Science is Global

Trustees' report and financial statements
for the year ended 31 March 2019

THE ROYAL SOCIETY

The Royal Society's fundamental purpose, reflected in its founding Charters of the 1660s, is to recognise, promote, and support excellence in science and to encourage the development and use of science for the benefit of humanity.

The Society is a self-governing Fellowship of distinguished scientists drawn from all areas of science, technology, engineering, mathematics and medicine.

The Society has played a part in some of the most fundamental, significant, and life-changing discoveries in scientific history and Royal Society scientists – our Fellows and those people we fund – continue to make outstanding contributions to science and help to shape the world we live in.

Discover more online at:
royalsociety.org

Charity

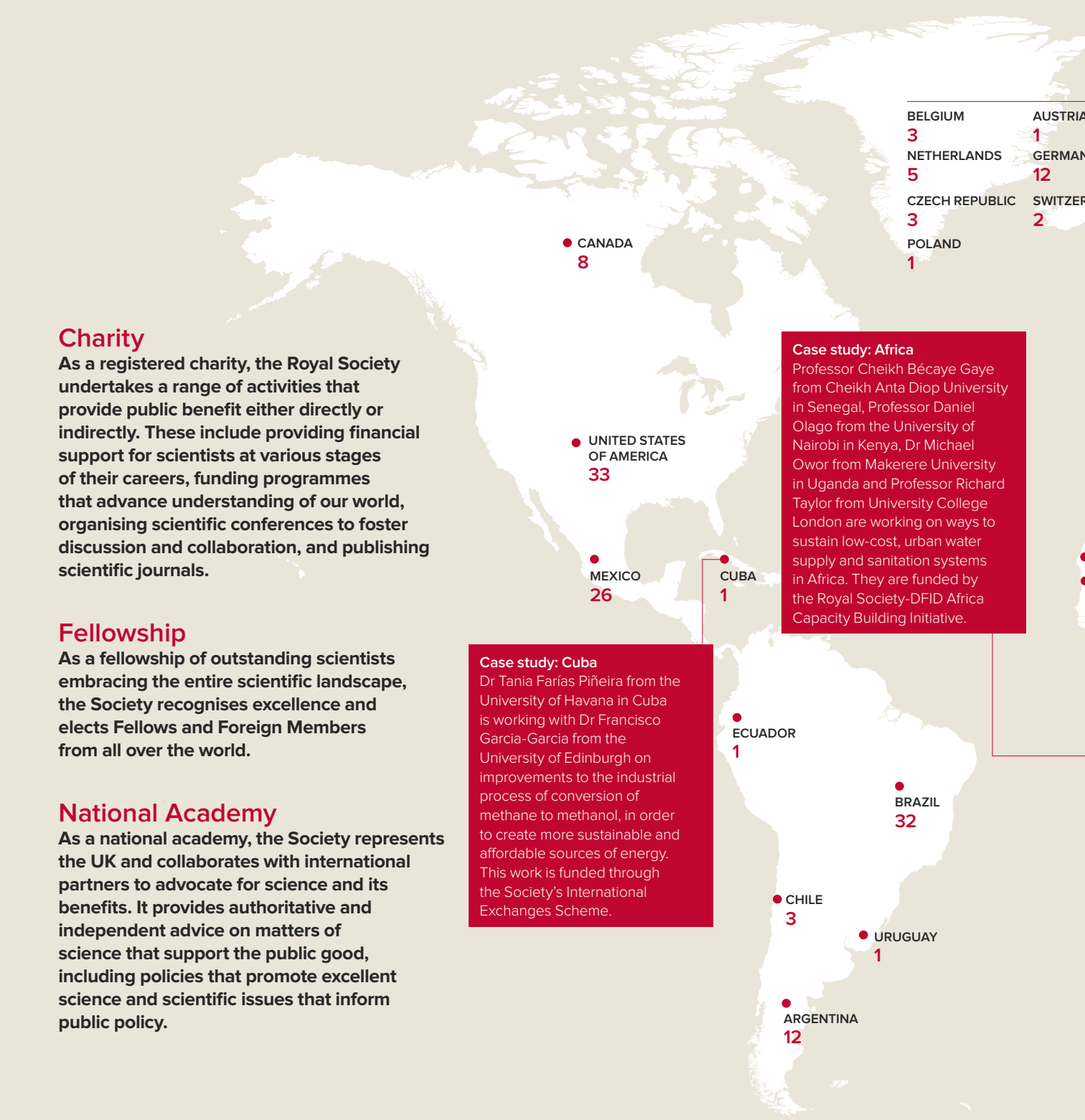
As a registered charity, the Royal Society undertakes a range of activities that provide public benefit either directly or indirectly. These include providing financial support for scientists at various stages of their careers, funding programmes that advance understanding of our world, organising scientific conferences to foster discussion and collaboration, and publishing scientific journals.

Fellowship

As a fellowship of outstanding scientists embracing the entire scientific landscape, the Society recognises excellence and elects Fellows and Foreign Members from all over the world.

National Academy

As a national academy, the Society represents the UK and collaborates with international partners to advocate for science and its benefits. It provides authoritative and independent advice on matters of science that support the public good, including policies that promote excellent science and scientific issues that inform public policy.



Case study: Africa
Professor Cheikh Bécaye Gaye from Cheikh Anta Diop University in Senegal, Professor Daniel Olago from the University of Nairobi in Kenya, Dr Michael Owor from Makerere University in Uganda and Professor Richard Taylor from University College London are working on ways to sustain low-cost, urban water supply and sanitation systems in Africa. They are funded by the Royal Society-DFID Africa Capacity Building Initiative.

Case study: Cuba
Dr Tania Farías Piñeira from the University of Havana in Cuba is working with Dr Francisco Garcia-Garcia from the University of Edinburgh on improvements to the industrial process of conversion of methane to methanol, in order to create more sustainable and affordable sources of energy. This work is funded through the Society's International Exchanges Scheme.

Our heritage

1660
The Royal Society is founded, following a lecture by Christopher Wren at Gresham College.

1665
Philosophical Transactions of the Royal Society is published. This journal established the concepts of scientific priority and peer review.

1673
Dutch microscope-maker and natural historian Antonie van Leeuwenhoek FRS (1632 – 1723) sends the first letter of observations to the Society, commencing a ground-breaking 50 years of original research from the Netherlands.

1723
The first Foreign Secretary of the Society is appointed, 59 years before the UK Government appoints its first Foreign Secretary.

1736
The Copley Medal is established from an endowment of £100 received from the estate of Sir Godfrey Copley in 1709. It is the world's oldest scientific honour, a prestigious forerunner of the Nobel Prize.

1778
President of the Society, Joseph Banks, begins 'conversaziones' as an opportunity for Fellows to demonstrate their cutting-edge research to the rest of the Fellowship. These have since developed into the annual public Summer Science Exhibition.

Case study: United Kingdom
Understanding how bones respond to stress during growth and development is the area of research of Professor Kate Robson Brown from the University of Bristol. She is an Apex award holder.

Case study: India
Professor Bimal Roy of the Indian Statistical Institute, Kolkata and Professor Feng Hao of the University of Warwick were awarded an International Collaboration Award to combine their cryptography and statistical expertise to develop a new generation of e-voting systems in India that are secure, dependable and easy to use. They also aim to make the new e-voting system accessible to voters with low or no literacy, and to disabled and older voters.

Map showing the number of researchers holding a Royal Society grant award in 2018/19

1787
Astronomer, Caroline Herschel, is the first female scientist to have a paper published in *Philosophical Transactions*.

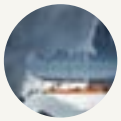
1839
The British Government approves the first of what will become a global network of observatories, attempting to measure the Earth's magnetic field. Led by Edward Sabine FRS (1788 – 1883), later President of the Society, the scheme enables Sabine to link variations in the Earth's magnetism with solar cycles.

1851
The British Government awards the Society its first annual government grant of £1,000 to be distributed for 'private individual scientific research'.

1904
The Society's Tropical Diseases Committee begins to research malaria and other ailments, particularly in Africa. As a result, Sir David Bruce FRS (1855 – 1931) elucidates the role of the tsetse fly in sleeping sickness.

1946
The Society hosts the first of its conferences for Commonwealth scientists, opened by the then Princess Elizabeth. Among the discussions are contributions on 'methods of improving interchange of scientists'.

1956
The Society establishes a research base at Halley Bay, Antarctica. Here in 1985, dramatic losses in the ozone layer are observed and the base remains an important location for climate research.



At a glance

£114.7m
total expenditure, 13% increase from 2017/18

1,477
Fellows

1,176
researchers currently supported through research fellowships

170
Foreign Members

883
grants awarded

212
employees

£84.7m
grants awarded, 16% increase from 2017/18

1,664
downloads of *Greenhouse gas removal* report

65
countries where the Society supported researchers in 2018/19

4.5m
people reached by #SummerScience on social media

40m
downloads of papers from our journals

38
scientific meetings

Contents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1964
Royal Society Wolfson Research Professor, Dorothy Hodgkin, becomes the UK's only female Nobel Prize winning scientist.

2010
Royal Society University Research Fellow, Kostya Novoselov, shares the Nobel Prize in Physics with Andre Geim for their work on graphene. This new form of carbon is only one atom thick but could lead to the manufacture of innovative electronics.

2011
The Society publishes Open Biology, its first fully 'open access' journal.

2018/19
The Society increases funding for researchers by 16% to £84.7 million.

The Society publishes a review of the success of 35 years of its University Research Fellowships supporting early career researchers.

The Society co-hosts, along with the US National Academy of Sciences and the Academy of Sciences of Hong Kong, a second international summit on human genome editing.

Looking forward

The Society will increase its funding for researchers to over £100 million.

The Society will announce the first recipients of its FLAIR Fellowships supporting early career researchers in sub-Saharan Africa.

The Society will jointly convene an international commission to develop principles, criteria, and standards for the possible clinical use of human germline genome editing.

President's foreword

2018 marked **35 years** of the Society's University Research Fellowship scheme and **23 years** of our Dorothy Hodgkin Fellowships.

The UK needs a Brexit deal that:

- Keeps highly-skilled scientists working in the UK and ensures that international talented people still choose to come here and contribute to our globally competitive science.
- Keeps access to money and networks that support the UK to work with scientists around the world.
- Maintains regulatory alignment that allows access to new medicines and technologies.

Science helps shape almost every aspect of our lives. It has contributed to improving our health, wealth and happiness and offers the prospect of more ways to tackle global problems such as disease, food security and climate change. The Fellows of the Royal Society and the researchers who we fund are at the forefront of this effort.

Interactions between people have become increasingly global in recent decades and this is even more the case for scientific exchange. The UK has been successful in attracting the finest researchers from all over the world to come and work here. The international nature of UK science has helped the UK become a genuine world leader in research and innovation – despite having less than 1% of the world's population and less than 3% of global research spending, researchers in the UK produce over 15% of the most highly cited research. Over half of UK scientific research involves international collaboration. Anything that threatens international research collaboration is bad for science and bad for the country. It is why the vast majority of the science community wanted to remain in the European Union (EU). UK research benefits from the international flow of people and ideas, from being part of world-leading EU research programmes and from being part of large-scale projects such as clinical trials of new medicines made possible by shared regulations. However, as with many other sectors impacted by Brexit, it has been difficult to get the politicians or the media to focus on science in the face of more contentious issues. The Society has continued to do everything we can to secure the best possible deal for science including leading a group of 29 Nobel Prize winners and six Fields medallists from across Europe in writing to the Prime Minister and President Juncker.

Read more about the Society's commitment to minimise any negative impact on UK science as a result of leaving the EU on page 22.

“Science helps shape almost every aspect of our lives. It has contributed to improving our health, wealth and happiness and offers the prospect of more ways to tackle global problems such as disease, food security and climate change.”

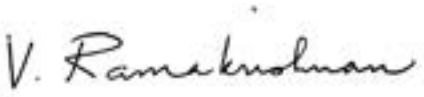
The year 2018 marked 35 years of the Society’s University Research Fellowship (URF) scheme and 23 years of our Dorothy Hodgkin Fellowships. Through these schemes, we support outstanding early career researchers. These researchers are pushing the boundaries of scientific knowledge and applying the resulting understanding to improving lives. To mark the anniversaries, we commissioned research to find out what the people we have supported have achieved. Around 70% of our URFs have gone on to become professors and include a Nobel Prize winner and a Fields medallist. There are highly successful entrepreneurs, researchers whose work has shaped domestic and international policy making and leading figures in science communication.

Read more about the difference the Society’s support has made to those supported by these schemes on page 16.

In order to ensure that the UK continues to produce great scientists and a scientifically literate population that can grapple with understanding the potential and pitfalls of new technologies, young people need a broader, more balanced and interconnected education. That must include science and maths to 18 alongside subjects such as English, modern languages, history, geography and the arts. New technologies are changing jobs and the nature of the economy and if we want to prepare young people for the jobs of the future, the current A-level system, that forces young people to narrow down their options at 16, is not fit for purpose. In February the Society launched a call for an independent review of post-16 education to take place in the next parliament with a view to delivering reform within 10 years. We are building the necessary alliances to make that a reality.

Human genome editing has both technological and social implications that society must discuss in an attempt to reach a sensible way forward that balances potential benefits and risks. In November we co-hosted, along with the US National Academy of Sciences and Academy of Sciences of Hong Kong, a second international summit on human genome editing. This was the focus of global attention with a claim by a Chinese scientist about the birth of the first genetically edited babies. The Society believes that any clinical use of heritable genome editing would be irresponsible at this time and that is why we are establishing a commission with the US National Academies of Sciences and Medicine and a number of other scientific academies from around the world to establish an international governance framework that has broad international, societal support.

Some of the challenges we have faced this year will remain priorities in 2019/20, many will be priorities for many years to come. Science will be a vital part of tackling many global challenges and the individuals that the Society continues to fund will, I believe, make a major contribution.



Venki Ramakrishnan
President of the Royal Society

Executive Director's report

16%

The Society has increased expenditure on grants from £73.3 million to £84.7 million.

During the year, the Society helped establish a network of scientific advisers in Commonwealth countries.

This has been another year of growth at the Royal Society. We have increased our expenditure by 13% to over £114 million. Much of that growth has been in our grants programmes which are supporting outstanding researchers. The Government's Investment in Research Talent Fund has allowed us to increase the number of early career and established researchers that we support. Researchers that are working on a wide range of areas from delivering low-cost, urban water supplies and sanitation in Africa to understanding the moons in our solar system.

Read more about the Society's income and expenditure on page 10.

We have also launched our Future Leaders – African Independent Research (FLAIR) scheme in association with the African Academy of Sciences and supported by the Government's Global Challenges Research Fund. The scheme will support early career researchers in sub-Saharan Africa who have the potential to become leaders in their field, undertaking cutting-edge scientific research that will address global challenges facing developing countries. We also helped establish a network of scientific advisers in Commonwealth countries.

Read more about the Society's grant schemes to support science in Africa on page 28.

On the international stage, aside from our work on Brexit, we have continued to build relationships with leading scientific nations such as the USA and China. With the USA, along with our work on the governance of human genome editing, highlights include: a joint workshop on *AI, society and social good* with the American Academy of Arts and Sciences at Stanford University; the publication of a report from a Royal Society-National Academies meeting on dealing with carbon dioxide at scale; and a subsequent 2018 forum on climate change and ecosystems. With China, the Society hosted the *UK-China joint commission* in November, convening representatives from the UK and Chinese governments to discuss a bilateral plan of activity for the future, and held a second policy dialogue with the Chinese Academy of Sciences focusing on low-carbon energy.

We have also continued our work on how to deliver low-carbon futures including publishing a report with the Royal Academy of Engineering on greenhouse gas removal and briefing the Government's Chief Scientific Advisers on the 1.5 degree climate

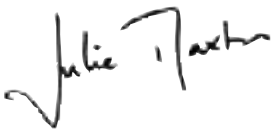
> 25% of the world's top 100 prescription medicines were discovered and developed in the UK... firms that consistently invest in research and development (R&D) are 13% more productive than firms that do not invest in R&D."

change target. Our work on artificial intelligence (AI) and data governance has included a series of public events with presenters including Demis Hassabis of Google DeepMind, Nobel Prize-winning economist Joseph Stiglitz and our Professor for Public Engagement in Science, Brian Cox.

Our collaboration with the Royal Society of Edinburgh and the judiciary to ensure that the best scientific guidance is available in the courts has gone from strength to strength. This year we have held meetings on topics including the autonomy of robots, and whether psychopathy is a brain disorder. For the wider public we had almost 12,000 people through our doors at the Society's Summer Science Exhibition. For those who could not be there in person, there were 240,000 page views on the Exhibition's website, 4.5 million people reached with #SummerScience and the Exhibition also featured prominently on TV and in other media.

It is impossible to cover all of the work of the Society here and so I will finish my review with the work we have done to highlight just how important science's contribution is to the economy. The Society, together with the British Academy, the Royal Academy of Engineering and the Academy of Medical Sciences, has published a factsheet highlighting that 25% of the world's top 100 prescription medicines were discovered and developed in the UK and that firms that consistently invest in research and development (R&D) are 13% more productive than firms that do not invest in R&D. We continue to press Government to deliver on its commitment to delivering investment of 2.4% of GDP for research and development. Our *Creating connections* meetings have brought together researchers with businesses and local policy makers and our regional mapping project has shown the impact of investment across the UK.

In 2019/20 we expect to increase our grant funding to outstanding scientists to over £100 million which will include the announcement of our first FLAIR fellows, 43 new University Research Fellows and eight Industry Fellowships. The Society will continue its work with other national science academies to establish an international governance framework for human genome editing. We will be taking a delegation to China to build on scientific partnerships. In addition, 2019/20 will see a major series of events focusing on humanity's relationship with our planet and the launch of our second *People of science* series of films.



Dr Julie Maxton
Executive Director of the Royal Society

Our strategic plan

Promoting excellence in science

The Society's aim is to harness the expertise of its Fellowship to ensure that excellence in science is recognised and supported and that scientific work is of the highest quality.

Read more on page 12.

Supporting international scientific collaboration

Science is an inherently international activity. The Society's aim is to reinforce the importance of science to build partnerships between nations, promote international relations and science's role in culture and society.

Read more on page 18.

Demonstrating the importance of science to everyone

Science is influenced by culture and other developments in society just as scientific thinking and innovation influence how people live their lives. It is important that the Society engages with different groups in society and with the public in general to find out about their experiences, listen to their views and to make science part of wider conversation.

Read more on page 24.

Public benefit statement

The Society's mission is to recognise, promote and support excellence in science and to encourage the development and use of science for the benefit of humanity. Research and innovation advance our economic, social and cultural well-being, provide health benefits and are key to sustainable long-term economic growth. The Society is concerned with excellent science, wherever and by whomever it is done and is committed to increasing diversity in science, technology, engineering and mathematics (STEM).

The Society furthers its mission through its three key roles: as a fellowship of the world's most eminent scientists; as the UK national academy of science; and as a registered charity.

The Society has a number of attributes that help to further its mission:

- the expertise of its Fellowship, which includes world leaders across all scientific fields;
- the breadth of its scientific disciplines. This removes barriers and enables leading scientists in different fields to come together;
- its independence from government and other organisations allows the Society to provide science advice with no other influence;
- its ability to convene groups of individuals in key roles and with relevant expertise to address major issues in science and wider society; and
- its history and the successes of the Society's Fellows act as a source of inspiration for what science can achieve.

The activities that the Society undertakes to promote science and its benefits, for the ultimate benefit of humanity, include:

- recognising scientific excellence;
- providing financial support for scientists at various stages of their careers in the UK and internationally;
- funding programmes that advance understanding of our world;
- organising discussion meetings to advance scientific discussion and discovery;
- providing expert scientific advice, including on science education, to policy makers;
- promoting the importance of science internationally; and
- staging programmes to engage the public with science.

Below:
The Summer Science Exhibition is the Society's flagship public event, showcasing selected research from across the UK, including the work of one of the schools funded by the Royal Society Partnership Grants scheme. This scheme funds schools to carry out scientific research in the classroom alongside a STEM partner from academia or industry.

Our strategy at a glance

Our mission

To promote science and its benefits.

Our motto

Nullius in verba – take nobody's word for it.

Our principles

- Independence
- Integrity
- Diversity and inclusion
- Collaboration
- Inspiration

Our roles

- Charity
- Fellowship
- National academy

Strategic priorities

Promoting excellence in science

Read more on pages 12 – 15.

- Elect exceptional scientists to the Fellowship.
- Advise on research landscape.
- Demonstrate economic impact of science investment.
- Fund outstanding researchers.
- Recognise scientific achievements.
- Encourage and support innovation.
- Publish scientific research.

Supporting international scientific collaboration

Read more on pages 18 – 21.

- Proactive engagement in major issues.
- Address global challenges.
- Partner with leading scientific nations on new technologies.
- Implement Commonwealth programmes.
- Convene leading international meetings to advance science.

Demonstrating the importance of science to everyone

Read more on pages 24 – 27.

- Increase scientific advice for policy makers.
- New programme of public dialogue and engagement.
- Integrate science into public debate and culture.
- Promote value of STEM education.
- Inspire through historic collections.

Relationships	Government, parliament and key influencers and funders	
Resources	Royal Charter and strong governance framework	Robust systems, policies and procedures

What have we achieved?

The Society has increased funding to scientists by 16% to £84.7 million, and a review of 35 years of our flagship funding schemes for early career researchers has shown how successful they have been, with 70% of our University Research Fellows going on to become professors. Royal Society Fellow, Sir Greg Winter was awarded the 2018 Nobel Prize in Chemistry. Scientific papers published by the Society were downloaded 40 million times, an 18% increase on the previous year. Eight new Royal Society Industry Fellows have been appointed to support collaboration between academics and employers such as Rolls-Royce, AstraZeneca and IBM.

Goals for 2020

The Society will increase spending on grants from £84.7 million to over £100 million, including increasing the number of early career researchers and the value of awards across its flagship programmes, including the URF, Dorothy Hodgkin and Research Professorship schemes. Ahead of the Government's spending review the Society will show the value investment in research brings to the UK. The Society will increase engagement with industry, holding two *Creating connections* events. The Society will seek to increase the nominations of candidates for the Fellowship from underrepresented groups and those working in industry.

What have we achieved?

The Society has joined with other scientific academies from around the world in creating a commission to establish an international governance framework for research into heritable genome editing. We increased our funding of international research by 7% to £14.8 million, funding work in 65 countries including Brazil, Ghana and India. We hosted the inaugural meeting of Commonwealth Science Advisers. We have worked with the US National Academy of Sciences on issues including climate change and the impact of AI and hosted the *UK-China joint commission*, convening representatives from the UK and Chinese governments to explore scientific collaborations.

Goals for 2020

The Society will convene an international commission to develop principles, criteria and standards for the possible clinical use of human germline genome editing. With the African Academy of Sciences, the Society will award the first FLAIR Fellowships and select the second cohort of awardees. On Brexit, the Society will continue to call for the best possible deal for research. The Society will also take a delegation to China to build on scientific partnerships and host the *5th joint science conference of the Western Balkans process*.

What have we achieved?

The Society's report on greenhouse gas removal, produced jointly with the Royal Academy of Engineering, showed how technology can be used to help meet climate targets, in the UK and globally. The Society's Summer Science Exhibition saw close to 12,000 people through our doors. We have over 230,000 followers on Twitter, up 29.6% on 2017/18, and 206,000 fans on Facebook, up 8.4% on last year. Our *You and AI* series of public events exploring artificial intelligence culminated with a sell-out crowd of 1,900 people at the Barbican in London and the lectures have had over 230,000 views on YouTube.

Goals for 2020

The Society will stage a *You and the planet* series of public events, the Summer Science Exhibition and a series of events outside London. Reports will be published to inform how the UK manages its land. The Society will publish a report on neural interfaces, including a look at public attitudes. The Society will also press for a review of post-16 education in the next parliament and publish two science primers for courts. A second series of *People of science* films will be launched.

Industry, academia, education and civil society

The public, including children and young people

Engaged Fellows, staff, volunteers and the science community

Where our income comes from and how we spend it

Income

The Society has a number of income sources including the Government, trusts, foundations, companies, individuals, trading activities and income from investments. Its income enables the Society to deliver a wide range of programmes in support of its strategic aims. Income for the year totalled £111.7 million.

Income and endowments from donations and legacies (£0.8 million)

The Society has relied on the generous support of philanthropists throughout its history. This year the Society received funding from trusts, foundations, companies and individuals in addition to the contributions made by Fellows. The Society is grateful to all its donors and their names can be found on the Society's website.

Further information is available online.

Grants for charitable activities (£89.2 million)

The Society receives the majority of its funding from the UK Government's Department for Business, Energy and Industrial Strategy (BEIS). In the year, a grant was also received from the Department for International Development.

In addition to government funding, the Society receives valuable contributions towards charitable activities from long-term partners such as the Wolfson Foundation and the Leverhulme Trust, as well as other external bodies.

Trading in furtherance of charitable activities (£11.6 million)

The Society undertakes trading activities in the form of publishing journals and conferencing activities that further its charitable objectives.

Other trading activities (£1.9 million)

The Society acquired Chicheley Hall in 2008 with the aim of operating the property as a centre for scientific and academic conferences. In addition to its mission-related activities, the Hall is available for conferences and other events, and Royal Society Trading Limited was established to process the activities of the Hall. Royal Society (London) Ltd was established to process other trading activities including income from sponsorship agreements.

Income from investments (£8.1 million)

The Society holds a significant investment portfolio which was valued at £261.3 million at 31 March 2019. A number of the funds held were bequeathed to the Society as endowments or gifted as a restricted fund for a specific purpose. The investment objective of the Society is to at least maintain the real value of its investment assets whilst generating a stable and sustainable return to fund charitable activities, thus being even handed between current and future beneficiaries.

Other income (£0.1 million)

The majority of other income sources relates to financial contributions made to projects led by the Society.

Expenditure

Expenditure for the year totalled £114.7 million. Expenditure is incurred on raising funds and charitable activities.

Expenditure on raising funds (£4.2 million)

Expenditure on raising funds includes the direct costs of raising funds, associated support costs, costs of trading and investment management fees. The costs of the subsidiaries are included in expenditure on raising funds within costs of trading.

Expenditure on charitable activities (£110.5 million)

The Society's charitable expenditure is categorised in the statement of financial activities in the following categories:

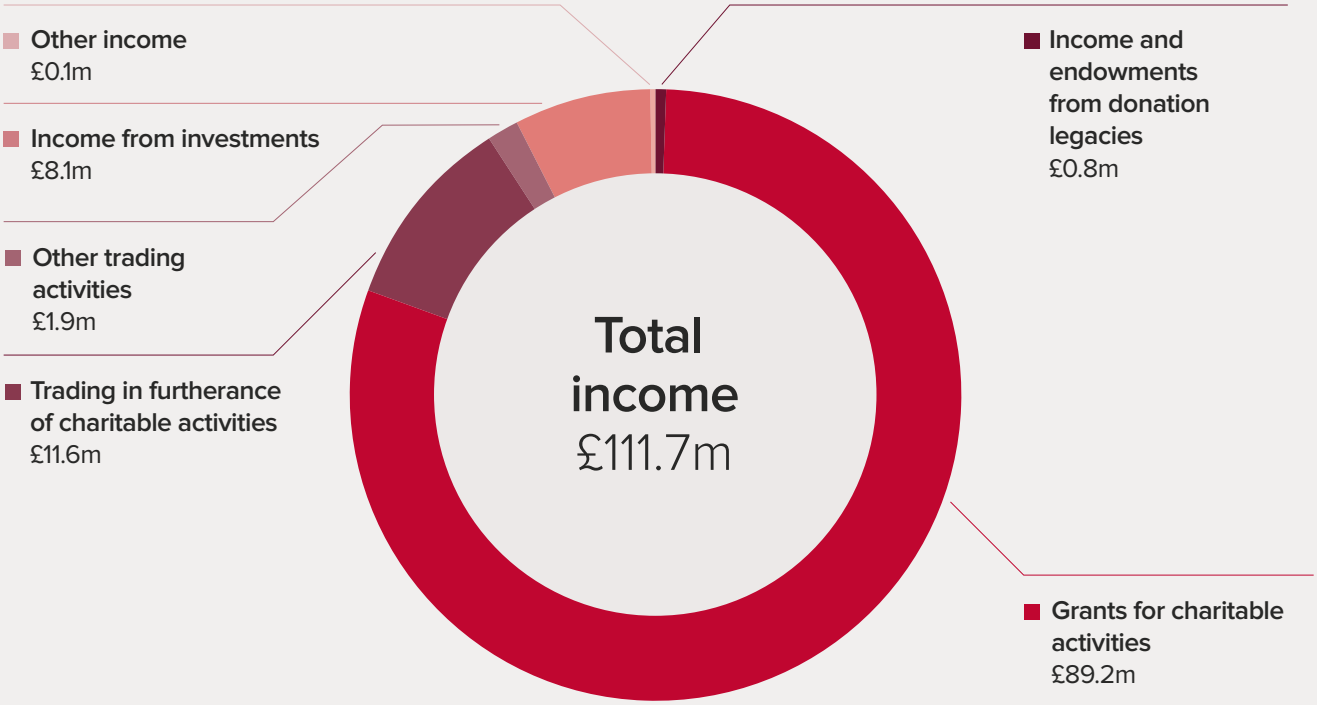
- promoting science and its benefits;
- supporting and recognising excellence in science;
- providing scientific advice for policy;
- fostering international and global cooperation; and
- education and public engagement.

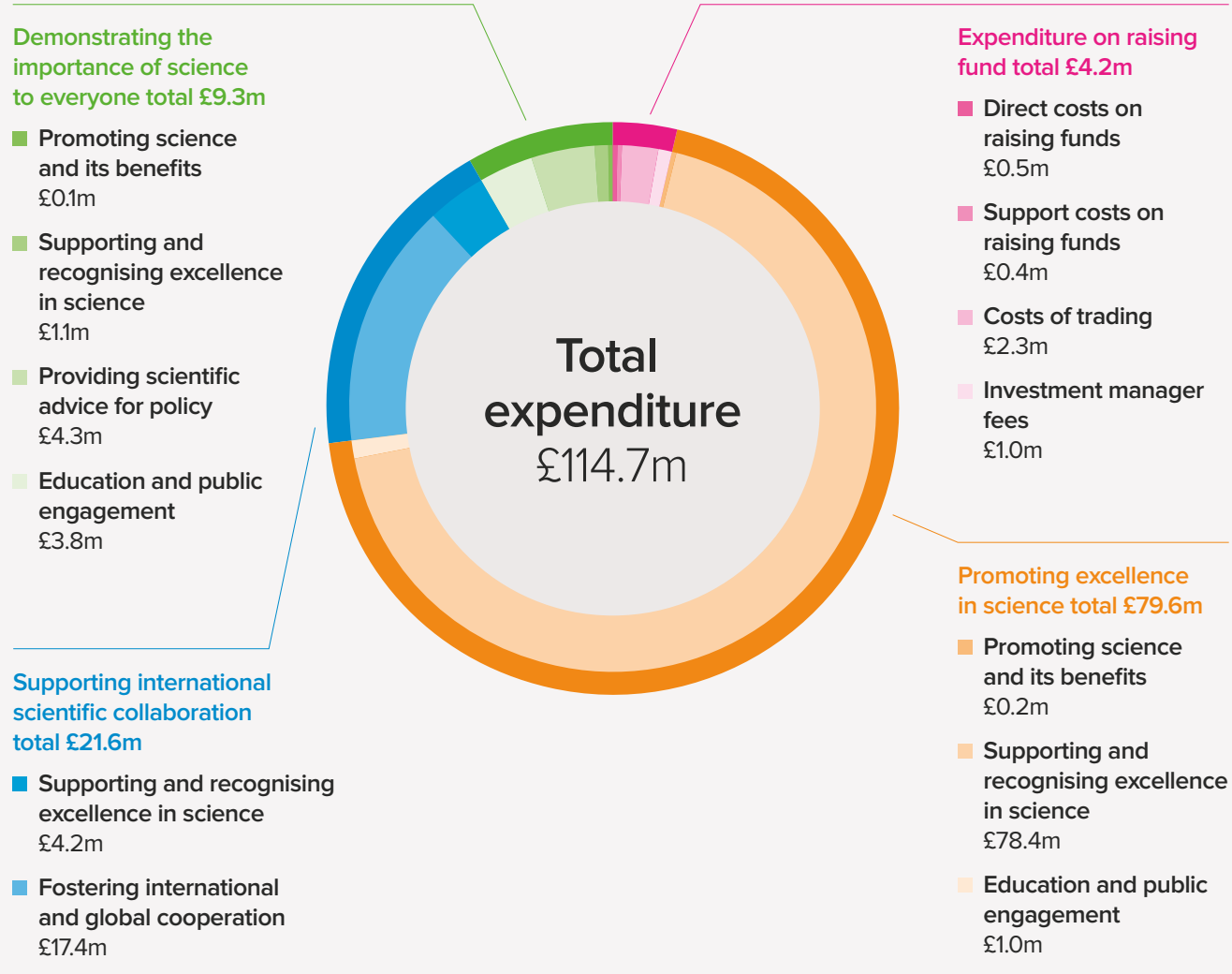
Each of the areas above supports the delivery of the three strategic objectives as set out in the current strategic plan. The expenditure chart on the following page illustrates expenditure by both strategic objective and expenditure category.

The expenditure to further the strategic objective of promoting excellence in science includes the majority of grant awards, the costs of the Society's publishing operation and the costs associated with lettings in furtherance of charitable objects. Expenditure in this area also includes costs arising from recognition of the excellence and creativity of scientists by election to the Fellowship and Foreign Membership and the awards to those scientists who are making a major contribution to society.

Expenditure to further the objective of supporting international scientific collaboration mainly constitutes grant awards on international schemes, providing scientific advice for areas of international policy and expenditure on events convening scientists from across the world.

The majority of the Society's expenditure to demonstrate the importance of science to everyone is in the form of providing scientific advice for policy and education and public engagement work.





Charitable expenditure is shown by strategic objective in the outer ring and by expenditure category as shown in the statement of financial activities in the inner ring.

Read more on page 34.

Strategy in action

Promoting excellence in science

Priorities:

1. Elect exceptional scientists to the Fellowship.
2. Advise on research landscape.
3. Demonstrate economic impact of science investment.
4. Fund outstanding researchers.
5. Recognise scientific achievements.
6. Encourage and support innovation.
7. Publish scientific research.

Above: Dr Asel Sartbaeva, University Research Fellow (2011 – 2019), conducts research into making vaccines thermally stable at room temperature without refrigeration, which is particularly relevant to low-income developing countries where cold storage and transport are not possible.

The Society's aim is to harness the expertise of its Fellowship to ensure that excellence in science is recognised and supported and that scientific work is of the highest quality.

Fund outstanding researchers

In 2018/19 the Society awarded £84.7 million in funding to outstanding scientists who are pushing the boundaries of human understanding. This is an increase in funding of 16% from 2017/18.

We support researchers in discovery-led and applied research across science, technology, engineering and mathematics.

Although the value of funding has increased there has been a decrease in the number awards. In 2017/18 all Research Professors, University Research Fellows and Dorothy Hodgkin Fellows were offered one-off additional grants as part of the Government's newly established Investment in Research Talent Fund however from 2018/19 additional funding is largely incorporated into existing grants in order to increase the attractiveness of the Society's schemes to outstanding early career researchers.

Number of grants awarded

	2018/19	2017/18	2016/17	2015/16	2014/15	Change over five year period
Early career researchers	345	627	290	278	293	18% ↑
International collaborations and travel	328	394	280	284	270	22% ↑
Capacity building	103	157	135	73	79	30% ↑
Industry, innovation and translation	59	49	26	10	16	269% ↑
Established researchers	48	67	64	49	67	28% ↓
Equipment and infrastructure	–	6	8	6	6	100% ↓
Total	883	1,300*	803	700	731	21% ↑
Total value	**£84.7m**	**£73.3m**	**£61.2m**	**£53.5m**	**£50.1m**	**69% ↑**

* In 2017/18 270 one off additional grants were awarded alongside a range of other new and one off grants. From 2018/19 additional funding is largely incorporated into existing grants.

Some of the people we fund:

Dr Anastasia Fialkov is a Royal Society University Research Fellow at the University of Sussex, who is conducting research into astrophysics and cosmology from the dark ages to the present day including the nature of dark matter, transient phenomena such as Fast Radio Bursts and low frequency radio observations.

Priorities

4

Royal Society Research Professor Corinne Le Quéré is Professor of Climate Change Science at the University of East Anglia. She instigated and led for 13 years an annual update of the global carbon budget, an international effort to keep track of global carbon emissions and their fate in the environment.

Priorities

1 4 7

Professor Martin Warren is a Royal Society Industry Fellow, at Mologic and the University of Kent, developing a rapid test for vitamin B12 deficiency in humans. B12 deficiency is linked to neural tube defects in unborn babies, brain atrophy in the elderly, cardiovascular disease and diabetes.

Priorities

4 6

Strategy in action continued

Elect exceptional scientists to the Fellowship

24% of new Fellows and 20% of new Foreign Members were women and this year the Society established special groups to oversee the 2019/20 nomination process for Fellows to ensure that the best candidates are put forward for election regardless of gender, ethnicity or where someone works.

Royal Society Fellow, Sir Greg Winter, was awarded the 2018 Nobel Prize in Chemistry for his work, which led to the development of new medicines for diseases such as rheumatoid arthritis.

Read more: List of our new Fellows on pages 30 – 31.

Advise on research landscape

A programme of work on research culture culminated this year with the *Research culture: Changing expectations* conference which brought together intertwined debates around research assessment, career progression, researcher development, research dissemination and research integrity. The programme reflected the Society's commitment to ensuring a working culture for scientists that allows them to be the best that they can be regardless of who they are or where they come from.

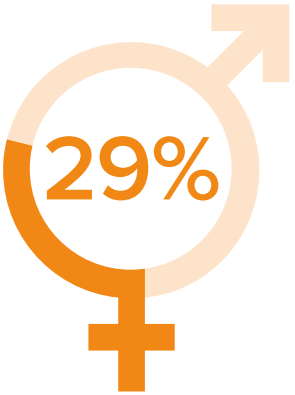
The theme of the Society's annual diversity conference was achieving diverse leadership in a research environment. Keynote speeches from Jacky Wright, Chief Digital and Information Officer at HMRC and Court of Appeal Judge, Lady Justice Rafferty showcased such diversity in leadership in other sectors.

Demonstrate economic impact of science investment

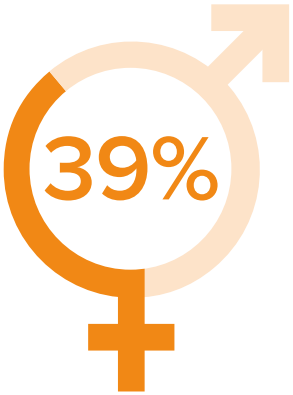
Financial support for research is key to driving productivity and therefore crucial to the future of the UK's economy. Having secured a Government commitment for the UK to invest 2.4% of GDP in Research by 2027, the Society has been continuing to press the Government to deliver.

We have been making the case at the highest levels of Government including with the Chancellor, Philip Hammond, who visited the Society in November. The commitment to investing in R&D was reinforced in his Spring Statement, reaffirming the additional £7 billion for science and innovation since 2016.

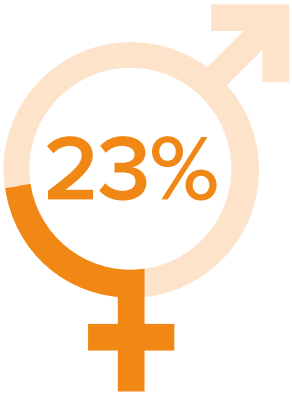
Our *Creating connections* meetings in Manchester, Newcastle and Cardiff have been bringing together leading experts from academia, industry, government and charities to explore issues around supporting and maximising R&D, with specific focus on local strengths and challenges.



of grants were awarded to women (2017/18: 28%).



of grants were awarded to women in our early career schemes (2017/18: 35%).



of new Fellows and Foreign Members were women (2017/18: 25%).

Recognise scientific achievements

Professor Jeffrey Gordon was awarded the Royal Society's Copley Medal, the world's oldest scientific prize. His work is in understanding the role of the microbes that live in our intestines and their impact on our health.

Priorities

5

Above: A selection of Royal Society journals from 2018/19.

Encourage and support innovation

Eight new Royal Society Industry Fellows have been appointed in 2018/19, linking academic researchers in collaborations with businesses to help develop the new technologies of the future. Recipients of the awards will work with employers such as Rolls-Royce, AstraZeneca and IBM on a range of areas of research including the development of new superalloys for gas turbine engines. Eleven Short Industry Fellowships and 15 Entrepreneurs in Residence were also awarded to support greater interaction between scientists working in academia and industry.

Publish scientific research

The Society's journals continue to publish high quality, cutting-edge research. The Society supports open access publishing as part of our commitment to the widest possible dissemination of research outputs. In 2018/19 48% of papers were published as open access, up from 43% in 2017/18. In 2018 31% of all papers published in the UK were open access. Papers from our journals were downloaded over 40 million times in 2018/19, up 18% on the previous year.

Looking forward 2019/20

The Society will:

- Increase grant expenditure to over £100 million including increasing the number of early career researchers and the value of awards across its flagship programmes, including the URF, Dorothy Hodgkin and Research Professorship schemes.
- Join forces with the Academy of Medical Sciences, British Academy, and the Royal Academy of Engineering to publish a report emphasising the value investment in research brings to the UK ahead of the Government's spending review.
- Increase engagement with industry including holding another two *Creating connections* events around the UK.
- Develop proposals to advance progression and recognition of underrepresented groups in science, and two temporary nominating groups will start their work to increase the nominations of candidates for election to the Fellowship from groups underrepresented because of geography, gender or ethnicity and from those working in industry.

Career tracker: 35 years of supporting early career researchers

The Society exists to encourage the development and use of science for the benefit of humanity. One of the main ways we do that is by investing in outstanding scientists, people who are pushing the boundaries of our understanding of ourselves and the world around us and applying that understanding to improve lives.

Thirty-five years ago, the Society introduced our University Research Fellowships (URFs) to support early career researchers. We have also been supporting early postdoctoral researchers who need to work flexibly through our Dorothy Hodgkin Fellowships (DHFs) for 23 years. Our goal in these schemes is to support early career researchers to develop independent research careers and give them freedom to pursue new and more innovative lines of research.

To mark the 35-year milestone we decided to ask those who have been supported by these schemes what difference it made to them. Of those who responded, 95% of URFs and 88% of DHFs are still in academia and 70% of URFs and 40% of DHFs, still in academia, have become professors.

Among those we have supported are a Nobel Prize winner and a Fields medallist, They include innovators and entrepreneurs, researchers whose work has shaped domestic and international policy and scientists who inspire the public to engage with the wonder of science.

80% of URFs had secured their first significant research grant as a principal investigator by the end of their fellowship. Nine in ten respondents to our survey were currently supervising at least one postgraduate researcher. From revolutionary DNA sequencers, to flexible plastic electronics, 'bendy' displays and 'sonic nets' which stop birds colliding with aircraft, many of our fellowship alumni have commercialised their research with major economic, environmental and societal impacts.

Alumni have also made a major contribution, at a national and international level, in policy areas including: pandemic planning; bioterror-related smallpox outbreaks; eradication programmes for diseases including malaria and rubella; the potential effects of climate change on marine ecosystems; research on traffic congestion; big data and machine learning and education; and gender equality in science.

84% of the people we have funded have come from the UK but our schemes have become increasingly international over the years with a quarter of those completing their fellowship in the last 10 years coming from other EU countries. The UK has had a small net 'brain gain' with more non-UK nationals staying in the UK than UK nationals who are now working overseas.

Over 90% of URF alumni were currently engaged in international collaboration and amongst DHF alumni the proportion was over 85%.

90%

Over 90% of URF alumni were currently engaged in international collaboration.

Nobel Prize winner Professor Sir Kostya Novoselov created a new field of research with his work on Graphene, a new material that is the strongest and most conductive material ever recorded.

Royal Society Professor for Public Engagement in Science, Brian Cox is the presenter of the BBC's *Wonders of...* series and *Stargazing Live*.

Professor Janet Hemingway was an adviser to Sri Lanka's malaria-control programme which has seen the disease eradicated in that country.

Professor Sir Shankar Balasubramanian co-founded the revolutionary DNA sequencing company Solexa, which was sold for $600 million.

Professor Claire Spottiswoode shares her time between the Universities of Cape Town and Cambridge. A field biologist working on the evolution, ecology and conservation of species interactions, she has been awarded the Bicentenary Medal of the Linnean Society of London and is the holder of a European Research Council Consolidator Grant.

Professor Dame Nancy Rothwell (main image) is the first female President and Vice-Chancellor of the University of Manchester.

70%

of URFs and

40%

of DHFs, still in academia, have become professors.

Strategy in action continued

Supporting international scientific collaboration

Priorities:

1. Proactive engagement in major issues.
2. Address global challenges.
3. Partner with leading scientific nations on new technologies.
4. Implement Commonwealth programmes.
5. Convene leading international meetings to advance science.

Above: Attendee at the second international summit on human genome editing.

Science is an inherently international activity. The Society's aim is to reinforce the importance of science to build partnerships between nations, and to promote international relations and science's role in culture and society.

Above: Julie Maxton (left) with Marjan Scharloo (right) at the Teylers Museum in Haarlem, Holland, where watercolours from the Royal Society archive are on exhibit.

Proactive engagement in major issues

In November 2018, the Society, the US National Academy of Sciences and the Academy of Sciences of Hong Kong co-hosted the second international summit on human genome editing. The meeting was a focus of international attention due to a claim by a Chinese scientist about the birth of the first genetically edited babies.

The Society has stated that any clinical use of heritable genome editing would be irresponsible at this time and has established a commission, with the US National Academies of Sciences and Medicine and a number of other scientific academies from around the world, as a means of establishing an international governance framework for research into heritable genome editing.

During the year we also published a joint report with the US National Academy of Sciences on dealing with carbon dioxide at scale and held a forum on climate change and ecosystems. There was also a policy dialogue with the Chinese Academy of Sciences, focusing on low-carbon energy.

In November, the Society hosted the *UK-China joint commission* convening representatives from the UK and Chinese governments to discuss a bilateral plan of activity for the future.

Dr Nipon Pisutpaisal of the King Mongkut's University of Technology North Bangkok was awarded a Newton Advanced Fellowship to work with Professor Tom Curtis at Newcastle University on developing novel systems to remove sulphur from industrial biogas. The award will allow Dr Pisutpaisal's group to develop expertise in molecular biology and bioinformatics research for industrial applications for energy recovery from industrial waste, and together with the Curtis laboratory, work on developing new technologies relevant to Thailand's economic development.

Priorities

1 2 3

Strategy in action continued

Address global challenges

The Society launched the Future Leaders – African Independent Research (FLAIR) scheme in association with the African Academy of Sciences and supported by the Government's Global Challenges Research Fund (GCRF). The scheme will support early career researchers, who have the potential to become leaders in their field, undertaking cutting-edge scientific research that will address global challenges facing developing countries. It was planned that awards would be made during the year however, being the first scheme of its kind for the Society, due diligence procedures took longer than initially anticipated and FLAIR Fellows were selected in 2018/19 with awards made in 2019/20.

The GCRF is a £1.5 billion fund announced by the UK Government to support cutting-edge research that addresses the challenges faced by developing countries. The Fund forms part of the UK's Official Development Assistance commitment. As part of the GCRF, the UK national academies, including the Society, have launched interdisciplinary challenge-led grants with a focus on resilience. The Society received just over £6 million from the GCRF in 2018/19.

Image credit: monsitj

Partner with leading scientific nations on new technologies

In 2018 the Society held a series of bilateral meetings with the US National Academy of Sciences (NAS) looking at data and AI. The meetings were designed to create connections across research communities. They also generated new insights on AI and work and explainable AI. Building on those links, in 2019 the Society will work with the US NAS to establish an international dialogue that identifies areas where international collaboration is necessary to create an environment of careful stewardship of AI technologies.

Implement Commonwealth programmes

The Society is the national science academy for the UK and Commonwealth and in 2018 we hosted the inaugural meeting of Commonwealth Science Advisers. The meeting, part of the Commonwealth Summit, brought together 31 Commonwealth nations – from Australia to Vanuatu – to share their experiences of bringing science into the world of policy to help address global challenges.

Priorities

1 2 4 5

431

international grants awarded

Priorities

2

£14.8m

of grants awarded to foster international and global cooperation

30

FLAIR fellows selected

Convene leading international meetings to advance science

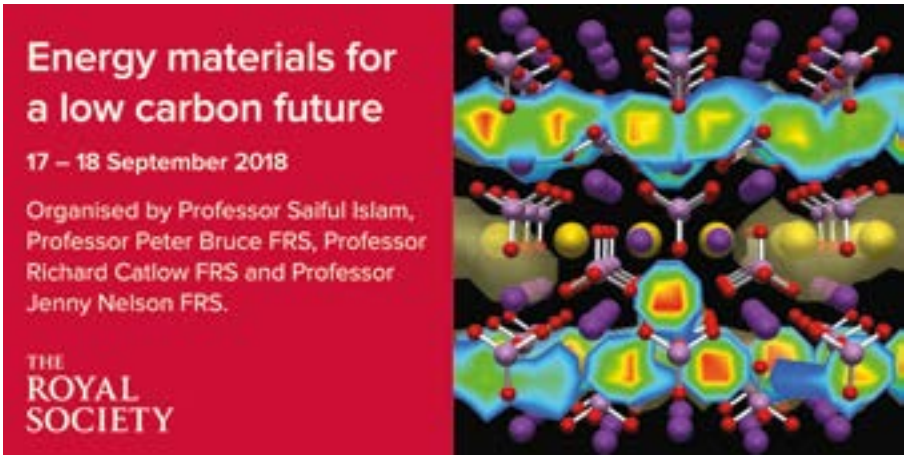
The Society runs a series of internationally renowned scientific meetings that bring together leading scientific experts to discuss the latest research and to develop knowledge of their field. The meetings are selected, in a competitive process, by the leading international scientists that make up the Society's Hooke Committee. Topics this year have included: *the transformative potential of data and image analysis for eye care*; *new technologies in cancer mechanobiology*; *energy materials for a low carbon future*; and *CRISPR ecology and evolution*. A number of the scientific meetings in the year were held at the Society's centre for scientific and academic conferences, the Kavli Royal Society International Centre at Chicheley Hall.

38
meetings were held with

2,102
attendees at the 33 UK meetings and

62%
of the 589 speakers were from overseas.

Priorities
1 5



Above: Social media card for the scientific discussion meeting, Energy materials for a low carbon future. Image credit: Saiful Islam, University of Bath.

Looking forward 2019/20

The Society will:

- Work with the US National Academies of Sciences and Medicine to convene an international commission to develop principles, criteria and standards for the clinical use of genome editing of the human germline, should use of the technology be considered acceptable by society.
- Award, with the African Academy of Sciences, the first round of FLAIR Fellowships to help address global challenges facing developing countries.
- Continue to call for a deal on Brexit that:
  - Keeps highly-skilled scientists working in the UK and ensures international talent continues to come here.
  - Keeps access to money and networks that support international collaboration.
  - Maintains regulatory alignment that allows access to new medicines and technologies.
- Take a delegation to China to build on scientific partnerships.
- Host the *5th joint science conference of the Western Balkans process* exploring the role of science in supporting peace and prosperity in the region.

Strategy in action continued

Science and the European Union

Since the Brexit referendum in 2016 the Society has been committed to minimising any negative impact on UK science as a result of leaving the EU. One in six researchers in UK universities and research institutions are from elsewhere in the EU. NHS patients have benefited from EU regulatory alignment to allow access to cutting-edge medical treatments as part of clinical trials. On leaving the EU, the UK could lose access to over £1 billion a year in EU research funding.

Over the past year the Society has continued to make the case for the closest possible relationship between UK and the rest of European science. We have emphasised Brexit's possible consequence for all European science. In October the President of the Society led a group of 29 Nobel Prize Winners and six Fields medallists from all over Europe who wrote to Prime Minister May and President Juncker highlighting the growing strength of European science, citing the ease of collaboration nurtured by the EU as a key factor in this.

The Society has continued to engage its partners throughout Europe to ensure that ways are found to maintain long established scientific collaboration, whatever the political circumstances. Building on previous years, the Society's leadership made visits to academies, funding organisations, universities and ministries across Europe. We have convened a bilateral international meeting with the Académie des Sciences in France and loaned collections from our archives to the Teylers Museum in the Netherlands for an exhibition on the Bauer brothers' work.

The Society has also continued to work closely with partner academies across Europe through membership of two academies' networks, EASAC and ALLEA. With ALLEA, this included hosting a pan-European conference on data governance, with participants from across Europe.

The Society has published a series of factsheets focusing on the value to the UK of maintaining the closest possible relationship with EU and on the threat of a no-deal Brexit. We also published a report on the value of EU funding across research disciplines. Our evidence has regularly featured in the media and in political debate.

We have been in regular contact with Government, and Royal Society Fellows have given evidence to a range of parliamentary select committees and appeared widely in the media. The last three Presidents of the Society wrote to *The Times* in July 2018 warning that "trashing relationships with the EU and member states will jeopardise global scientific progress".

The Prime Minister gave a speech on science in May 2018 in which she spoke of the UK wanting a "deep science partnership with the EU" echoing much of what the Society has been saying. The Government has also committed that all successful UK bids into Horizon 2020 submitted before exit will be underwritten and that all UK participation in Horizon 2020 calls that are open to third-country participants (from the date of exit to the end of the programme) will also be underwritten.

The Society has also been active in responding to the Government's *White Paper on the UK's future skills based immigration system*. We are seeking to ensure that the UK has an immigration system that keeps highly skilled researchers working in the UK and ensures that talented people from around the world still choose to come here and work alongside our home-grown scientists.

Image credit: georgeclerk

1 in 6

academic staff in UK Higher Education Institutions are from elsewhere in the EU.

+£1bn

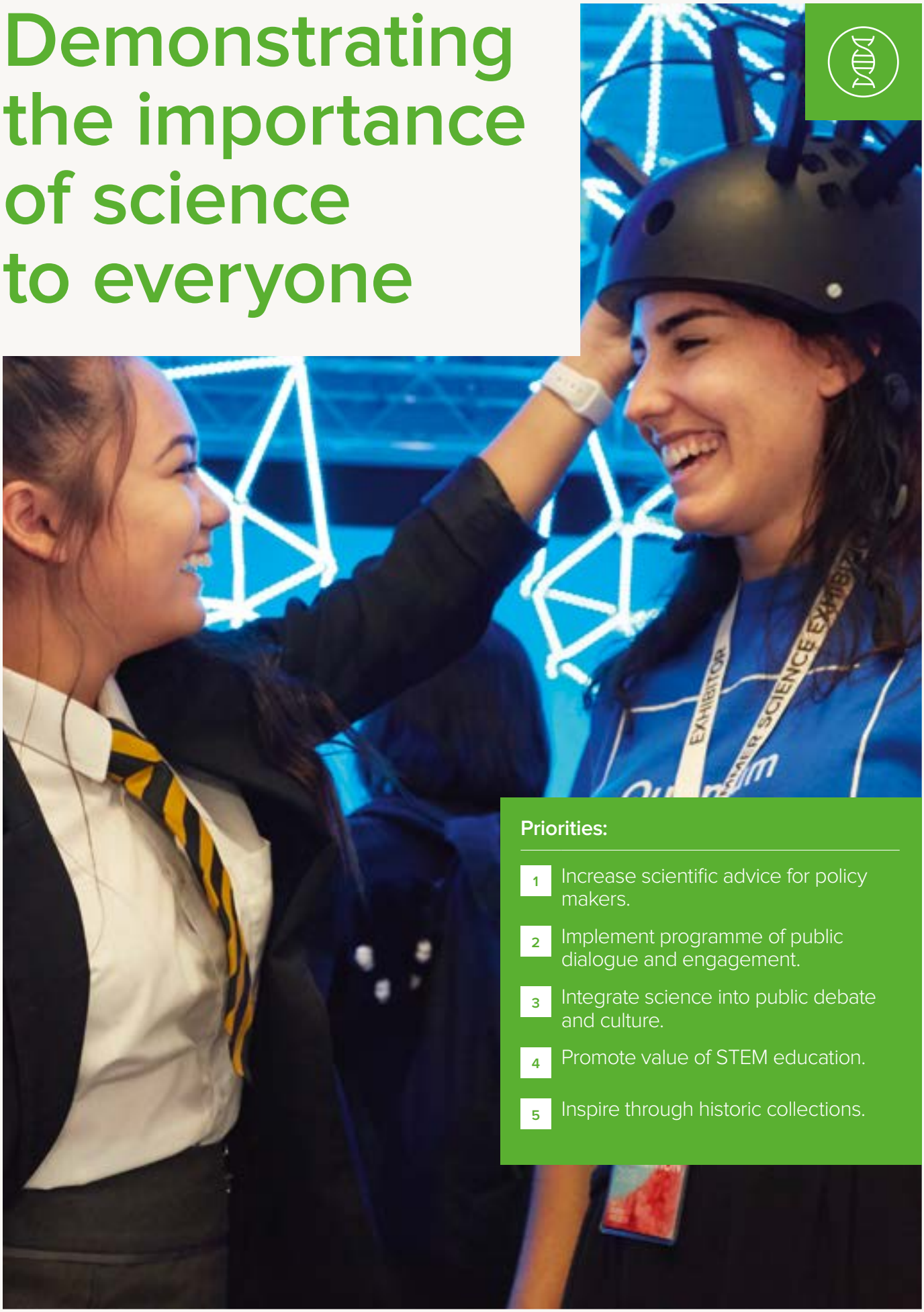
UK research receives over £1 billion a year in EU research funding.

Regulatory alignment

between the UK and the EU allows NHS patients access to many clinical trials of new treatments.

Strategy in action continued

Demonstrating the importance of science to everyone



Priorities:

1. Increase scientific advice for policy makers.
2. Implement programme of public dialogue and engagement.
3. Integrate science into public debate and culture.
4. Promote value of STEM education.
5. Inspire through historic collections.

Above: Participants at the Summer Science Exhibition, 2018.

Science is influenced by culture and by other developments in society just as scientific thinking and innovation influence how people live their lives. It is important that the Society engages with different groups in society and with the public in general to find out about their experiences, listen to their views and to make science part of wider conversation.

Increase scientific advice for policy makers

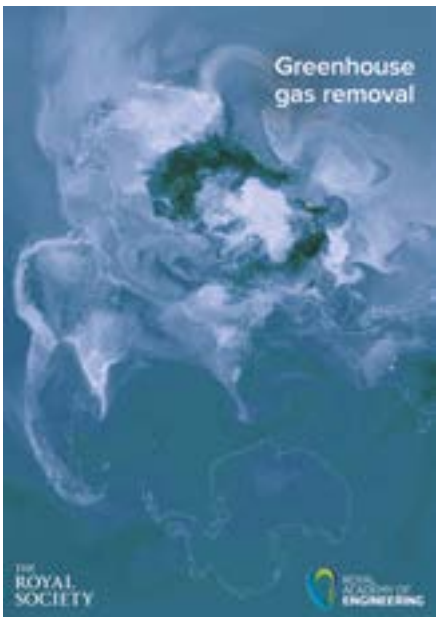
The Society has continued to engage policy makers and the public about the use of genetic technologies. We have also been engaging policy makers on issues including enabling the rapid and safe development and deployment of all forms of data science, and looking at the elements of science and technology that will deliver low-carbon futures.

Our report *Greenhouse gas removal* (right), produced jointly with the Royal Academy of Engineering, identified the range of available greenhouse gas removal methods, the factors that will affect their use and considers how they may be deployed together to meet climate targets, both in the UK and globally. The report was featured by the *BBC, Financial Times, The Times, The Guardian* and *The Independent,* and the full report was downloaded 1,664 times with the summary downloaded 820 times. We also briefed the Government's Chief Scientific Advisers and held an event for MPs and Peers on why the 1.5 degree climate change target matters and what we can do to meet it.

Accurate, concise and unbiased evidence is increasingly important to policy makers and the Society has worked with the Academy of Medical Sciences to outline the principles by which evidence should be synthesised. The Society works with the Policy Institute at King's College London to run a Policy Primer that helps researchers understand the rapidly changing policy landscape in the UK, and how scientific research helps to shape, and is shaped by, Government policy. The annual Royal Society pairing scheme also brought 28 scientists together with MPs and Civil Servants to learn about each other's work.

Implement programme of public dialogue and engagement

The Society has been asking the public about their attitudes towards neural interfaces in a series of dialogue sessions run across the UK. These devices placed on or in the human body, interact with a person's nervous system and can be used to restore hearing, sight or movement but they also raise questions about human enhancement. We have been seeking the public's views on: the acceptability of levels of invasiveness in various contexts; criteria used to distinguish between enhancement and non-enhancement applications; definitions made by society of desirable and undesirable uses of neural interfaces; and issues around privacy, equity, and social justice in relation to the technologies. Those views will be published in 2019 and have helped inform our work in the area.



Priorities

1 3

> "If the UK acts now on greenhouse gas removal, we can reach national emissions targets and show how a major industrialised economy can play a leading role in meeting the goals of the Paris Agreement."
>
> Professor Gideon Henderson FRS, Chair of the Royal Society working group on greenhouse gas removal.

Strategy in action continued

Integrate science into public debate and culture

The Society's Summer Science Exhibition saw close to 12,000 people through our doors to meet the scientists doing some of the most exciting and cutting-edge research from across the UK. Over 2 million people had a taste of the Exhibition when it featured on ITV London's early evening news. We had 240,000 page views on our website and #SummerScience reached 4.5 million people on social media.

Beyond the Summer Science Exhibition we held numerous events around the UK. As part of the celebrations for our Young People's Book Prize, we had 200 children and parents doing hands-on activities at a local library in Strabane, Northern Ireland, and Mark Miodownik gave the Royal Society Michael Faraday Lecture at the Society and to a packed crowd at the Cheltenham Science Festival.

On social media we have over 230,000 followers on Twitter, which is a 29.6% increase on 2017/18. On Facebook, we have 206,000 fans, up 8.4% on last year. Our YouTube channel has 43,000 subscribers, up almost 30% and will be a focus for the Society in 2019/20. Our website had 1.7 million users and 2.6 million sessions, up 19.1% and 16.7% on last year respectively.

The Society has also continued our collaboration with the Royal Society of Edinburgh and the judiciary to ensure that the best scientific guidance is available in the courts. We held a range of meetings covering topics including the autonomy of robots, and whether psychopathy is a brain disorder.

A highlight of our work on AI and data governance was our *You and AI* series of public events. The series was supported by Google Deepmind and included speakers Demis Hassabis of Google DeepMind and Joseph Stiglitz, Nobel Prize-winning economist. There were also expert panel events hosted by Professor Jim Al Khalili in Manchester and by Professor Brian Cox, our Professor for Public Engagement in Science, in front of a sell-out crowd of 1,900 at the Barbican in London. The lectures have had over 230,000 views on YouTube.

Above: Participants at the Summer Science Exhibition, 2018.

Promote value of STEM education

Following the publication of our *Computing in schools* report in 2018, the Government committed £100 million to ensure that every secondary school pupil can study computing. In 2019 the government took a step towards delivering on that commitment with the establishment of the National Centre of Computing Education.

As part of our ongoing campaign to create the conditions for young people in the UK to receive a broader, more balanced and connected education, including science and maths, beyond age 16, the Society has called for an independent review of post-16 education in the next parliament. This is essential if we want all young people to have an engaging and rounded education that supports academic achievement but also develops the skills, knowledge and qualities needed to flourish in life, learning and work. We are also engaging with a wide range of stakeholders through a public dialogue on the benefits and the challenges of changing the post-16 education system, particularly for students, teachers and employers.

Priorities

2 4

230,000

over 230,000 Twitter followers

206,000

over 206,000 Facebook fans

Inspire through historic collections

Following the success of the first series of our *People of science* films, the Society has been filming a second series, which will launch in 2019. The films see Professor Brian Cox joining leading scientists to delve into the Society's rich archive of science artefacts to tell the stories of extraordinary scientists, their science and how it is still influencing our understanding of the world today.

The Society also continues to add to our historic collections and additions this year have included the papers of William Hyde Wollaston, Sir James Mackenzie Davidson and Sir Charles Vernon Boys. We have also acquired books by Erasmus Darwin and a pre-publication, proof copy of James Watson's book *The Double Helix*.

Above: *Eight specimens of beetles*, from *Zoologischer Atlas*, by Johann Friedrich Eschscholtz, 1829.

Priorities

2 3 5

Above: Sarah-Jayne Blakemore, winner of the Royal Society Insight Investment Science Book Prize 2018, with her winning book, *Inventing Ourselves*.

Professor Sarah-Jayne Blakemore was awarded the Royal Society Insight Investment Science Book Prize. The former Royal Society University Research Fellow's book, *Inventing Ourselves*, explores how the brain develops during adolescence to shape the adults we become.

Priorities

3

Looking forward 2019/20

The Society will:

- Stage a series of *You and the planet* public events to stimulate public debate on how science can inspire a positive vision of protecting and enhancing the health of the planet.
- Showcase the work of 22 of the UK's most cutting-edge research teams at the Summer Science Exhibition.
- Hold a series of *Places of science* regional events to demonstrate the relevance of science to communities across the UK.
- Publish evidence synthesis reports to inform a long-term vision for how the UK manages its land post-Brexit.
- Publish a report on neural interfaces and reveal the outcomes of a public engagement exercise exploring public attitudes towards these technologies.
- Continue to press for political commitments to an independent review of post-16 education in the next parliament.
- Publish primers for courts on statistics and collision analysis to assist the judiciary in handling scientific evidence.
- Launch a second series of six *People of science* films.

Science in Africa

Science is global and supporting international science benefits the whole world. That is why the Royal Society supports international scientific collaboration, improving scientific quality, building scientific capacity and addressing global challenges and the United Nations Sustainable Development Goals.

The Society runs a number of grant schemes to support science in Africa.

Our Challenge-Led Grants scheme has seen £7 million awarded to 15 interdisciplinary collaborations in Africa, Asia and Latin America. These consortia will generate new approaches to significant and complex resilience problems facing developing countries and each consists of one UK research group and two international research groups. The initiative is a collaboration between the Society, the British Academy, the Royal Academy of Engineering and the Academy of Medical Sciences. Projects in Africa that are funded under the scheme deliver research in sanitation; drought resilience; and developing novel therapeutic approaches for Kaposi's sarcoma, the most common HIV-associated cancer in sub-Saharan Africa.

The Royal Society-DFID Africa Capacity Building Initiative aims to strengthen research and training capacity across sub-Saharan Africa by creating sustainable scientific networks. The model incorporates integrated PhD scholarships and shared supervision between UK-based and African consortia members. Funded by DFID, 10 awards of up to £1.2 million each have been awarded to support over 30 postgraduate students from sub-Saharan Africa. Projects include low-cost urban water supply and sanitation systems, developing materials for solar cells and unravelling the role of animals in African soil ecology.

In 2018/19 the Society launched our FLAIR scheme in association with the African Academy of Sciences and supported by the Government's GCRF. The scheme will support early career researchers in sub-Saharan Africa who have the potential to become leaders in their field undertaking cutting-edge scientific research that will address global challenges facing developing countries.

Fishery management
Professor Andrew Brierley from the University of St Andrews, will be working with Dr Safari Methusela Kinung'hi from the National Institute for Medical Research in Tanzania and Dr Robert Jeremiah Kayanda from the Lake Victoria Fisheries Organization in Uganda. The project is a collaboration between fisheries scientists, experts on parasite infection, social scientists and healthcare providers from Tanzania, Kenya, Uganda and the UK. The goal is to produce better informed fishery management and healthier human populations with a more secure food supply.

Meeting Energy needs
Mrs Mary Suzan Abbo from Makerere University in Uganda, Professor Bernard M'Passi-Mabiala from Marien Ngouabi University in the Republic of the Congo and Dr Consalva Msigwa from the Dar es Salaam Institute of Technology in Tanzania are working with Professor Jon Lovett and Dr Andrew Ross from the University of Leeds on solar treatment of biomass for power generation. The goal is to help address Africa's chronic shortage of clean renewable energy.

Renewable energy technology development (main image)
Professor Joshua Meyer of the University of Pretoria in South Africa, Dr Mohammad Elahee of the University of Mauritius and Dr Olabode Olakoyejo from the University of Lagos in Nigeria are working with Professor Christos Markides of Imperial College London on an advanced solar-energy technology suited to the environmental and developmental conditions of Africa. They are part of the Royal Society-DFID Africa Capacity Building Initiative.

People

At the core of the Society are people, from Fellows and staff to generous donors and the scientists who are supported through the Society's funding programmes.

Further information is available online.

Fellows of the Society elected in 2018

Jim Al-Khalili
Professor of Physics and Professor of Public Engagement in Science, Department of Physics, University of Surrey

Polly Arnold
Crum Brown Chair of Chemistry, EaStCHEM School of Chemistry, University of Edinburgh

Jillian Banfield
Professor, University of California, Berkeley, Lawrence Berkeley National Laboratory and University of Melbourne

Margaret Brimble
Distinguished Professor, Chair of Organic Chemistry and Director of Medicinal Chemistry, School of Chemical Sciences and School of Biological Sciences, University of Auckland

Neil Brockdorff
Wellcome Trust Principal Research Fellow, Department of Biochemistry, University of Oxford

Frank Caruso
Melbourne Laureate Professor and NHMRC Senior Principal Research Fellow, Department of Chemical Engineering, The University of Melbourne

Vincenzo Cerundolo
Director, MRC Human Immunology Unit, Weatherall Institute of Molecular Medicine, University of Oxford

Kevin Costello
Krembil Foundation William Rowan Hamilton Chair in Theoretical Physics, Perimeter Institute for Theoretical Physics

Robert Crabtree
Whitehead Professor of Chemistry, Department of Chemistry and Energy Sciences Institute, Yale University

Philip Dawid
Emeritus Professor of Statistics, Department of Pure Mathematics and Mathematical Statistics, University of Cambridge

Peter Dayan
Professor of Computational Neuroscience, Gatsby Computational Neuroscience Unit, University College London

Richard Dixon
Distinguished Research Professor, Department of Biological Sciences, University of North Texas

Gregory Edgecombe
Merit Researcher, Department of Earth Sciences, The Natural History Museum

Wenfei Fan
Professor of Web Data Management, School of Informatics, University of Edinburgh

Roger Goody
Emeritus Director, Max-Planck-Institute of Molecular Physiology

Robin Grimes
Professor of Materials Physics, Department of Materials, Imperial College London and Chief Scientific Adviser, Foreign & Commonwealth Office

Gregory Hannon
Royal Society Wolfson Research Professor of Molecular Cancer Biology and Director, Cancer Research UK, Cambridge Institute, University of Cambridge

Demis Hassabis
Founder and CEO, DeepMind

Judy Hirst
Deputy Director, MRC Mitochondrial Biology Unit, University of Cambridge

Graeme Jameson
Laureate Professor and Director of the Centre for Multiphase Processes, University of Newcastle (Australia)

Harren Jhoti
President and CEO, Astex Pharmaceuticals

Sophien Kamoun
Senior Scientist, The Sainsbury Laboratory

Andrew King
Wellcome Trust Principal Research Fellow and Professor of Neurophysiology, Department of Physiology, Anatomy and Genetics, University of Oxford

Dimitri Kullmann
Professor of Neurology, Department of Clinical and Experimental Epilepsy, Institute of Neurology, University College London

Dominic Kwiatkowski
Head of Parasites and Microbes Programme, Wellcome Sanger Institute and Professor of Genomics and Global Health, University of Oxford

Richard Marais
Director, The CRUK Manchester Institute, University of Manchester

Catherine Martin
Project Leader, Department of Metabolic Biology, John Innes Centre

Elon Musk
Engineer, inventor and entrepreneur

Peter O'Hearn
Research Scientist, Facebook, and Professor of Computer Science, University College London

Vassilis Pachnis
Senior Group Leader, Development and Homeostasis of the Nervous System Laboratory, The Francis Crick Institute

Tracy Palmer
Professor of Molecular Microbiology, Division of Molecular Microbiology, School of Life Sciences, University of Dundee

Colin Prentice
AXA Professor of Biosphere and Climate Impacts, Imperial College London

Lalita Ramakrishnan
Professor of Immunology and Infectious Diseases and Head of Molecular Immunity Unit, Department of Medicine, University of Cambridge

Nancy Reid
University Professor of Statistical Sciences and Canada Research Chair, Department of Statistical Sciences, University of Toronto, and Director, Canadian Statistical Sciences Institute

Graham Richards
Chairman and Founder, Oxford Drug Design Ltd and Professor, Department of Chemistry, University of Oxford

David Richardson
Deputy Director, Optoelectronics Research Centre, University of Southampton

Sheila Rowan
Director, Institute for Gravitational Research, University of Glasgow

Ingrid Scheffer
Chair of Paediatric Neurology, The University of Melbourne, Honorary Senior Principal Research Fellow, The Florey Institute of Neuroscience and Mental Health, and Director of Paediatrics, Austin Health

Michelle Simmons
Professor of Physics and Director, Centre of Excellence for Quantum Computation and Communication Technology, University of New South Wales

John Smol
Professor, Department of Biology and School of Environmental Studies, Queen's University (Canada)

Timothy Softley
Pro-Vice-Chancellor (Research and Knowledge Transfer), University of Birmingham

John Speakman
Chair in Zoology, Institute of Genetics and Developmental Biology, University of Aberdeen and '1000 talents' Professor, Institute of Genetics and Developmental Biology, Chinese Academy of Sciences

Graeme Stephens
Director, Center for Climate Sciences, Jet Propulsion Laboratory, California Institute of Technology

Angela Strank
BP Chief Scientist and Head of Technology, Downstream, BP plc

Charles Swanton
Director, CRUK UCL/Manchester Lung Cancer Centre, UCL Cancer Institute and Senior Group Leader, Francis Crick Institute

Peter Visscher
Professor and Chair of Quantitative Genetics and Director, Program in Complex Trait Genomics, University of Queensland

Guy Wilkinson
Professor of Physics, Department of Physics, University of Oxford

Geordie Williamson
Professor of Mathematics, School of Mathematics and Statistics, University of Sydney

Daniel Wise
James McGill Professor, Department of Mathematics and Statistics, McGill University

Nikolay Zheludev
Deputy Director, Optoelectronics Research Centre, University of Southampton and Co-Director, The Photonics Institute, Nanyang Technological University

Foreign Members elected in 2018

Carolyn Bertozzi
Anne T and Robert M Bass Professor of Chemistry, Department of Chemistry and Howard Hughes Medical Institute, Stanford University

Martin Chalfie
University Professor, Department of Biological Sciences, Columbia University

Sebsebe Demissew
Professor of Plant Systematics and Biodiversity, College of Natural Sciences, Addis Ababa University and Executive Director, Gullele Botanic Garden

Jeffrey Friedman
Marilyn M Simpson Professor, Laboratory of Molecular Genetics, Rockefeller University and Investigator, Howard Hughes Medical Institute

Fabiola Gianotti
Physicist, Director-General, CERN

Albrecht Hofmann
Emeritus at the Max Planck Institute for Chemistry and Senior Visiting Research Scientist and Adjunct Professor, Lamont-Doherty Earth Observatory, Columbia University

Butler Lampson
Technical Fellow, Microsoft Corporation

Tullio Pozzan
Director, Department of Biomedical Sciences, Italian National Research Council and Professor of General Pathology, University of Padova

Joachim Sauer
Professor of Physical and Theoretical Chemistry, Department of Chemistry, Humboldt-Universität zu Berlin

Adi Shamir
Computer Science and Applied Mathematics, The Weizmann Institute of Science

Honorary Fellow elected in 2018

David Willetts
Executive Chair of the Resolution Foundation, Visiting Professor at King's College, London and member of the House of Lords

People continued

Above: Royal Society Fellows and Foreign Members elected in 2018.

Fellows

Fellows are elected through a peer-review process on the basis of their contribution to science. It is from the eminence of its Fellowship and Foreign Membership and its independence from government that the Society derives its authority in scientific matters. Fellows and Foreign Members fulfil a range of responsibilities for the Society on a voluntary basis. Many others, scientists and non-scientists, also contribute to the work of the Society on a voluntary basis. The Fellowship is supported by staff based in London.

A new fellowship election process was implemented during the year, moving it from a paper-based process to an online system. This change facilitated a significant increase in the number of votes received.

Scientists

The Society has played a part in some of the most fundamental, significant, and life-changing discoveries in scientific history and the Society's scientists continue to make outstanding contributions to science in many research areas. The Society is currently supporting 1,176 (2018: 1,111) researchers through its research fellowships. These researchers receive long-term funding from the Society and range from early-career researchers just starting their independent careers to some of the most distinguished senior researchers in the country.

Staff

The Society aims to offer fair pay to attract and retain appropriately qualified staff to lead, manage, support and deliver the Society's aims on behalf of its Fellows and Council. As at 31 March 2019, the Society had 212 staff. The Society's staff are organised into programmes, services and trading sections.

Volunteers

A number of our public engagement events, including the Society's Summer Science Exhibition, and other work would not be possible without the contribution of our volunteers and the Society is grateful to all those who have contributed to its work over the past year.

1,176

Researchers currently supported by the Royal Society through its research fellowships

1,111

Researchers in 2018 supported by the Royal Society through its research fellowships

Equality, diversity and inclusion

As the UK's national academy of science, engineering, technology and mathematics, the Society has a particular responsibility to ensure that diversity and inclusion are embedded across all of its activities and are part of the culture of the organisation. The Society publishes an annual diversity data report.

As an employer, the Society is committed to providing an environment free from discrimination, bullying, harassment or victimisation and to creating a culture of inclusivity where individual differences and the contributions of all staff are recognised and valued.

The Society provides equality of opportunity for all and will not tolerate discrimination on grounds of age, disability, gender reassignment, marriage and civil partnership, pregnancy and parenthood, race, religion or belief, sex or sexual orientation.

Remuneration policy

The aim of the Society's remuneration policy is to maintain sustainable, fair levels of pay at the same time as attracting and retaining the right people to deliver our charitable objectives. In setting appropriate levels of senior management pay, the Society considers the skills, experience and competencies required for each role, and the remuneration level for those roles in sectors where suitable candidates would be found. Remuneration packages for all staff are benchmarked using proprietary pay surveys and external advisers. The last review of pay structures was undertaken during 2018.

All Trustees are unremunerated.

Gender pay gap reporting

The Society has voluntarily completed gender pay gap reporting in order to better understand how we compare with other organisations. At the 'snapshot' date of 5 April 2018, the mean gender pay gap was -0.2% and the median gender pay gap was 11.4% compared to the national average of 14.35% and 11.8% respectively, as reported on the Gender Pay Gap website as at 28 March 2019.

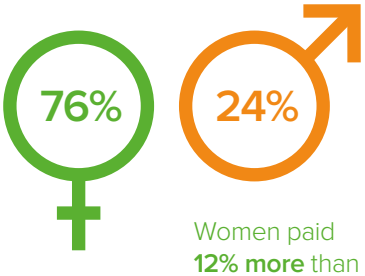
Gender pay gap reporting

On 5 April 2018, we employed 174 full-pay relevant employees.

Median
men earn **11.4%** more than women

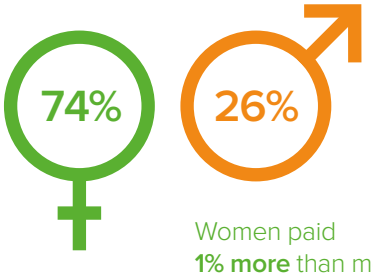
UK median **11.8%** less than men

Quartile 1:



Women paid **12% more** than men

Quartile 2:

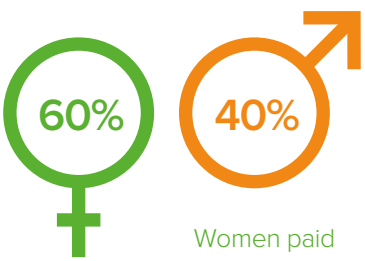


Women paid **1% more** than men

Mean
women earn **0.2%** more than men

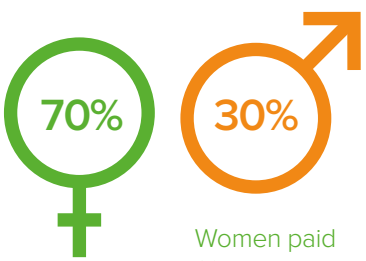
UK average 14.34% less than men

Quartile 3:



Women paid **4% less** than men

Quartile 4:



Women paid **3% less** than men

Note: gender pay gap referenced in quartiles are based on mean calculations.

Financial review

Overview

In the year to 31 March 2019, the Society's income increased by 14%, from £98.3 million to £111.7 million. The majority of the Society's income came from charitable activities, which increased by 15% during the year to £100.8 million (2018: £87.6 million).

Total expenditure increased by 13% on the prior year from £101.7 million to £114.7 million, as the Society has continued to expand its charitable programme. Expenditure on charitable activities increased from £97.3 million to £110.5 million, and remains around 95% of total expenditure, in line with 2018.

Income from investments has increased from the previous year to £8.1 million (2018: £5.6 million).

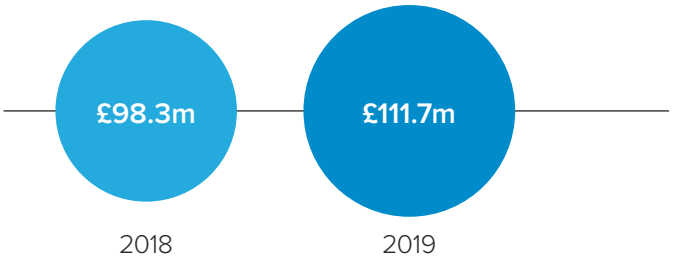
Income

Income from charitable activities

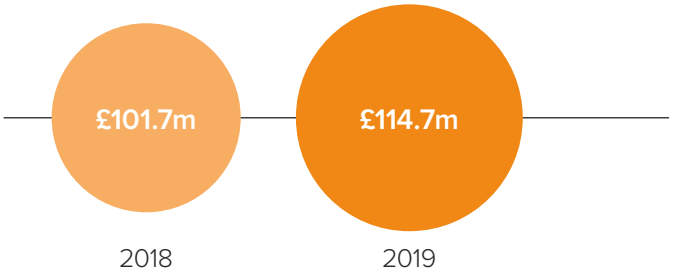
Most of the year-on-year increase in income relates to the increase in grants for charitable activities which rose to £89.2 million (2018: £76.1 million). The Society's core grant from BEIS was £47.1 million (2018: £47.1 million). BEIS also provided a grant to the Society of £21.7 million under the Investment in Research Talent fund to expand the number of grants awarded under existing grant programmes and income in support of the Newton Fund Academies' Programme of £6.5 million (2018: £6.6 million). There was also an increase in the grant from the Department for International Development of £0.5 million to £2.4 million (2018: £1.9 million).

Trading in furtherance of charitable objectives remained at a similar level to the previous year with a small increase in income of £0.2 million to £11.6 million (2018: £11.4 million) due to successful trading years for both publishing and conferencing.

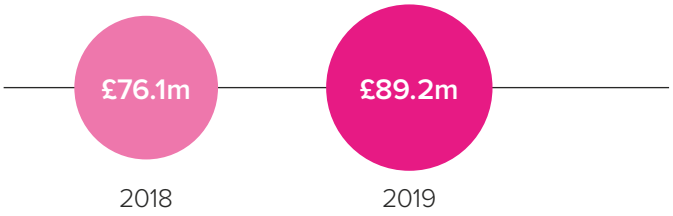
Total income



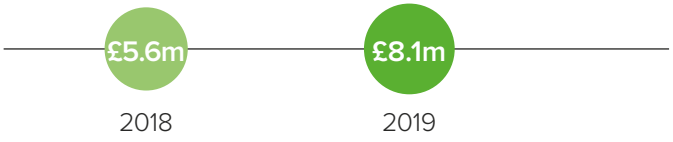
Total expenditure



Grants for charitable activities



Income from investments



Income from donations and legacies

Income from donations and legacies decreased from the prior year to £0.8 million (2018: £3.5 million), this was mainly driven by larger legacy income received in 2018.

Expenditure

The Society undertakes a broad range of activities that provide public benefit either directly or indirectly, in line with our strategic priorities.

Read more on the Society's public benefit statement on page 6.

	2019 £m	2018 £m
Expenditure on raising funds	**4.2**	4.4
Expenditure on charitable activities	**110.5**	97.3
Total expenditure	**114.7**	101.7

Expenditure on charitable activities

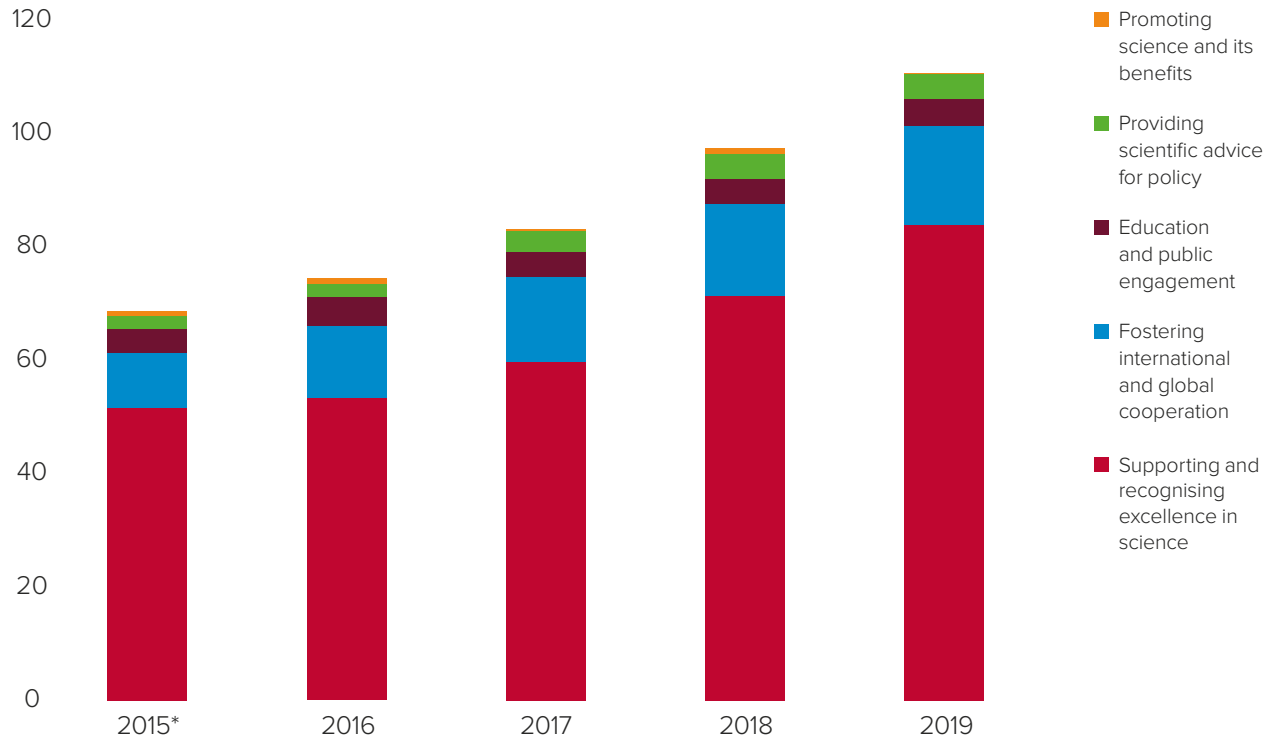
The majority of the Society's charitable expenditure relates to grant awards; this year accounting for £84.7 million (2018: £73.3 million). The expansion of the grant programme included an increase in the value of grants awarded under existing schemes, most significantly in the URF programme of £8.0 million to £37.6 million (2018: £29.6 million) and an increase in the number of international awards in the Newton International Fellowships programme of £1.7 million to £6.6 million (2018: £4.9 million) and DFID African awards of £0.3 million to £2.0 million (2018: £1.7 million).

The funding received under GCRF has enabled the Society to fund more international URFs and establish a new grant programme for funding and supporting research in sub-Saharan Africa called Future Leaders – African Independent Research Fellowships ('FLAIR'). FLAIR aims to support early career researchers who are transitioning into an independent research career. The scheme, which was launched in May 2018, is operated in partnership with the African Academy of Sciences. Being the first scheme of its kind for the Society, due diligence procedures have taken longer than initially anticipated and, as a result, the first awards were made in April 2019, which was later than originally planned.

Aside from grants activity, expenditure on providing scientific advice for policy remained broadly consistent with the prior year at £4.3 million (2018: £4.4 million). The Society's work in this area focussed particularly on the governance of data use and AI, human genome editing and education.

Expenditure on education and public engagement increased from £4.5 million in 2018 to £4.8 million in 2019. This includes expenditure on a number of events including the *You and AI* lecture series, the *Transforming our future* events and the Society's flagship annual Summer Science Exhibition.

Expenditure on charitable activities, £m

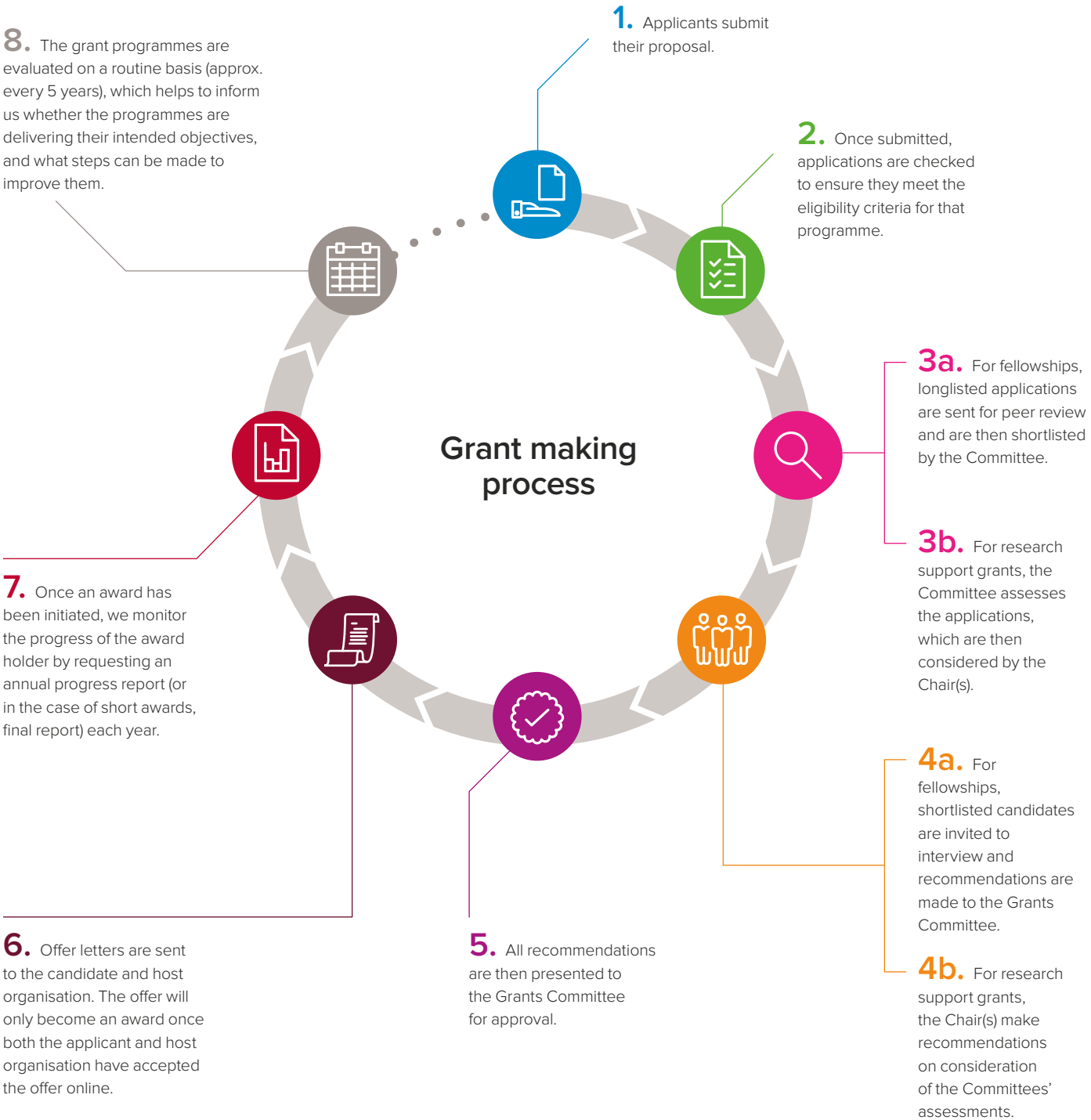


* 2015 reported under UK GAAP, 2016 restated under FRS 102.

Financial review continued

Grants

The primary purposes of the Society's grant-giving activities are to support the work of outstanding individual scientists at various stages of their careers, primarily in the UK, and to encourage collaborations between UK scientists and scientists throughout the world.



Further information is available online

Grants made by the Society fall into two broad classes as follows:

(1) Fellowships
- early career fellowships, professorships;
- senior fellowships, and support for innovation; and

(2) Research grants
- research grants, collaboration;
- travel grants;
- capacity-building grants;
- education related grants.

Grant applications are assessed by means of a peer-review process and consideration by a panel of experts comprising Fellows of the Royal Society and other senior scientists. Each panel is chaired by a Fellow of the Society.

Chicheley Hall – Royal Society Trading Limited

Since February 2013, the management of the property has been outsourced to De Vere Venues. The trading subsidiary recorded a loss of £0.1 million in the year (2018: £0.2 million). This has been attributed to a difficult trading environment, with lower than expected room rates and higher costs largely due to staff shortages in the local area. The Society progressed with a review of operations at Chicheley Hall during the financial year; a number of options have been identified and advice will be taken from relevant professionals in the coming months to determine a longer term strategy for the property and the company.

A number of scientific meetings were held at Chicheley Hall in the year, including a Frontiers of Science meeting between the Society and the University of the West Indies, the inaugural meeting in a 3-year programme for the advancement of science in the Caribbean and the use of science to solve big problems affecting the region.

Royal Society (London) Ltd

Royal Society (London) Ltd was set up in 2013 to process corporate sponsorships at the Society and trading activities commenced during the year with income of £0.1 million (2018: £nil).

Above: Delegates at the *Frontiers of science* meeting, held at Chicheley Hall.

Financial review continued

Pension and Life Assurance Plan of the Royal Society

The Society operates a defined benefit pension scheme which was closed to new members in 2014. The valuation of the scheme at 31 March 2019 showed a deficit of £11.6 million (2018: £11.0 million). This represents the difference between the assets and the obligations of the fund rather than an immediate cash liability. The increase in deficit was mainly driven by changes to the assumptions resulting from changes in market conditions which increased the liabilities by £3.1 million, the change in the mortality assumptions used reduced the liabilities by £1.3 million, assets returned £0.8 million in excess of interest, and the payment of deficit reduction contributions during the year of £0.7 million. In accordance with FRS102, the actuarial losses on the scheme of £0.7 million (2018: £1.1 million) have been charged to unrestricted funds. A triennial valuation of the scheme will be undertaken during 2019/20, which will determine the long-term liability of the scheme for the coming years, but under the current valuation, the Society will make deficit contributions to the pension scheme of £0.7 million during the next financial year. Current budgets and forecasts indicate that the Society will be able to meet these contributions as they arise.

	2019 £m	2018 £m
Unrestricted funds	**83.7**	84.1
Unrestricted tangible fixed assets	**(13.4)**	(14.3)
Heritage assets	**(49.4)**	(49.3)
Free reserves	**20.9**	20.5

Investment policy and performance

On 23 March 2016, Council passed a resolution under Section 104A(2) of the Charities Act 2011 to adopt the use of total return in relation to its permanent endowments with the exception of the Theo Murphy Australia Fund in order to best enable it to be even-handed between current and future beneficiaries.

The Society does not invest in organisations which conflict with the charity's purpose, or where Council deem that to do so would hamper the charity's work, for example by alienating those who support the Society financially. Council have resolved that the Society should not invest in companies or funds that derive a significant portion of their income from the sale or manufacture of tobacco products.

The Society ensures that performance is managed against appropriate benchmarks. Income from investments for the year was £8.1 million (2018: £5.6 million). The value of the Society's investment portfolio increased in the year, from £239.5 million in 2018 to £261.3 million in 2019. The increase was due to improvement in the performance of markets. During the year, Investment Committee appointed consultants to consider the ongoing appropriateness of the investment strategy.

Reserves

The total funds of the Society increased by £14.5 million to £304.2 million during the financial year, mainly due to the gains on investments.

Free reserves are unrestricted reserves (after pension deficit) less heritage assets and fixed assets. The Society holds free reserves so that it can respond to unforeseen charitable opportunities and continue to honour existing commitments in the event of a shortfall of income. The Society's policy is to review its income streams and expenditure commitments on an annual basis, and assess the main financial risks faced by the Society and their associated likelihood in order to develop a risk-based reserves level. The target level was set cognisant of the risks associated with the changes in the publishing landscape and volatility in investment markets which may affect returns.

At the balance sheet date, the value of the Society's free reserves was £20.9 million (2018: £20.5 million), well above the target level of £14.8 million.

The Society continues to develop longer-term strategies to increase its charitable activities in a sustainable way which will reduce the level of reserves whilst ensuring that it has adequate resources to enable it to respond to emerging risks and opportunities.

Enterprise fund (Amadeus RSEF LP)

The Royal Society Enterprise Fund was created with the aim of becoming a financially successful contributor to early-stage science based companies in the UK and a role model for the translation of excellent science for commercial and social benefit. Due to the dual benefits expected to be received, the fund is accounted for as a mixed motive investment in the financial statements. The Society entered into a Limited Partnership Agreement with Amadeus Capital Partners in 2014 to create the Amadeus RSEF LP.

Statement of policy on fundraising

Section 162a of the Charities Act 2011 requires the Society to make a statement regarding fundraising activities because it is subject to an external audit. We do not use professional fundraisers or 'commercial participators' or indeed any third parties to solicit donations. We are therefore not subject to any regulatory scheme or relevant codes of practice, nor have we received any complaints in relation to fundraising activities nor do we consider it necessary to design specific procedures to monitor such activities.

Modern Slavery Act

The Society is committed to taking the appropriate measures to reduce the risk of slavery and human trafficking taking place in our organisation or our supply chains. Pursuant to section 54 of the Modern Slavery Act 2015, the Society has published its slavery and human trafficking statement for the financial year ended 31 March 2019.

Further information is available online.

Going concern

The Trustees consider that there are no material uncertainties about the Society and its subsidiaries to continue as a going concern.

Principal risks and uncertainties

Council is responsible for ensuring that proper arrangements are in place for risk management. Council relies principally on the Audit Committee, supported by the internal auditors, to assess those arrangements and to advise it accordingly. During the year, KPMG LLP replaced PricewaterhouseCoopers LLP as the Society's internal auditors following a competitive tender process.

The Audit Committee considers regular reports on risk-management systems and management of major risks. Council considers regular reports from the Audit Committee and reviews management of major risks, including using its own risk register. The risk registers of the Society's sections are also updated periodically and used in managing and monitoring risks and communicating information about risks across the organisation. The internal audit plan for the year included a review of risk management in projects, to supplement the review on risk management arrangements undertaken by the previous internal auditors.

Council and senior staff reflect frequently on uncertainties and risks to achieving the Society's goals and the effectiveness of the various means it employs to mitigate those risks. They are also vigilant in identifying new risks and taking steps to address them. Actions and processes often contribute to mitigation of several risks simultaneously. The Society works assiduously to develop and maintain relationships to ensure that its activities remain relevant, that its contributions are effective, and that the value of its work is recognised. The Society enjoys many beneficial relationships through its Fellows, Foreign Members and staff. The main risks identified by Council and actions taken to manage them, including ongoing actions, are described below.

Key

Status of risk

High risk

Medium risk

Only significant risks are presented in the table below therefore none have been rated as low risk

Change of status

↑ Increased risk

↔ No change

↓ Decreased risk

Key strategic priorities at risk

Promoting excellence in science

Supporting international scientific collaboration

Demonstrating the importance of science to everyone

Risk	Key strategic priorities at risk	Management	Status of risk
Broad political context in which the Society operates remains unsettled making short-term planning difficult, in particular because of uncertainty related to Brexit.		• Continue to work with many partners, in the UK, in the rest of Europe, and globally. • Advocate for and promote future arrangements for international collaboration, and the ability of the UK to continue to attract outstanding scientists from overseas, funding for UK science, and regulatory matters. • Provide advice and build relationships.	↔
Funding reduced or remaining static has a negative impact on the Society's ability to support excellent science.		• Strengthen existing relations and develop new relationships, seeking to secure additional funding and diversify sources of funding. • Improve arrangements for financial planning. • Increased investment in primary-purpose trading activity.	↑

Risk	Key strategic priorities at risk	Management	Status of risk
Dilution in the quality of the science funded by grants and/or failure to apply the available resources to activities that are of the highest quality and are likely to have the most valuable impact to further the Society's strategic aims.		• Grants Committee formed of experts in subject area making them best placed to select applications of 'excellent science'. • Ongoing review of performance against strategy. • Policies and procedures in place to govern decision making processes.	
Reduced income generated by publishing activities due to open access journals strategy.		• Continual review of strategy. • Diversify sources of funding.	
Trading subsidiary fails to contribute funds to support research and/or carry out activities to further the Society's objectives.		• Take advice from relevant professionals to determine a longer term strategy.	
The economic climate and inherent uncertainties in performance give rise to the risk that investments are not properly safeguarded or perform poorly, including those in the defined benefit pension scheme.		• Review of investment-management arrangements. • Regularly review the investment portfolio and performance of the investment manager. • Complete triennial valuation.	
Technology and change across the organisation does not reflect growth and support the delivery of the strategy.		• Regular review of service delivery. • Undertake planned system upgrades and implementation. • Continual improvement to increase control and gain efficiencies.	
Events adversely impact reputation and operations (cyber-attack, serious data security breach, a serious fraud, major health and safety incidents or internal process failures).		• Engage senior-level management, committees and Council in policy-setting and monitoring. • Regular review and update of information security policies and procedures. • Regular review and update of business continuity and disaster recovery plans to help minimise disruption to operations from unexpected events.	
Talented staff not recruited, developed and retained.		• Ongoing benchmarking of compensation and benefits against the rest of the sector. • Employee engagement surveys informing areas of change. • Development of schedule of internal courses available for employees.	
Governance structure fails to provide the right level and diversification of expertise to make decisions and run the Society effectively.		• Identify potential members with broad trustee experience. • Include non-Fellows with relevant expertise on Society committees. • Continue to enable willing Fellows to contribute to the Society's work.	
Narrow representation due to lack of diversity in the Fellowship, Council, grant applicants and general science arena.		• Active agenda to positively influence and encourage engagement from underrepresented groups. • Unconscious bias training provided to those in positions to make decisions. • Continual consideration and engagement with experts in relevant fields.	

Governance

Structure and management

The Society is a registered charity and Council is the trustee body under charity law. The Society was founded in 1660 and incorporated by Royal Charter. A Supplemental Charter was granted in 2012, and that now serves as the Society's governing document. The governing body of the Society is its Council, whose members are elected by and from the Fellowship.

Under the Charter, Council 'shall and may have full authority, power, and faculty from time to time to draw up, constitute, ordain, make, and establish such laws, statutes, acts, ordinances, and constitutions as shall seem to them, or to the major part of them, to be good, wholesome, useful, honourable, and necessary, according to their sound discretions, for the better government, regulation, and direction of the Royal Society aforesaid, and of every Member of the same, and to do and perform all things belonging to the government, matters, goods, faculties, rents, lands, tenements, hereditaments, and affairs of the Royal Society aforesaid.'

Council

The Charter specifies that Council must have between 20 and 24 members, each of whom must be a Fellow of the Society.

Council determines the strategic direction of the Society and in particular approves the Society's strategic plan. Council also approves plans for specific charitable programmes on the recommendation of relevant committees, and those committees oversee activities within the programmes on behalf of Council.

Council has reflected on the new Charity Governance Code for larger charities and supports the principles set out and the model for continuous improvement, with a self-evaluation due to be undertaken in the next financial year.

Membership of Council

Among the members of Council are the President, who is the Chair of Council, and four Officers: the Biological Secretary, the Foreign Secretary, the Physical Secretary, and the Treasurer. During the year there were also 18 so-called Ordinary Members. The President and the Officers normally serve 5-year terms and the Ordinary Members serve 3-year terms.

Changes in the membership of Council took place as usual on 30 November, which is the Society's Anniversary Day. The new members received an induction that included a review of relevant documents and presentations on trustee duties by a partner in a leading charity-law practice and on internal control by a partner from the Society's auditors BDO. During the year, Council also received guidance from professional advisers on specific matters and updates on relevant developments affecting charities and trustees.

Council delegates responsibility for day-to-day management of the Society's affairs to the Executive Director.

Public benefit

Fellows are not remunerated for serving as trustees. Council has complied with its duty to have due regard to the Charity Commission's public benefit guidance when exercising any powers or duties to which that guidance is relevant. Information about public benefit provided by the Society is presented in this report.

Committee structure

Council

The trustee body under charity law. Council has a system of committees and determines the memberships of committees, which comprise Fellows and many non-Fellows with relevant expertise. Delegations of authority by Council are explicit in the terms of references of committees.

Board

A subcommittee of Council comprising the President and the Officers. Board oversees fundraising and considers on behalf of Council matters that require urgent attention and matters, such as international affairs, that span many programmes.

Fellowship Committees

The members of Council, Fellows and Foreign Members are elected by the Fellowship. Council determines the candidates for election on the advice of its Nominations Committee and Sectional Committees.

The Sectional Committees span the scientific disciplines, and a committee to advise on general and honorary candidates whose contributions to science are not primarily in research.

Financial, Planning and Subsidiary Committees

Committees make recommendations to Council for approval in a range of areas including financial planning and budgeting, the effectiveness of the Society's internal control system, external audit and financial statements, pay related matters and trading activities.

Programme Committees

There are programmes and associated committees in diversity, education, grants, industry and translation, prizes, public engagement, publishing, science policy, and scientific meetings, among others. If they are not themselves members of Council, Chairs of these committees are invited to attend specific Council meetings to present reports.

Audit Committee

The Audit Committee approves the internal audit programme; reviews internal audit reports, and tracks implementation of any actions arising; approves the external audit plan; discusses the audit and matters arising from it with the external auditors and management; and makes recommendations to Council in relation to the financial statements and associated matters.

Investment Committee

The Society's Investment Committee advises Council on investment policy, determines investment strategy, and oversees the performance of the Society's investment managers.

Planning and Resources Committee

The Planning and Resources Committee monitors financial performance and oversees the Society's trading activities and the provision of services and recommends the Society's financial plan and its annual budgets to Council for approval.

Remuneration Committee

The remuneration committee considers pay-related matters, including remuneration of key management personnel.

Trading Subsidiary Boards

The Board of Royal Society Trading Limited oversees the activities undertaken by the trading subsidiary, whose primary purpose is to manage the running of operations at Chicheley Hall.

The Board of Royal Society (London) Ltd oversees the trading activities processed by the trading subsidiary.

Statement of Trustees' responsibilities

The Council members (who are the Trustees of the Society) are responsible for preparing the Trustees' Annual Report and the financial statements in accordance with applicable law and regulations.

Charity law requires the Council to prepare financial statements for each financial year in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law). Under charity law the Council members must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the group and charity and of the incoming resources and application of resources, including the income and expenditure, of the group for that period.

In preparing these financial statements, the Council members are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

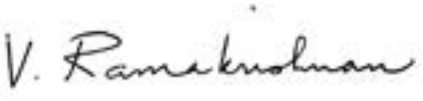
The Council members are responsible for keeping adequate accounting records that are sufficient to show and explain the charity's transactions and disclose with reasonable accuracy at any time the financial position of the charity and enable them to ensure that the financial statements comply with the Charities Act 2011. They are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Financial statements are published on the charity's website in accordance with legislation in the United Kingdom governing the preparation and dissemination of financial statements, which may vary from legislation in other jurisdictions. The maintenance and integrity of the charity's website is the responsibility of the Council. The Councils' responsibility also extends to the ongoing integrity of the financial statements contained therein.

The current Council members, having made enquiries of fellow Council members and the charity's auditors, confirm that:

- so far as they are aware, there is no relevant audit information of which the charity's auditors are unaware; and
- they have taken all reasonable steps they ought to have taken as trustees in order to make themselves aware of any relevant audit information and to establish that the charity's auditors are aware of that information.

This report was approved by Council on 2 July 2019 and signed on their behalf by:



Venki Ramakrishnan
President of the Royal Society

Independent auditor's report

Opinion

We have audited the financial statements of The Royal Society ("the Parent Charity") and its subsidiaries ("the Group") for the year ended 31 March 2019 which comprise the consolidated statement of financial activities, the consolidated balance sheet, the consolidated statement of cash flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion, the financial statements:

- give a true and fair view of the state of the Group's and of the Parent Charity's affairs as at 31 March 2019 and of the Group's incoming resources and application of resources for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

Opinion on other matter as required by BEIS grant letter

In our opinion, in all material aspects, the core grant payments received from the Department for Business, Energy and Industrial Strategy (BEIS) have been applied for the purposes set out in the Grant Letter and in accordance with the terms and conditions of the core grant.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Group and the Parent Charity in accordance with the ethical requirements relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions related to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the Trustees' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the Trustees have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group or the Parent Charity's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Other information

The other information comprises the information included in the Trustees' Report and Financial Statements, other than the financial statements and our auditor's report thereon. The other information comprises the Trustees' Report. The Trustees are responsible for the other information.

Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters in relation to which the Charities Act 2011 requires us to report to you if, in our opinion:

- the information contained in the financial statements is inconsistent in any material respect with the Trustees' Annual Report; or
- adequate accounting records have not been kept by the Parent Charity; or
- the Parent Charity financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

Independent auditor's report continued

Responsibilities of Trustees

As explained more fully in the Statement of Trustees' responsibilities, the Trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Trustees determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

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

Auditor's responsibilities for the audit of the financial statements

We have been appointed as auditor under section 144 of the Charities Act 2011 and report in accordance with the Act and relevant regulations made or having effect thereunder.

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

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

Use of report

This report is made solely to the Charity's trustees, as a body, in accordance with the Charities Act 2011. Our audit work has been undertaken so that we might state to the Charity's trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Charity and the Charity's trustees as a body, for our audit work, for this report, or for the opinions we have formed.

BDO LLP

Fiona Condron
(Senior Statutory Auditor)

For and on behalf of BDO LLP, statutory auditor
Gatwick

3 July 2019

BDO LLP is eligible for appointment as auditor of the charity by virtue of its eligibility for appointment as auditor of a company under section 1212 of the Companies Act 2006.

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

Above: Participants at the Summer Science Exhibition, 2018.

Consolidated statement of financial activities

For the year ended 31 March 2019

(incorporating an income and expenditure account)

	Notes	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	**2019 Total funds £'000**	2018 Total funds £'000
Income and endowments from donations and legacies	1	638	194	–	–	**832**	3,462
Income from charitable activities							
Grants for charitable activities	4	992	88,254	–	–	**89,246**	76,114
Trading in furtherance of charitable activities	3	10,960	608	–	–	**11,568**	11,446
		11,952	88,862	–	–	**100,814**	87,560
Other trading activities	3	1,924	–	–	–	**1,924**	1,562
Income from investments	2	1,804	1,208	1,172	3,867	**8,051**	5,624
Other income	5	7	65	–	–	**72**	125
Total income		**16,325**	**90,329**	**1,172**	**3,867**	**111,693**	98,333
Expenditure on raising funds	6	3,370	361	114	409	**4,254**	4,375
Expenditure on charitable activities	7						
Promoting science and its benefits		73	203	–	–	**276**	949
Supporting and recognising excellence in science		11,056	72,716	–	–	**83,772**	71,257
Providing scientific advice for policy		1,993	2,305	–	–	**4,298**	4,426
Fostering international and global cooperation		905	16,462	–	–	**17,367**	16,139
Education and public engagement		3,020	1,733	–	–	**4,753**	4,512
		17,047	93,419	–	–	**110,466**	97,283
Total expenditure		**20,417**	**93,780**	**114**	**409**	**114,720**	101,658
Net (expenditure)/income before net gains/(losses) on investments		**(4,092)**	**(3,451)**	**1,058**	**3,458**	**(3,027)**	(3,325)
Net gains on investments	18	1,406	2,962	2,903	10,993	**18,264**	816
Net (expenditure)/income for the year		**(2,686)**	**(489)**	**3,961**	**14,451**	**15,237**	(2,509)
Gross transfers between funds	23	2,966	1,099	(671)	(3,394)	**–**	–
Actuarial losses on defined benefit pension scheme	25	(736)	–	–	–	**(736)**	(1,091)
Net movement in funds		**(456)**	**610**	**3,290**	**11,057**	**14,501**	(3,600)
Total funds brought forward		84,138	39,820	38,136	127,572	**289,666**	293,266
Total funds carried forward		**83,682**	**40,430**	**41,426**	**138,629**	**304,167**	289,666

All of the above results are derived from continuing activities. There are no other gains or losses other than those stated above.

The Consolidated Statement of Financial Activities is for the Group as a whole. The Charity's total income for the year was £111.4m (2018: £96.8m). The Charity's total funds increased by £14.6m in the year (2018: £3.4m decrease).

The notes that follow form part of the financial statements.

Consolidated and Charity balance sheets
As at 31 March 2019

	Notes	Group 2019 £'000	Group 2018 £'000	Charity 2019 £'000	Charity 2018 £'000
Fixed assets					
Tangible assets	15	**13,354**	14,305	**13,354**	14,305
Heritage assets	17	**49,416**	49,321	**49,416**	49,321
Investments	18	**261,260**	239,544	**261,260**	239,544
		324,030	303,170	**324,030**	303,170
Current assets					
Stocks		**43**	42	**20**	21
Debtors receivable within one year	19	**6,508**	8,043	**7,513**	8,685
Cash at bank and in hand		**11,408**	4,697	**10,653**	4,450
		17,959	12,782	**18,186**	13,156
Creditors: amounts falling due within one year	20	**(26,101)**	(15,106)	**(25,403)**	(14,668)
Net current liabilities		**(8,142)**	(2,324)	**(7,217)**	(1,512)
Total assets less current liabilities		**315,888**	300,846	**316,813**	301,658
Creditors: amounts falling due after more than one year	20	**(140)**	(161)	**(140)**	(161)
Net assets before pension scheme liability		**315,748**	300,685	**316,673**	301,497
Defined benefit pension scheme liability	25	**(11,581)**	(11,019)	**(11,581)**	(11,019)
Total net assets		**304,167**	289,666	**305,092**	290,478
Permanent endowment funds	23	**138,629**	127,572	**138,629**	127,572
Expendable endowment funds	23	**41,426**	38,136	**41,426**	38,136
Restricted funds	23	**40,430**	39,820	**40,430**	39,820
Unrestricted funds					
Revaluation reserve	23	**47,856**	47,856	**47,856**	47,856
Defined benefit pension reserve	23	**(11,581)**	(11,019)	**(11,581)**	(11,019)
Unrestricted income funds	23	**47,407**	47,301	**48,332**	48,113
Total funds		**304,167**	289,666	**305,092**	290,478

The financial statements were approved and authorised for issue by Council on 2 July 2019 and signed on its behalf by

Professor Andrew Hopper
Treasurer

Consolidated statement of cash flows
For the year ended 31 March 2019

	Notes	2019 £'000	2019 £'000	2018 £'000
Net cash provided by/(used in) operating activities	A		**3,790**	(7,026)
Cash flows from investing activities:				
Investment income	2	**8,051**		5,624
Purchase of tangible fixed assets	15	**(629)**		(719)
Purchase of heritage assets	17	**(33)**		(20)
Purchase of investments	18	**(21,484)**		(21,268)
Proceeds from sale of investments	18	**17,015**		25,452
Net cash provided by investment activities			**2,921**	9,069
Increase in cash and cash equivalents			**6,711**	2,043
Cash and cash equivalents at 1 April			**4,697**	2,654
Cash and cash equivalents at 31 March			**11,408**	4,697

A. Reconciliation of net income/(expenditure) to net cash flow from operating activities.

		2019 £'000	2018 £'000
Net income/(expenditure) as per the statement of financial activities		**15,237**	(2,509)
Adjustments for:			
Depreciation charges	15	**1,580**	1,683
Gains on investments	18	**(18,264)**	(816)
Investment income	2	**(8,051)**	(5,624)
Loss on the disposal of fixed assets	15	**–**	66
Investment management fees charged to portfolio	18	**1,016**	952
(Increase)/decrease in stocks		**(1)**	2
Decrease/(increase) in debtors	19	**1,535**	(1,173)
Increase in creditors	20	**10,974**	539
Donated heritage assets	17	**(62)**	(1)
Difference between pension charge and cash contributions	25	**(174)**	(145)
Net cash provided by/(used in) operating activities		**3,790**	(7,026)

Accounting policies
For the year ended 31 March 2019

The principal accounting policies adopted in the preparation of these financial statements are as follows:

Accounting convention
The financial statements have been prepared in accordance with Financial Reporting Standard 102 – 'The Financial Reporting Standard applicable in the United Kingdom and Republic of Ireland' ('FRS 102') and with the Statement of Recommended Practice: Accounting and Reporting by Charities FRS 102 as revised in 2015 ('the SORP 2015') together with the reporting requirements of the Charities Act 2011.

The financial statements have been prepared under the historical cost convention with items recognised at cost or transaction value unless otherwise stated in the relevant accounting policy or note.

The accounts have been prepared on a going concern basis. The Royal Society ('the Society') is a Public Benefit Entity as defined by FRS 102. The accounting policies have been applied consistently throughout the financial statements and the prior year.

Basis of consolidation
These financial statements consolidate the results of the Royal Society and its active wholly-owned subsidiaries, Royal Society Trading Limited and Royal Society (London) Ltd on a line by line basis. In the consolidated financial statements uniform accounting policies have been used. A separate statement of financial activities for the charity itself is not presented.

Cash flow statement
The Society meets the definition of a qualifying entity under FRS 102 and has therefore taken advantage of the disclosure exemption in relation to presentation of a cash flow statement in respect of its separate financial statements, which are presented alongside the consolidated financial statements.

Critical accounting judgements and key sources of estimation uncertainty
In the application of the group's accounting policies the trustees are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. Judgements, estimates and associated assumptions are reviewed on an ongoing basis and are based on historical experience and other factors that are considered to be relevant, including expectations of future events that are believed to be reasonable under the circumstances.

Critical judgements relate to the accounting treatment of the multi-employer defined benefit scheme. Critical accounting estimates and assumption relate to the defined benefit pension scheme.

Multi-employer defined benefit scheme
Certain employees participate in a multi-employer defined benefit scheme with other organisations. In the judgement of the Trustees, the Society does not have sufficient information on the plan assets and liabilities to be able to reliably account for its share of the defined benefit obligation and plan assets. In accordance with FRS 102 this is therefore accounted for as though it were a defined contribution scheme.

Defined benefit pension scheme
The cost of the defined benefit pension scheme, and the value of the present value of the scheme liability depend on a number of factors including assumptions about inflation, discount rates and mortality which are taken by actuarial specialists. The valuation of the scheme is particularly sensitive to discount rate assumptions, with a 0.1% movement in the discount rate resulting in a £1.2m change in the value of the scheme liabilities.

Income
Income is accrued and recognised when conditions on entitlement are met, receipt can be quantified reliably and is probable.

Donations and legacies
Donated goods and services are included at the value to the Society where these can be quantified. No amounts are included in these financial statements for the services donated by volunteers or Fellows.

Donations are accounted for on a receivable basis where receipt is probable and there is entitlement to the income. Donations include Gift Aid based on amounts receivable at the accounting date.

Legacy income is recognised on a receivable basis when there is sufficient evidence to assess that receipt is probable and receipt can be quantified reliably.

Fellows' Annual Contributions are recognised in the year in which they become due.

Grants for charitable activities
Grants are recognised when all conditions for receipt are met. Where donor-imposed restrictions apply to the timing of the related expenditure as a precondition of its use the grant is treated as deferred income until those restrictions are met. Grants received for specific purposes are accounted for as restricted funds.

Income from trading activities
Income from conferencing activities is recognised when the event takes place. Income from publishing activities is recognised when the publication is provided.

Income from investments
Investment income and interest on deposits is recognised on an accruals basis. Investment income arising on endowment funds is credited to the appropriate fund in accordance with the prescribed conditions.

Accounting policies continued

Expenditure

Expenditure, including irrecoverable VAT, is accounted for on an accruals basis. Expenditure is allocated to the particular activity where the cost relates directly to that activity. Support costs, which cannot be directly attributed to a particular activity, are apportioned based on the costs of staff engaged in direct activities.

Expenditure on raising funds

Costs of raising funds include those costs incurred in raising donations and legacies.

Expenditure on charitable activities

Charitable expenditure includes all expenditure incurred on grants awarded and on other schemes run in pursuance of the Society's objectives under its Charter, including Fellowship activities and primary purpose trading.

The direct costs of supporting these activities, including staff and other overhead costs, are separately analysed and shown as support costs under this heading.

Grants are recognised as a liability when the Society formally notifies the recipient of the award. Due to the nature of the funding source for the majority of grant awards, the liability is measured as the total of expected payments for the period to the next confirmation of income due. Payments due in future periods are disclosed as grant commitments. Any termination liabilities are recognised when a decision to cease the grant is made. Liabilities for awards where more than one year of expected payments are provided at the outset are discounted to current value using a rate equivalent to the opportunity cost from investments forgone.

Leased assets

Rentals payable under operating leases are charged to the SOFA evenly over the term of the lease.

Tangible fixed assets

Tangible fixed assets are capitalised at cost, including purchase price and any other costs of bringing the asset into working condition for its intended use. The Society only capitalises items costing more than £5,000. Batches of items below this threshold are capitalised if forming part of a larger asset or project and together costs more than £5,000.

Depreciation is provided on all assets, excluding freehold land and assets under development, to write off the cost of tangible fixed assets on a straight-line basis over their expected useful lives as follows:

Freehold property and improvements:	20-50 years
Freehold fixtures and fittings:	3-10 years
Leasehold improvements:	20-30 years
Leasehold fixtures and fittings:	3-10 years
Computers and AV equipment:	3-5 years
Other equipment:	10-20 years

On completion, assets under development are transferred to the relevant category and depreciated.

Heritage assets

- Heritage assets comprise:
- Printed books
- Archives
- Pictures, sculptures and other works of art
- Other artefacts

Printed books and archives are included on the balance sheet at deemed cost using a valuation performed in 2003. Pictures, sculptures and other works of art, and other artefacts are included on the balance sheet on a valuation basis. The valuation reflects their fair value and is performed every 5 years.

Additions to heritage assets are made by purchase or donation. Purchases are initially recorded at cost and donations are recorded at a fair value where practicable. The Society holds and maintains these assets principally for their contribution to knowledge and culture in line with its charitable aims.

The Trustees do not consider that a reliable estimate of the fair value can be obtained for a large part of the archives collection without incurring costs that would exceed the benefits provided. The Society was founded in 1660 and the collection has been built up throughout its existence and the number of assets held in the collection is extensive and diverse in nature. Reliable and relevant information on the cost of many of the assets is therefore not readily available and there is a lack of comparable market values. As such, these assets are not recognised in the accounts.

Investments

Listed investments are held at fair value. Unlisted investments are held at cost as an approximation to fair value where the fair value is not obtainable. Realised gains and losses on investments sold in the year and unrealised gains and losses on revaluation of investments are included in the SOFA.

Investment management fees are allocated proportionally against the funds under investment.

The investment in subsidiary undertakings are held at cost on the Society only balance sheet.

Total return accounting

The Society adopts the use of total return in relation to its permanent endowments with the exception of the Theo Murphy Australia Fund. Income from the endowment's investments and investment gains and losses are recognised in the endowment column of the SOFA. Unapplied total return that is allocated to income funds is presented as an allocation between endowment funds and income funds as a transfer on the face of the SOFA.

The amount of any unapplied total return fund is included as part of the relevant endowment together with the value of the trust for investment on the balance sheet.

The Trustees policy is to distribute up to 4% of the rolling 5 year average capital value of the fund. In determining that the charity should adopt a total return approach, the trustees considered the Charities (Total Return) Regulations 2013, and received advice from Stone King LLP and Cazenove Capital Investment managers.

The core endowment represents the part of the assets which the trustees seek to maintain in real terms. It is based on the value of the endowments at 31 March 2012, together with an allowance for inflation (UK CPI as determined by the Office for National Statistics).

Impairment of fixed assets and investments

Fixed assets and investments are subject to review for impairment when there is an indication of a reduction in their carrying value. Investments held at cost are reviewed annually for impairment. Any impairment is recognised in the corresponding SOFA category in the year in which it occurs.

Heritage assets are reviewed for impairment at the end of each reporting period to ensure that the carrying value reflects their carrying amounts.

Foreign currency

Transactions in foreign currencies are recorded at the exchange rate at the date of the transaction. Assets and liabilities in foreign currency are translated into sterling at the exchange rate at the balance sheet date. Resulting gains or losses are included in the SOFA.

Financial instruments

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

Fund accounting

Restricted funds can only be used for particular purposes specified by or agreed by the donor. Permanent endowment funds are funds where the capital must be retained and invested. Expendable endowment funds are funds that must be invested to produce income. Unrestricted funds may be used for any purpose in the furtherance of the general objectives of the charity.

Pension costs

Defined benefit pension scheme assets are measured at fair value and liabilities on an actuarial basis using the projected unit method and discounted at a rate equivalent to the current rate of return on a high-quality corporate bond of equivalent currency and term to the Scheme liabilities. The actuarial valuations are obtained triennially and updated under FRS 102 rules at each balance sheet date. Any surplus or deficit is shown in the balance sheet as an asset or liability.

The charge to the SOFA is calculated so as to spread the cost of pensions over employees' working lives with the Society. The charge comprises the administration costs of running the scheme, the current service cost computed by the actuary under FRS 102 and gains and losses on settlements and curtailments. Past service costs or credits are recognised immediately if the benefits have vested. If the benefits have not vested immediately, the costs are recognised over the period until vesting occurs. The interest on the assets and liabilities for the period are shown as a net amount of other finance costs or credits charged or credited to the statement of financial activities. Actuarial gains and losses are recognised immediately under the description 'Actuarial losses on defined benefits pension scheme'.

Multi-employer schemes are accounted for as defined contribution schemes as it is not possible to identify the Society's share of the underlying assets and liabilities on a reasonable and consistent basis. Contributions payable relating to funding of the deficit are included as a liability on the balance sheet and charged to the SOFA.

The amounts charged to the SOFA for defined contribution pension schemes represent the employer's contributions payable in the year.

The method for allocation of pension costs between funds is to allocate on a pro-rata basis using departmental salary costs as a base.

Termination benefits

Termination benefits are payable when employment is terminated by the Society, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The amounts charged to the SOFA represent the best estimate of the expenditure required to settle the obligation at the balance sheet date.

Taxation

The Society is a charity within the meaning of Paragraph 1 Schedule 6 Finance Act 2010. Accordingly, the Society is exempt from income and corporation taxes on income and gains to the extent that they are applied to charitable purposes. The trading subsidiaries do not generally pay UK corporation tax because their policy is to pay taxable profits to the Society as Gift Aid.

Prior year comparatives

In accordance with FRS 102, prior year comparative figures for the following can be found as follows:

- Consolidated statement of financial activities – Note 27
- Analysis of net assets between funds – Note 28
- Movement n Trust and specific funds in year – Note 29

Notes to the financial statements
For the year ended 31 March 2019

1 Income and endowments from donations and legacies

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	**2019 Total funds £'000**	2018 Total funds £'000
Gifts and donations	170	218	–	–	**388**	417
Legacies	233	(24)	–	–	**209**	2,813
Fellows' contributions	235	–	–	–	**235**	232
Total	638	194	–	–	**832**	3,462

2 Income from investments

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	**2019 Total funds £'000**	2018 Total funds £'000
Dividends and interest	1,770	1,208	1,172	3,867	**8,017**	5,598
Bank deposit interest	34	–	–	–	**34**	26
Total	1,804	1,208	1,172	3,867	**8,051**	5,624

3 Trading

	External income £'000	Recharged internal lettings £'000	Gross expenditure £'000	**2019 Net surplus/ (deficit) £'000**	2018 Net surplus/ (deficit) £'000
Trading activities through subsidiary companies					
Kavli Royal Society International Centre	1,797	413	(2,323)	**(113)**	(226)
Sponsorships	127	–	(4)	**123**	–
	1,924	413	(2,327)	**10**	(226)
Trading in furtherance of charitable activities					
Publishing	7,682	–	(3,454)	**4,228**	4,746
Lettings in furtherance of objectives – Carlton House Terrace	3,249	1,532	(3,113)	**1,668**	1,576
Other	637	–	–	**637**	593
	11,568	1,532	(6,567)	**6,533**	6,915
Total	13,492	1,945	(8,894)	**6,543**	6,689

The costs of the Society's publishing operation and the costs associated with the lettings in furtherance of charitable objects are included in 'Supporting and recognising excellence in science' on the face of the statement of financial activities. The costs of trading through subsidiary companies are included in expenditure on raising funds.

The Society was exempt from income tax, corporation tax and capital gains tax on income derived from its primary purpose trading and charitable activities.

4 Grants for charitable activities

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	**2019 Total funds £'000**	2018 endowment funds £'000
From Government and other public bodies						
Core grant from the Department for Business, Energy and Industrial Strategy (BEIS)	992	46,109	–	–	**47,101**	47,101
BEIS Investment Research Talent Fund	–	21,673	–	–	**21,673**	9,173
Department for International Development	–	2,415	–	–	**2,415**	1,858
BEIS Newton Fund	–	6,541	–	–	**6,541**	6,587
BEIS Global Challenges Research Fund	–	6,028	–	–	**6,028**	5,034
Other grants from government and public bodies	–	214	–	–	**214**	66
From other external bodies						
Contribution to charitable activities	–	5,274	–	–	**5,274**	6,295
Total	992	88,254	–	–	**89,246**	76,114

Details of the income to and movement of individual funds are disclosed in note 23.

5 Other income

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	**2019 Total funds £'000**	2018 Total funds £'000
Other Income	7	65	–	–	**72**	125
Total	7	65	–	–	**72**	125

6 Expenditure on raising funds

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	**2019 Total funds £'000**	2018 Total funds £'000
Direct costs on raising funds	477	–	–	–	**477**	498
Support costs on raising funds	460	–	–	–	**460**	637
Cost of trading	2,301	–	–	–	**2,301**	2,287
Investment management fees	132	361	114	409	**1,016**	953
Total	3,370	361	114	409	**4,254**	4,375

Notes to the financial statements continued

7 Expenditure on charitable activities

	Staff costs £'000	Grant costs £'000 (Note 10)	Other direct costs £'000	Support £'000 (Note 8)	**2019 Total £'000**	2018 Total £'000
Charitable activities						
Promoting science and its benefits	1	161	112	2	**276**	949
Supporting and recognising excellence in science	3,748	69,531	6,126	4,367	**83,772**	71,257
Providing scientific advice for policy	1,706	–	599	1,993	**4,298**	4,426
Fostering international and global cooperation	761	14,766	935	905	**17,367**	16,139
Education and public engagement	1,385	287	1,468	1,613	**4,753**	4,512
Total for costs of charitable activities	7,601	84,745	9,240	8,880	**110,466**	97,283

8 Support costs

	Media relations and public engagement £'000	Facilities and building management £'000	Support services £'000	Governance £'000	**2019 Total £'000**	2018 Total £'000
Support costs on raising funds	26	107	307	20	**460**	637
Charitable activities						
Promoting science and its benefits	–	1	1	–	**2**	12
Supporting outstanding and recognising excellence in science	249	1,016	2,915	187	**4,367**	4,088
Providing scientific advice for policy	113	464	1,331	85	**1,993**	2,053
Fostering international and global cooperation	52	210	604	39	**905**	755
Education and public engagement	92	375	1,077	69	**1,613**	1,753
	506	2,066	5,928	380	**8,880**	8,661
Total support costs	532	2,173	6,235	400	**9,340**	9,298

Facilities and building management comprises the rent and running costs (maintenance, insurance, cleaning and security) of Carlton House Terrace.

Support services comprises finance, IT, HR, pension costs and corporate management.

Support costs are allocated on a pro-rata basis using departmental salary costs as a base.

9 Staff costs

	2019 £'000	2018 £'000
Costs by type		
Salaries	**9,534**	8,998
Social Security costs	**957**	864
Pension costs	**1,239**	1,201
Total	**11,730**	11,063

As required by FRS102, included in 2019 staff costs is an amount of £244,000 (2018: £241,000) relating to holiday pay owed to staff at 31 March 2019.

Pension costs include Employer contributions to two Royal Society pension schemes, a defined contribution scheme and a defined benefit scheme, and the USS pension scheme as follows:

- The Royal Society Group Personal Pension Plan (defined contribution): £472,000 (2018: £363,000)
- The Pension and Life Assurance Plan of the Royal Society (defined benefit): £396,000 (2018: £447,000)
- USS: £110,000 (2018: £100,000)

The following numbers of employees of the Royal Society earning £60,000 per annum or more received total emoluments within the bands shown:

	2019	2018
£60,001 – £70,000	**10**	4
£70,001 – £80,000	**7**	9
£80,001 – £90,000	**1**	2
£90,001 – £100,000	**2**	1
£100,001 – £110,000	**–**	2
£110,001 – £120,000	**2**	1
£120,001 – £130,000	**1**	–
£130,001 – £140,000	**–**	1
£140,001 – £150,000	**1**	1
£150,001 – £160,000	**1**	–
£160,001 – £170,000	**–**	1
£170,001 – £180,000	**1**	–
£320,001 – £330,000	**–**	1
£340,001 – £350,000	**1**	–

The 12 key management personnel of the Royal Society (2018: 10) received total remuneration of £1,694,000 including employer's NIC (2018: £1,502,000).

The average number of employees, analysed by function, was:

	2019	2018
Expenditure on raising funds	**6**	8
Expenditure on charitable activities	**150**	144
Support (including governance)	**44**	38
Total	**200**	190

The average full time equivalent was 197 (2018: 189).

Redundancy and termination payments were made to 1 employee during the year (2018: 1). Total redundancy and termination payments in respect of this employee were £5,000 (2018: £2,900).

Notes to the financial statements continued

10 Grants

	Grants to institutions £'000	Grants to individuals £'000	**2019 Total £'000**	2018 Total £'000
Fellowships				
University Research Fellowships	–	37,648	**37,648**	29,550
Royal Society Research Professorships	–	12,437	**12,437**	10,274
Newton International Fellowships	–	6,640	**6,640**	4,915
Dorothy Hodgkin Fellowships	–	4,948	**4,948**	3,884
Newton Advanced Fellowships	–	3,608	**3,608**	3,584
Sir Henry Dale Fellowships	–	3,550	**3,550**	3,200
RS Visiting Research Professorship	–	2,740	**2,740**	1,772
Wolfson Research Merit Award	2,322	–	**2,322**	2,807
Industry Fellowships	–	1,708	**1,708**	1,445
RS Challenge Grants	–	1,278	**1,278**	2,019
Leverhulme Trust Senior Research Fellowships	–	511	**511**	317
International Fellowship Grants	–	276	**276**	288
Wolfson Advanced Fellowships	140	–	**140**	–
Professorship of Public Engagement	–	37	**37**	36
Education Schemes				
Partnership grants scheme	90	–	**90**	84
Education Research Fellowships	–	2	**2**	10
Other Education grants	2	5	**7**	5
Other Grant Programmes				
DFID Africa Awards	–	2,046	**2,046**	1,659
International Exchanges	–	1,787	**1,787**	2,433
Wolfson Laboratory Refurbishment Grants	668	–	**668**	1,608
Entrepreneur in Residence	–	487	**487**	214
Awards and prizes	–	411	**411**	739
Leverhulme Trust APEX Awards	–	354	**354**	138
FLAIR Fellowships Delivery	–	251	**251**	–
Newton International Exchanges	–	202	**202**	742
Paul Instrument Fund	–	196	**196**	197
Brian Mercer Awards	–	143	**143**	751
Australian Academy of Science Think Tank	–	106	**106**	310
Foundation for Science and Technology	–	35	**35**	30
Kavli Scientific Seminars	–	25	**25**	1
Commonwealth Science	–	–	**–**	162
Other	3	89	**92**	77
Total	3,225	81,520	**84,745**	73,251

10 **Grants** continued

	Number	2019 Total £'000	2018 Total £'000
Recipients of institutional grants			
University College London	13	**206**	268
London School of Hygiene and Tropical Medicine	2	**203**	–
University of Cambridge	14	**188**	271
Keele University	1	**187**	–
Imperial College London	12	**174**	393
University of Edinburgh	14	**161**	156
University of Glasgow	9	**159**	159
University of Bristol	15	**156**	157
University of Southampton	15	**150**	147
University of Warwick	17	**142**	175
University of St Andrews	6	**127**	93
University of Oxford	12	**126**	421
University of Leeds	13	**125**	344
University of Nottingham	8	**119**	73
University of Birmingham	9	**97**	110
University of Exeter	8	**93**	326
King's College London	5	**79**	55
University of Bath	5	**56**	77
University of Manchester	9	**55**	128
University of York	4	**48**	59
Cardiff University	5	**44**	–
Queen Mary University of London	4	**42**	–
University of Leicester	5	**41**	99
Newcastle University	3	**40**	–
Other organisations	71	**405**	1,041
Total	279	**3,223**	4,552

Grants are generally awarded to particular individuals, although the actual award is made to the host organisation.

Details of individual grants awarded during the year analysed by organisation are available from the finance department on request.

Notes to the financial statements continued

11 Reconciliation of grants payable

	2019 Total £'000	2018 Total £'000
Liability at 1 April	**3,052**	882
New grants awarded in year	**86,642**	75,034
Grants paid in year	**(75,606)**	(71,080)
Grants refunded to the Society	**(1,897)**	(1,784)
Liability at 31 March	**12,191**	3,052

All grants payable fall due within one year.

12 Payments to Trustees and Related Party Transactions

	2019 Total £'000	2018 Total £'000
Expenses: Travel and subsistence	**131**	108

No Trustees received remuneration from the Society in the year (2018: Nil). Expenses were reimbursed to or paid on behalf of 19 Trustees (2018: 23 Trustees).

Indemnity insurance

With the consent of the Charity Commission, the Society has taken out Trustees' indemnity insurance. The cost of this insurance for the year was £8,000 (2018: £8,000). No claims have been made under this policy.

Grants and awards

Professor Peter Bruce FRS was a co-applicant on Newton Advanced Fellowship grant.

Professor Richard Catlow FRS was a nominated referee on Newton International Fellowship grant.

Other

Sir Venki Ramakrishnan, President of the Royal Society, has use of the President's flat at Carlton House Terrace.

Related Party Transactions

The Royal Society had two wholly-owned trading subsidiaries during the year, Royal Society Trading Limited (registered number: 06967016) and Royal Society (London) Ltd (registered number: 08808518).

13 Total expenditure includes the following amounts:

	2019 Total £'000	2018 Total £'000
Operating lease rentals		
Plant and machinery	**75**	48
Rent	**490**	490
	565	538
Fees payable to the Charity's auditors for:		
The audit of the Charity and Group accounts	**33**	32
The audit of the Charity's subsidiaries accounts pursuant to legislation	**6**	4
	39	36
Charges on owned assets		
Depreciation	**1,580**	1,683
	1,580	1,683

14 Financial memoranda

Income and expenditure relating to government grants during the year was as follows:

	2019 Total £'000	2018 Total £'000
Department for Business, Energy and Industrial Strategy – core grant		
Income	**47,101**	47,101
Expenditure	**(47,101)**	(47,101)
	–	–
Department for Business, Energy and Industrial Strategy – Investment in Research Talent Fund		
Income	**21,673**	9,173
Expenditure	**(21,673)**	(9,173)
	–	–
Department for International Development grant		
Income	**2,415**	1,858
Expenditure	**(2,415)**	(1,858)
	–	–
BEIS Global Challenges Research Fund		
Income	**6,028**	5,034
Expenditure	**(6,028)**	(5,034)
	–	–
BEIS Newton Fund		
Income	**6,541**	6,587
Expenditure	**(6,541)**	(6,587)
	–	–

Notes to the financial statements continued

15 Tangible fixed assets – Group and Charity

	Chicheley Hall freehold and property improvement £'000	Chicheley Hall computers and other equipment £'000	Leasehold improvements £'000	Computers and other equipment £'000	Assets under development £'000	2019 £'000	2018 £'000
Cost							
At 1 April	17,595	722	19,871	3,491	1,111	**42,790**	42,143
Additions	72	–	296	181	80	**629**	719
Disposals	–	–	–	–	–	**–**	(72)
Transfers	15	–	812	254	(1,081)	**–**	–
At 31 March	17,682	722	20,979	3,926	110	**43,419**	42,790
Depreciation							
At 1 April	14,108	604	11,222	2,551	–	**28,485**	26,808
Charge for year	71	49	1,160	300	–	**1,580**	1,683
Disposals	–	–	–	–	–	**–**	(6)
At 31 March	14,179	653	12,382	2,851	–	**30,065**	28,485
Net book value at 31 March 2019	3,503	69	8,597	1,075	110	**13,354**	
Net book value at 31 March 2018	3,487	118	8,649	940	1,111		14,305

All tangible fixed assets are used for the support of charitable activities within the Society.

The Group and the charity have freehold property with a net book value of £3,503,000 (2018: £3,487,000).

16 Capital commitments – Group and Charity

	2019 £'000	2018 £'000
Authorised and contracted for	**37**	36
Authorised but not contracted for	**2,567**	2,101
Total Commitment	**2,604**	2,137

At the balance sheet date, £1,157,000 (2018: £740,000) of capital commitments was authorised for refurbishment of 6-9 Carlton House Terrace. A further spend of £695,000 (2018: £586,000) had been authorised on IT projects. £305,000 (2018: £258,000) had been authorised for the historic maintenance of Chicheley Hall. Other general capital items total £447,000 (2018: £553,000), of which £37,000 (2018: £36,000) has been contracted for by the year end.

17 Heritage assets – Group and Charity

The Society holds an extensive collection of heritage assets relating to the history of the Society itself and the wider history of scientific endeavour. The collection has four main components:

Printed works: The Library contains over 70,000 titles, published from the 1470s to the present day. The main strength of the collection is in the 17th and 18th centuries; from the 1680s to the mid-19th century, the policy of the Library was to acquire every important scientific publication.

Archives: These comprise an extraordinary and unrivalled record of the development of science that spans nearly 350 years. The archive collection is a unique resource for historians, particularly historians of science, containing over 250,000 items. It includes the Society's Charter Book and the manuscript of Isaac Newton's Principia Mathematica.

Pictures, sculptures, and other works of art: The collection includes over 200 original works (primary collection) and approximately 10,000 photographs and engravings (secondary collection), many of them portraits of past and present Fellows.

Other artefacts: The collection comprises approximately 250 items and includes scientific instruments, furniture and furnishings, and the Society's Charter Book.

The collections are accessible to scholars and the wider public through the Royal Society's History of Science Centre, which includes a reference library and an extensive on-line presence, including fully searchable catalogue and image library.

Summary of heritage asset transactions	Assets held at cost £'000	Assets held at valuation £'000	**2019 £'000**	2018 £'000
Purchases/donations				
At 1 April	36,215	13,106	**49,321**	49,300
Additions	33	62	**95**	21
Valuation or cost at 31 March	36,248	13,168	**49,416**	49,321
The heritage assets comprise				
Printed books			**13,277**	13,270
Archives			**22,928**	22,877
Pictures, sculptures and other works of art			**9,440**	9,403
Other artefacts			**3,771**	3,771
Total			**49,416**	49,321

The Printed Books and Archives were valued in August 2003 by Roger Gaskell, a rare book dealer and the pictures and other artefacts by Weller King, Fine Art Dealers, in 2015. The valuations are on a fair market/replacement basis on those parts of the collection where it is felt such a valuation can be reasonably made. Assets are held at valuation as a proxy for cost.

The paintings and furniture at Chicheley Hall were valued in March 2015 by Weller King, Fine Art Dealers. The valuations are on a fair market/replacement basis on those parts of the collection where it is felt such a valuation can be reasonably made. The Trustees consider there to be no material impairment on the present market values/replacement values compared to those stated.

Notes to the financial statements continued

17 Heritage assets – Group and Charity continued

Five year financial summary of heritage asset transactions	2019 £'000	2018 £'000	2017 £'000	2016 £'000	2015 £'000
Purchases/donations					
Printed books	**7**	1	13	13	3
Archives	**51**	–	23	4	–
Pictures, sculptures and other works of art	**37**	20	9	54	–
Other artefacts	**–**	–	4	–	112
Total Purchases/donations	**95**	21	49	71	115

Donated heritage assets are recognised in the year they are received. There have been no disposals of heritage assets within the last five years.

Preservation and management

Expenditure which in the Trustees' view is required to preserve or clearly prevent further deterioration of individual collection items is recognised in the Income and Expenditure account when it is incurred.

The Society has an ongoing cataloguing project and the Society's major strategic facilities for the long-term preservation of its historic archives, manuscripts and printed books are environmentally-controlled store rooms (conforming to British Standard BS EN 16893:2018).

The Society's modern records have been subject to a full audit, completed in April 2011. This process enabled the full-life management, destruction and permanent archiving of pertinent files. Conservation of both old and new archives is now underway.

Each of the Society's major collections (archives, modern records, printed books, pictures, journals, objects) has a designated member of curatorial staff and exhibited materials are looked after by an exhibitions manager. Collections are managed and recorded in discrete databases and according to the prevailing standard in each area (for example, International Standard Archival Description (ISAD) for archival cataloguing, SPECTRUM for museum standards and picture control). In 2018, the Society's archives achieved accredited status (for procedures and service quality) with the UK National Archives.

18 Investments – Group and Charity

	2019 £'000	2018 £'000
Valuation at 1 April	**239,544**	243,864
Additions of investments	**25,905**	30,718
Disposal of investments	**(22,619)**	(21,900)
Net change in cash invested for trades within portfolio	**(4,422)**	(9,450)
Investment management costs	**(1,016)**	(952)
Net cash added to/(withdrawn from) portfolio	**5,604**	(3,552)
Net gains on valuation at 31 March	**18,264**	816
Valuation at 31 March	**261,260**	239,544
Total historical cost at the end of the year	**189,708**	181,175
The valuation at 31 March 2019 comprises:		
Investments listed on a recognised stock exchange including investments and unit trusts:		
UK	**130,322**	119,597
Overseas	**103,022**	92,791
Other Unlisted Securities:		
UK	**10,652**	8,543
Overseas	**5,109**	6,060
Cash:		
UK	**5,656**	6,007
Overseas	**6,499**	6,546
Total	**261,260**	239,544

Overseas investments comprise equities, unit/investment trusts and fixed interest funds.

The Society owns 100% of the issued share capital of Royal Society Trading Limited (note 26). The principal activity of the company is conferencing activities at Chicheley Hall.

The Society owns 100% of the issued share capital of Royal Society (London) Ltd (note 26). The principal activity of the company is corporate sponsorships.

Funds are invested as follows:

	2019 £'000	2018 £'000
Specific investments – Amadeus RSEF	**9,536**	7,854
Specific investments – Theo Murphy Australia Fund	**3,480**	3,299
Pooled investments	**248,244**	228,391
Total	**261,260**	239,544

Notes to the financial statements continued

19 Debtors

	2019 Receivable within one year £'000	2018 Receivable within one year £'000
Trade debtors	**2,136**	4,531
Grants receivable	**2,610**	250
Legacy receivable	**665**	1,486
Other debtors	**228**	182
Accrued income	**383**	1,253
Prepayments	**486**	341
Total	**6,508**	8,043

Included in the Group debtors are debtors of £151,000 (2018: £42,000) of Royal Society Trading Limited and £30,000 (2018: Nil) of Royal Society (London) Ltd. All other debtors relate to the Charity.

The Charity holds a loan in respect of the Royal Society Trading Limited of £1,010,000 (2018: £684,000). The loan incurs an annual interest charge at 2% above the Bank of England base rate.

20 Creditors

	2019 Due within one year £'000	2019 Due after one year £'000	2018 Due within one year £'000	2018 Due after one year £'000
Trade creditors	**1,603**	**–**	1,147	–
Publications advanced sales	**3,876**	**–**	3,569	–
Chicheley advanced sales	**211**	**–**	164	–
Grants payable	**12,191**	**–**	3,052	–
Other creditors	**328**	**–**	189	10
Accruals and provisions	**2,302**	**140**	912	151
Deferred income	**5,590**	**–**	6,073	–
Total	**26,101**	**140**	15,106	161

Included in the Group creditors are creditors of £774,000 (2018: £520,000) relating to Royal Society Trading Limited. All other creditors relate to the Charity.

As at 31 March 2019, the Charity owed Royal Society Trading Limited £80,000 (2018: £82,000).

As required by FRS102, included within accruals and provisions 2019 is a provision for a liability under the deficit recovery plan for the Universities Superannuation Scheme (USS) multi-employer pension scheme. A total amount of £151,000 has been provided for, comprising £11,000 due within one year and £140,000 due within more than one year. This provision has been calculated using the modeller developed by the British Universities Finance Directors Group (BUFDG), with the support of the USS trustee company, to provide a tool for estimating the liability under the recovery plan for accounting purposes.

Reconciliation of deferred income

	2019 £'000	2018 £'000
Deferred income brought forward	**6,073**	6,176
Amount released from previous year	**(6,073)**	(6,176)
Income deferred in the year	**5,590**	6,073
Total	**5,590**	6,073

21 Statement of total returns

	Expendable endowment £'000	Permanent endowment £'000	2019 Total £'000
Investment returns			
Investment Income	1,172	3,867	**5,039**
Capital gains	2,903	10,880	**13,783**
Investment management costs	(114)	(409)	**(523)**
Total return for year	3,961	14,338	**18,299**
Indexation	(542)	(1,780)	**(2,322)**
Less application of total return	(671)	(3,394)	**(4,065)**
Net total return for the year	2,748	9,164	**11,912**
Unapplied Total return			
At 31 March 2019	12,348	40,249	**52,597**
At 31 March 2018	9,600	31,085	**40,685**

22 Analysis of net assets between funds – Group

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	2019 Total funds £'000	2018 Total funds £'000
Funds balances at 31 March are represented by:						
Tangible fixed assets	13,354	–	–	–	**13,354**	14,305
Heritage assets	49,416	–	–	–	**49,416**	49,321
Investments	40,775	40,430	41,426	138,629	**261,260**	239,544
Net current liabilities	(8,142)	–	–	–	**(8,142)**	(2,324)
Creditors: Due after one year	(140)	–	–	–	**(140)**	(161)
Defined benefit pension scheme liability	(11,581)	–	–	–	**(11,581)**	(11,019)
Net assets	83,682	40,430	41,426	138,629	**304,167**	289,666

The net current liabilities in 2019 are funded by investments, which could be realised to meet the net liabilities as they fall due.

Included in the Group net current liabilities are liabilities of £925,000 (2018: £812,000) of Royal Society Trading Limited. All other net current liabilities relate to the Charity.

Notes to the financial statements continued

23 Movements on Trust and specific funds in year – Group

Permanent endowment funds	Relevant value b/f £'000	Indexation £'000	Relevant value c/f £'000	Unapplied total return at 1 April 2018 £'000	Income £'000	Investment gain £'000	Expenditure £'000	Indexation £'000	Transfers application of total return £'000	Unapplied total return at 31 March 2019	Total at 31 March 2019 £'000
Life Sciences Trust	11,102	211	**11,313**	4,174	474	1,338	(50)	(211)	(555)	**5,170**	**16,483**
Maths and Physical Sciences Trust	10,184	194	**10,378**	3,854	435	1,230	(46)	(194)	(509)	**4,770**	**15,148**
RW Paul Instrument Fund	10,920	207	**11,127**	3,652	450	1,261	(48)	(207)	(266)	**4,842**	**15,969**
Theo Murphy – UK	52,342	994	**53,336**	16,930	2,149	6,069	(227)	(994)	(1,875)	**22,052**	**75,388**
Other Permanent Endowments	9,165	174	**9,339**	2,475	359	982	(38)	(174)	(189)	**3,415**	**12,754**
Total Permanent endowments part of the UTR	93,713	1,780	**95,493**	31,085	3,867	10,880	(409)	(1,780)	(3,394)	**40,249**	**135,742**
Funds not part of the Unapplied Total return											
Theo Murphy – Australia	2,774		**2,774**			113					**2,887**
Total Permanent endowments	96,487	1,780	**98,267**	31,085	3,867	10,993	(409)	(1,780)	(3,394)	**40,249**	**138,629**

Expendable endowment funds	Relevant value b/f £'000	Indexation £'000	Relevant value c/f £'000	Unapplied total return at 1 April 2018 £'000	Income £'000	Investment gain/(loss) £'000	Expenditure £'000	Indexation £'000	Transfers application of total return £'000	Unapplied total return at 31 March 2019	Total at 31 March 2019 £'000
General Trust Fund	10,646	202	**10,848**	4,111	454	1,125	(44)	(202)	–	**5,444**	**16,292**
Life Sciences Trust	6,507	124	**6,631**	2,451	276	683	(27)	(124)	(199)	**3,060**	**9,691**
Maths and Physical Sciences Trust	3,543	67	**3,610**	1,424	152	373	(15)	(67)	(178)	**1,689**	**5,299**
Other Expendable funds	7,840	149	**7,989**	1,614	290	722	(28)	(149)	(294)	**2,155**	**10,144**
Total expendable endowment funds	28,536	542	**29,078**	9,600	1,172	2,903	(114)	(542)	(671)	**12,348**	**41,426**

Indexation has been applied using the annual CPI rate to March.

23 Movements on Trust and specific funds in year – Group continued

	Brought forward at 1 April 2018 £'000	Income £'000	Investment and actuarial gain/(loss) £'000	Expenditure £'000	Transfers £'000	Carried forward at 31 March 2019 £'000
Restricted funds						
Life Sciences Trust	5,416	340	207	(488)	488	**5,963**
Maths and Physical Sciences Trust	6,437	261	237	(2,668)	516	**4,783**
Enterprise Fund	7,854	–	1,937	(255)	–	**9,536**
Other restricted funds	20,113	89,728	581	(90,369)	95	**20,148**
Total restricted funds	39,820	90,329	2,962	(93,780)	1,099	**40,430**
Unrestricted funds						
General Trust Fund	14,446	606	646	(45)	45	**15,698**
BEIS Science and Research	–	992	–	(992)	–	**–**
Revaluation Reserve	47,856	–	–	–	–	**47,856**
Defined Benefit Pension Reserve	(11,019)	–	(736)	174	–	**(11,581)**
General Purpose	32,855	14,727	760	(19,554)	2,921	**31,709**
Total unrestricted funds	84,138	16,325	670	(20,417)	2,966	**83,682**

Purposes of funds

The objects of the Life Sciences Trust are to promote and advance for the general benefit of the public, including the scientific (science, medicine, engineering and technology) community, the study and investigation of, and research into all areas of life sciences and other science at the interface between this area and other areas of science. This shall be done in particular by supporting scientists working in this area, advancing engagement of the public in all matters relating to such science and providing the best possible scientific advice and information to those making policy in the area of life science.

The objects of the Mathematics and Physical Sciences Trust are to promote and advance for the general benefit of the public, including the scientific (science, medicine, engineering and technology) community, the study and investigation of, and research into all areas of mathematics and physical sciences and other science at the interface between this area and other areas of science. This shall be done in particular by supporting scientists working in this area, advancing engagement of the public in all matters relating to such science and providing the best possible scientific advice and information to those making policy in the area of mathematics and physical science.

Following the Deed of retirement of the other trustees the property and investments of the RW Paul Instrument Fund were transferred to the sole remaining trustee being the Royal Society. The application of the income from the portfolio is restricted to the provision of grants under the Paul Instrument Grants Scheme.

The Theo Murphy Funds (in the UK and Australia) were created through a bequest from the estate of the late Theo Murphy. The funds "shall be used or applied to further scientific discovery in the fields of medicine, science, technology and engineering". The Theo Murphy Australia Fund is held in Australia and is used to carry out activities in Australia and is excluded from total return accounting due to the separate legal jurisdiction in which it operates.

The objects of the General Fund are to promote and advance for the general benefit of the public, including the scientific (science, medicine, engineering and technology) community, the efficiency and effectiveness of the Royal Society and its Fellowship. This shall be done in particular by establishing, promoting, supporting and maintaining, for the general benefit of the public and the scientific community, its activities, premises, fixtures and fittings, equipment, libraries and archives, general publications and the history of science.

The Enterprise Fund was created by generous donations in support of the Society in making equity investments in innovative early-stage businesses emerging from the science base in the UK and elsewhere.

Other Restricted Funds comprise monies received to fund separate restricted projects in line with our charitable activities and are held as separate individual funds in our accounts.

The Revaluation Reserve relates to the revaluation of the heritage assets.

Notes to the financial statements continued

23 Movements on Trust and specific funds in year – Group continued

The Transfers between projects and funds include administration charges of the investments held in the trusts, administration costs reclaimed from projects where applicable, notional interest paid to projects in respect of income held during the year and any income released to the general reserves at the end of projects (where allowed under the gift or grant agreement).

24 Financial Commitments – Group and Charity

At 31 March 2019 the Society had the following commitments:

Total future minimum lease payments under a non-cancellable operating lease in respect of occupation of 6–9 Carlton House Terrace, London is as follows for each of the following periods:

	2019 £'000	2018 £'000
Less than one year	**490**	490
One to five years	**1,960**	1,960
Over five years	**19,600**	20,090
Total	**22,050**	22,540

The lease is due to expire on 5 January 2064 however the next 10 yearly rent review is due on 5 January 2025.

Agreements and commitments to fund research professorships /fellowships and other grants totalling £194,000,000 (2018: £160,800,000). Of these, £79,000,000 (2018: £49,000,000) are due in less than one year, and £115,000,000 (2018: £111,800,000) in between two and five years. There are no grants payable in more than 5 years. As the Society retains the discretion to terminate these grants they are treated as liabilities of future periods and will be financed by specific grants or other income receivable in those periods.

The Society has entered into investment contract commitments totalling £489,000 (2018: £576,000) payable at dates yet to be agreed.

25 Pension obligations – Group and Charity

The Royal Society ("the Employer") operates a defined benefit pension arrangement in the UK called the Pension and Life Assurance Plan of the Royal Society ("the Plan"), with assets held in a separately administered fund. The Plan provides retirement benefits on the basis of members' final salary. The Plan is closed to new members, although remains open to future benefit accrual, and provides benefits on a defined benefit basis.

The most recent valuation of the Plan under FRS102 was carried out as at 31 March 2019. The valuation of the Plan used the projected unit method and was carried out by Barnett Waddingham LLP, professionally qualified actuaries.

The FRS102 liability does not include any allowance for discretionary benefits. The Employer expects to make contributions to the Plan during the year to 31 March 2020 of around £1,110,000 (2019: £1,128,000).

The Plan is subject to the Statutory Funding Objective under the Pensions Act 2004. A valuation of the Plan is carried out at least once every three years to determine whether the Statutory Funding Objective is met. As part of the process the Employer must agree with the trustees of the Scheme the contributions to be paid to address any shortfall against the Statutory Funding Objective and contributions to pay for future accrual of benefits.

The full actuarial valuation at 1 January 2016 showed a decrease in the deficit from £4,744,000 to £3,716,000. It has been agreed with the Trustees that the Employer will pay £358,500 on or before each 30 April and 31 October in the years 2016 to 2021 inclusive to meet the deficit. The triennial valuation as at 1 January 2019 is currently in progress.

Contributions payable by the Employer in respect of future benefit accrual and expenses are at the rate of 23.9% of Pensionable Salaries. Members' contributions are 7% of Pensionable Salaries. Life cover and dependants' pensions in respect of death in service are provided by additional insurance premiums.

25 Pension obligations – Group and Charity continued

The Principal assumptions used to calculate Plan liabilities include:

	2019 % pa	2018 % pa
Inflation (RPI)	**3.3**	3.2
Inflation (CPI)	**2.3**	2.2
Salary escalation	**2.0**	2.0
Increase to pensions in payment* – subject to LPI minimum 4%	**4.2**	4.2
Increase to pensions in payment* – subject to LPI	**3.2**	3.1
Statutory revaluation	**2.3**	2.2
Discount rate (pre-and-post-retirement)	**2.5**	2.7
Pre-retirement mortality table	**S2NA**	S2NA
Post-retirement mortality table	**S2NA**	S2NA
Post-retirement mortality projection	**CMI_2018 projections with LTR of 1.5% pa**	CMI_2017 projections with LTR of 1.5% pa
Tax free cash	**20% of pension**	20% of pension
Withdrawals	**None**	None

* Pensions in payment increase by the lesser of the annual increase in the retail price index or 5%. For service prior to 1 November 2001 this is subject to a minimum increase of 4%.

Under the mortality tables and projections adopted, the assumed future life expectancy at age 60 is as follows:

	2019	2018
Male currently aged 40	**28.4 years**	29.0 years
Female currently aged 40	**30.6 years**	31.1 years
Male currently aged 60	**26.6 years**	27.1 years
Female currently aged 60	**28.8 years**	29.2 years

The assets in the Plan were:

	Value at 31 March 2019 £'000	Value at 31 March 2018 £'000
Equities	**21,820**	20,845
LDI Portfolio	**9,956**	8,814
Cash	**134**	139
Diversified growth	**10,166**	10,352
Annuity policies	**5,423**	6,072
Total market value of Plan assets	**47,499**	46,222
Present value of scheme liabilities	**(59,080)**	(57,241)
Net pension liability	**(11,581)**	(11,019)

Notes to the financial statements continued

25 Pension obligations – Group and Charity continued

Reconciliation of present value of scheme liabilities

	Value at 31 March 2019 £'000	Value at 31 March 2018 £'000
Defined benefit obligation at 1 April	**57,241**	55,126
Current service cost	**449**	484
Contributions by Plan participants	**116**	131
Past service cost	**59**	–
Interest cost	**1,522**	1,526
Benefits paid	**(1,863)**	(1,369)
Experience (gain)/loss on liabilities	**(161)**	186
Changes to demographic assumptions	**(1,341)**	649
Changes to financial assumptions	**3,058**	508
Defined benefit obligation at 31 March	**59,080**	57,241

Reconciliation of fair value of scheme assets

	Value at 31 March 2019 £'000	Value at 31 March 2018 £'000
Fair value of scheme assets at 1 April	**46,222**	45,053
Interest on assets	**1,238**	1,257
Contributions by the Employer	**1,114**	1,164
Contributions by Scheme participants	**116**	131
Benefits paid	**(1,863)**	(1,369)
Administration costs	**(148)**	(266)
Return on Plan assets less interest	**820**	252
Fair value of scheme assets at 31 March	**47,499**	46,222

The actual return on Plan assets in the year was £2,060,000 (2018: £1,510,000).

Analysis of the amount charged to the statement of financial activities – operations

	Value at 31 March 2019 £'000	Value at 31 March 2018 £'000
Current service cost	**449**	484
Administration costs	**148**	266
Interest cost	**1,522**	1,526
Interest on assets	**(1,238)**	(1,257)
Past service cost	**59**	–
Total charge	**940**	1,019

25 Pension obligations – Group and Charity continued

Actuarial gains and losses

	Value at 31 March 2019 £'000	Value at 31 March 2018 £'000
Losses/(gains) on scheme assets in excess of interest	**(820)**	(252)
Experience losses (gains) on liabilities	**(161)**	186
Losses (gains) from changes to demographic assumptions	**(1,341)**	649
Losses (gains) from changes to financial assumptions	**3,058**	508
Actuarial losses	**736**	1,091

The Royal Society ("the Employer") operates two pension schemes and contributes to the Universities Superannuation Scheme (USS).

Two members of the Society's staff are active members of USS, a defined benefit scheme (2018: three members). During the year ended 31 March 2019, employer contributions to this scheme totalled £110,000 (2018: £100,000). The employer contribution rates at the year end was 18% (2018: 18%).

USS is a defined benefit scheme which is externally funded and valued every three years by professionally qualified independent actuaries using the Projected Unit Method. The scheme is a "last man standing" scheme which means that in the event that another member institution becomes insolvent the other participating members will pick up any funding shortfall.

At the date of the latest actuarial valuation of the scheme (31 March 2017), the assets were sufficient to cover 89% of the benefits that had accrued to members; the deficit at 31 March 2017 was £7.5bn (2016: £10.0bn). The triennial valuation as at 31 March 2018 is still pending.

Based on expected contributions until 31 March 2031, the net present value of the payment towards the reduction of the deficit is estimated using the modeller developed by the British Universities Finance Directors Group (BUFDG), with the support of the USS trustee company, as a tool for estimating the liability under the recovery plan for accounting purposes. An initial liability of £184,000 was charged to the Statement of Financial Activities during 2015/16 and recorded as a liability on the balance sheet to be unwound over time (initially over the period to 2031) as the liability is discharged; to 31 March 2019, £33,000 of this provision has been released. Further information can be found at https://www.uss.co.uk

Notes to the financial statements continued

26 Subsidiary undertakings

The Society owns 100% of the £1 called-up and issued share capital of Royal Society Trading Limited 06967016. Royal Society Trading Limited company has been set up to process the activities that occur at Chicheley Hall.

The Society also owns 100% of the £1 called-up and issued share capital of Royal Society (London) Ltd 08808518. Royal Society (London) Ltd company has been set up to process corporate sponsorships at the Society.

	Royal Society (London) Ltd		Royal Society Trading Limited	
	2019 £'000	2018 £'000	**2019 £'000**	2018 £'000
Results for the year ended 31 March:				
Trading income				
Internal income	**–**	–	**413**	499
External income	**127**	–	**1,797**	1,562
Cost of sales	**–**	–	**(2,268)**	(2,245)
Gross profit	**127**	–	**(58)**	(184)
Administrative expenses	**(4)**	–	**(43)**	(30)
Operating profit/(loss)	**123**	–	**(101)**	(214)
Interest on loan account to parent	**–**	–	**(12)**	(12)
Gift Aid payable to parent charity	**(123)**	–	**–**	–
Result for the period	**–**	–	**(113)**	(226)
Total funds brought forward at 1 April	**–**	–	**(812)**	(586)
Total funds carried forward at 31 March	**–**	–	**(925)**	(812)
Balance Sheet as at 31 March:				
Current assets				
Stock	**–**	–	**23**	21
Debtors	**30**	–	**231**	125
Cash at bank and in hand	**122**	–	**632**	247
	152	–	**886**	393
Creditors: amounts falling due within one year	**(152)**	–	**(1,811)**	(1,205)
Net Current Liabilities	**–**	–	**(925)**	(812)
Capital and reserves				
Called up share capital	**–**	–	**–**	–
Profit & loss reserve	**–**	–	**(925)**	(812)
Shareholder's funds	**–**	–	**(925)**	(812)

Royal Society (Australia) Pty Limited ACN 126112678 is the Trustee of the Royal Society Theo Murphy (Australia) Fund. It is an Australian company the shares of which are owned by the Society.

27 Prior year comparison – Consolidated statement of financial activities

For the year ended 31 March 2018

(incorporating an income and expenditure account)

	Notes	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	2018 Total funds £'000
Income and endowments from donations and legacies	1	1,871	1,591	–	–	**3,462**
Income from charitable activities						
Grants for charitable activities	4	992	75,122	–	–	**76,114**
Trading in furtherance of charitable activities	3	10,876	570	–	–	**11,446**
		11,868	75,692	–	–	**87,560**
Other trading activities	3	1,562	–	–	–	**1,562**
Income from investments	2	939	832	900	2,953	**5,624**
Other income	5	6	119	–	–	**125**
Total income		16,246	78,234	900	2,953	**98,333**
Raising funds	6	3,548	341	108	378	**4,375**
Expenditure on charitable activities	7					
Promoting science and its benefits		92	857	–	–	**949**
Supporting and recognising excellence in science		10,091	61,166	–	–	**71,257**
Providing scientific advice for policy		2,052	2,374	–	–	**4,426**
Fostering international and global cooperation		755	15,384	–	–	**16,139**
Education and public engagement		3,083	1,429	–	–	**4,512**
		16,073	81,210	–	–	**97,283**
Total expenditure		19,621	81,551	108	378	**101,658**
Net (expenditure)/income before net (losses)/gains on investments		(3,375)	(3,317)	792	2,575	**(3,325)**
Net (losses)/gains on investments	18	(40)	(1,634)	704	1,786	**816**
Net (expenditure)/income for the year		(3,415)	(4,951)	1,496	4,361	**(2,509)**
Gross transfers between funds	23	3,291	1,792	(1,228)	(3,855)	**–**
Actuarial losses on defined benefit pension scheme	25	(1,091)	–	–	–	**(1,091)**
Net movement in funds		(1,215)	(3,159)	268	506	**(3,600)**
Total funds brought forward		85,353	42,979	37,868	127,066	**293,266**
Total funds carried forward		84,138	39,820	38,136	127,572	**289,666**

Notes to the financial statements continued

28 Prior year comparison – Analysis of net assets between funds – Group

	Unrestricted funds £'000	Restricted funds £'000	Expendable endowment funds £'000	Permanent endowment funds £'000	**2018 Total funds £'000**
Funds balances at 31 March 2018 are represented by:					
Tangible fixed assets	14,305	–	–	–	**14,305**
Heritage assets	49,321	–	–	–	**49,321**
Investments	34,016	39,820	38,136	127,572	**239,544**
Net current liabilities	(2,324)	–	–	–	**(2,324)**
Creditors: Due after one year	(161)	–	–	–	**(161)**
Defined benefit pension scheme liability	(11,019)	–	–	–	**(11,019)**
Net assets	84,138	39,820	38,136	127,572	**289,666**

29 Prior year comparison – Movements on Trust and specific funds in year – Group

	Brought forward at 1 April 2017 £'000	Income £'000	Expenditure £'000	Transfers £'000	Investment and actuarial gain/(loss) £'000	**Carried forward at 31 March 2018 £'000**
Permanent endowment funds						
Life Sciences Trust	15,209	363	(43)	(525)	273	**15,277**
Maths and Physical Sciences Trust	13,980	333	(44)	(482)	251	**14,038**
RW Paul Instrument Fund	14,292	341	(44)	(275)	257	**14,571**
Theo Murphy – UK	68,995	1,645	(211)	(2,397)	1,240	**69,272**
Theo Murphy – Australia	3,213	–	–	–	(439)	**2,774**
Other Permanent Endowments	11,377	271	(36)	(176)	204	**11,640**
Total permanent endowment funds	127,066	2,953	(378)	(3,855)	1,786	**127,572**
Expendable endowment funds						
General Trust Fund	14,683	349	(43)	(506)	273	**14,756**
Life Sciences Trust	8,914	212	(25)	(308)	166	**8,959**
Maths and Physical Sciences Trust	4,865	116	(14)	(91)	91	**4,967**
Other Expendable Endowments	9,406	223	(26)	(323)	174	**9,454**
Total expendable endowment funds	37,868	900	(108)	(1,228)	704	**38,136**
Restricted funds						
Life Sciences Trust	7,551	208	(2,943)	552	48	**5,416**
Maths and Physical Sciences Trust	6,270	160	(448)	448	7	**6,437**
Enterprise Fund	9,771	3	(217)	–	(1,703)	**7,854**
Other Restricted Funds	19,387	77,863	(77,943)	792	14	**20,113**
Total restricted funds	42,979	78,234	(81,551)	1,792	(1,634)	**39,820**
Unrestricted funds						
General Trust Fund	14,201	412	(518)	401	(50)	**14,446**
BEIS Science and Research	–	992	(992)	–	–	**–**
Revaluation Reserve	47,856	–	–	–	–	**47,856**
Defined Benefit Pension Reserve	(10,073)	–	145	–	(1,091)	**(11,019)**
General Purpose	33,369	14,842	(18,256)	2,890	10	**32,855**
Total unrestricted funds	85,353	16,246	(19,621)	3,291	(1,131)	**84,138**
Total for all trusts						
Life Sciences Trust	31,674	783	(3,011)	(281)	487	**29,652**
Maths and Physical Sciences Trust	25,115	609	(506)	(125)	349	**25,442**
RW Paul Instrument Fund	14,292	341	(44)	(275)	257	**14,571**
Theo Murphy – UK	68,995	1,645	(211)	(2,397)	1,240	**69,272**
Other Permanent Endowments	11,377	271	(36)	(176)	204	**11,640**
Theo Murphy – Australia	3,213	–	–	–	(439)	**2,774**
General Trust Fund	28,884	761	(561)	(105)	223	**29,202**
Other Expendable Endowments	9,406	223	(26)	(323)	174	**9,454**
Enterprise Fund	9,771	3	(217)	–	(1,703)	**7,854**
Other Restricted Funds	19,387	77,863	(77,943)	792	14	**20,113**
BEIS Science and Research	–	992	(992)	–	–	**–**
Revaluation Reserve	47,856	–	–	–	–	**47,856**
Defined Benefit Pension Reserve	(10,073)	–	145	–	(1,091)	**(11,019)**
General Purpose	33,369	14,842	(18,256)	2,890	10	**32,855**
Total	293,266	98,333	(101,658)	–	(275)	**289,666**

Reference and administrative details

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Professor Andrew Hopper

Physical Secretary
Professor Peter Bruce**

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Biological Secretary
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* Retired 30 November 2018

** Appointed 30 November 2018

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The Royal Society is a self-governing Fellowship of many of the world's most distinguished scientists drawn from all areas of science, engineering, and medicine. The Society's fundamental purpose, as it has been since its foundation in 1660, is to recognise, promote, and support excellence in science and to encourage the development and use of science for the benefit of humanity.

The Society's strategic priorities emphasise its commitment to the highest quality science, to curiosity-driven research, and to the development and use of science for the benefit of society. These priorities are:

- Promoting excellence in science
- Supporting international scientific collaboration
- Demonstrating the importance of science to everyone.

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