable by the application of the partial exemption formula is taken to the Operating Cost Statement as Other Operating Income. Income is shown net of VAT.

q) Ownership of Equipment Purchased with BBSRC Research Grants

Equipment purchased by an institution with research grant funds supplied by the Council belong to the institution and are not therefore the equipment of the Council.

r) Grant-in-Aid

Grant-in-aid for revenue purposes is recognised as a financing flow and thus credited to the General Reserve.

s) Research Grants

Subject to the terms and conditions under which research grants are awarded, BBSRC makes payments for grants on the basis of pre-determined quarterly profiles. Profiles are arranged, in overall terms, to reflect the rate and incidence of expenditure at the grant-holding organisation. Payments are normally made in the period to which they relate, although BBSRC retains some latitude in timing. Grant expenditure is charged to the Statement of Comprehensive Net Expenditure on an accruals basis.

t) Deferred Income

The Council receives funding for collaborative projects to support BBSRC's research. The majority of this funding is received from the UK public sector. Some of the funding may involve payment for the collaboration a number of years in advance of the accounting period to which it relates. Where there is a variance between work done in the accounting period and received funding, income will be deferred if the contract or agreement includes key conditions relating to the repayment of surplus funds.

u) Insurance

In line with Government policy, BBSRC carries its own risk in respect of employment of staff, buildings and equipment, except where there is a statutory requirement to insure.

v) Critical Accounting Estimates and Judgements

The Council makes estimates and assumptions that affect the reported amounts of assets and liabilities in the next financial year. Estimates and judgements are continually evaluated and based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances at the reporting date.
The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amount of assets and liabilities within the next financial year are discussed below.

Estimates

The useful life of each of the Council's items of property, plant and equipment and intangibles is estimated based on the period over which the asset is expected to be available for use. Such estimation is based on experiences with similar assets and practices of similar businesses. The estimated useful life of each asset is reviewed periodically and updated if expectations differ from previous estimates due to physical wear and tear, technical or commercial obsolescence or legal or other limits on the use of an asset. An increase in the estimated useful life of any item of property, plant and equipment and intangibles would decrease the recorded operating expenses and increase non-current assets.

Judgements

IFRS requires that an asset impairment review be performed when certain impairment indicators are present. Property, plant and equipment, intangible assets and financial assets are subject to an annual impairment test or whenever there is a strong indication that the asset will be impaired. Management is required to make estimates and assumptions to determine the future cash flows to be generated from the continued use and ultimate disposal of these assets in order to determine the value of the assets. While the Council believes that the assumptions used are reasonable and appropriate, these estimates and assumptions can materially affect the financial statements. Future adverse events may cause the management to conclude that the assets are impaired and may have a material impact on the financial condition and results of operations of the Council.

w) Capital and Reserves

The Council has three reserves: the General Reserve, the Revaluation Reserve and the Gates Reserve. The General Reserve is used to account for accumulated surpluses. The Revaluation Reserve is a specific reserve used only to reflect the unrealised balance of cumulative indexation and revaluation adjustments to fixed assets. Increases in valuation are credited to the revaluation reserve. Losses on revaluation are debited to the revaluation reserve to the extent of the gains previously recorded and then to the Statement of Comprehensive Net Expenditure. The Gates Reserve is a restricted reserve created for funds from the Bill & Melinda Gates Foundation. This reserve is ring-fenced for use on specific grant applications from 2012 onwards.

x) BBSRC-Sponsored Institutes

BBSRC's scientific remit requires research that is most appropriately delivered at mission-oriented institutes with specialist facilities, alongside that conducted in university research departments, and new multi-disciplinary and 'virtual' centres.

y) Administration Costs and Programme Costs

BBSRC analyses the total of other administration costs and programme costs as shown in the Statement of Comprehensive Net Expenditure in a separate note to the financial statements. This disclosure includes the individual components of non-cash items and an analysis of other significant expenditure items.

z) Currency Risk

BBSRC mitigates the risk of foreign exchange rate movements on its foreign currency transactions through the use of forward contracts. The agreed cost of the contracts is fair valued using the mid-market rate ruling at the period end and the difference is credited to the reserves.

2. ANALYSIS OF RESEARCH GRANTS AND TRAINING AWARDS BY BUSINESS SEGMENT

The primary format used for segmental reporting is grant expenditure, where the key funding data is split between research funding, training, administration, and other, which reflects BBSRC's internal management structure and reporting. BBSRC's assets and liabilities are shared across all the operating segments, and therefore it is not possible to separately identify which segment they relate to.

Research

BBSRC funds, promotes and supports high-quality basic, strategic and applied research relating to the understanding and exploitation of biological systems to advance knowledge and technology (including the promotion and support of the exploitation of research outcomes) which meets the needs of users and beneficiaries (including the agriculture, bioprocessing, chemical, food, healthcare, pharmaceutical and other biotechnological industries), thereby contributing to the economic competitiveness of the United Kingdom and the quality of life.

In March 2011, Research Councils UK (RCUK) published a report detailing plans to drive efficiency in research funding, in response to the Wakeham Review conducted by Sir William Wakeham and published in June 2010. All savings made in research funding remain within the ring-fence and are reinvested within science and research. The savings achieved to date are therefore included within the Research figures below. These are also reported within the Annual Report at the front of this document. Further details, including the RCUK report, can be found on the Research Councils UK website.

Training

BBSRC supports postgraduate training to help ensure the flow of highly qualified people into research careers and seeks to optimise the quality, volume and style of postgraduate and postdoctural training for the needs of academia and industry and other user communities.

Office

The costs for the administration of the BBSRC office, including BBSRC's share of the costs associated with the UK SBS. Office costs do not equate to BBSRC's administration budget, as there are some office costs which are divided between programme and adminsitration budgets (e.g. staff costs, which are classified on the basis of the role of the team).

At 31 March 2013

	Research £'000	Training £'000	Office £'000	Other £'000	Total £'000
Research Grants	307,896	-	-	-	307,896
Capital Grants	106,753	-	-	-	106,753
Postgraduate Awards	-	43,287	-	-	43,287
Fellowships	-	8,994	-	-	8,994
Staff Costs	-	-	11,393	-	11,393
Other Operating Costs	-	-	17,636	-	17,636
Staff Restructuring	-	-	-	6,273	6,273
Depreciation	-	-	-	8,053	8,053
Impairment and Other	-	-	-	10,964	10,964
Total Operating Expenditure	**414,649**	**52,281**	**29,029**	**25,290**	**521,249**

At 31 March 2012

	Research £'000	Training £'000	Office £'000	Other £'000	Total £'000
Research Grants	284,145	-	-	-	284,145
Capital Grants	123,893	-	-	-	123,893
Postgraduate Awards	-	54,853	-	-	54,853
Fellowships	-	8,896	-	-	8,896
Staff Costs	-	-	12,796	-	12,796
Other Operating Costs	-	-	17,364	-	17,364
Staff Restructuring	-	-	-	14,794	14,794
Depreciation	-	-	-	9,601	9,601
Impairment and Other	-	-	-	16,182	16,182
Total Operating Expenditure	**408,038**	**63,749**	**30,160**	**40,577**	**542,524**

3. STAFF NUMBERS AND RELATED COSTS

For BBSRC office, Bioscience IT Services (BITS) and Research Councils' Joint Services Units hosted by BBSRC.

	2012-13	2011-12
	£'000	£'000
Salaries and Wages	**10,265**	10,854
Social Security Costs	**755**	784
Other Pension Costs	**2,394**	2,424
Other Fees and Honoria	**290**	270
	13,704	14,332
Less UK paid Joint Service Staff	**(2,292)**	(2,280)
Less Overseas paid Joint Service Staff	**(194)**	(169)
Administrative and BITS Staff on Payroll	**11,218**	11,883
Temporary Administration and BITS Agency Staff	**175**	913
Total	**11,393**	12,796

AVERAGE NUMBERS OF PERSONS EMPLOYED

	2012-13	2011-12
Administrative	**217.5**	188.9
BITs	**0.7**	19.0
Administrative and BITs Staff on Payroll	**218.2**	207.9
UK Paid Joint Services staff	**60.4**	63.6
Overseas Paid Staff	**4.0**	3.0
Staff on Payroll	**282.6**	274.5
Temporary Agency Staff	**4.0**	10.0
	286.6	284.5

BBSRC hosts the Research Council Internal Audit Services, RCUK Assurance, the Joint Business Office Services, the Joint Superannuation Services and the UK Research Office on behalf of all of the Research Councils. The costs of these Joint Services Units (JSUs) are recharged to all of the Research Councils, including BBSRC. Also included in the staff costs figures are the permanent and temporary staff costs for the Biosciences IT service (BITS) which is the common service provider of Information Communication Technology (ICT) services to BBSRC. BITS closed its operations in April 2012.

No staff costs have been capitalised in 2012-13 or 2011-12.

4. SUPERANNUATION

The employees of the Council are members of the Research Councils' Pension Schemes (RCPS) which are defined benefit schemes funded from annual grant-in-aid on a pay-as-you-go basis. The benefits are by analogy to the Principal Civil Service Pension Scheme, except that while the schemes provide retirement and related benefits based on final or average emoluments, redundancy and injury benefits are administered and funded by the Council. The scheme is administered by the Research Councils' Joint Superannuation Service with the associated grant-in-aid managed by BBSRC. The schemes' accounts are prepared by BBSRC, on behalf of the BBSRC Chief Executive as the Accounting Officer for the RCPS. Separate accounts are published for the Pension Schemes. Employees' contributions vary between 1.5% and 5.9%. The employer's contribution is agreed by the RCPS Board of Management on the recommendation of the Government Actuary's Department (GAD) and is set at 25.6% of pensionable pay.

For 2012-13, employers' contributions of £2,394K were payable to the RCPS (2011-12: £2,424K) at 25.6% (2011-12: 25.6%) of pensionable pay, based on the salary bands. Employer contributions are reviewed every four years following a full scheme valuation by GAD. The contribution rates reflect benefits as they are accrued, not when the costs are actually incurred, and reflect past experience of the scheme.

5. REPORTING OF CIVIL SERVICE AND OTHER COMPENSATION SCHEMES-EXIT PACKAGES

Exit package cost band	Number of compulsory redundancies	Number of other departures agreed	Total number of exit packages by cost band
<£10,000	8 (0)	20 (20)	28 (20)
£10,000 - £25,000	24 (0)	22 (53)	46 (53)
£25,000 - £50,000	15 (0)	24 (48)	39 (48)
£50,000 - £100,000	1 (0)	5 (31)	6 (31)
£100,000-£150,000	0 (0)	0 (5)	0 (5)
£150,000-£200,000	0 (0)	0 (0)	0 (0)
Total number of exit packages by type	**48 (0)**	**71 (157)**	**119 (157)**
Total resource cost £	**1,057,343 (0)**	**1,591,713 (5,208,607)**	**2,649,056 (5,208,607)**

Comparative figures for 2011-12 are in brackets

Redundancies and other departure costs have been paid in accordance with the provisions of the Research Councils Compensation Scheme which is in analogy to the Civil Service Compensation Scheme. Exit costs are accounted for in full in the year in which departure is agreed. Where the BBSRC has agreed early retirements, the additional costs are met by BBSRC and not by the Research Councils Compensation Scheme. Ill-health retirement costs are met by the pension scheme and are not included in the table.

6. OTHER EXPENDITURE

	2012-13 £'000	2011-12 £'000
UKSBS Operating Costs	**5,670**	2,934
UKSBS Stabilisation Costs	**-**	2,583
Central Purchasing by BITs	**-**	691
Professional Fees and Management Consultancy	**3,921**	4,231
Computing Expenses	**1,729**	2,449
Travel, Subsistence and Hospitality	**1,136**	1,039
Other	**1,680**	1,183
Office Supplies	**252**	495
Rent, Rates and Insurance	**74**	59
Maintenance, Repairs and Cleaning	**2,513**	1,185
Internal Audit	**267**	332
Staff Training	**309**	93
External Audit	**85**	90
Total	**17,636**	17,364

7a. OTHER OPERATING INCOME

	2012-13 £'000	2011-12 £'000
Property Rentals	**541**	775
Contributions to Grants	**57**	451
Other	**73**	1,166
	671	**2,392**

7b. OTHER RECOVERIES

	2012-13 £'000	2011-12 £'000
Recovery of hosting Joint Service Units (JSUs)	**530**	483
	530	**483**

7c. NET FUNDING FROM OTHER BODIES

	2012-13 £'000	2011-12 £'000
From Other Research Councils	**7,380**	5,411
From Other Government Departments	**8,051**	7,682
From Other Bodies	**1,328**	1,640
From EU	**1,623**	113
Net Funding	**18,382**	14,846

8. ANALYSIS OF NET EXPENDITURE BY PROGRAMME AND ADMINISTRATION BUDGET

	2012-13			2011-12		
	Programme £'000	**Administration £'000**	**Total £'000**	Programme £'000	Administration £'000	Total £'000
Expenditure						
Research and Capital Grants	**414,649**	**-**	**414,649**	408,038	-	408,038
Training Awards and Fellowships	**52,281**	**-**	**52,281**	63,749	-	63,749
Staff costs*	**3,409**	**7,984**	**11,393**	778	12,018	12,796
Other Operating Costs**	**1,558**	**16,078**	**17,636**	1,412	15,952	17,364
Research Institute Staff Restructuring***	**6,273**	**-**	**6,273**	15,668	(874)	14,794
Non-cash items****:	**-**	**-**	**-**	-	-	-
Depreciation	**7,911**	**155**	**8,066**	9,137	350	9,487
Amortisation	**-**	**(13)**	**(13)**	-	114	114
(Profit) or loss on disposals and demolitions of non-current assets	**-**	**160**	**160**	275	160	435
Impairment	**8,940**	**-**	**8,940**	14,011	-	14,011
Loss on Joint Venture	**-**	**1,864**	**1,864**	-	1,736	1,736
Income						
Other Operating Income	**(245)**	**(426)**	**(671)**	(531)	(1,861)	(2,392)
Other Grant Income	**(18,099)**	**(283)**	**(18,382)**	(13,846)	(1,000)	(14,846)
Recovery of IT service to institutes	**-**	**-**	**-**	(4)	(984)	(988)
Other Recoveries	**-**	**(530)**	**(530)**	-	(483)	(483)
VAT recovered	**-**	**(40)**	**(40)**	(41)	-	(41)
Interest payable	**-**	**-**	**-**	-	-	-
Net Expenditure after Interest	**476,677**	**24,949**	**501,626**	498,646	25,128	523,774

*Staff costs are classified as administration or programme on the basis of the core functions of teams.

**Other operating costs are mainly classified as administration as these relate to items such as UK SBS costs, computing expenses and office supplies. The programme element relates to costs associated with BBSRC's Knowledge Exchange and Commercialisation activities and BBSRC's usage of JANET, the UK's education and research network.

***Research Institute Staff Restructuring is classified as programme since these costs relate to one-off exercises to restructure BBSRC-funded institutes following the changes to governance arrangements between BBSRC and the institutes. Note 9 provides more detail.

****For non-cash items, costs associated with IT and SSC assets are classified as administration, costs associated with land and buildings and scientific equipment are classified as programme. Costs associated with Swindon office are classified as administration.

9. RESEARCH INSTITUTE STAFF RESTRUCTURING

	2012-13 £'000	2011-12 £'000
Annual Compensation Payments (ACP)	**1,465**	2,424
Redundancy Payments*	**6,888**	17,722
Early Retirement Lump Sums (ERLS)	**-**	-
Other Costs	**-**	-
	8,353	20,146
Recoverable ACP and Redundancy Payments	**(505)**	(561)
Recoverable ERLS	**(1,139)**	(926)
Provided for (note 10)	**(1,405)**	(5,234)
	5,304	13,425
Increase Provision for ACP and Restructuring Cost (note 10)	**1,101**	1,659
Release from Existing Restructuring Provisions (note 10)	**(132)**	(290)
Net Cost	**6,273**	14,794

The total number of redundancies during 2012-13 was 119 (2011-12: 157).

* In 2012-13 the Department for Business Innovation and Skills (BIS) allocated BBSRC a ring-fenced budget of £8.0M(2011-12:£13.4M to cover restructuring costs. These funds can only be used for the stated purpose of restructuring, and BBSRC is required to demonstrate to BIS that the terms of any redundancy payments arising are consistent with the new Civil Service Compensation Scheme.

Please see note 5 'Reporting of Civil Service and other compensation schemes - exit packages' for details on compensations agreed in 2012-13.

10. PROVISIONS FOR LIABILITIES AND CHARGES

PROVISIONS

	Annual Compensation Payments £'000	Major Institute Restructuring £'000	Total 2012-13 £'000
At 1 April 2012	**4,812**	**2,405**	**7,217**
Amount provided in year	**791**	**310**	**1,101**
Amount released in year	**-**	**(132)**	**(132)**
Amount expended in year	**(1,405)**	**-**	**(1,405)**
Total Provisions At 31 March 2013	**4,198**	**2,583**	**6,781**

PROVISIONS

	Annual Compensation Payments £'000	Major Institute Restructuring £'000	Total 2012-13 £'000
At 1 April 2011	**6,054**	**5,028**	**11,082**
Amount provided in year	**621**	**1,038**	**1,659**
Amount released in year	**-**	**(290)**	**(290)**
Amount expended in year	**(1,863)**	**(3,371)**	**(5,234)**
Total Provisions At 31 March 2012	**4,812**	**2,405**	**7,217**

Annual Compensation Payments (ACP) are payments to early retirees in advance of their pension entitlements under the Research Councils' Pension Schemes.

Major Institute Restructuring comprises provisions for HR legal cases and provision for clean up costs at BBSRC sites.

Following the payment of the final compensation lump sum, provision for on-going annual compensation payments (ACP) associated with the specific institute restructuring programme is transferred from the major restructuring provision to the ACP provision.

TOTAL PROVISION FOR YEAR

	2012-13 £'000	2011-12 £'000
Restructuring	**6,781**	7,217
	6,781	7,217
Split as follows:		
Current Provision	**587**	561
Non-Current Provision	**6,194**	6,656
	6,781	7,217

ANALYSIS OF EXPECTED TIMING OF CASH FLOWS

	Annual Compensation Payments £'000	Major Institute £'000	Total Restructuring £'000
Within one year	194	393	587
Between 2014 and 2019	4,004	2,190	6,194
Between 2019 and 2023		-	-
	4,198	**2,583**	**6,781**

11. LOSS ON DISPOSAL/DEMOLITION OF PROPERTY, PLANT AND EQUIPMENT

	2012-13 £'000	2011-12 £'000
Receipts on Disposals of Property, Plant and Equipment	**86**	-
Less: Net Book Value of Assets Sold/Demolished	**(246)**	(435)
Loss on Disposal/Demolition of Fixed Assets	**(160)**	(435)

During 2012-13, the remaining assets of BITS were disposed of which resulted in a loss on disposal of £246K.
In 2011-12, disposal of IT equipment at BITS resulted in a loss on disposal of £160K, in addition to a loss on demolished assets of £275K.

12. FINANCIAL ASSETS

	PBL £'000	SSC £'000	NRP LLP	Total £'000
Valuation/cost				
at 1 April 2012	**536**	**9,815**	**833**	**11,184**
Additions	**-**	**0**	**-**	**-**
Disposal	**-**	**(7,855)**	**-**	**(7,855)**
Profit/(loss) at 31 March 2013	**96**	**(1,960)**	**-**	**(1,864)**
Net Book Value at 31 March 2013	**632**	**0**	**833**	**1,465**

Plant Bioscience Ltd (PBL)
110 ordinary shares at 10p each, representing one third of the issued share capital of Plant Bioscience Ltd.
Plant Bioscience Ltd is incorporated in England and Wales. www.pbltechnology.com

RCUK Shared Service Centre (SSC Ltd)
RCUK SSC Uk Ltd was accounted for as a joint venture until the change in governance and ownership of the company on 6 March 2013. Under the new arrangement the company's name was changed to UK Shared Business Services (UKSBS), BIS hold a Government Department (GD) share carrying 51% of the votes, UKSBS holds 1 share carrying 5% of the votes, and all other stakeholders including BBSRC each own one non-Government Department (NGD) share, with the combined voting value of all the NGD shares being 44%.
BBSRC have exchanged their A share, which carried the voting rights, for a new NGD share and have sold their B shares, conveying ownership rights, to BIS at their value as at 6 March 2013 (£7,855k). This value represents BBSRC's opening JV value (9,815k) less BBSRC's share of the company's losses and other impairments incurred during the year until 6 March 2013 (£1,960k). The amount from BIS can be seen on the Cash Flow Statement under investing activities, and means that BBSRC have not needed to draw down as much GIA from BIS as initially expected. BBSRC's share of the company losses and other impairments has been charged to the Statement of Comprehensive Net Expenditure.
This leaves BBSRC with one NGD share and means that BBSRC no longer have joint ownership of the company. Therefore the company has been reclassified as an unlisted investment with an initial cost of £1 being the nominal value of the NGD share.

Norwich Research Partners Limited Liabilty Partnership (NRP LLP)
In 2011-12, BBSRC invested £833K in the NRP LLP out of a total capital investment of £2.5M that was shared equally between the three landowners of the Norwich Research Park (NRP), i.e. BBSRC, the John Innes Foundation, and the University of East Anglia. It is anticipated that through the LLP there would be formal collaboration between the NRP partners – which consists of the three landowners, together with the Norfolk & Norwich University Hospital, the John Innes Centre, the Sainsbury Laboratories, and the Genome Analysis Centre – in delivering the stated economic benefits of the government's £26M capital investment in facilities on the Park and:

a) transforming the NRP into a world-leading centre for research and innovation in life and environmental sciences, creating 5,000 new jobs in the Norwich area over the next ten years; and
b) contributing to the Government's growth agenda, particularly in the area of bio-economy which is essential to creating economic growth and formulating effective responses to pressing global challenges.

Roslin BioCentre Ltd (RBL)
49 Ordinary Shares at 100p each representing 49 per cent of the issued share capital of Roslin BioCentre Ltd fully paid.
Roslin BioCentre Ltd is incorporated in Scotland. www.roslinbiocentre.co.uk

Rainbow Seed Fund (RSF)
Partner's capital fund investment of £92. The Rainbow Seed Fund is an independently managed evergreen venture capital fund established in 2001 by the Office of Science and Innovation (the predecessor to BIS) to invest in technologies developed from publicly funded research (www.rainbowseedfund.com). During 2011-12, BBSRC provided a capital grant to the fund of £1M to support investment in the commercialisation of technology and services from publicly funded research, and ultimately support the Government's agenda for economic growth.

13. PROPERTY, PLANT AND EQUIPMENT

	Completed Land excluding Dwellings	Completed Buildings excluding Dwellings	Dwellings	Buildings Under Construction	Information Technology	Plant & Equipment	Fixtures & Fittings	TOTAL
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Cost or Valuation								
At 1 April 2012	55,754	228,422	30,423	93,059	1,902	304	38	409,902
Additions	-	-	-	-	92	-	-	92
Valuation additions*	-	7,220	-	48,244	-	-	-	55,464
Impairment	(4,988)	(24,384)	-	-	-	-	-	(29,372)
Reclassification	-	(5,025)	-	5,025	(18)	(6)	6	(18)
Disposals	-	-	-	-	(1,699)	(176)	(33)	(1,908)
Revaluation	2,805	1,053	1,250	-	-	-	-	5,108
At 31 March 2013	**53,571**	**207,286**	**31,673**	**146,328**	**277**	**122**	**11**	**439,268**
Depreciation and Impairment								
At 1 April 2012	1	102,246	294	-	1,670	195	17	104,423
Provided during the year	-	7,673	312	-	53	27	1	8,066
Impairment	-	(20,432)	-	-	-	-	-	(20,432)
Reclassification	-	-	-	-	(10)	-	23	13
Disposals	-	-	-	-	(1,551)	(147)	(30)	(1,728)
Revaluation	-	(2,923)	(312)	-	-	-	-	(3,235)
At 31 March 2013	**1**	**86,564**	**294**	**-**	**162**	**75**	**11**	**87,107**
Net Book Value								
At 31 March 2013	**53,570**	**120,722**	**31,379**	**146,328**	**115**	**47**	**0**	**352,161**
At 1 April 2012	55,753	126,176	30,129	93,059	232	109	21	305,479

	Completed Land excluding Dwellings	Completed Buildings excluding Dwellings	Dwellings	Buildings Under Construction	Information Technology	Plant & Equipment	Fixtures & Fittings	TOTAL
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Cost or Valuation								
At 1 April 2011	56,033	219,559	28,493	67,945	2,130	304	19	374,483
Additions	-	-	-	-	23		19	42
Valuation additions*	-	-	-	51,577	-	-	-	51,577
Impairment	(2,964)	(26,366)	-	-	-	-	-	(29,330)
Reclassification	(650)	26,463	-	(26,463)	-	-	-	(650)
Disposals	(275)		-	-	(251)	-	-	(526)
Revaluation	3,610	8,766	1,930	-		-	-	14,306
At 31 March 2012	**55,754**	**228,422**	**30,423**	**93,059**	**1,902**	**304**	**38**	**409,902**
Depreciation and Impairment								
At 1 April 2011	1	107,660	-	-	1,638	185	12	109,496
Provided during the year	-	8,948	294	-	230	10	5	9,487
Impairment	-	(15,319)	-	-	-	-	-	(15,319)
Reclassification	-	-	-	-	-	-	-	-
Disposals	-	-	-	-	(198)		-	(198)
Revaluation	-	957	-	-	-	-	-	957
At 31 March 2012	**1**	**102,246**	**294**	**-**	**1,670**	**195**	**17**	**104,423**
Net Book Value								
At 31 March 2012	**55,753**	**126,176**	**30,129**	**93,059**	**232**	**109**	**21**	**305,479**
At 1 April 2011	56,032	111,899	28,493	67,945	492	119	7	264,987

*Where Institutes carry out development that results in a material change in value of the Council's owned assets, this is disclosed as a fixed asset valuation addition.

The land and buildings were professionally valued as at 31 March 2011 by external valuers, Powis Hughes Chartered Surveyors, in accordance with SAVP and RICS guidance notes. In between formal professional valuations, management have used appropriate indices to revalue the land and buildings. In addition to this valuation, Polaris House was revalued as at 31 March 2010 by Powis Hughes, as part of a valuation carried out by NERC.

All assets are owned.

14. IMPAIRMENT

During the year there were impairments amounting to £8.94M (£14.01M in 2011-12). The large majority of impairments relate to properties on the two sites leased to the The Pirbright Institute at Compton and Pirbright. The Compton site is planned for closure with The pirbright Institute gradually moving to the Pirbirght site which is currently undergoing major development. As a result, several buildings have been taken out of use at Compton as they become vacant, and a couple of buildings at Pirbright have been taken out of service to facilitate work on the new development.

In accordance with the FReM, impairments are taken through the Statement of Comprehensive Net Expenditure.

15. INTANGIBLE ASSETS

	Website £'000	Computer Software £'000	Total £'000
Cost or Valuation			
At 1 April 2012	**92**	**421**	**513**
Additions	**34**	**-**	**34**
Valuation additions	**-**	**-**	**-**
Reclassification	**-**	**18**	**18**
Disposals	**-**	**(326)**	**(326)**
Revaluation	**-**	**-**	**-**
At 31 March 2013	**126**	**113**	**239**
Amortisation			
At 1 April 2012	**92**	**364**	**456**
Provided during the year	**4**	**(17)**	**(13)**
Disposals	**-**	**(260)**	**(260)**
Revaluation	**-**	**-**	**-**
Reclassification	**-**	**(13)**	**(13)**
At 31 March 2013	**96**	**74**	**170**
Net Book Value			
At 31 March 2013	**30**	**39**	**69**
At 1 April 2012	0	57	57

	Website £'000	Computer Software £'000	Total £'000
Cost or Valuation			
At 1 April 2011	**92**	**1,408**	**1,500**
Additions	**-**	**-**	**0**
Valuation Additions	**-**	**-**	**-**
Reclassification	**-**	**-**	**-**
Disposals	**-**	**(987)**	**(987)**
Revaluation	**-**	**-**	**-**
At 31 March 2012	**92**	**421**	**513**
Amortisation			
At 1 April 2011	**75**	**1,147**	**1,222**
Provided During the Year	**17**	**97**	**114**
Disposals	**-**	**(880)**	**(880)**
Revaluation	**-**	**0**	**0**
Reclassification	**-**	**-**	**0**
At 31 March 2012	**92**	**364**	**456**
Net Book Value			
At 31 March 2012	**0**	**57**	**57**
At 1 April 2011	17	261	278

All additions to intangible assets arose from external purchases and services that were bought in. No element of intangible assets is internally generated or acquired as part of a business acquisition.

16. ASSETS CLASSIFIED AS HELD FOR SALE

	2012-13 £'000	2011-12 £'000
1 April 2012	**3,933**	3,100
Additions and Capital Improvement	**-**	651
Revaluation	**-**	182
31 March 2013	**3,933**	3,933

The brought forward assets held for sale as at 31 March 2013 comprise of a site that became surplus to requirements, as it was no longer needed for institute research. The site is valued at £3.1M and is due to be sold during 2013-14. In addition there are several buildings at Skedsbush and one building at Compton that are surplus to requirements. These assets are also expected to be sold in 2013-14.

17. TRADE RECEIVABLES AND OTHER CURRENT ASSETS

	2012-13 £'000	2011-12 £'000
Amounts falling due within one year		
Trade Receivables	**6,960**	3,613
Other Receivables	**4,769**	7,250
Repayment of Early Retirement Lump Sums*	**1,115**	1,139
	12,884	12,002
Prepayments and Accrued Income		
Research Grants	**-**	210
Training Awards	**10,733**	11,394
Other	**6,044**	4,554
	16,777	16,158
	29,621	28,160
Amounts falling due after one year		
Repayment of Early Retirement Lump Sums	**1,571**	2,628
Other Receivables **	**9,657**	10,557
	11,228	13,185
Total Receivables	**40,849**	41,345

* Cash received from the Research Councils' Pension Schemes (RCPS) in 2012-13 in repayment of Early Retirement Lump Sums (ERLS) was £1,139K (2011-12: £926K)
** Other receivables due after one year include a £9.53M (2011-12:£10.0M) loan to Babraham Bioscience Technologies (BBT) for the development of Babraham BioPark. A loan repayment schedule has been agreed with BBT which will see the loan repaid in full by the end of 2014-15.

17a. TRADE RECEIVABLES AND OTHER CURRENT ASSETS BY SOURCE

	2012-13 £'000	2011-12 £'000
i) Amounts falling due within one year		
Other Central Government Bodies	**11,592**	8,704
Bodies External to Government	**18,029**	19,456
Total	**29,621**	28,160
ii) Amounts falling due after one year		
Other Central Government Bodies	**1,571**	2,628
Bodies External to Government	**9,657**	10,557
Total	**11,228**	13,185

18. TRADE AND OTHER PAYABLES AND OTHER CURRENT LIABILITIES

	31 March 2013 £'000	31 March 2012 £'000
Amounts falling due within one year		
Trade Payables	**8,635**	19,938
Deferred Income	**5,662**	7,058
Shared Services Centre Capital Costs	**-**	-
Other Payables	**570**	142
	14,867	27,138
Accruals		
Research Grants	**20,117**	14,650
Other	**27,277**	19,419
	47,394	34,069
	62,261	61,207

18a. TRADE AND OTHER PAYABLES BY SOURCE

	31 March 2013 £'000	31 March 2012 £'000
Current		
Other Central Government Bodies	**13,003**	9,474
Bodies External to Government	**49,258**	51,733
Total	**62,261**	61,207

19. NET PARLIAMENTARY FUNDING

	2012-13 £'000	2011-12 £'000
Amount provided by BIS - Capital Funding	**103,300**	123,893
Amount provided by BIS - Revenue Funding	**421,350**	357,560
Animal Licences Provided by BIS	**125**	125
Net Parliamentary Funding	**524,775**	481,578

20. NOTES TO THE CASH FLOW STATEMENT

Reconciliation of movement in cash to movement in net funds	**2012-13 £'000**	2011-12 £'000
Cash as at 1 April 2012	**5,784**	10,483
(Decrease)/Increase in cash in the year	**51,166**	(4,699)
Cash as at 31 March 2013	**56,950**	5,784

Breakdown of Balances	**2012-13 £'000**	2011-12 £'000
Citybank	**54,426**	4,314
Lloyds/Barclays Bank PLC	**2,524**	1,470
	56,950	5,784

Third Party Assets: Cash held on behalf of Institutes to cover unforeseen losses	**2012-13 £'000**	2011-12 £'000
At 1 April 2012	**-**	536
Disposals	**-**	(536)
At 31 March 2013	**-**	-

BBSRC follows the public sector policy of not taking out commercial insurance and looks to self-insure through maintaining an appropriate level of general reserves to protect against potential unforeseen losses.

In previous years, BBSRC sponsored institutes contributed to a fund held by BBSRC to assist financially with any unforeseen losses of the institutes (and not BBSRC), which might otherwise have been covered by a commercial insurance policy. The fund was designated to address unforeseen losses with a financial value of less than 2% of the institutes' recurrent income. The fund was held by BBSRC for the sole usage by the institutes for such needs. In light of revised governance arrangements for BBSRC-sponsored institutes, BBSRC closed the fund in 2011-12 and the remaining amounts in the fund were returned to the institutes.

21. FORWARD COMMITMENTS ON APPROVED RESEARCH GRANTS

	31 March 2013 £M	**31 March 2012 £M**	31 March 2011 £M
2011-12	**-**	-	185.0
2012-13	**-**	239.9	112.2
2013-14	**240.1**	162.3	57.7
2014-15	**178.3**	83.6	12.0
2015-16	**100.3**	19.5	2.9
After 2015-16	**58.0**	4.6	-
	576.7	509.9	369.8

At then end of 2010-11, BBSRC migrated it's Grants service to the RCUK Shared Services Centre Ltd. In preparation for the migration, grants processing ceased in the final monthsof 2010-11, and as a result, forward commitments were lower than usual at 31 March 2011. Following migration and the stabilisation of grants processing, the forward commitments for 31 March 2013 onwards are now in line with pre migration expectations.

22. CAPITAL COMMITMENTS

The majority of capital expenditure funded by BBSRC is on contracts let by sponsored institutes. Capital commitments as at 31 March 2013, for which no provision has been made, are as follows:

	2012-13 £'000	2011-12 £'000
Authorised for contracts to be let, in some cases subject to full business case	**232,223**	194,988
Funding approved in principle:		
BBSRC works on Houghton Grange	**-**	1,050
BBSRC contribution to capital equipment for strategically funded institutes	**3,000**	15,000
BBSRC contribution to backlog maintenance and dilapidations on BBSRC estate	**2,000**	2,984
	237,223	214,022

23. OPERATING LEASE COMMITMENTS

BBSRC has one annual operating lease commitment under non-cancellable agreements as shown below:

	2012-13 £'000	Restated 2011-12 £'000
Within 1 year	**46**	46
Between 2 and 5 years	**-**	46
After 5 years	**-**	-
	46	92

This is a lease held by UK Research Offices (UKRO) in Brussels as office accommodation.

In the 2011-12 accounts the disclosure of the lease held by UKRO for office accommodation in Brussels was omitted from the accounts and should have shown that £46k was due within one year and £46K was due in between 2 and 5 years under non- cancellable agreements.

23a. OPERATING LEASE RECEIPTS

BBSRC expects annual operating lease receipts under non-cancellable agreements in respect of properties where the lease term expires as follows:

	2012-13 £'000	2011-12 £'000
Within 1 year	**-**	244
Between 2 and 5 years	**-**	964
After 5 years	**-**	6,210
	-	7,418

During the year the lease was cancelled and BBSRC no longer receives lease receipts. BBSRC also has several leases with sponsored Institutes where lease receipts are at peppercorn rent.

24. CONTINGENT LIABILITIES

The former BBSRC-sponsored IGER Institute transferred to the University of Aberystwyth on 31 March 2008. As part of the transfer, BBSRC agreed to contribute toward any redundancy costs should the University experience a fall in programme grant income as a result of the transfer, between 1 April 2008 and 31 March 2014. BBSRC's contribution to any directly attributable redundancy costs is dependent upon both the level and year of income reductions. A provision of £2.3M was made in 2009-10 for several known redundancies which arose as part of this transfer and this was increased by £0.95M during 2011-12. There were £3.25M claims for redundancy costs in 2011-12 so the provision was expended in full as at 31 March 2012. No aditional provision was required as at 31 March 2013.

The former BBSRC sponsored Roslin Institute transferred to The University of Edinburgh on 13 May 2008. Should the University experience a fall in programme grant income between the transfer date and May 2015, BBSRC agreed to contribute to the cost of any redundancies that arise as a direct result of the transfer. The level of BBSRC's contribution is dependent upon both the size and year of income reduction. BBSRC also agreed to provide indemnity for any potential costs that arise as a result of past actions of the Institute and indemnity for any fall in grant income of the Neuropathogenesis Unit as a result of the transfer. The proportion of settlement BBSRC will fund declines on an annual basis and is limited to claims up to May 2023. A provision of £160K was made in 2009-10, and this was increased by £90K to £250K in 2010-11. In 2011-12 there were claims of £121K against this provision, £75K was released, and the provision was increased by £22K, resulting in a provision of £76K as at 31 March 2012. The brought forward provision of £76K has been utilised/released in year and no additional provision was required as at 31 March 2013 as expected costs for 2013-14 have been accrued for.

As part of the transfer of the former BBSRC-sponsored IGER institute to the University of Aberystwyth, certain key staff from IGER moved to Nottingham University. BBSRC agreed to underwrite a sum of £340K over a five-year period starting in 2011-12, in case the newly formed Research Group fails to win additional grant funding in this time. BBSRC has encouraged a strategic link between Nottingham University and IBERS at the University of Aberystwyth to maximise the potential synergies, particularly between work on wheat, grasses and roots.

25. RELATED PARTY TRANSACTIONS

BBSRC is a non-departmental public body sponsored by the Department for Business, Innovation and Skills (BIS).

For the purposes of IAS 8, BIS and its partner organisations are regarded as related parties. During the year, BBSRC has had various material transactions with BIS and entities for which BIS is regarded as the parent department, viz.: Arts and Humanities Research Council, Economic and Social Research Council, Engineering and Physical Sciences Research Council, Medical Research Council, Natural Environment Research Council, Science Technology and Facilities Council, Technology Strategy Board, UK Space Agency, and the Higher Education Funding Council of England.

BBSRC also had a number of related transactions with UK SBS, as set out in the notes to these accounts.

Professor Douglas Kell was appointed BBSRC Chief Executive and Accounting Officer on 1 October 2008 and attends BBSRC Council as the Deputy Chair. Professor Kell continues to work one day a week with the Manchester Interdisciplinary Biocentre (MIB), which is part of the University of Manchester and abstains from any discussions with relation to the University of Manchester while working for BBSRC. All BBSRC grants where Professor Kell was the principal investigator were transferred from Professor Kell prior to his employment with BBSRC, with the exception of one grant where the final payment of £48K was paid on receipt of the final report, which occurred after 1 October 2008.

The accounts provide disclosure of all material transactions with those who are recognised as key management personnel as per IAS 24 *Related Parties*. This is taken to be those members of staff who are included under Directors' Remuneration in the Remuneration Report and all Council members.

During the year, BBSRC did not undertake any material transactions with any Directors. However during the year, the following **material** payments with Council members' organisations took place in respect of research and training grants funded by BBSRC:

	Awards	£
Professor Sir Tom Blundell FRS	**2**	71,687
Professor Sir David Baulcombe FRS	**1**	342,720
Professor Anne Dell CBE FRS	**1**	198,414
Professor Sarah Gurr	**1**	56,416
Professor David Richardson	**1**	136,056

The following Council members held positions on the Governing Bodies of sponsored research institutes:

Dr David Lawrence	Rothamsted Research
Mr David Gregory	Institute for Food Research

Registers of interest for Council, Boards and Committees can be found at www.bbsrc.ac.uk

The following Council staff held positions on the Governing Bodies of sponsored institutes and centres

Mr Peter Swinburne	The Pirbright Institute
Mr Paul Gemmill	The Pirbright Institute

BBSRC sponsors six research institutes, which conduct long-term, mission-orientated research using specialist facilities that are in line with BBSRC's priorities. BBSRC provides Strategic Programme Grants to the institutes to fund specific research programmes. The sponsored institutes have separate charitable status and an independent governing body oversees the institutes' activities.

Between 2004 and 2006, BBSRC invested £2M for one third of the issued share capital of Plant Biosciences Ltd. Details are shown in note 12.

	Grants		Receivables (including loans)		Payables		Major Provision In Year	
	12-13	11-12	**12-13**	11-12	**12-13**	11-12	**12-13**	11-12
	£M	£M	**£M**	£M	**£M**	£M	**£M**	£M
Transactions with BBSRC-Sponsored Institutes								
Babraham Institute*	**32.1**	36.20	**-**	-	**3.28**	5.70	**-**	-
The Pirbright Institute *	**66.8**	76.90	**0.19**	-	**5.86**	8.40	**-**	-
Institute of Food Research*	**12.7**	14.40	**-**	-	**0.18**	1.40	**-**	-
John Innes Centre	**32.6**	27.50	**1.67**	1.70	**1.60**	2.10	**-**	-
Rothamsted Research	**27.2**	22.40	**0.13**	3.50	**4.77**	1.40	**-**	-
The Genome Analysis Centre	**9.2**	21.40	**-**	-	**0.90**	8.00	**-**	-
	180.6	198.80	**1.99**	5.20	**16.59**	27.00	**-**	-
Transactions with former BBSRC-Sponsored Institutes								
Institute of Grassland and Environmental Research	**8.4**	9.50	**-**	-	**0.50**	0.60	**-**	-
Roslin Institute	**11.6**	7.50	**-**	-	**0.08**	-	**-**	-
	20.0	17.00	**-**	**-**	**0.58**	0.60	**-**	-
Transactions with other related parties								
Plant Biosciences Ltd	**-**	-	**-**	-	**-**	-	**-**	-
RCUK SBS	**-**	-	**0.80**	0.20	**0.53**	0.90	**-**	-
	-	-	**0.80**	0.20	**0.53**	0.90	**-**	-
Total	**200.6**	215.80	**2.79**	5.40	**17.70**	28.50	**-**	-

*Institutes occupying BBSRC-owned estate at peppercorn rents.

	Receivables		Payables	
	12-13	11-12	**12-13**	11-12
	£M	£M	**£M**	£M
	(see note 17)		(see note 18)	
Non-Institute:				
Within the WGA Boundary				
Other Research Councils	**5.23**	0.80	**2.60**	0.60
Other Government Organisations	**0.83**	0.40	**3.90**	8.20
Research Councils' Pensions Schemes	**6.31**	6.60	**0.12**	0.20
Non WGA				
Babraham Bioscience Technologies Ltd	9.53	10.00	0.56	-
Other Debtors (including Universities)	16.16	18.10	37.38	23.70
	38.06	35.90	**44.56**	32.70
BBSRC-Sponsored Institutes & Other Related Parties	**2.79**	5.40	**17.70**	28.50
	40.85	41.30	**62.26**	61.20

26. DERIVATIVES AND OTHER FINANCIAL INSTRUMENTS

As the cash requirements of BBSRC are met through grant-in-aid provided by BIS, financial instruments play a more limited role in creating and managing risk than would apply to a non-public sector body. The majority of financial instruments relate to contracts to buy non-financial items in line with BBSRC's expected purchase and usage requirements and BBSRC is therefore exposed to little credit, liquidity or market risk.

CURRENCY RISK

The Council's exposure to foreign currency risk was not significant during the year.

Through the use of forward contracts, the Council seeks to mitigate its risk of foreign exchange rate movements on its foreign currency transactions.

For 2012-13 two contracts with an agreed cost of £2.54M have been fair valued (using the mid-market rate ruling at 31st March 2012) at £2.61M with the difference being credited to the General Reserve.

	Amount	Settlement date	Cost	Fair Value at 31 March 2013	Fair Value at 31 March 2012	Difference to reserves
	US$			£	£	£
Contract date						
24/11/2011	**2,000,000**	**24/05/2013**	**1,273,480**	**1,309,672**	**1,252,270**	**(36,192)**
24/11/2011	**2,000,000**	**24/05/2014**	**1,275,104**	**1,310,101**	**1,255,650**	**(34,997)**
			2,548,584	**2,619,773**	**2,507,920**	**(71,189)**

27. EVENTS AFTER REPORTING PERIOD

FIAS 10 Events after the reporting period, require the disclosure of the date on which the Financial Statements were 'authorised for issue' and who gave that authorisation.

There were no significant events between the Statement of Financial Position date and 28 June 2013, the date when the Accounting Officer authorised the accounts for issue. The Financial Statements do not reflect events after this date.

BBSRC Institutes and Centres

- **Babraham Institute**
- **Institute of Biological, Environmental and Rural Sciences at the University of Aberystwyth**
- **Institute of Food Research**
- **John Innes Centre**
- **Roslin Institute at The University of Edinburgh**
- **Rothamsted Research**
- **North Wyke Research**
- **The Genome Analysis Centre**
- **The Pirbright Institute**
- **BBSRC Sustainable Bioenergy Centre**
- **Centre for Integrated Systems Biology of Ageing and Nutrition**
- **Centre for Integrative Systems Biology at Imperial College**
- **Manchester Centre for Integrative Systems Biology**
- **Centre for Systems Biology at Edinburgh**
- **Centre for Plant Integrative Biology**
- **Oxford Centre for Integrative Systems Biology**

Our current strategic partners are:

- **The University of Edinburgh**
- **University of Cambridge**
- **The University of Nottingham**
- **University of Oxford**
- **Imperial College London**
- **University of Bristol**
- **The University of Warwick**
- **University of East Anglia**
- **Aberystwyth University**

Acronyms

AHRC	Arts and Humanities Research Council
ARC	Advanced Training Partnership
BBR	Bioinformatics and Biological Resources
BBSRC	Biotechnology and Biological Sciences Research Council
BI	Babraham Institute
BIS	Department for Business, Innovation and Skills
BRIC	Bioprocessing Research Industry Club
BSBEC	BBSRC Sustainable Bioenergy Centre
CIDLID	Combating Infectious Diseases in Livestock for International Development
CIRC	Crop Improvement Research Club
CPD	Continuing Professional Development
DBT India	Department of Biotechnology of the Indian Ministry of Science and Technology
Defra	Department for Environment, Food and Rural Affairs
DfID	Department for International Development
DRINC	Diet and Health Research Industry Club
DSTL	Defence Science and Technology Laboratory
ESRC	Economic and Social Research Council
EPSRC	Engineering and Physical Sciences Research Council
FoF	Follow on Fund
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institution
HSE	Health and Safety Executive
IAH	Institute for Animal Health
IBERS	Institute of Biological, Environmental and Rural Sciences
IBTI	Integrated Biorefining Research and Technology Club
IFR	Institute of Food Research
INRA	Institut National de la Recherche Agronomique
JIC	John Innes Centre
MRC	Medical Research Council
NC3R	The National Centre for the Replacement, Refinement and Reduction of Animals in Research
NDPB	Non-Departmental Public Body
NERC	Natural Environment Research Council
NFU	National Farmers Union
NRP LLP	Norwich Research Partners Limited Liability Partnership
PBL	Plant Bioscience Ltd
PI	The Pirbright Institute
RBL	Roslin BioCentre Ltd
RCUK	Research Councils UK
RELU	Rural Economy and Land Use Programme
RI	Roslin Institute
RRES	Rothamsted Research
SCRI	Scottish Crop Research Initiative
sLoLas	strategic Longer Larger grants
SSC	Shared Services Centre
STFC	Science and Technology Facilities Council
TGAC	The Genome Analysis Centre
TSB	Technology Strategy Board
WT	Wellcome Trust

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