# Promoting science for the benefit of humanity

Trustees' report and financial statements
for the year ended 31 March 2023

THE ROYAL SOCIETY

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## Strategic report



## Governance



## Financial statements



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 an independent 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 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.


Above: Dorothy Hodgkin Fellow, Matthieu Cartigny and his research team, involved in setting seafloor instruments to produce the first direct observations of a submarine landslide (Bute Inlet, Canada). The image on the front cover was taken during the same field campaign, and features Post Doctoral Research Associate Dr Rebecca Englert, also funded by the Royal Society, during the placement of a seismometer network to detect any submarine landslides remotely.

# What we do

**Give grants to fund scientific research**

**Provide scientific advice for policy**

**Promote science education and engagement**

**Support scientific collaboration, nationally and internationally**

**Recognise scientific excellence**

Read more about the Royal Society online at royalsociety.org

# About the Royal Society

The Royal Society has three roles that are key to fulfilling its purpose.

## Our purpose

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.

Scientific research and innovation advance our economic, social and cultural well-being, provide health benefits and are key to a sustainable long-term future.

Read more about how the Society fulfils its purpose for public benefit on page 8

## How we are governed

The governing body of the Society is its Council, whose members are elected by and from the Fellowship. Council is responsible for determining the strategic direction of the Society and approving specific charitable programmes.

Read more about Governance on pages 32 – 33

## What we do

The Society gives grants to fund scientific research, provides scientific advice for policy, promotes science education and engagement, supports national and international scientific collaboration and recognises scientific excellence.

Read more about the Society's activities on page 8

### 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

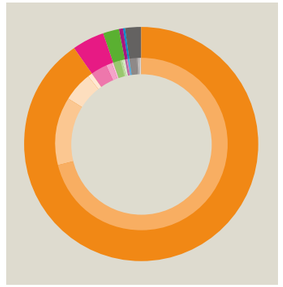
As a national academy, the Society represents the UK research community and collaborates with international partners to advocate for science and its benefits. It provides authoritative and independent advice on matters of science that support the public good, including policies that promote excellent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

## 2022/23 highlights

**£141.7m**

**total expenditure**
(compared to £127.7m in 2021/22).

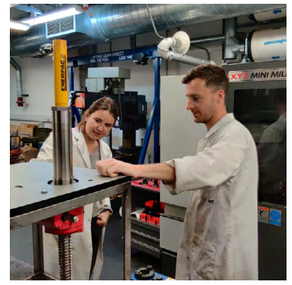
Read more about our expenditure on pages 27 – 28



**871**

**researchers currently supported by the Royal Society through its research fellowships.**

Read more about our grant-giving activities on page 11



**Over 43m**

**downloads of articles from Royal Society journals.**

Read more about our publishing activities on page 18


**62**

**new Fellows and Foreign Members elected, including 14 women.**

Read more about the Fellowship and Foreign Membership on page 14


**61%**

**of published papers were open access in the 2022 calendar year**
(compared to 53% in 2021).

Read more about our open access journals on page 19

**Over 300,000**

**views of Summer Science content across the Society's YouTube channel.**

Read more about our public engagement events on page 20


**Over 4.7m**

**views of the 2022/23 BBC Ideas films, made in partnership with the Society, across the BBC website and the Society's social channels.**

Read more about our public engagement activities on page 20

**Over 3,990**

**policy reports and briefings downloaded from the website.**

Read more about our science policy reports and briefings on page 17

# The Society's heritage

**The Royal Society has played a part in some of the most fundamental, significant and life-changing discoveries in scientific history.**

## 1660

The Royal Society is founded, following a lecture by Christopher Wren.

## 1662

The Royal Society publishes its first book, John Evelyn's *Sylva*. This recognised the impact of humans on the natural world and the need for sustainability.

## 1665

The world's first science journal was launched – *Philosophical Transactions*. It is still published today.


## 1763

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.

## 1796

Edward Jenner FRS trials his first vaccination, using cowpox to protect against smallpox. Vaccination would eventually become an accepted medical technique, saving millions of lives.

## 1826

Mary Somerville publishes her first paper in *Proceedings of the Royal Society*, *On the magnetizing power of the more refrangible rays of the Sun*. Although not the first woman to publish papers with the Society, Somerville becomes the most widely recognised female mathematician, writer and translator of science in the 19th century.

## 1851

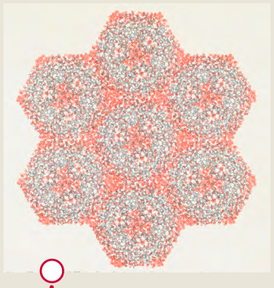
The UK Government awards the Society its first annual Government grant of £1,000 to be distributed for 'private individual scientific research'.

## 1867

Charles William Siemens and Charles Wheatstone present jointly on dynamo-electrical machines at the Society. Their machines were the first practical electrical generators used in industry.

## 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.

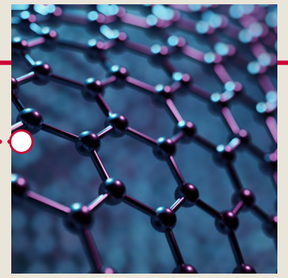


## 1964

Royal Society Wolfson Research Professor Dorothy Hodgkin FRS becomes the UK's only female Nobel Prize-winning scientist. She used X-ray crystallography to solve the structure of penicillin.

## 2006

The Stern review is launched at the Society. This seminal report on how global warming effects the world economy marked a turning point in climate policies globally.



## 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.

## 2020

The Data and Evaluation Learning for Viral Epidemics (DELVE) group is convened by the Society in response to the COVID-19 pandemic, contributing data driven analysis to inform the UK's strategic response to the pandemic.

### Looking forward

The Royal Society will continue to promote science and its benefits through its roles as a charity, Fellowship and National Academy.
Read more about upcoming activity on page 13.

Find out more about our history at royalsociety.org/about-us/history

# Challenges in the scientific landscape

The Royal Society has always stood for excellence in science and its application for human benefit: to quote the Charter, it exists to promote "by the authority of experiments the sciences of natural things and of useful arts, to… the advantage of the human race…"

What does the promotion of excellence mean in today's circumstances? We believe that science will play a key role in developing solutions to many of the greatest challenges currently faced by society, both now and in the future. The Royal Society formulated its Strategic Plan for 2022 – 27 in recognition of some of these challenges. By working directly with talented researchers, and continuing to take a forward-looking, global outlook, we are committed to creating conditions where innovation can flourish and the benefits of science can be shared by all.

### Global societal challenges

From biodiversity loss and food insecurity to climate change, many of the biggest challenges facing humankind are global in both cause and effect. Finding solutions to these complex issues will require concerted, collaborative effort, arising from international partnerships. At a time when global politics are marked by a tendency to insularity and protectionism, forging new partnerships and creating new knowledge-sharing networks is more important than ever to ensuring that science can thrive.

### Funding landscape

Within the UK, we are seeing the emergence of new models of science and innovation funding, and there have been rapid and frequent changes in the policy landscape, both with respect to science itself and areas affected by it. With the UK's relationship with Horizon Europe still unresolved, more certainty around the long-term outlook for the research environment is critical for the research community, along with clearer career trajectories for individual researchers.

### Academic freedom and the culture of science

There are widespread challenges in the culture of science including potential threats to academic freedom, concerns about rising bureaucracy and the presence of perverse incentives that are working against real quality in research.

### Value of international collaboration

In the wake of Brexit and the reduction in ODA commitments, the UK's position in the world has shifted, along with perceptions of the value of the UK as a science partner. There have been a number of high-profile initiatives to attract talent to the UK, but these need to be complemented by a recognition of the importance of mobility from within the UK to other countries and clear commitments to strengthen the pipeline of domestic talent.

### Mistrust and misinformation

Growing volatility and fragmentation in the global political landscape present a unique threat to the principles that underpin scientific discourse and endeavour. Isolationist, inward-looking policies endanger the networks and investments that are necessary for international collaboration. Growing levels of mistrust and misinformation serve to erode the openness and freedom upon which decades of extraordinary scientific discovery have depended.

### Technological change: artificial intelligence

Revolutionary technological change is affecting society at all levels. For instance, over the last 12 months, chat-based and image-generative platforms powered by large language model (LLM) networks have captured the public imagination on an unprecedented scale. Machine learning techniques have been employed in scientific settings for some time, with uses ranging from controlling plasma in hydrogen fusion reactors to accelerating the discovery of new antibodies to help combat infectious disease. Meanwhile, there is a growing body of evidence that LLMs can be opaque, fallible and can replicate biases inherent in the datasets upon which they are trained. As access to increasingly powerful LLM platforms expands, it raises far-ranging questions about their broader impact on society.

Science in a changing world

# President's foreword

**"The role of the Royal Society, now and into the future, is to continue to create an environment in which ideas can flourish, leading to innovation..."**

Sir Adrian Smith

President of the Royal Society

Science continues to be central to so many of the big debates in society. Domestically, research and innovation have been placed at the heart of the UK's plans for driving the economy and improving people's lives. Internationally, science remains central to tackling problems such as climate change and biodiversity loss.

The Government has continued to reinforce its commitment to increasing investment in science, with spending set to hit £20 billion a year by the end of this parliament – up from £14.7 billion in 2021/22. The Society had also been among voices calling for the importance of science to be recognised via a cabinet level post and that was delivered this year with the establishment of the new Department for Science, Innovation and Technology and the appointment of Michelle Donelan as the Secretary of State.

In last year's Trustees' Report, I lamented the continuing delay with the UK's association to the EU's research programmes. That has been a recurring theme this year, while the situation remained unresolved. The Government has, however, now entered negotiations and the Royal Society has continued to press for a quick resolution. I hope that in next year's report I will finally be reflecting on the successful conclusion of negotiations and I have been assured by the new Secretary of State that it is a priority of hers to deliver this.

The Royal Society has a long-standing interest in reform of the post-16 education system, which, for those taking A levels, is currently one of the most narrowly focused in the world. We are not preparing young people for the jobs of the future if we continue to make them give up science or humanities subjects at 16. We advocate for a broader education, which includes some element of maths for all students.

This year, we saw some progress on this goal, when in January the Prime Minister set out an ambition for all school pupils in England to study some form of maths to the age of 18. Such a reform to education will be difficult and there will be many barriers but all parties need to recognise that maths, data, statistics and numeracy are essential skills for a modern world. There was strong support for this at the *Future of Education* conference the Society held in June 2022 that brought together leaders across business, industry, academia, teaching and a range of other stakeholders.

The Royal Society is a Fellowship of the world's most eminent scientists and it is that Fellowship that gives us our strength. Our 1,700 Fellows are the bedrock of our expertise, independence and convening power. They also give us a reach far beyond the shores of the United Kingdom, with the soft networks of influence based on the flow of people and ideas across borders.

Our strategy commits us to not only ensure that we fully understand and make the best use of the unique resource that is the Fellowship but also strive to make sure that it is representative of scientific excellence in all its forms. Over the past year, we have been reviewing our election processes to try and ensure that we are finding the best people whoever and wherever they are. Changes have included the introduction of a broader range of election categories and increasing the number of Fellows who can be elected, and search panels are being established to help identify people whose talent and contributions might otherwise have gone unrecognised. We look forward to seeing the benefits of these changes in the coming years.

Making sure that our Fellowship includes the best people and getting the best out of them has never been more important. Science is central to tackling some of the world's big challenges and the mission of the Society, since it was founded in the 1660s, is the application of science for the benefit of humanity.

For the Society, this year has seen us explore a range of challenges as we seek to inform debate and influence policy making, both at home and on the international stage. Through reports, events and other activities we have looked at understanding the impacts of climate change and biodiversity loss and delivering solutions to both mitigate and adapt to those challenges. We have also explored how we ensure that the many benefits of technologies such as AI and genetic editing are fully realised, while the dangers are discussed and dealt with. That work will continue.

And, of course, there are the many researchers we fund and the science done by all of our Fellows. It is this ongoing quest for knowledge that drives progress. The success of COVID-19 vaccines did not happen overnight. Nor has the potential of AI or genetic technologies to improve lives. They are all based on the decades of work that have gone before. The role of the Royal Society, now and into the future, is to continue to create an environment in which ideas can flourish, leading to innovation, where those innovations can be debated, and applied in ways that can benefit humanity.

**Sir Adrian Smith**
President of the Royal Society

# Executive Director’s foreword

> “Science plays a critical role in cementing international relationships.”

Dr Julie Maxton DBE

Executive Director of the Royal Society

The last twelve months included the sad passing of our patron, Her Majesty the Queen. Her six decades as our Patron spanned great scientific progress, from the discovery of the structure of DNA at the very start of her reign to the subsequent revolution in information technology. It is our hope that King Charles will become the Patron, continuing a relationship with the Crown that dates back to the first Royal Charter in 1662.

2022/23 was the first year of the Royal Society’s new five-year strategy and good progress has been made towards our objectives.

Fundamentally the Society is its Fellowship. 52 Fellows and 10 Foreign Members were elected to the Society this year. Their achievements range from the detection of a new type of neuron in the human brain and the design and development of new vaccines for globally important infectious diseases to the development of a new way of looking at Einstein’s theory of general relativity.

Work to ensure that the Fellowship is representative of scientific excellence in all its forms has been a significant theme this year, with changes to the election process and steps to increase the diversity of nominations. This work represents an integral part of the Society’s strategy alongside plans to improve the diversity of grants’ applications and the continued effort to increase the equality, diversity and inclusion of the scientific workforce at all levels.

Since its inception, the Society has been a leader in supporting informed and evidence-based decision making in government and beyond. This year’s work on scientific advice for UK and global policy makers covered issues such as privacy enhancing technologies and multifunctional landscapes. Please read page 17 for a case study on the Society’s reports from the past 12 months.

A substantial amount of the Society’s influencing work is internationally focused, reflecting the global nature of science. Together with 18 other Commonwealth academies, the Society published a joint statement urging their nations’ leaders to work together to take coordinated action to address climate change, biodiversity loss and other critical and related sustainability challenges. The Third International Summit on Human Genome Editing took place in March in London, continuing the exploration of the areas of somatic and germline human genome editing.

Science plays a critical role in cementing international relationships. This year, we have worked with partners to assist Ukrainian academics who have had to flee their homes, and we are continuing to develop this package of support as the conflict continues.

The Society has always been a leader in shaping the character of the scientific enterprise and this is reflected in our work in awarding grants, in publishing and elsewhere.

The Royal Society’s grant expenditure, in the last financial year, was more than £108.8 million. This enabled the Society to support over 871 researchers at different stages of their careers, as well as hundreds of PhD students, postdoctoral research assistants and technicians, both in the UK and globally. Twenty entrepreneurs, senior scientists and business leaders were awarded a place on the Entrepreneur in Residence scheme for 2022.

In August the winner of the Copley Medal was announced and for the first time in its nearly 300-year history, the Medal was awarded to a team – the people responsible for the development of the Oxford-AstraZeneca COVID-19 vaccine.

The Transforming our future programme went from strength to strength with two conferences on *Machine learning and AI* and *Innovation in sport*. The programme of scientific meetings continued to bring together world-leading experts to advance their fields of research. This year’s topics included *Probing the quantum origin of spacetime* and *Confronting radical uncertainty.*

Publishing figures remain impressive. Papers from our journals were downloaded over 43 million times during the past year. The move to a sustainable open access publishing model for journals continues and 61% of our articles are now published as open access.

An exciting new initiative, the UK Young Academy, launched this year in conjunction with seven partner Academies. In January the first 67 members, who are passionate about driving societal change, were announced.

The Society has a long tradition of engagement in scientific matters with communities beyond the world of research. In December, the Society welcomed representatives from over 55 universities from across the UK, to discuss public engagement through the lens of REF21. The Society’s Public Engagement Committee is currently reflecting on the themes that came out of the conference and planning our next steps.

Twenty-eight schools took part in the *Tomorrow’s climate scientists* programme, which is an extension of the Society’s Partnership Grants, a programme funding projects in schools. The BBC Ideas partnership also continued and the films made in the last year have been watched over 4.5 million times.

The Summer Science Exhibition returned to an in-person format this year. 500 researchers showcased some of the country’s most exciting research through 16 exhibits and a livestream of the event helped reach as many people as possible.

The Royal Society Insight Investment Science Book Prize was won by *A (Very) Short History of Life on Earth* by Henry Gee. The winner of the Young People’s Book Prize 2022 was *If the World Were 100 People*, by Jackie McCann and Aaron Cushley.

Science and the Law continued with seminars on topics including *Climate change* and *Sex and gender* and the publication of two new primers in the series, *Collision investigation analysis* and *Forensic anthropology*. Planning is already under way for an international meeting next year, *Science in the interests of justice*, which will take place on 3 – 4 October 2023.

The Society’s historic collections expanded with the acquisition of the working papers of the molecular biologist and Nobel Laureate Sir John Ernest Walker FRS.

It has been a busy and rewarding year for the Society and I am grateful for the commitment, dedication and efforts of all my colleagues in every team.

**Dr Julie Maxton DBE**
Executive Director of the Royal Society

# Fulfilling the Society's purpose for public benefit

The Society's purpose 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 wellbeing, 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 carries out several activities to fulfil its purpose:

### Grants to fund scientific research

**Activities include:**

- Funding research that advances understanding of our world;
- Providing financial support for excellent scientists at various stages of their careers in the UK and internationally; and
- Working for greater equality, diversity and inclusion in the scientific workforce.

**Value created**

**For researchers:**

- Opportunity to build and develop an independent research career.
- Financial support and mentorship.
- Support to collaborate across different disciplines.

**Wider society:**

- Novel scientific research.
- Insight into solving global challenges.
- Developing scientific leaders.
- Developing greater diversity in the scientific workforce.

### Providing scientific advice for policy

**Activities include:**

- Providing expert scientific advice to policy-makers; and
- Ongoing emphasis on the importance of evidence-based policy.

**Value created**

**For policy-makers:**

- Ability to make more informed decisions in key areas of science.
- Policy-makers have access to independent, impartial and expert advice.

**Wider society:**

- Better policy decisions will lead to better outcomes.

### Promoting science education and engagement

**Activities include:**

- Publishing high-quality, cutting-edge research and supporting open science;
- Supporting excellence in the teaching of STEM subjects; and
- Staging programmes to engage the public with science.

**Value created**

**For researchers:**

- Collaboration and knowledge sharing accelerates scientific innovation.
- Increasing the reliability of research for others to build on.

**Wider society:**

- Increasing trust in science.
- Expanded engagement with cutting-edge research.
- Improved scientific literacy in the general public.
- Inspiring the next generation of researchers.

### Supporting scientific collaboration, nationally and internationally

**Activities include:**

- Organising discussion meetings to advance scientific collaboration and discovery; and
- Promoting the importance of science internationally.

**Value created**

**For researchers:**

- Opportunity to work with other scientists to expand knowledge and insights.

**Wider society:**

- Knowledge sharing between institutions and countries ensures continued scientific advancement.

### Recognising scientific excellence

**Activities include:**

- Electing exceptional scientists to the Fellowship;
- Promoting scientific achievements; and
- Demonstrating the economic impact of science investment.

**Value created**

**For researchers:**

- Rewarding outstanding contributions to the public good.

**Wider society:**

- Increased public and private investment in research.
- Inspiring the next generation of researchers.

## The Society has a number of attributes that mean it is uniquely placed to carry out these activities:

- The expertise of its Fellowship, which includes world leaders across all scientific fields.
- Its history and the successes of the Society's Fellows act as a source of inspiration.
- Its independence from Government and other organisations.
- Its ability to convene groups of individuals in key roles and with relevant expertise.
- The breadth of its scientific disciplines; this removes barriers and enables leading scientists in different fields to come together.

# Understanding the Society's stakeholders

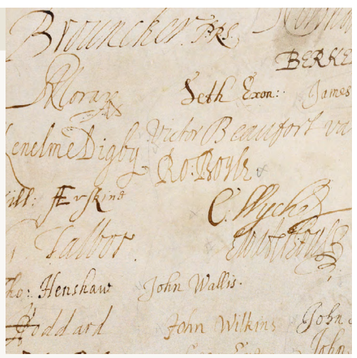
Working in partnership with others is fundamental to how the Royal Society operates.

By building strong relationships and empowering others, the Society catalyses connections and amplifies the benefits of science for society. We regularly engage with our stakeholders on the issues that matter to them, to inform our work and inspire others.

## Fellows

The Royal Society is an independent Fellowship made up of the most eminent scientists, engineers and technologists from the UK and the rest of the world. Its Fellows and Foreign Members are elected for life through a peer review process on the basis of excellence in science. Simply put, it would not exist without its Fellows and Foreign Members.

The Royal Society places a huge emphasis on encouraging collaboration and knowledge sharing within the Fellowship and Foreign Membership. It also provides a powerful platform for Fellows and Foreign Members to engage with external stakeholders in related and divergent disciplines, in industry, academia and beyond. We are committed to working more closely with Fellows and Foreign Members, convening forum events and conducting research to gauge their opinions and experiences of the Royal Society and to better understand how we can enhance our offer to them in the future.



## International partners

Scientific breakthroughs do not happen in isolation. That is why the Royal Society is committed to fostering scientific collaboration across borders and using its convening powers to facilitate knowledge sharing and the cross-pollination of ideas. Many of the biggest challenges faced by the world today cut across national boundaries. Developing effective solutions will require international co-operation and collaboration.

The disruption to global travel in recent years has underlined just how important it is for information to continue to flow freely between scientists working in different geographies and across different disciplines. Our ongoing involvement in a range of high-profile international partnership schemes ensures that scientific discourse continues to reflect and benefit from a range of different perspectives.

## Research scientists

As the UK's national academy for science, research scientists are at the heart of the Royal Society's work. Scientific progress relies on attracting and retaining talent within the field and creating the right conditions through a combination of career opportunities, recognition and support. We know that currently many researchers can face obstacles in pursuing their vocation and that some groups are consistently under-represented in the scientific community. That's why the Royal Society is committed to levelling up opportunities for all.

Our grants programmes give outstanding young scientists the freedom to conduct cutting-edge research and to pursue exploratory, curiosity-led innovation. In addition to providing funding, we work with academic institutions, funding bodies and policy makers to create the conditions in which talented researchers from a range of backgrounds can flourish. As our grants funding accounts for such a large proportion of our total expenditure, we monitor the impact of these programmes through regular evaluations, case studies and our longitudinal career tracker.

## Staff

The breadth and impact of activity that the Royal Society delivers is only possible due to the expertise, commitment and creativity of its staff. Ensuring that the Royal Society continues to be able to attract and develop talented individuals from a diverse range of backgrounds, is vital to its continued success.

We regularly consult staff via surveys and feedback sessions, helping us to ensure that we are providing people with the support they need to excel in their roles. The Royal Society strives to foster an inclusive working environment. The Society is committed to investing in its staff by recognising excellence and creating opportunities for career progression as well as providing competitive remuneration, generous benefits and an extensive wellbeing offer.

## Governments and policy makers

Whilst the Royal Society has always championed independent thought, it also recognises that by working with partners it can magnify its impact and reach new audiences. That's why we invest in creating long-term relationships with government and policy makers, applying scientific insight to some of the most pressing social and political issues of the day.

Sound scientific advice is a crucial element for evidence-based policy making, and the Royal Society provides access to leading authorities across a range of different disciplines. Its independence from outside influence and the rigour of its approach positions it as a trusted source of impartial advice on policy matters of national and international import. The Royal Society has strong relations with government and policymakers, who regularly approach it for expert advice on scientific matters. In addition, we actively engage with stakeholders to understand their priorities so that we can effectively highlight the value of evidence-based decision making in all forms of public debate and discourse.


## Future generations

Science is a discipline that looks to the future; research conducted today helps to lay the foundations for tomorrow's innovations. Whilst we cannot predict what new opportunities and challenges may emerge in time, we believe that science will have a fundamental role in helping individuals and communities to navigate these uncertainties and ensure that future generations can thrive.

Many of the scientists that the Royal Society has supported during their early careers have gone on to make major discoveries, developing ground-breaking innovations that benefit society as a whole. By investing in early career researchers the Royal Society helps to secure a pipeline of scientific talent for the future. Meanwhile, the Society's work with schools, universities and the wider public helps to inspire young people about science and ensure they are equipped to engage with and unlock the benefits of new technologies.

# Amplifying the Society's impact

**In last year's report, we looked at how the Royal Society's grants funding programmes can lead to outcomes that help to contribute to the United Nation's Sustainable Development Goals (UNSDGs). This year, our focus is on how our science policy activity is also having a positive impact in areas that relate to key aspects of the UNSDGs.**

The Royal Society's collaborative, multi-disciplinary and long-term approach to supporting science is part of what makes it unique. The majority of our expenditure goes directly to support world-class researchers, but we recognise that outstanding science is just the beginning of the journey to real world impact and the benefit to humanity that is the Society's core mission. By leveraging the Royal Society's reputation and convening power to bring science to the attention of policy actors, we can help to influence systemic change at both a national and international scale.

The Society's policy work covers a number of areas, including biodiversity and land use, AI and data tools, climate, education, and improving science and innovation systems.

The Royal Society has a long history of engaging with partner institutions and policy makers to create conditions in which science can influence policy for real world benefit. Indeed, the Royal Society has contributed to science policy and the wider research landscape since it was founded in 1660, with the purpose of encouraging the development and use of science for the benefit of humanity. Providing scientific advice and building strong influential partnerships continues to be an important part of the Society's core mission.

We undertake a range of activities – from synthesising cutting edge science into influential reports for policy makers, to consultation responses, convening policy workshops, hosting public dialogues, and briefing officials, Ministers and MPs on current key science issues. We communicate our work to policymakers, parliamentarians and other influencers, and help to build bridges between scientists and policy audiences.

## Supporting the transition to net zero

The Royal Society has long been an active advocate for an evidence-led response to climate change. Whilst science and technology alone cannot solve global warming, they will play an essential role in developing effective solutions. Our vision for a transition to net zero emissions emphasises three key strands:

- Deploy existing technology at scale. For instance, scaling up a national charging infrastructure to support the uptake of electric vehicles.
- Develop emerging technologies (such as improving energy storage and fuel cell performance) to anticipate risks and accelerate market entry.
- Research to discover the challenges and solutions of the future.

Alongside this, the Royal Society continues to call for the establishment of a Net Zero Advisory Group to create investment clarity from a realistic technology roadmap to achieving net zero in the UK, and for the UK to show leadership in setting the research and development agenda for achieving net zero internationally.

As part of the international dimension of our influencing agenda, the Royal Society has worked in partnership with scientists and policy makers from ten countries to identify the core issues that needed to be solved through science in a series of online meetings. In 2022, the Royal Society convened an in-person conference in Japan to discuss the actions required globally to achieve net zero. Through ongoing, bilateral and multilateral dialogue, we hope to establish an international consensus on the research and development priorities needed to reach net zero.

Our work around net zero permeates a range of our activity, including our *Transforming our future* conferences, public events, education policy and the schools engagement programme.

The Royal Society has developed a range of resources showcasing how science can contribute to building a more sustainable future for all. Included below are some highlights – follow the links to find out more.

### Videos and digital content

- What is net zero?
- Climate change in 60 seconds.
- Climate Change Q&A.
- #2050Challenge campaign on net-zero.

Further information is available online at youtube.com/@royalsociety

### Transforming our futures

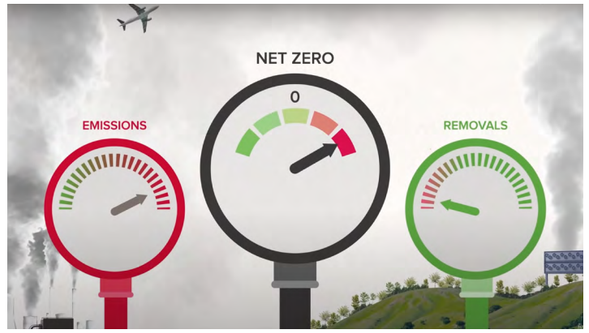
- Unlocking building sustainability.
- Sci-Fi: bridging climate science and green finance.
- Digital technologies and the planet: towards net zero.
- Future food: health and sustainability.
- Energy storage: automotives and grids.
- Decarbonisation of electricity and transport.

Further information is available on our website

### You and the planet

- Tomorrow's Earth.
- Oceans.
- Air.
- Technology.
- The new normal.
- Biodiversity.
- Food.
- Energy.
- State of the Earth.

Further information is available on our website



Above: Image from *What is net zero?* animated explainer video.

## Summary of impact

- Thirteen substantial reports looking at how science can contribute to achieving net zero, as well as a number of high profile workshops gathering together exceptional scientists from around the world.
- An estimated £85 million invested by the UK government in climate science and net zero technology has directly cited Royal Society reports and policy briefings, with a further £750 million of investment indirectly linked to Royal Society policy work.
- The Royal Society's report on greenhouse gas removal was a cornerstone of the evidence that led to the UK government adopting a target of net zero by 2050.
- The Royal Society has worked directly with ten countries (including all G7 members) from which deeper relationships have developed.

## Looking forward

## 2023/24

Over the next 12 months, the Royal Society is planning follow-up reports focusing on energy efficiency and defossilisation of the chemical industry. It will also host in-depth meetings with partners in China, the USA and Germany to identify opportunities for bilateral research, whilst working directly with the UK government to support a safe and sustainable transition towards a net zero economy.

SUSTAINABLE DEVELOPMENT GOALS

2 ZERO HUNGER · 4 QUALITY EDUCATION · 7 AFFORDABLE AND CLEAN ENERGY · 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE · 11 SUSTAINABLE CITIES AND COMMUNITIES · 12 RESPONSIBLE CONSUMPTION AND PRODUCTION · 13 CLIMATE ACTION · 17 PARTNERSHIPS FOR THE GOALS

# The Society's grant-giving activities

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.

## About our grant programmes

The Society provides research fellowships and other grants for outstanding researchers in the UK and internationally. The value of grant awards made by the Society has significantly increased since 2018/19, with an overall increase of 28% from £84.7 million to £108.8 million in 2022/23. The reduction in capacity strengthening grant awards since 2021/22 is due to a decrease in grant funding made available by the UK Government for the Society's Official Development Assistance (ODA) funded programmes. The largest portion of our grant expenditure is in grants to early career researchers through the Society's University Research Fellowship and Dorothy Hodgkin Fellowship programmes.

| £m | 2022/23 | 2021/22 | 2020/21 | 2019/20 | 2018/19 | Change over four-year period |
|---|---|---|---|---|---|---|
| Early career researchers | 83.5 | 72.7 | 69.4 | 60.2 | 51.8 | 61% ↑ |
| Established researchers | 13.4 | 11.4 | 14 | 12.7 | 9.8 | 37% ↑ |
| International collaborations and travel | 7.2 | 7.3 | 6.9 | 8.1 | 8.7 | -17% ↓ |
| Capacity strengthening | 1.5 | 5.7 | 20.1 | 16.8 | 10.1 | -85% ↓ |
| Industry, innovation and translation | 2.5 | 2.7 | 3.1 | 2.7 | 2.3 | 9% ↑ |
| Other | 0.7 | 1.8 | 1.6 | 2.0 | 2.0 | -65% ↓ |
| **Total** | **108.8** | **101.6** | **115.1** | **102.5** | **84.7** | **28%** ↑ |

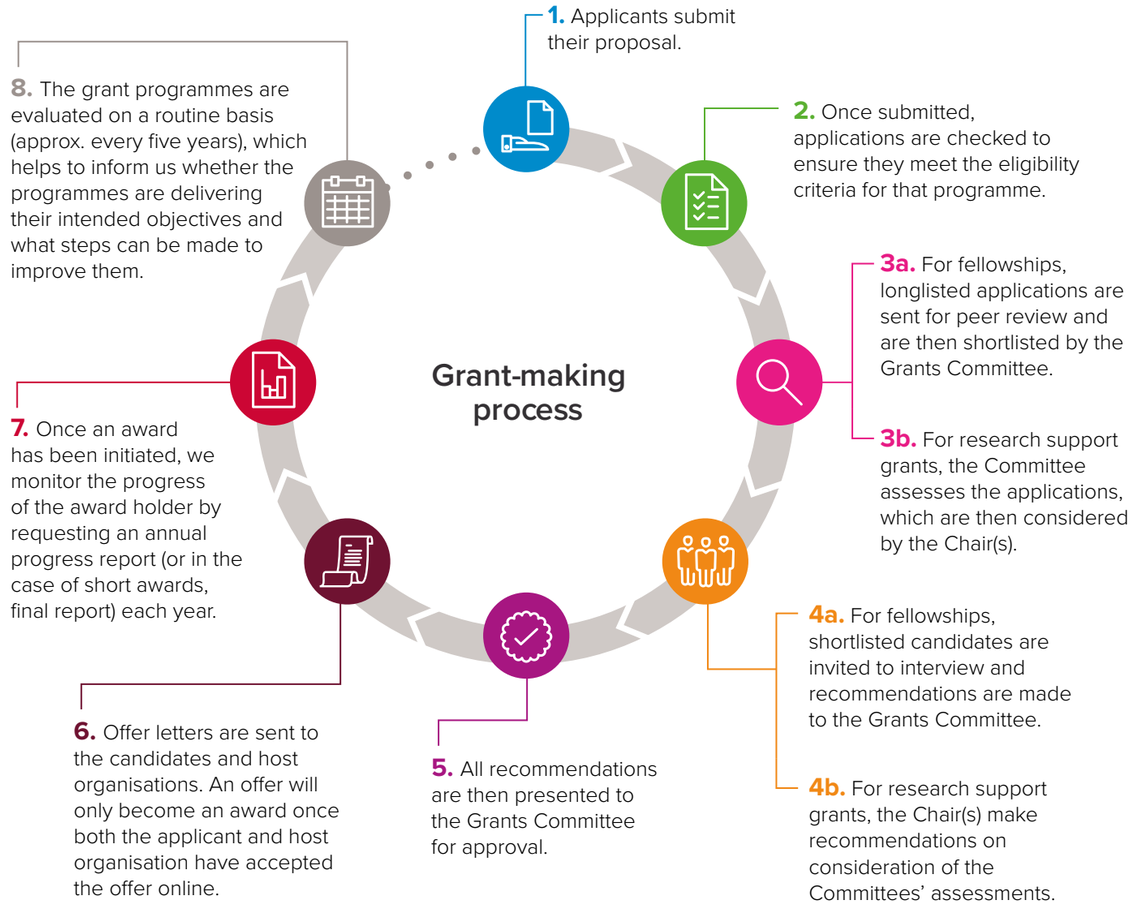
## Grant-making process

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

- Research Fellowships, which include early career, senior and industry fellowships as well as professorships; and
- Research grants, which include collaboration grants, travel grants, capacity-building grants and 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.

Further information is available online at royalsociety.org/grants/applications



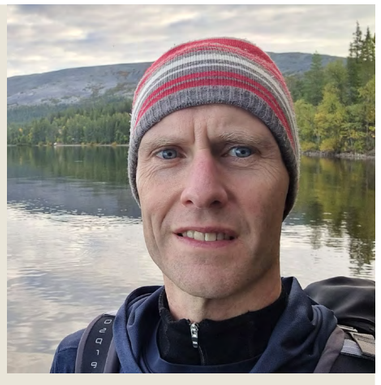

## How Royal Society grants are funding frontline research

### Professor David Hannah

Royal Society Wolfson Fellow – University of Birmingham

David's research spans a breadth of topics across water science. His overall goal is to explore how global change, including climate change and human activity, are altering water quality and availability for people. Through this work, he provides policy advice to the UK water industry and governments, partakes in public engagement activities including at the 2022 Commonwealth Games, COP26 and COP28 and holds leadership positions including the Chair of UKRI Natural Environment Research Council's Science Committee.

His expertise and publication record resulted in David receiving the Royal Geographical Society Murchison Award 2022 for "quality, international impact and breadth of publications within the field of hydroclimatology".



# Where the Society's income comes from and how it's spent

The Society receives income from a number of sources. Its income enables the Society to deliver a wide range of programmes in support of its strategic aims.

The outer rings below show the sources of income used to fund the expenditure against each of the strategic aims.

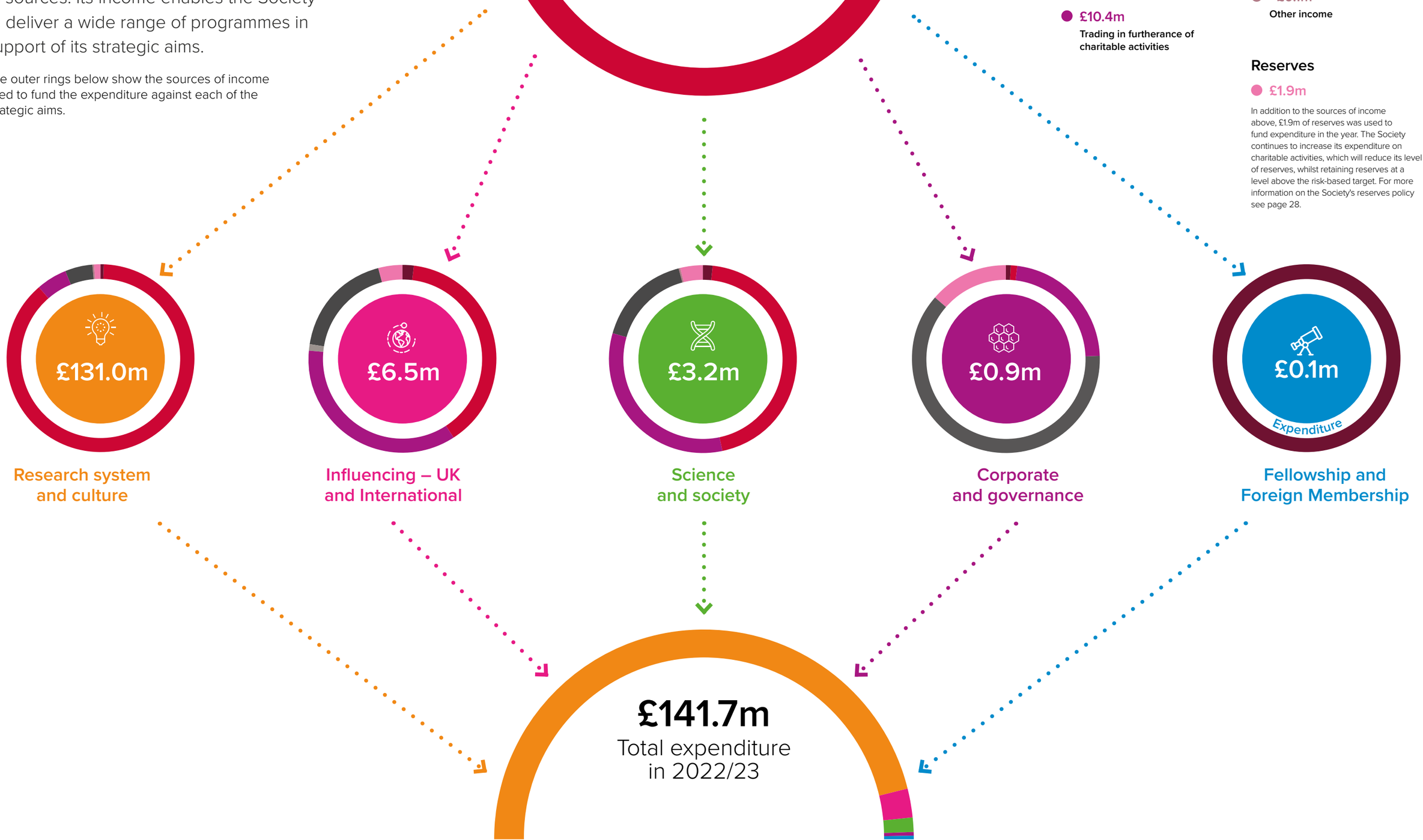

## Sources of income

- **£1.4m** Income and endowments from donations and legacies
- **£119.2m** Grants for charitable activities
- **£10.4m** Trading in furtherance of charitable activities
- **<£0.1m** Other trading activities
- **£8.7m** Income from investments
- **<£0.1m** Other income

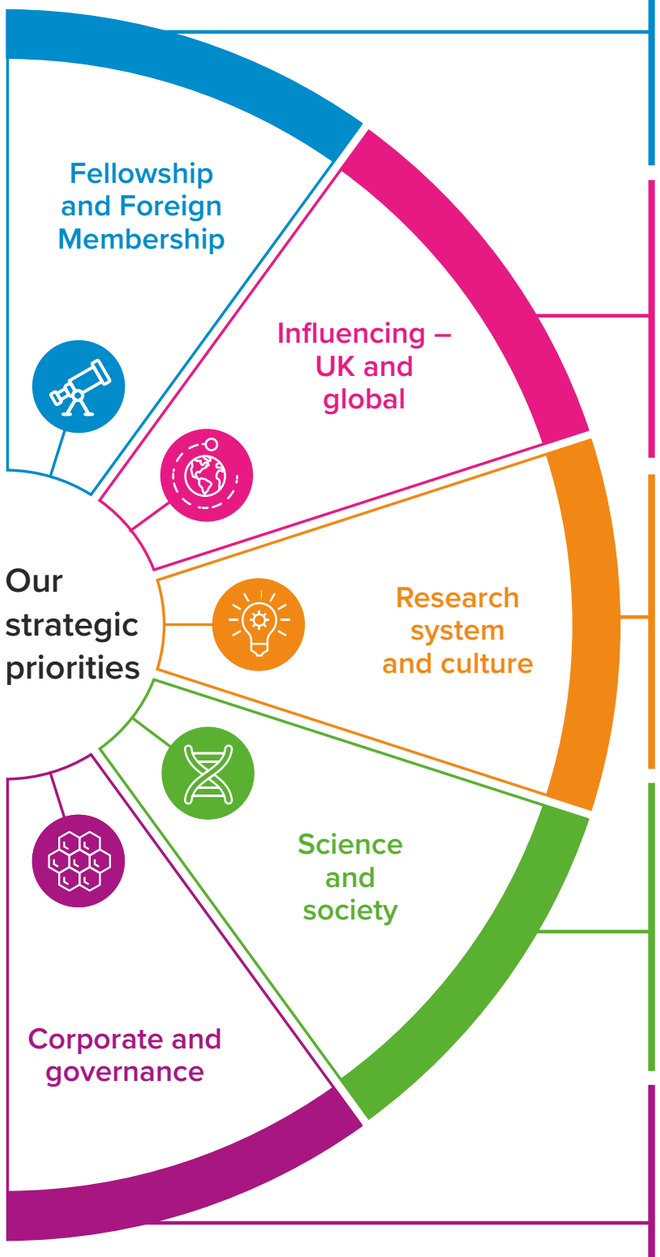
## Reserves

- **£1.9m**

In addition to the sources of income above, £1.9m of reserves was used to fund expenditure in the year. The Society continues to increase its expenditure on charitable activities, which will reduce its level of reserves, whilst retaining reserves at a level above the risk-based target. For more information on the Society's reserves policy see page 28.



# The Society's strategy at a glance




## Strategic priority

Fundamentally, the Society is its Fellowship. None of our work can be delivered without an excellent, diverse, and engaged Fellowship and Foreign Membership. They sit at the centre of wider networks of excellence, which are also critical to the Society's work.

Read more about **Fellowship and Foreign Membership** on page 14

Since its inception, the Society has been a leader in supporting informed and evidence-based decision making, in government and beyond.

Read more about **Influencing – UK and global** on page 16

Since its early focus on the application of the experimental method, the Society has been a leader in shaping the character of the scientific enterprise.

Read more about **Research system and culture** on page 18

The Society has a long tradition of engagement in scientific matters with communities beyond the world of research.

Read more about **Science and society** on page 20

The Society's ability to deliver these programmes rests on a wide range of coordination and support services. The systems and policies that underpin our work need to be fit for purpose and support clarity, transparency and accountability in our decision making.

Read more about **Corporate and governance** on page 21

## Progress to date

- 62 new Fellows and Foreign Members elected in recognition of their scientific achievements.
- Royal Society Fellows and Foreign Members active at scientific events and conferences, covering topics from marine science to cognitive artificial intelligence.
- New search committees established, to identify talented researchers working in industry and commercial settings.

- Continued engagement with the UK government and scientific communities in UK and Europe to encourage full association to Horizon Europe.
- Working with policy makers to make the case for universal access to mathematics teaching up to the age of 18. A measure later endorsed by the government in its 2023 commitment to restructure maths education in England.
- Proposals for the 2022/23 parliamentary session highlighted the importance of research and development (R&D), action on climate change and protecting biodiversity.

- Over £108.8m grants awarded in 2022/23, including £83.5m to early-career scientists.
- The UK Young Academy officially launched in 2022.
- The Royal Society moved closer to its target of publishing 70% of its journals on an open-access basis.
- Two new award schemes launched to celebrate the work of technicians and research office staff.
- Twenty candidates from across 19 universities and institutions awarded a place on the Royal Society Entrepreneur in Residence scheme.

- The Royal Society's *Transforming our future* events highlighted how cutting edge science could impact areas as diverse as pandemic prevention and elite sport performance.
- The Science and the Law programme published several primers and delivered seminars on climate change and the law.
- The Society's *Creating Connections* explored the role of research and development in driving innovation and prosperity, across the UK.
- Over 5,750 visitors attended the 2022 Summer Science exhibition. Online materials from the event attracted more than 337,000 views.

- The new Royal Society strategy launched in spring 2022, setting out the Society's priorities for the next five years.
- Investment in strengthened cyber security to safeguard systems and data in response to increased levels of external threat.
- A new post has been created to co-ordinate the Royal Society's environmental impact reduction activities.

## Goals for 2023/24

- Fellowship Forum pilot to update Fellows on current activity and explore topical issues. Follow-up sessions across the UK in development.
- Research to gather insights on Fellows' areas of interest and expertise to facilitate collaboration and engagement.
- Implementation of the changes to the election process agreed in February 2023.

- Reports on how science and technology can help reduce carbon emissions and practical action to reduce reliance on fossil fuels.
- Working with the Chinese Academy of Science and partners in the USA and Germany to identify research opportunities.
- In May 2023, the Royal Society will host a conference on *Ukraine's recovery: rebuilding with research*.

- Development of long-term vision for science in the UK, setting out how research systems and culture can be strengthened over the next 20 years.
- In May 2023, the Royal Society will host *Sustainability in the research and innovation endeavour*, a conference exploring how laboratory research can be made more sustainable.

- Spring 2023 launch of *Science in the Making* programme, making material from the Society's historical scientific journals publicly available in digital format.
- *Creating connections* in Scotland 2023 – a two-day conference focusing on Scottish research and innovation, in partnership with the Royal Society of Edinburgh.
- The 2023 Summer Science event will enable participants to meet scientists working on cutting-edge research and explore a series of interactive exhibits and workshops.

- An independent Board Effectiveness review will assess and make recommendations on governance and decision-making at the Society.
- A programme of work to strengthen the Royal Society's risk management procedures.
- A salary benchmarking exercise will be conducted, to ensure the Royal Society continues to be an attractive employer.
- Launch of new website in late 2023, a refreshed online platform to showcase the Royal Society's work and engage and inspire the public.

# Strategy in action

## Fellowship and Foreign Membership

### Strategic outcomes:

1. A Fellowship and Foreign Membership that is representative of scientific excellence in all its forms (including in industry, innovation, engineering, technology and medicine).
2. A Fellowship and Foreign Membership that is closely engaged in the work and decisions of the Royal Society.
3. A Royal Society that understands in depth (and makes best use of) the remarkable resource that the Fellowship, Foreign Membership, and its many grant holders represent.
4. A Fellowship and Foreign Membership engaged in strong collaborative networks beyond the Society, with leaders in research, industry, innovation and administration.

### Recognising and representing scientific talent

The Fellowship and Foreign Membership form the heart of the Society's networks, but these are expanded by wider networks of scientists funded by the Society and others, all of whom contribute to our work.

Science is strongest when it incorporates a diverse range of perspectives, focusing on quality and talent, regardless of demographic and socio-economic factors. The Royal Society is committed to broadening representation among the scientific community at all levels and ensuring that careers in science are accessible to all. This year's intake of new Fellows included 14 women scientists. We recognise that historic and systemic inequalities within the science sector – and wider society – mean that there is still a long way to go for science to be truly inclusive.

1 3

### Election of scientists to the Fellowship

As part of ongoing efforts to represent the full spectrum of scientific talent, the Royal Society adopted a number of changes to the process for election of the Society's Fellowship and Foreign Membership, as discussed at a Special General Meeting of the Fellowship held on 7 February 2023. These reforms affected the classification of Fellows, the annual numbers that may be elected in the different categories, the committee structure supporting the election process, and the ways in which the Society supports the nominations process. These reforms have been brought in with the aim of better representing scientists from non-traditional backgrounds, such as industry and commerce. It is also hoped that by increasing the maximum number of Fellows that can be elected in any given year, a broader range of talent can be reflected within the Fellowship.

This work will be supported by the establishment of a new Fellowship working group, tasked with looking in depth at current sectional committee practice, how this might be improved, and whether further changes to the treatment of mainstream candidates are required.

1 3

### Forums and Fellowship Engagement

As well as engaging the Fellowship on the changes to the way in which Fellows are nominated, the Society has also embarked on a series of initiatives to involve and engage Fellows with its activities. A new Fellowship Engagement Manager post has been created to coordinate this work. One of the responsibilities of this new role will be to develop a range of guidance, mentoring and support resources to help newly-elected Fellows to orient themselves within the organisation and to provide clear guidance on their roles and responsibilities. Planning is already underway for a series of regular Fellowship engagement events to take place in 2023 and beyond.

2 4

### Entrepreneurs in Residence

The Royal Society Entrepreneur in Residence (EiR) scheme aims to increase the knowledge and awareness in UK universities of cutting edge industrial science, research and innovation.

Twenty entrepreneurs, senior scientists and business leaders from across 19 universities and institutions, were awarded a place on the Royal Society Entrepreneur in Residence scheme for 2022.

The Entrepreneurs join a growing network in universities and research institutes across the UK, helping translate cutting-edge research into industrial success. Alongside their host institution, the award holders will develop projects that build the entrepreneurial skills of staff and students, as well as their understanding of the scientific challenges being tackled in the innovation sector.

Through the scheme, Entrepreneurs in Residence are funded to spend one day a week with the partner institution. The scheme has funded 101 placements in 46 universities across the UK since it was established in 2018.

4

### Looking forward 2023/24

The Society will continue to recognise scientists' achievements through election to the Society's Fellowship.

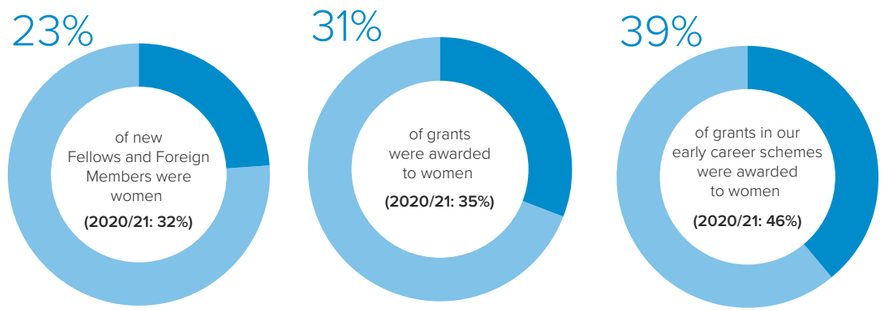
The changes to the nomination process introduced in 2022/23 will be supported by work to ensure the promotion of more diverse nominations, and work to maintain and enhance the Society's reputation for identifying and recognising excellence in science.

A series of Fellowship Forum events to be held in regional centres extending the Society's reach within and beyond London and the South East.

In late 2023, the Society will scope out a research project to survey the entire Fellowship to better understand their attitudes towards and experiences of the Royal Society.

Above: 2022 Fellows admission day

### Gender diversity of new Fellows and of new grant awards



# Strategy in action CONTINUED

## Case study: Research funded by the Society

We believe in funding talented individuals, regardless of background or specialism so they have freedom to follow the science wherever it leads. This radical exploratory approach, twinned with our ability to spot and invest in potential, is part of what makes the Royal Society's grants programme unique.

### Dr Rucha Karnik
**University Research Fellow, University of Glasgow**

Increasing atmospheric carbon dioxide levels and climate change have a negative impact on crop health and productivity, thus increasing scarcity for food and limiting the availability of agricultural land and water resources world-wide. Aimed at mitigating climate challenges, Rucha's research addresses how plants sense and respond to carbon dioxide. She focuses on stomata – the microscopic pores on plants that uptake carbon dioxide for photosynthesis in exchange of water loss. Rucha's work is crucial to increase our understanding of how plants respond to climate pressures, an essential first step to ensuring food and water security into the future.

### Dr Assumpta Chinwe Nwanya
**Future Leaders – African Independent Research Fellow, University of Nigeria**

Assumpta is a *Future Leaders – African Independent Research (FLAIR)* Fellow, based at the University of Nigeria, developing low cost and environmentally friendly nanomaterials for application in electrochemical energy storage devices to store the renewable energy generated through solar and wind power in Nigeria. Her focus was on green synthesis routes, hence Assumpta's starting materials were synthesised from plants such as aloe vera. This eliminated the use of toxic chemicals, thereby reducing the pollution risk whilst producing the desired materials using a less energy intensive methodology reducing the environmental impact.

The research that Assumpta has completed during her FLAIR Fellowship led to promotion to Senior Lecturer in 2022, with similar benefits to other members of her research team. Conference attendance imparted skills in research paper writing, publishing, and presenting meaning that almost all of Assumpta's seven research assistants have now been able to publish their work. The success of her research team has led to requests from nearby institutions to co-supervise Masters and PhD students.

### Dr Guolin Yun
**Newton International Fellow, University of Cambridge**

Liquid-metal electronic skin sounds like something from a Sci-fi film but in reality, it is a vital component to the prosthetics that are worn by nearly 10 million children and adults. Current electronic skin cannot sense pressure like human skin due to the limitations of the pressure sensors used. The sensitivity is either lower, or there is a narrow range of pressure that can be detected.

Guolin's research aims to improve this sensitivity over a wide working range, and endow the sense of human touch to prosthetics and soft robotics used in biomedical and agricultural applications. He hopes to achieve this by designing a new generation of liquid-metal enabled e-skin through innovations at the nano, micro and macro-length scales.

### Dr Natalia Ares
**University Research Fellow, University of Oxford**

The theory of thermodynamics is a universal set of laws that governs everything from black holes to the evolution of life. With modern technologies miniaturising devices to the atomic scale, thermodynamics can now be tested in a completely new realm. Natalia builds experimental platforms to explore the thermodynamics of small devices operating in the quantum regime. Her devices allow her to build engines with nanoscale pistons and electrons as 'steam'. Her research has resulted in a spin out company QuantrolOx, which has been awarded two significant grants from the European Innovation Council and an Industrial Strategy Challenge Fund from UKRI to develop and commercialise her research on the automatic tuning of quantum devices.

### Dr Jennifer Carter
**Dorothy Hodgkin Fellow, University of Leicester**

Jennifer, an astrophysicist specialising in the Earth's magnetosphere and how it interacts with the solar wind, is working with the European Space Agency and the Chinese Academy of Sciences to launch their spacecraft SMILE in 2025. SMILE will observe the 'Sun-Earth connection' when the solar wind first encounters the Earth's magnetic field, while simultaneously measuring how the Earth's outer atmosphere responds. This is the process responsible for causing effects such as the aurora borealis, otherwise known as the Northern Lights. Jennifer's findings have implications on power generation and communication as the processes she is researching fall under the umbrella of space weather.

# Strategy in action CONTINUED

## Influencing – UK and global

**Strategic outcomes:**

1. Decision making by those who frame policy for science is informed by a rich evidence base and sets a strong framework for excellence in research and innovation.
2. The case for investment in science and innovation is widely understood in all relevant sectors.
3. The Royal Society is an active contributor to debates relating to matters where science has an important perspective to offer, improving decisions at all levels of government and beyond.
4. Royal Society advice on policy relating to global challenges is recognised and effectively used in bilateral and multilateral fora.

### Policy for science

The Society is a leader in supporting informed and evidence-based decision making in government and beyond.

Science policy reports represent a key output of the Society and these are explored in-depth in a case study on page 17.

1 3

### UK Budget

The Society has continued to advocate for the importance of science, technology and innovation for the UK economy and a range of related initiatives featured prominently in the 2022 UK budget. There was also acknowledgement of the role of education and skills as drivers of growth and productivity.

2

### Horizon Europe

Issues around the Northern Ireland protocol delayed the UK's association to the EU's Horizon Europe programme for many months. Over this time, the Royal Society consistently used every opportunity to press politicians and civil servants in the UK and globally to secure association as quickly as possible.

With the announcement of the Windsor Framework in February 2023 to resolve the issues of the Northern Ireland protocol, there was finally a very real prospect of sealing the deal on association to Horizon Europe, Euratom and Copernicus. The Society continues to push hard for swift action with both private and public interventions, as it did with a recent joint letter from Science Academy Presidents across Europe and Nobel Laureates.

1 2 3

### Ukraine

Following Russia's invasion of Ukraine, the Royal Society moved quickly with other Academies in the UK and internationally to provide support to Ukranian researchers who have had to flee the conflict and Ukraine's science sector. The Society has been a key partner to the Cara and British Academy Researchers-at-Risk scheme, which is providing support to Ukrainian academics in the UK and we have worked closely with the US, Polish and other academies to provide support to the Ukrainian Academy of Sciences.

In January 2023, the Society partnered with the Universities Policy Engagement Network (UPEN) and Universities UK (UUK) to begin work on a conference taking place in May 2023 entitled *Ukraine's recovery: rebuilding with research*.

3 4

### Third International Summit on Human Genome Editing

The London meeting of the Third International Summit on Human Genome Editing took place on 6 – 8 March. The three-day summit expanded the global conversations around somatic and germline human genome editing. The event was organised by the Royal Society, the UK Academy of Medical Sciences, the US National Academies of Sciences and Medicine and The World Academy of Sciences.

Above: Speakers at the *Third international summit on human genome editing* conference.

4

### Commonwealth

In June 2022, the Society joined 18 Commonwealth science academies to urge their nations' leaders to work together to take coordinated and equitable action to address climate change, biodiversity loss and other critical and related sustainability challenges. Their call, made in a joint letter to Commonwealth Secretary-General Baroness Patricia Scotland, drew on recommendations shared with the Commonwealth Heads of Government in a joint statement and a joint letter in 2020 and 2021 respectively. The letter was issued shortly before the Commonwealth Heads of Government Meeting (CHOGM) in Kigali.

4

### International scientific meetings

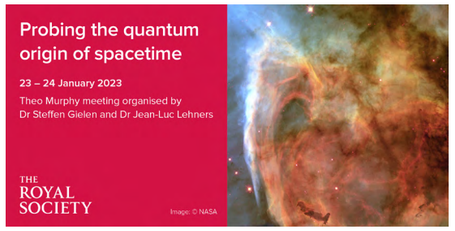
Each year, the Society runs a series of internationally renowned scientific meetings that bring together leading experts to discuss the latest research and to develop knowledge of their field.

This year, meetings included *Probing the quantum origin of spacetime* and *Confronting radical uncertainty.*

**26** (2021/22: 10) **UK and international scientific meetings**

**1,172** **attendees in person and 3,706 online registrants**

**516** (2021/22: 266) **speakers, chairs, organisers and panellists**




Above: Social media posts promoting *Probing the quantum origin of spacetime* and *Confronting radical uncertainty* scientific meetings.

3

### The science academies of the G7

Ahead of the G7 summit in Japan in May 2022, the science academies of the G7 countries issued a joint statement calling for the protection of the environment and human health. The academies focused on three areas: the need to address systemic risks in a world vulnerable to climate change, conflict, and global health crises; the protection and restoration of the ocean; and improvement to health and wellbeing in an ageing society. The statements were submitted to the governments of the G7 countries at the G-Science Academy 2023 International Symposium held in Tokyo in March 2023.

4

### Looking forward 2023/24

Building on the success of its recent reports on sustainability and recommendations for practical steps to net zero, the Royal Society is looking to develop new policy reports on a number of topics, including the defossilisation of the chemical industry and energy efficiency.

In May 2023, the conference, *Ukraine's recovery: rebuilding with research*, will explore how research can help to tackle some of the many challenges facing policymakers and facilitate a greener economic recovery.

The conference outcomes will be shared with policymakers ahead of the UK government hosted Ukraine Recovery Conference taking place in June 2023.

Over the coming months, the Royal Society will be actively engaging in in-depth meetings with the Chinese Academy of Science and partners in the USA and Germany to explore bilateral research opportunities.

Longer term projects include work towards creating a roadmap to demonstrate the viability of hydrogen as a low carbon alternative energy source and formulating an early stage proposal for a net-zero advisory group for the UK Government.

# Strategy in action CONTINUED

## Case study: Science policy reports and briefings

The Royal Society provides independent, timely and authoritative scientific advice to UK, European and international decision makers. This is often implemented through policy briefings, reports and publications covering an array of scientific topics.

In the last year, reports and briefings have included:

- *Net zero aviation fuels: resource requirements and environmental impacts.*
- *Creating resilient and trusted data systems.*
- *Multifunctional landscapes.*
- *Privacy enhancing technologies (PETs).*
- *Climate change in the critical decade: A summary of the IPCC Sixth Assessment Report and its implications for the UK.*
- *Locked away: geological carbon storage.*

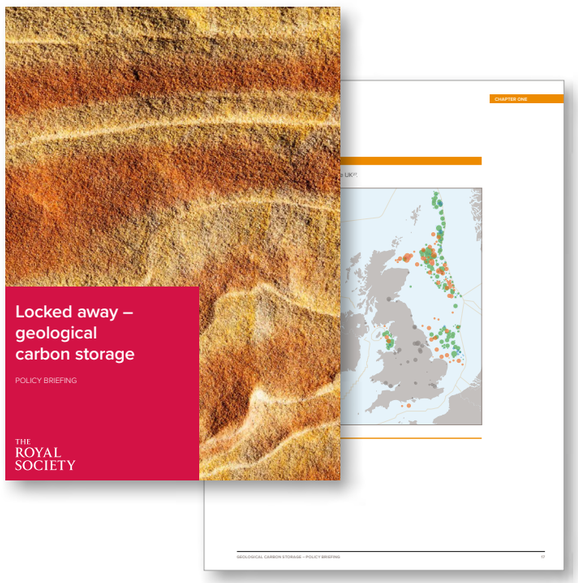


## Impact

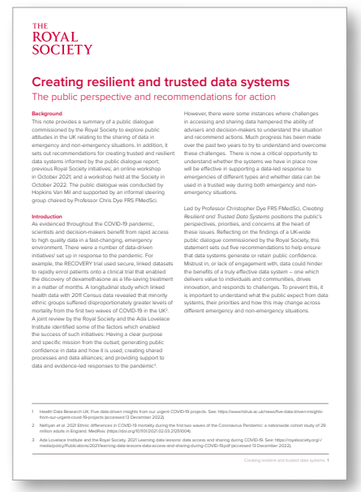
*Net zero aviation fuels* received lots of media coverage, including the BBC and a successful report launch was held at Parliament. Attendees included the Minister for Aviation, the Labour Shadow Minister for Climate Change, and representatives from industry. Subsequent meetings were organised with Labour Shadow Minister for Climate Change, and the Liberal Democrats' Shadow Minister for Climate Change.

The impact of the Society's work often goes far beyond written outputs and media coverage. Creating resilient data systems and trusted data systems was cited in the Institute for Government's report on lessons from the pandemic. The findings of *Data for emergencies* were also presented at a UNESCO conference in Paris.

Since its launch in January, the PETs report has seen uptake of its recommendations in UK government departments. For example, the Centre for Data Ethics and Innovation are developing a cost-benefit analysis tool for PETs as suggested in the report. In February, the Society presented the report's findings in Washington DC as part of AI regulation workshops between UK and US government, public and private sector organisations.






Above: Science policy reports from 2022/23.

# Strategy in action CONTINUED

## Research system and culture

**Strategic outcomes:**

1. Maintaining a healthy environment for continued scientific discovery and application in the UK and beyond.
2. The Society is recognised internationally as a visible leader on open science, academic freedom, and integrity in science.
3. People from diverse, non-traditional backgrounds are encouraged and supported to take up scientific and technical careers and enabled, through an inclusive culture, to progress to leadership positions and/or make positive contributions to the wider innovation agenda through the appropriate development of skills.
4. The research system treats people fairly and rewards the full range of scientific activity (in the broadest sense of the words) that benefits society.
5. The UK develops an enduring reputation for being a magnet destination for partners and for talented researchers from all over the world, who are attracted by the strength and benefits of the UK research system and the career opportunities it offers.

### Investing in outstanding researchers

In 2022/23, the Society awarded £108.8 million to fund exceptional researchers and outstanding scientists. This is an increase in funding of 7% from last year, as we have continued to increase the scale of our grants programme. The Society supports both early career and senior scientists through a range of schemes, which include both discovery-led and applied research. We work with partners overseas to support international collaborations and are involved in industry and innovation schemes. The next generation of research leaders are supported with opportunities including training, mentoring and networking. These schemes are funded by the Government, in partnership with other funding organisations, via philanthropic gifts and through the Society's own funds.

1 4

### Long-term vision for science

The long-term vision for science (also known as 'Science 2040') is a five-year programme, chaired by the Royal Society's President, Adrian Smith, aimed at countering the cycle of short termism in science policy and UK politics and seeking long-term cross-party commitments on funding, governance and strategic direction. The first meeting of the programme's steering group took place in March. A parallel action group on the economic value of science, led by Richard Jones FRS, is underway, and a further action group will be set up shortly on societal resilience co-chaired by Julia King, Baroness Brown of Cambridge FRS and Sheila Rowan FRS.

2 5

Above: The Royal Society Research Culture Award 2022 was awarded to Mark Richards.

### Awards and prizes

The Copley Medal, the Society's oldest and most prestigious award, is awarded for sustained, outstanding achievements in any field of science. In 2022, it was awarded to the Oxford-AstraZeneca Vaccine Team (pictured left) for rapidly developing and deploying a COVID-19 vaccine, the first time in the nearly 300-year history of the Copley Medal that it has been awarded to a team.

Other recipients of the Society's 2022 prizes awarded for their involvement in the COVID-19 pandemic include Professor Sir Jonathan Van-Tam MBE FMedSci, who received the David Attenborough Award and Lecture for his public engagement work, and Professor Graham Medley OBE who was awarded the Gabor Medal, in recognition of his team's epidemiological modelling contributions.

The Royal Society introduced two new annual prizes in 2022, celebrating the work of technicians and those who work to improve research culture.

The Hauksbee Award is awarded for outstanding achievements in science to an individual or team whose work is mostly 'behind the scenes' or in support, including technicians, research office staff or other contributors who might not normally be recognised.

The Research Culture Award is awarded annually to an individual or team for outstanding and sustained work in the improvement of the research system and research culture.

4

### Publishing

The Royal Society publishes journals that cover the entire range of mathematics, physical sciences, biology, engineering and the history of science. Over 43 million articles were downloaded from the Society's journals in 2022/23, an increase compared to the 40 million downloaded in 2021/22. Please read the case study on page 19 regarding the journals' transition to open access.

2

### UK Young Academy

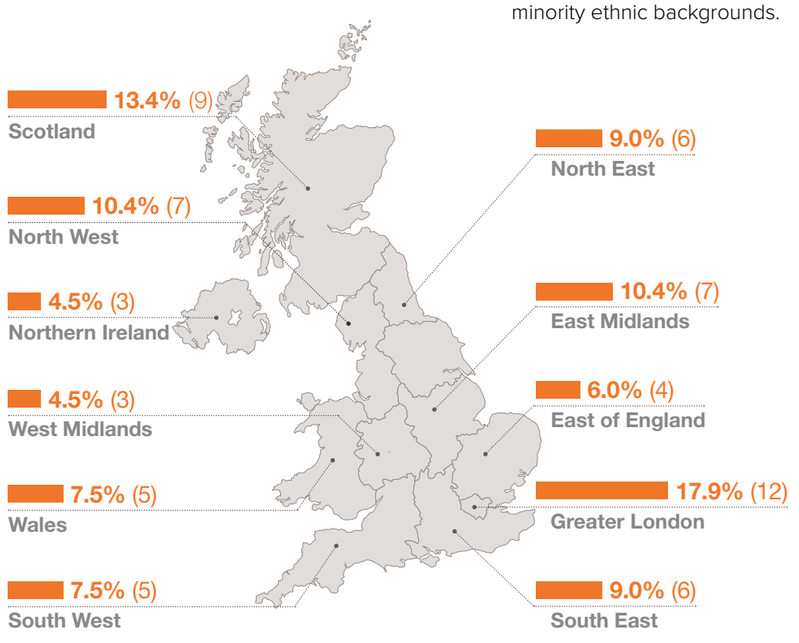
In January 2023, the Society and the other national academies of the UK and Ireland announced the first members of the new UK-wide Young Academy – a network of early career researchers and professionals established to help tackle local and global issues and promote meaningful societal change.

The UK Young Academy's first cohort brings together members from across academia, charity organisations and the private sector, to galvanise their skills, knowledge and experience to find innovative solutions to the challenges facing societies now and in the future. The successful candidates include researchers, innovators, clinicians, professionals and entrepreneurs who have each made significant contributions to their field, whilst going above and beyond to make an impact outside of their main areas of work.

The first cohort of the UK Young Academy will have the opportunity to shape the strategy and focus of this new organisation, tapping into their collective knowledge and expertise to inform local and global policy discussions.

3 4 5

**UK Young Academy membership is drawn from across the UK**




Of the initial UK Young Academy cohort 49% are women and 34% are from minority ethnic backgrounds.

### Looking forward 2023/24

In May 2023, the President, Officers and Executive Director will be travelling to Washington DC to take part in our annual joint meeting with the leadership of the US National Academy of Sciences. Discussions will cover a broad range of scientific topics including climate change and biodiversity, follow up from the gene editing summit, and AI and its implications.

Work around the long-term vision for science will continue, mapping out how the science and research landscape can be strengthened and enhanced over the next 20 years. We will be working with government and policy makers from across the political spectrum to underline the importance of securing sustainable long-term investment in science and a robust pipeline of talent within the sector.

# Strategy in action CONTINUED

## Case study: Publishing scientific research

In 2020, Council made a decision that the four hybrid research journals should transition to become fully open access over the next five years, joining the two journals which are already open access.

### Open access

Open access is the publication of research articles without any form of access restriction and under an open licence to maximise their availability and usefulness. Open access articles – usually identified by an open padlock symbol – can be read by anyone free of charge and their content may be reused in whole or in part without permission. Traditionally, published research outputs were only available via a library or individual subscription and were subject to copyright restrictions on reuse. By opening research to everyone, open access widens access to research, speeds discovery and facilitates engagement, collaboration and understanding.

### Moving to open access

Two journals, *Royal Society Open Science* and *Open Biology,* have been fully open access since launch. The four other primary research journals – *Proceedings A, Proceedings B, Biology Letters* and *Interface* – are publicly committed to switch to a fully open access model when 75% of their articles are being published open access.

To drive this transition, the Society has developed a series of 'Read and Publish' agreements with institutional libraries and consortia around the world. In 2021, over 170 such agreements were made and this doubled in 2022. As a result, in the 2022 calendar year, 61% of all published articles were open access, compared to 53% in the previous calendar year.

### Open access week

All Royal Society journal articles were made free to access during Open Access Week, 24 – 30 October 2022. Following the theme of Open for Climate Justice we produced a special collection of climate research papers and blog posts which explore how open data policies support climate change research and the benefits to authors of publishing open access.



Above: Social media card for Open Access week.

Right: Royal Society journals from 2022/23.

# Strategy in action CONTINUED

## Science and society

**Strategic outcomes:**

1. Debate on important societal and global issues is well informed by relevant science, including the recognition of uncertainties.
2. Decision makers are better informed by science and benefit from stronger public understanding of science, founded on constructive public discourse regarding aspects of science that will impact the lives of current and future generations.
3. Citizens of all ages are inspired by scientific possibilities and achievements, enhancing participation in science, and demand for its benefits in shaping our lives and our future.

### Science and the law

The Society's Science and the law programme went from strength to strength by bringing together scientists and members of the judiciary to debate key areas of common interest, ensuring that the best scientific guidance is available to the courts. Over the last year, the seminars included *Climate Change and the Law* and primers were published on *Forensic collision investigation* and *Forensic anthropology.*

### Transforming our future

*Transforming our future* are hybrid conferences addressing the major scientific and technical challenges of the next decade. *Machine learning and AI in biological science, drug discovery and medicine* featured keynote speaker Dr Demis Hassabis CBE, with speakers and panellists from Recursion, BenevolentAI and GSK. The conference attained a record for online attendees for a *Transforming our future* conference with 1,995 unique views. *Innovation in sport: accelerating breakthroughs in engineering, optimisation and performance* included speakers from industry. Both conferences had well over 100 invited delegates in the room.

### Creating connections

*Creating connections* meetings took place in Norwich and Exeter last year with both meetings bringing together a wide range of local academics and representatives from industry and government. Over 140 delegates attended the Exeter meeting with Darren Jones, MP for Bristol North West and Chair of the House of Commons Business, Energy and Industrial Strategy Select Committee, speaking at the networking lunch. The Norwich meeting was attended by 90 delegates from the region.

1 2

### School engagement

The Partnership Grants scheme offers UK students, aged 5 – 18, a first glimpse of scientific research in the classroom with a grant of up to £3,000. This can be used to buy equipment to carry out research projects in partnership with a STEM professional.

The 2022/23 funding round was largely unchanged from 2021/22. In total, 67 schools received funding, of which 28 are part of the Tomorrow's climate scientists programme. In total 8,500 students will benefit from this funding.

3

### Public engagement

The Places of science scheme provides grants of up to £3,500 to small museums, funding projects that tell the stories of science and scientists relevant to communities across the UK. In 2022/23, 36 small museums across the UK received a grant. The Museum of Welsh Cricket will create online learning activities for primary and secondary school students relating to climate change and sustainable, eco-friendly lifestyles.

Summer Science Exhibition returned in July 2022 to a hybrid format and was attended by over 6,000 visitors, including 701 students from 33 schools. The flagship event also had content on YouTube with 337,046 views. The Young Researcher Zone showcased the research being undertaken in 10 UK schools as part of the Partnership Grants scheme.

The Society's partnership with BBC Ideas continued to create videos focusing on different aspects of science. Videos include *Can you put a price on nature?* and *Five things you never knew about whiskers.* The total number of views for all 2022/23 BBC Ideas films across Facebook, YouTube, the BBC Ideas website and Royal Society YouTube channel is 4,708,900.

Other popular video content included *The Politics of DNA and the story of eugenics with Adam Rutherford,* which had 41,033 views.

The winner of the Young People's Book Prize was *If The World Were 100 People* by Jackie McCann. 712 judging panels took place in the scheme in 2022, involving over 14,000 young judges. The Royal Society Science Book Prize, which was generously supported by Insight Investment, was won by *A (Very) Short History of Life on Earth: 4.6 Billion Years in 12 Chapters* by Henry Gee.

2 3

### Historic collections

The Royal Society is home to a world-class collection of manuscripts, papers and records, books and journals related to the history of science.

Notable new archival acquisitions of larger collections include working papers of the molecular biologist and Nobel Laureate Sir John Ernest Walker FRS (b.1941).

Among the Library's digital offerings in the year was one of the most lavishly illustrated of the Society's natural history publications, *De historia piscium* (The history of fishes) by Francis Willughby and John Ray, published in 1686. Best known as the book that almost bankrupted the Royal Society, the work now appears in Turning the Pages digital format.

Above: Flying fish, from *De historia piscium libri quatuor,* by Francis Willughby and John Ray, 1686.

3

### Education

The President, Sir Adrian Smith FRS, spoke at the Society's conference *The Future of Education* in June 2022, with an audience comprised of leaders across business, industry, academia, charities and major arts institutes. He called for a broader post-16 curriculum in England to address the nation's growing inequality and stagnating productivity. Over the past year, the Society's views have regularly featured in the media.

In April 2022, the President met with Nadhim Zahawi, the then Secretary of State for Education, to discuss a reform of the education system with science and maths to 18 as part of a baccalaureate style system. In early 2023, Prime Minister Rishi Sunak announced plans to restructure maths education in England with all students studying the subject until they are 18 years old.

1 2

**344,454**
**Twitter followers at 31 March 2023**
14,855 net follower growth since 31 March 2022

**261,379**
**Facebook fans at 31 March 2023**
3,054 net page likes (fans) growth since 31 March 2022

**61,049**
**Instagram followers at 31 March 2023**
6,611 net follower growth since 31 March 2022

**175,650**
**YouTube subscribers at 31 March 2023**
16,781 net page likes (fans) growth since 31 March 2022

## Looking forward 2023/24

In spring 2023, the Royal Society will launch Science in the Making, a new website showcasing material from the archive collections related to the long history of scientific publishing at the Royal Society.

In July, the Royal Society will welcome visitors from around the country to its annual Summer Science Exhibition.

In October, scientists and prominent members of the legal community from the UK and USA will convene at the *Science in the interests of justice* meeting, part of the Royal Society's ongoing Science and the Law programme.

# Strategy in action CONTINUED

## Corporate and governance

**Strategic outcomes:**

1. Working towards the highest standards of charity governance.
2. Continuing to invest in the Royal Society's staff and strengthening its working culture.
3. Continue to develop its digital capabilities, including enhanced support for hybrid events across its programming and an improved website and digital platforms.
4. Develop a plan for attaining, over an achievable timescale, a reduced environmental footprint for the conduct of the Society's own activities.

### Governance

The Royal Society is engaged in a continuing programme of work to strengthen its governance and corporate oversight processes. The Society held its first ever hybrid Special General Meeting of the Fellowship on 7 February 2023, in the light of which Council revised a range of provisions regarding election to the Fellowship and Society governance. A Fellowship Engagement Manager was appointed with a view to creating closer and more meaningful dialogue between the Society and the Fellowship that makes it up.

A Board Effectiveness Review had originally been scheduled to take place in the current reporting period, to provide an independent assessment of the Royal Society's governance and oversight functions. This review will now take place in summer 2023 to better align with the dates of Council meetings.

1

Read more about **governance** on pages 32 – 33.

### Our people

We know that employees take pride in the work that the Royal Society does and support its overarching purpose of promoting science for the good of humanity. This was again underlined in the findings of our biennial employee survey, which took place in 2022/23. The survey showed that staff have a strong understanding of the purpose and objectives of the Society – both at a personal and departmental level. Staff say that they find their work interesting, that it makes a good use of their skills and makes a real difference to the success of the Royal Society. Staff say they feel proud to work for the Royal Society and would recommend it as a place to work.

As well as shedding light on what staff value about working at the Society, the survey helped to highlight some areas for improvement and provided valuable insights into perceptions and experiences of working at the Royal Society. The findings have been used to inform enhancements to our training and development offer and how staff are supported to achieve their personal objectives.

2

Read more about **the people at the Society** on pages 23 – 26.

Above: The Royal Society Industry team.

### IT and Digital

The IT section has delivered and supported a number of key projects throughout 2022/23. These include strengthening the Society's data security systems with additional firewalls in response to increased risk of external cyber attack. The upgrades have also served to improve the speed and volume of data flow within the Royal Society. The events booking and management process has been streamlined by an extension of the Society's customer relationship management (CRM) system, which allows much greater flexibility for managing RSVPs for event invitees. There have also been a number of bespoke projects with teams across the organisation to develop micro applications, which support the day to day operations of the Society. The IT and Digital sections continued to support hybrid events throughout 2022/23. During the year, over 6,800 participants attended Zoom meetings and public events livestreamed on YouTube received over 119,000 views in total.

3

### Sustainability

The Royal Society has a long history of playing a prominent role in policy debates on biodiversity, climate change and net zero. During 2022/23, the Society created the new role of Environmental Sustainability Programme Manager to co-ordinate the Society's internal efforts to reduce the environmental footprint of its work. The focus for the first 18 months of the programme will be to develop a clear picture of the Society's baseline position in terms of the current greenhouse gas emissions and environmental impact of its operations. Once established, this baseline data will be used to develop and publish an Environmental Sustainability strategy, identifying initial steps and setting out the Society's ambition for reducing its environmental impact. The strategy will be underpinned by a detailed action plan, with clear and achievable goals that reflect the science on climate change and biodiversity loss.

4

Read more about **Sustainability** on page 22.

Above: The Royal Society Aldabra 50th anniversary conference, one of many events offering hybrid meeting options for speakers and participants.

### Looking forward

## 2023/24

A Board Effectiveness Review has been commissioned from an external provider to assess the effectiveness of Council decision making alongside the role of Audit Committee.

A working group of Fellows will be convened to look in detail at areas where the Statutes and Standing Orders might be revised with a view to aligning the Society more closely with current best practice.

Over the next 18 months, the Society will develop a road map and action plan, setting out its ambition for reducing the environmental impact of its activities.

# Sustainability

One of the dominant challenges of the 21st century is the need to live within our environmental means, existing in a way that does not destabilise the physical and biological systems on which we depend, whilst supporting a population that has grown from around 2.5 billion in the early 1950s to one that will be approaching 10 billion in just one century.

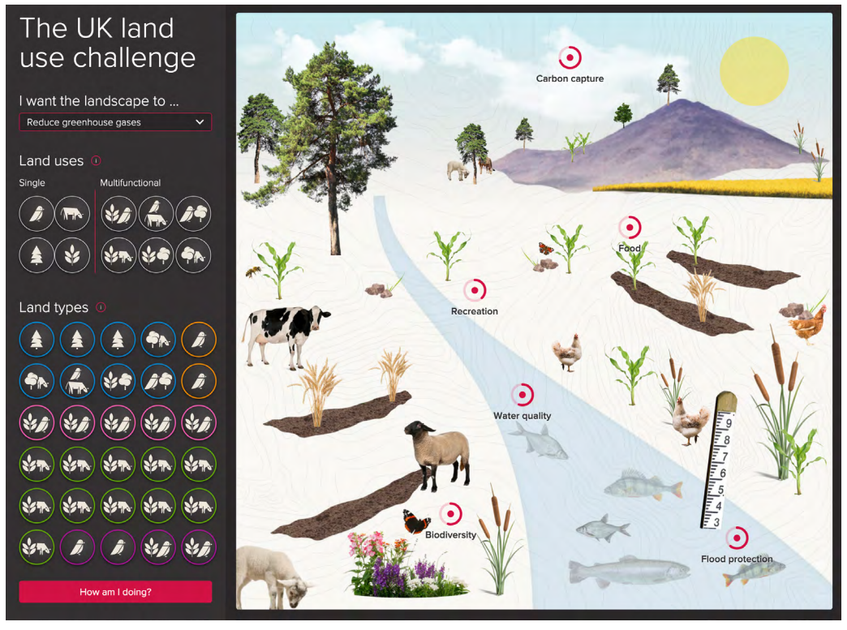
Science-led solutions play a critical role in delivering the rapid decarbonisation required, as well as helping communities to adapt to the impacts of climate change. Supporting the journey towards net zero is a central tenet of the Royal Society's influencing strategy; a key part of the Royal Society's policy output alongside other globally important issues, such as biodiversity, land use, emerging technology, AI and use of data.

Over the course of the last 12 months, the Royal Society has been actively engaging with the science community, policy makers and the general public on these issues. Drawing on the expertise of the Fellowship and its convening capabilities, it has hosted numerous events and published a series of briefings on the topics of climate change, biodiversity and sustainability.

## Policy reports

### *Multifunctional landscapes*

The Royal Society's *Multifunctional landscapes* report advises on the use of science to increase the productivity of land and makes recommendations on the data and analytics, innovation, skills and policy mechanisms required to create landscapes that meet society's many needs, efficiently and sustainably.




Left: Image from the UK and land use interactive, produced as part of the multifunctional landscapes programme of work.

### *Net zero aviation fuels*

If low carbon emission jet fuels are to have a strong positive impact on the UK's road to net zero, it is important that the alternative fuels adopted are truly beneficial to the fight against the climate crisis and do not cause unacceptable collateral ecological damage. The report looks at four alternative fuels: hydrogen, ammonia, synthetic fuels (efuels) and biofuels, providing a deep-dive analysis of the impact, costs and feasibility of each.

### *Geological carbon storage*

To keep global warming temperatures below 1.5°C, many thousands of underground $CO_2$ storage wells will be required by 2050 to lock away millions of tonnes of $CO_2$ for thousands of years. As the $CO_2$ storage industry develops, there will be continued advances in improving predictions of $CO_2$ migration, technologies for monitoring reservoirs, and enhancing the capacity of storage systems. All of these advances will increase the efficiency of $CO_2$ storage and speed of setting up new carbon capture and storage sites. Part of the Royal Society's ongoing policy work around low carbon energy, this report outlines the latest evidence on the practicalities and challenges associated with storing $CO_2$.

Read more about the Society's science policy reports on page 17.

## Scientific meetings

The Royal Society also regularly hosts scientific meetings, bringing together experts across disciplines to exchange ideas and collaborate on the science required to progress the sustainability agenda.

### *Geodiversity science for society*

Geodiversity relates to the variety of earth materials, forms and processes that constitute and shape the Earth and as such is crucial to the long-term viability of the Earth's eco-systems. It was designed to strengthen the intellectual core around geodiversity science and enhance its policy impact by developing 'essential geodiversity variables' related to human well-being, sustainability and natural resource management. This will initiate a new field of transdisciplinary science.

### *Marine microbes in a changing climate*

Marine microbes are crucial for ocean health and ecosystem services. However, understanding their response to climate change requires us to bridge gaps between biogeochemistry and genomics to reveal how the changing seascape impacts microbial metabolism, diversity, and evolution. This meeting brought together this cross-disciplinary community to discuss emerging findings and key topics, as well as identifying new research opportunities.

### *Transforming our future – decarbonisation of electricity supply and land transport to meet net zero in the UK*

This conference explored issues associated with implementing decarbonisation technologies. Topics discussed included the development of electrification through batteries and other alternatives, and the coordination of an increasingly diverse and dispersed electricity system.

### *Climate change: science, responses and research needs*

The Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC) delivered the starkest warning yet on the risks of climate change. The Royal Society brought together leading scientists, policy professionals and representatives from the energy and land use sectors to discuss the findings and implications of the IPCC AR6 reports.

Left: Image used to promote the scientific meeting, *Marine microbes in a changing climate.*

## Engaging with policy makers

As part of ongoing dialogue with policymakers, the Royal Society has submitted evidence to the Department for Science, Innovation and Technology (DSIT), for its review of net zero and called for a roadmap to coordinate work towards net zero, giving academics, businesses and consumers the confidence in the direction of travel to a long-term prosperous and predictable goal. DSIT brings together the relevant parts of the former Department for Business, Energy and Industrial Strategy and the former Department for Digital, Culture, Media and Sport. The Royal Society has consistently emphasised how crucial it will be for the UK Government to have access to the best and most up to date advice from all relevant areas of expertise and, accordingly, has called for a Net Zero Advisory Group to be established to gather all relevant evidence.

## Looking forward

Alongside this external influencing activity, the Royal Society is embarking on a programme to understand and reduce its own environmental impact, across the full range of its activities. Having been postponed in the wake of the pandemic, we are now in the scoping phase and aim to complete an initial baseline study of the impacts of our operations by early 2024. This preliminary work will inform the development of a medium- to long-term strategy, which we aim to publish in summer 2024. Over the course of the next year, we will also look to identify and adopt early actions and engage with Fellows, staff and external organisations.

Our goals for the first 18 months of the programme, through to Summer 2024, are:

- To build a clear picture of the current greenhouse gas emissions and environmental impacts from our activities. We will be collating data we already capture and expanding our current knowledge base.
- To work closely with Council, we will develop and publish an environmental sustainability strategy and action plan, lay out our current position and intended direction of travel, and draw on relevant science and experience.
- To focus on engagement as we will look to benefit from the expertise and skills of Fellows and staff, whilst identifying knowledge gaps and looking for opportunities to convene experts to contribute to debates on best practice.

# People

## Fellows of the Society elected in 2022:

**Professor Fernando Alday FRS**
Professor, Mathematical Institute, University of Oxford

**Dr Simon Boulton FMedSci FRS**
Principal Group Leader, Francis Crick Institute

**Professor Graham Burton FMedSci FRS**
Mary Marshall and Arthur Walton Professor Emeritus of the Physiology of Reproduction, University of Cambridge

**Professor Jason Chin FMedSci FRS**
Head, Centre for Chemical and Synthetic Biology, and Joint Head, Division of Protein and Nucleic Acid Chemistry, MRC Laboratory of Molecular Biology; Professor of Chemistry and Chemical Biology, Yusuf Hamied Department of Chemistry, University of Cambridge; Associate Faculty in Synthetic Genomics, Wellcome Sanger Institute; and Fellow in Natural Sciences, Trinity College, Cambridge

**Professor Roberto Cipolla FREng FRS**
Professor of Information Engineering, Department of Engineering, University of Cambridge

**Professor Martin Dawson FRS**
Professor, Institute of Photonics, Department of Physics, University of Strathclyde

**Professor Douglas Easton FMedSci FRS**
Professor of Genetic Epidemiology, Centre for Cancer Genetic Epidemiology, Department of Public Health and Primary Care, University of Cambridge

**Professor Robin Franklin FMedSci FRS**
Principal Investigator, Altos Labs – Cambridge Institute

**Professor Pierre Friedlingstein FRS**
Professor, College of Engineering, Mathematics and Physical Sciences, University of Exeter

**Dr Eileen Furlong FRS**
Head of Department, Genome Biology Department/Unit, European Molecular Biology Laboratory (EMBL), Germany

**Professor Vincent Fusco FREng FRS**
Professor of High Frequency Electronic Engineering, Director of Research EEECS, Queen's University Belfast

**Professor Richard Gilbertson FMedSci FRS**
Li Ka Shing Chair of Oncology and Head of Department of Oncology, University of Cambridge, Director of Cancer Research UK Cambridge Centre and Senior Group Leader, CRUK Cambridge Institute

**Professor Peter Goadsby FMedSci FRS**
Director, NIHR-Wellcome Trust King's Clinical Research Facility and Professor of Neurology, King's College London

**Professor Alain Goriely FRS**
Statutory Chair of Mathematical Modelling, Mathematical Institute, University of Oxford

**Dr Alexander Gould FMedSci FRS**
Principal Group Leader, Francis Crick Institute

**Professor Andrew Harrison OBE FRS**
CEO, Diamond Light Source Ltd

**Professor Jane Hillston FRS**
Professor and Head of School, School of Informatics, University of Edinburgh

**Professor Peter Hore FRS**
Professor of Chemistry, Department of Chemistry, University of Oxford

**Professor Nicholas Jennings CB FREng FRS**
Vice-Chancellor and President, Loughborough University

**Dr Sandra Knapp FRS**
Research Botanist, Natural History Museum, London

**Professor Susan Lea FMedSci FRS**
Chief and Senior Investigator, Center for Structural Biology, Center for Cancer Research, National Cancer Institute, National Institutes of Health, United States

**Professor Paul Lehner FMedSci FRS**
Professor of Immunology and Medicine, Cambridge Institute of Therapeutic Immunology and Infectious Disease, University of Cambridge

**Professor Andrew Livingston FREng FRS**
Vice Principal Research and Innovation and Professor of Chemical Engineering, Queen Mary University of London

**Professor Juergen Maier CBE FREng FRS**
Chair, Manchester Graphene Company, University of Manchester

**Professor Roberto Maiolino FRS**
Professor of Experimental Astrophysics, Cavendish Laboratory and Kavli Institute for Cosmology, University of Cambridge, and Honorary Professor at University College London

**Professor Oscar Marín FMedSci FRS**
Professor of Neuroscience and Director, MRC Centre for Neurodevelopmental Disorders and Director, Centre for Developmental Neurobiology, King's College London

**Professor Angelos Michaelides FRS**
1968 Professor of Chemistry, Yusuf Hamied Department of Chemistry, University of Cambridge

**Professor Irene Miguel-Aliaga FMedSci FRS**
Professor of Genetics and Physiology, Imperial College London and MRC Investigator, MRC London Institute of Medical Sciences

**Professor Mark Newman FRS**
Anatol Rapoport Distinguished University Professor of Physics, Department of Physics and Center for the Study of Complex Systems, University of Michigan, United States

**Professor Rachel O'Reilly FRS**
Professor of Chemistry, School of Chemistry, University of Birmingham

**Sir Menelas Pangalos FMedSci FRS**
Executive Vice President and President, BioPharmaceuticals R&D, AstraZeneca

**Professor Robert Pressey FRS**
Professor, Australian Research Council Centre of Excellence for Coral Reef Studies, James Cook University, Australia

**Professor Trevor Price FRS**
Professor, Department of Ecology and Evolution, University of Chicago, United States

**Professor Oliver Pybus FRS**
Professor of Infectious Diseases, Department of Pathobiology and Population Sciences, Royal Veterinary College, London and Professor of Evolution and Infectious Disease, Department of Zoology, University of Oxford

**Professor Jordan Raff FMedSci FRS**
César Milstein Chair of Cancer Cell Biology, Sir William Dunn School of Pathology, University of Oxford

**Professor Andrew Rambaut FRS**
Chair of Molecular Evolution, School of Biological Sciences, University of Edinburgh

**Professor Ros Rickaby FRS**
Chair of Geology, Department of Earth Sciences, University of Oxford

**Professor Richard Robson FRS**
Professorial Fellow, School of Chemistry, University of Melbourne, Australia

**Professor Yvonne Rogers FRS**
Professor of Interaction Design, UCLIC Director and Deputy Head, Computer Science Department, University College London

**Professor Jamie Rossjohn FMedSci FRS**
Professor, Department of Biochemistry and Molecular Biology, Biomedicine Discovery Institute, Monash University, Australia

**Professor Paul Seymour FRS**
Alfred Baldwin Dod Professor of Mathematics, Department of Mathematics, Princeton University, United States

**Professor Ben Sheldon FRS**
Luc Hoffmann Professor of Field Ornithology, Department of Department of Zoology, University of Oxford

**Professor Ian Shipsey FRS**
Henry Moseley Centenary Professor of Experimental Physics, University of Oxford

Note: affiliations are at the time of election in April 2022.

# People CONTINUED

**Professor Kate Storey FMedSci FRS**
Head, Division of Cell and Developmental Biology, School of Life Sciences, University of Dundee

**Dr Ilya Sutskever FRS**
Co-Founder and Chief Scientist of OpenAI

**Dr Michael Thackeray FRS**
Argonne Emeritus Scientist and Distinguished Fellow, Chemical Sciences and Engineering Division, Argonne National Laboratory, United States

**Professor Zeblon Vilakazi FRS**
Vice Chancellor, University of the Witwatersrand, South Africa

**Professor Carola G. Vinuesa FRS**
Royal Society Wolfson Fellow, Principal Group Leader and Professor of Immunology, Francis Crick Institute and Australian National University

**Professor Vaclav Vitek FRS**
Professor Emeritus of Engineering and Applied Science, Department of Materials Science and Engineering, University of Pennsylvania, United States

**Professor Sally Ward FRS**
Director of Translational Immunology, Cancer Sciences Unit, Centre for Cancer Immunology, University of Southampton

**Professor Rachel Wood FRS**
Professor of Carbonate Geoscience, Grant Institute, School of GeoSciences, University of Edinburgh

## Honorary Fellow elected in 2022

**Dr Tedros Ghebreyesus FRS**
Director General, World Health Organization

## Foreign Members elected in 2022

**Dr Charles Bennett ForMemRS**
Fellow, IBM Research Division

**Professor Donald Canfield ForMemRS**
Professor, Department of Biology, University of Southern Denmark, Denmark

**Professor Titia de Lange ForMemRS**
Leon Hess Professor, Laboratory for Cell Biology and Genetics, Rockefeller University, United States

**Professor George Gao ForMemRS**
Director-General, Chinese Center for Disease Control and Prevention, Vice President, National Natural Science Foundation of China, and Director and Professor, CAS Key Laboratory of Pathogen Microbiology and Immunology, Institute of Microbiology, Chinese Academy of Sciences

**Professor Michael Graetzel ForMemRS**
Professor and Director. Laboratory for Phtonics and Interfaces, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

**Professor Hiroshi Hamada ForMemRS**
Team Leader, RIKEN Center for Biosystems and Dynamics Research, Japan

**Professor Maria Leptin ForMemRS**
Professor of Genetics, Institute of Genetics, University of Cologne and President of the European Research Council (ERC)

**Professor Carlos Nobre ForMemRS**
Senior Researcher, Institute of Advanced Studies, University of São Paulo, Science Director, Institute of Climate Studies, Federal University of Espírito Santo and Director of the Amazon Third Way Initiative/Amazonia 4.0 Project, Brazil

**Professor Peter Scholze ForMemRS**
Director, Max-Planck-Institut für Mathematik, Germany

**Professor Howard Stone ForMemRS**
Donald R Dixon ’69 and Elizabeth W Dixon Professor in Mechanical and Aerospace Engineering, School of Engineering and Applied Science, Princeton University, United States

Note: affiliations are at the time of election in April 2022.

# People CONTINUED

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 programme.

## 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.

## 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 871 (2022: 986) researchers through its research fellowships. These researchers receive long-term funding from the Society and range from early career researchers, who are just starting their independent careers to some of the most distinguished senior researchers in the country.

## Volunteers

A number of our public engagement events 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. We also recognise the contributions of the many scientists who have supported our work by lending their expertise to panels and discussions. Finally, we are fortunate to have volunteer committee members across several of our committees. Their experience and expertise is invaluable to the operation of the charity.

## Staff

As at 31 March 2023, the Society had 267 paid staff, organised into programmes, services and trading sections. The Society aims to offer fair pay and an attractive benefits package to ensure that appropriately qualified staff are recruited, engaged and feel able to thrive in delivering the charity's aims. As a smaller employer, we are cognisant of the fact that career development can be a challenge for an organisation of our size, and we have worked hard to increase internal progression of staff over the year.

During the year, we developed plans to perform an external review of our remuneration levels on a more granular basis to ensure that we remain competitive as an employer and that staff are rewarded fairly for what they do.

## Ways of working

During summer 2022, the Senior Management Team worked with a team of consultants to carry out a thorough exploration of hybrid working. Workshops were held with Heads and Directors to reflect on behaviours and work patterns that were emerging, and to develop new internal guidance, *"Ways of Working"*. This guidance was published internally in December 2022 and takes a more flexible approach than before the pandemic, retaining some flexibility and benefits of time spent away from the office whilst trying to balance this with the advantages of in-person collaborations and interactions. This approach will be continually reviewed to ensure effectiveness with a formal review planned for summer 2023.

## Wellbeing

The wellbeing of staff is an important consideration for the Trustees and the Senior Management Team. We continued to develop the wellbeing services we offer to staff, running a programme of wellbeing lectures and events, including sessions on mental health, menopause in the workplace, sleep habits, time management, resilience, stress and anxiety, financial planning, and health and nutrition. This work supplements support given via mental health First Aiders, and an Employee Assistance Programme, which offers access to telephone, online and face-to-face counselling support on a broad range of issues, from mental health to personal finances. In addition the Royal Society has reviewed and enhanced its position concerning compassionate leave.

Staff-led activities have also proliferated and a huge range of clubs are now available, from board games at lunch time to monthly bake offs and sports clubs to seed banks.

## Training

As well as mandatory training around workplace safety and GDPR, the Society offers staff a variety of formal and informal training and development opportunities. Training delivered in 2022/23 included courses on stakeholder management, influencing, presentation skills and line management alongside a range of technical skills training.

In addition, staff are encouraged to apply for a professional learning award to pursue more personalised development programmes in areas of their own choosing. In 2022/23 the Society provided 26 staff with funding and support to complete a further education course or professional qualification.

## 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's Diversity Committee regularly monitors statistics on diversity across the Society's activities and publishes an annual diversity data report. The Society is committed to making diversity and inclusion a priority, both within our own organisation and across the scientific landscape. The Society's Diversity Strategy for 2019 – 2022 sets out how the Royal Society will use its convening power and leadership, in partnership with others, to increase diversity in STEM and build a more inclusive scientific community. The Diversity Committee, a Standing Committee of Council, keeps under review and makes recommendations to Council on the diversity strategy. The Committee also oversees the delivery of a programme of activities by the Society in line with this strategy.

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 in which 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. The Society regularly surveys staff through staff questionnaires and in exit interviews on matters of diversity and inclusion, specifically any issues they have witnessed or would like to report.

In 2021/22, the Society committed to joining the *Business in the Community's Race at Work* charter, to promote understanding and support staff to feel confident in conversations regarding race in the workplace. Organisation-wide training took place in summer 2022, leading to an increased awareness of the role that all staff play in creating an open and inclusive workplace. Phase 2 will be delivered in summer 2023 and beyond, and includes training for all people managers, hiring managers and senior leaders on how to foster an inclusive culture at work.

Read more about the Royal Society's diversity reporting on our website

## Our values

An organisation's values support its vision, shape its culture and reflect expectations of employees and the way they work together. The Society has a set of organisational values created by staff, which help inform how we should work together and represent the Society.

# People CONTINUED

## 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 in which suitable candidates would be found.

Recommendations regarding the remuneration of staff are made by the Society's Remunerations Committee, chaired by Sir Martin Taylor FRS. The Committee meets twice each year to consider the remuneration of senior staff, taking their individual responsibilities and an analysis of levels of remuneration in comparable roles elsewhere in the sector into account. The annual salary review process provided to all staff is also agreed by the Society's Remuneration Committee. The Committee includes Fellows and independent advisers.

Benefits accessible to all Royal Society staff include a generous annual leave allowance and pension package, life assurance and access to the cycle to work scheme and childcare vouchers. This year, policies on Sabbatical Leave, Paid Volunteering Days and a Referral recruitment scheme have also been added to the benefits package. A new sabbatical policy provides the opportunity for staff to take an unpaid career break of up to six months.

The total emoluments of the Society's Executive Director, Dr Julie Maxton DBE, including taxable benefits in kind, in 2022/23 were £396,911 (2021/22: £385,444). The Executive Director's contract of employment requires that they reside in the Society's premises at Carlton House Terrace during the working week for no less than 12 nights in a month, and the use of an apartment in the building is treated as a taxable benefit in kind for this purpose.

The Chair of Remuneration Committee conducts the Executive Director's annual performance review on behalf of the Committee.

All Trustees are unremunerated.

Above: Royal Society staff attending a scientific meeting.

## Gender pay gap reporting

The Society has voluntarily completed gender pay gap reporting. At the 'snapshot' date of 5 April 2022, the mean gender pay gap was 3.79% and the median gender pay gap was 12.65% compared with the national average of 13.9% and 14.9% respectively, as reported on the Gender Pay Gap website as at 1 June 2023.

## Gender gap reporting

On 5 April 2022, we employed 207 full-pay relevant employees (2021: 212). All figures below are as at 5 April 2022:

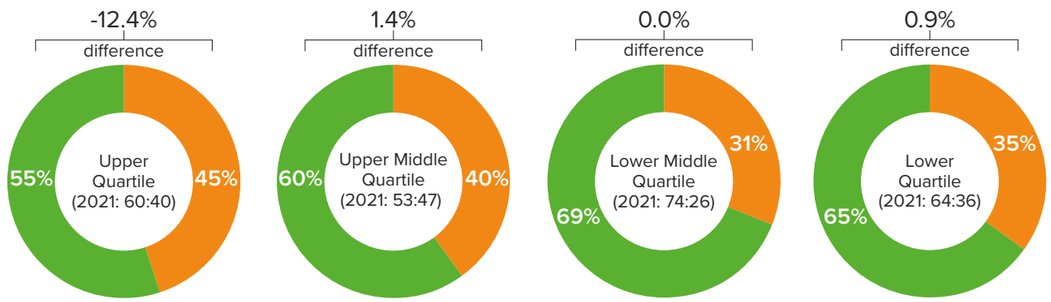
### Number of employees

129 Women 78 Men

(2021: 133 (W) 79 (M))

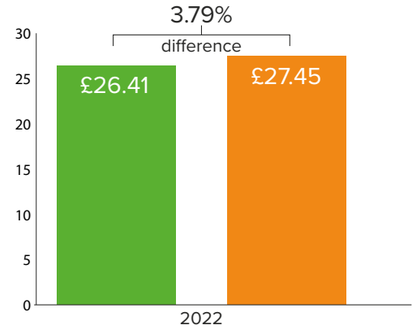
### Proportion of men and women in each quartile (%)

The difference between the mean pay of the men and women in each quartile is shown above each chart (a negative difference indicates that the mean pay of women was higher).



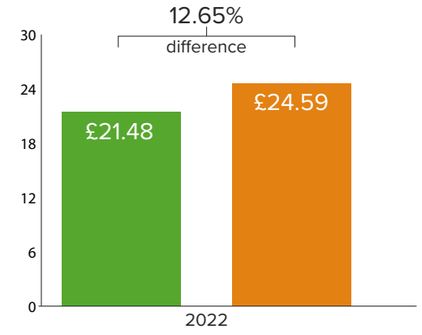

Note: gender pay gap percentages referenced in quartiles are based on mean calculations. The reported quartiles represent an equal number of employees in each quartile, from the highest paid to the lowest paid. The upper quartile represents the highest-paid employees. Quartiles are based on mean pay and so there are different numbers of men and women in each quartile.

### Mean gender pay gap in hourly pay




**Mean:** men earn 3.79% more than women (2021: -0.02%)

### Median gender pay gap in hourly pay




**Median:** men earn 12.65% more than women (2021: 15.33%)

# Financial review

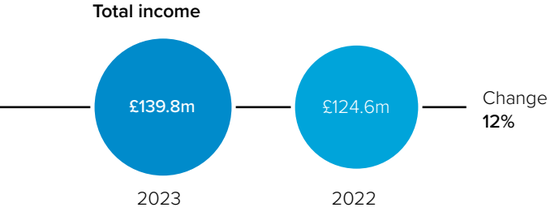
## Overview

In the year to 31 March 2023, the Society's income increased from £124.6 million to £139.8 million. The majority of the Society's income came from charitable activities, which increased by 11% during the year to £129.6 million (2022: £116.7 million).

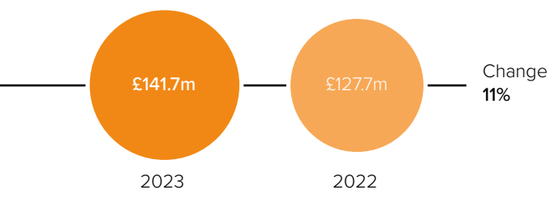
Total expenditure increased by 11% on the prior year from £127.7 million to £141.7 million, largely driven by the increase in grant income. Expenditure on charitable activities increased from £124.1 million to £138.6 million and has increased to around 98% of total expenditure from around 97% in 2022. Income from investments has increased by 21% from the previous year to £8.7 million (2022: £7.2 million).

Despite the growth in investment income, the value of the investment portfolio fell during the period, which was characterised by high inflation, central bank interventions and continued global political uncertainty. This resulted in a net loss in investments of £22.2 million (2022: £17.7 million gain). During the year, the Society appointed a new investment consultant and agreed a new investment strategy.

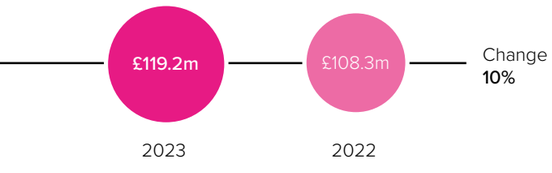
**Total income**




**Total expenditure**




**Grants for charitable activities**




**Income from investments**


The transition of investments to the new strategy completed after the end of the financial year.

| | 2023 £m | 2022 £m |
|---|---|---|
| Expenditure on raising funds | **3.1** | 3.6 |
| Expenditure on charitable activities | **138.6** | 124.1 |
| Total expenditure | **141.7** | 127.7 |

## Income

The Society receives income from a number of 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 from charitable activities

Most of the year-on-year increase in income relates to the increase in grants for charitable activities, which rose to £119.2 million (2022: £108.3 million). The Society's core grant from the Department for Science, Innovation and Technology (DSIT), previously from BEIS, was consolidated with the Investment in Research Talent Fund into one fund. Income from DSIT increased from £101.8 million in 2022 to £112.3 million in 2023. Offsetting this, there was a decrease in the Global Challenges Research Fund (GCRF) from £7.7 million in 2022 to £3.6 million in 2023. Additional BEIS funding of £4.3 million, which was received in 2022 to fund costed extensions to ease the impact of the COVID-19 pandemic on researchers funded by the Society decreased to £nil in the year.

The UK Government reduced its overseas development aid (ODA) budget during 2021/22 and the Society's ODA-funded programmes were consequently reduced, including those funded by the GCRF. This is reflected in the corresponding decline in expenditure in 2022. The GCRF income received in 2023 was expended in the winding down of schemes supported by this fund, including the Future Leaders – African Independent Research (FLAIR) Fellowships.

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

The Society undertakes trading activities in the form of publishing journals and hosting conferences that further its charitable objectives. Income from trading in the furtherance of charitable objectives increased by £2.0 million to £10.4 million (2022: £8.4 million) due to growth in conferencing activities following its resumption at the end of the prior year.

### Income from donations and legacies

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 further details can be found on the Society's website.

Income from donations and legacies increased by £0.9 million to £1.4 million (2022: £0.5 million), mainly due to a significant legacy notification received in the year.

## Expenditure

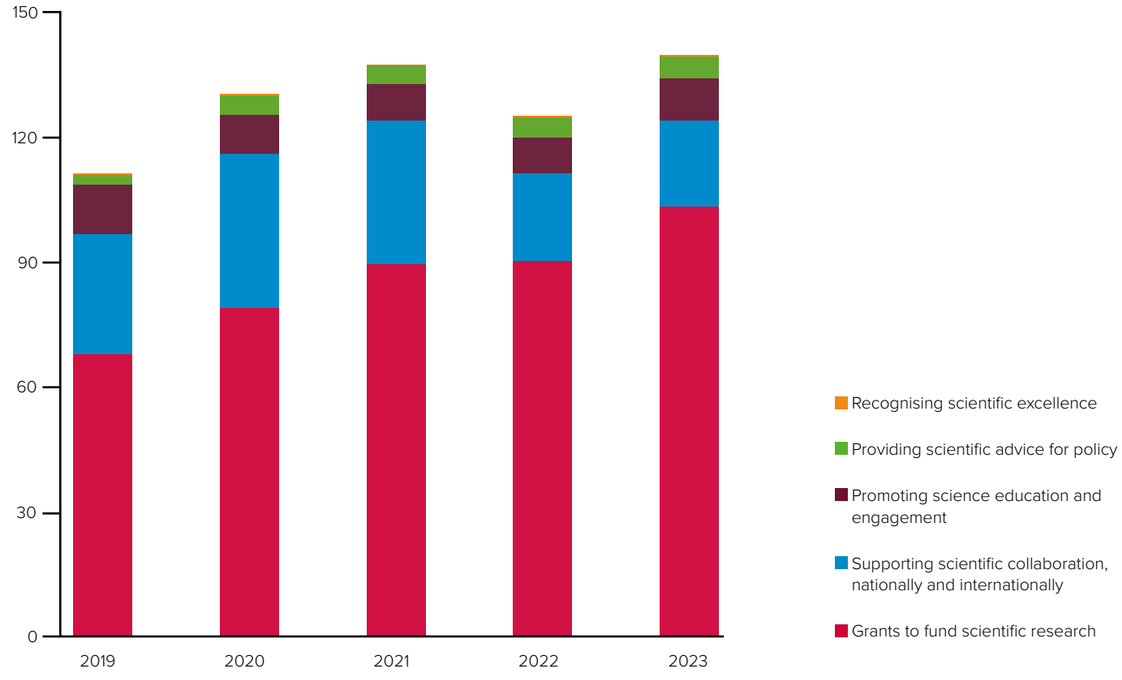
Expenditure is incurred on raising funds and charitable activities. The Society undertakes a broad range of activities that provide public benefit either directly or indirectly, in line with our strategic priorities. Read more on the Society's public benefit statement on page 8.

Expenditure on raising funds includes the direct costs of raising funds, associated support costs, costs of trading and investment management fees. Expenditure on raising funds reduced from £3.6 million in 2022 to £3.1 million in 2023 largely due to a decline in investment management fees calculated in relation to the value of the investment portfolio, which has decreased due to market uncertainty.

### Expenditure on charitable activities

The categorisation of expenditure on charitable activities in the financial statements was reviewed in the year and it has been aligned to reflect the core activities the Society performs to fulfil its purpose for public benefit.

**Expenditure on charitable activities, £m**




The Society's charitable expenditure is categorised in the statement of financial activities, as follows:

- Grants to fund scientific research;
- Providing scientific advice for policy;
- Promoting science education and engagement;
- Supporting scientific collaboration, nationally and internationally; and
- Recognising scientific excellence.

Each of the areas above support the delivery of the strategic objectives set out in the 2022 – 2027 strategic plan. The expenditure chart on page 28 illustrates expenditure both by strategic objective and expenditure category.

The majority of the Society's charitable expenditure relates to grant awards, this year accounting for £108.8 million (2022: £101.6 million). The increase in grant expenditure largely relates to increases in University Research Fellowships, which rose by £5.0 million to £60.5 million (2022: £55.5 million), and Royal Society Research Professorships, which rose by £7.4 million to £19.5 million (2022: £12.1 million). These increases were partly offset by decreases in schemes funded by the Society's ODA funding from the UK Government, with schemes ending in 2022 showing a refund due in 2023 following reconciliations performed at the end of the awards.

# Financial review CONTINUED

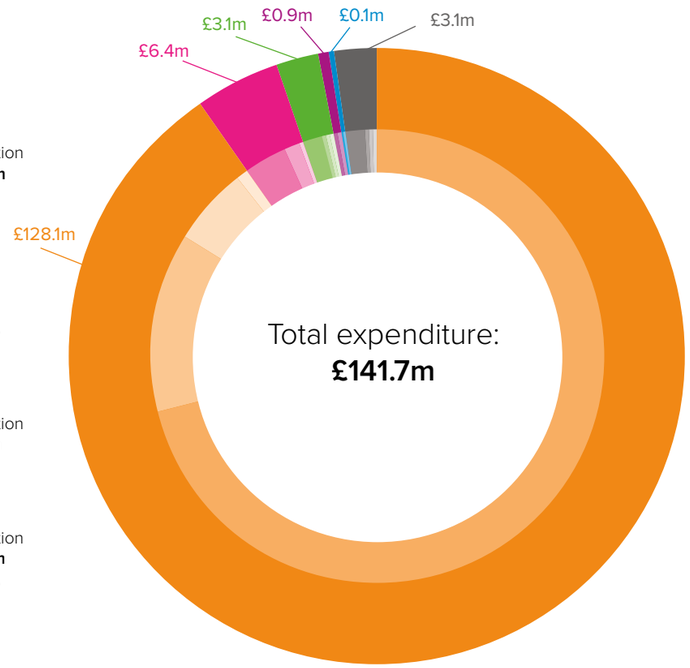
## Expenditure in 2022/23

The expenditure chart below illustrates expenditure by both strategic priority and expenditure category in the Statement of Financial Activities.

**Research system and culture £128.1m**
- Grants to fund scientific research **£102.4m**
- Supporting scientific collaboration **£18.5m**
- Promoting science education and communication **£6.9m**
- Recognising excellence in science **£0.3m**

**Influencing – UK and global £6.4m**
- Providing scientific advice for policy **£4.7m**
- Supporting scientific collaboration **£1.6m**
- Promoting science education and communication **£0.1m**

**Science and society £3.1m**
- Promoting science education and communication **£2.5m**
- Providing scientific advice for policy **£0.6m**
- Grants to fund scientific research **<£0.1m**
- Recognising excellence in science **<£0.1m**




**Corporate and governance £0.9m**
- Promoting science education and communication **£0.5m**
- Supporting scientific collaboration **£0.4m**

**Fellowship and Foreign Membership £0.1m**
- Supporting scientific collaboration **£0.1m**
- Recognising excellence in science **<£0.1m**

**Expenditure on raising funds £3.1m**
- Investment management fees **£2.1m**
- Direct costs on raising funds **£0.5m**
- Support costs on raising funds **£0.5m**
- Cost of trading **<£0.1m**

## Expenditure on charitable activities CONTINUED

Aside from grants activity, expenditure on providing scientific advice for policy increased from £4.7 million in 2022 to £5.3 million in 2023. The Society's work in this area focused particularly on emergency technology, science in public life and the Human Genome Editing Summit held in March 2023.

Expenditure on promoting science education and engagement grew from £8.7 million in 2022 to £10.0 million in 2023. The increase in spend is due to return to in-person activity, with events taking place in a hybrid format, including the Summer Science Exhibition, which had an additional digital element plus an expanded Young Researcher Zone. The additional funding from DSIT for the Education Partnership Grants scheme is focusing growth on schools in disadvantaged areas across the UK, particularly working with partners in the North of England to expand the scheme to develop multi-school projects.

## Royal Society (London) Ltd

Royal Society (London) Ltd was set up in 2013 to process corporate sponsorships at the Society. The company commenced trading in 2019 and had income of £0.1 million (2022: £0.1 million).

## 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 2023 showed a deficit of £0.5 million (2022: £4.3 million). This represents the difference between the assets and the obligations of the fund rather than an immediate cash liability. The decrease in deficit was mainly driven by changes to actuarial assumptions resulting from changes in market conditions and the payment of deficit funding contributions in the year of £1.6 million. In accordance with FRS 102, the actuarial gains on the scheme of £2.4 million (2022: £7.0 million) have been taken to unrestricted funds.

A triennial valuation of the scheme at 1 January 2022 was agreed during the year. This showed a decrease in the 'technical provisions' deficit from £8.7 million to £6.0 million and it was agreed with the Trustees that the Society will pay deficit payments of £1.2 million per annum under a four-year recovery plan. Current budgets and forecasts indicate that the Society will be able to meet these contributions as they arise.

## Investment policy and performance

The Society holds a significant investment portfolio which was valued at £283.4 million at 31 March 2023, down from £308.3 million in 2022. The decline was due to uncertainty in investment markets impacting on the value of the investment portfolio. Many of these funds held were bequeathed to the Society as endowments or gifted as a restricted fund for a specific purpose.

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. The investment objective of the Society is to at least maintain the real value of its investment assets while generating a stable and sustainable return to fund charitable activities, thus being even handed between current and future beneficiaries.

The Society does not invest in organisations that 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 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 £8.7 million (2022: £7.2 million).

During the year, the Society completed a procurement exercise to appoint a new investment consultant and Mercer Limited was selected. The selection criteria included an assessment of the firm's reputation and integrity, approach to strategic asset allocation, environmental, social and governance considerations, performance and fees. A new investment strategy has been agreed and the transition of the Society's investments to Mercer took place in the first quarter of 2023/24.

## Reserves

The total funds of the Society decreased by £21.6 million to £334.6 million during the financial year, mainly due to the loss on investments. Free reserves are unrestricted reserves (after the 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 £32.4 million (2022: £34.3 million), well above the target level for 2022/23 of £15.0 million. The decrease in the level of free reserves is largely due to the decrease in the value of the investment portfolio, partly offset by the decrease in the pension deficit as at 31 March 2023. The Society continues to develop longer-term strategies to increase its charitable activities in a sustainable way, which will reduce the level of reserves while ensuring that it has adequate resources to enable it to respond to emerging risks and opportunities.

| | 2023 £m | 2022 £m |
|---|---|---|
| Unrestricted funds | **91.3** | 93.1 |
| Unrestricted intangible and tangible fixed assets | **(9.6)** | (9.6) |
| Heritage assets | **(49.3)** | (49.2) |
| Free reserves | **32.4** | 34.3 |

## 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 2023. Further information is available on our website.

## Going concern

The Trustees consider that there are no material uncertainties about the Society and Royal Society (London) Ltd to continue as a going concern. This conclusion has been reached after careful consideration of reserves levels, future forecasts and changes in external factors. The Society manages uncertainties through risk management processes with mitigations in place for key risk areas, and has a robust reserves position and availability of liquid assets in cash at hand and as cash within the investment portfolio. Royal Society Trading Limited was dormant for the year ended 31 March 2023.

# Principal risks and uncertainties

The Council is ultimately responsible for oversight of the Royal Society's risk management processes, working closely with the Audit Committee and supported by the internal auditors to regularly assess the organisation's exposure to risk. Audit Committee advises on risk management protocols and ensures that major risks are actively monitored and managed, providing Council with regular briefings on the principal risks to the delivery of the Society's strategy. In addition, each of the Society's sections holds its own risk register to manage risks associated with the delivery of key programmes and workstreams. These sectional risk registers are updated regularly and are used to anticipate and mitigate emerging risks, enabling issues to be quickly identified and escalated as appropriate.

Risk management is a constant process. 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. Due to the interrelated nature of many of the risks currently being monitored, actions and processes often contribute to mitigation of several risks simultaneously.

Currently, the two highest rated risks originate from external sources, relating to the global and political environment in which the Royal Society operates. The relatively high ratings associated with these risks reflect the fact that their root causes lie outside of the Society's direct control. The Society will continue to wield its influence to counteract these risks and has active measures in place to safeguard its operations in the event of any adverse impact arising from these quarters.

## Key

**Status of risk**

High risk
Medium risk

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

**Change of status**

↑ Increased risk
↓ Decreased risk
↔ No change
N New

**Key strategic priorities at risk**

- Fellowship and foreign membership
- Influencing – UK and global
- Research system and culture
- Science and society
- Corporate and governance

| Risk | Key strategic priorities at risk | Management | Status of risk |
|---|---|---|---|
| **International collaboration**<br>Political developments in major international science partners, or between UK and major international science partners, have negative impacts on the UK science system. | | • Continue to work with many partners, in the UK, the rest of Europe and globally.<br>• Advocate and promote future arrangements for international collaboration and the desire to work globally, and the ability of the UK to continue to attract outstanding scientists from overseas, funding for UK science and regulatory matters.<br>• Maintain strong dialogue with the government on the most challenging issues.<br>• Promote good research culture and values of science, which promote good collaboration.<br>• Provide advice and build relationships. | Status: ↔<br>Prior year status: ↓ |
| **National decision making**<br>Decisions and actions by the UK Government have a negative impact on the Society's work and ability to achieve its strategy. | | • Maintaining important relationships with key government contacts.<br>• Maintain relationships with key stakeholders, including partners and funders.<br>• Develop a communications plan to convey the Society's position in relation to decisions made by the UK, including targeted interventions to critical decision makers.<br>• Clear messaging about the Society's independence of government. | Status: ↔<br>Prior year status: ↑ |
| **UK Young Academy**<br>The UK Young Academy initiative does not maintain its independence and an identity separate from the Royal Society, and this poses a financial, legal and/or reputational risk to the Society. | | • Established a committee to oversee the UK Young Academy, with representation from the other six academies.<br>• Appropriate legal advice sought and followed.<br>• Dedicated project manager appointed.<br>• Independent systems developed.<br>• Continued oversight by RS Council. | Status: ↓<br>Prior year status: N |
| **Public benefit recognition**<br>The Society does not ensure the effectiveness of its work, fails to remain relevant and/or address important issues as they arise, including Environmental, Social and Governance considerations, and does not ensure that its public benefit is recognised by stakeholders. | | • Public benefits explicitly set out in new five-year strategy document.<br>• New programmes of work are approved by Council, who have oversight over all work at the Society and set the Society's strategy.<br>• Regular meetings of the Officers and regular communication from the Officers to Council.<br>• Oversight of the Society's activities by Fellows with relevant experience.<br>• Effective project initiation and project management processes. | Status: ↓<br>Prior year status: ↓ |

# Principal risks and uncertainties CONTINUED

| Risk | Key strategic priorities at risk | Management | Status of risk |
|---|---|---|---|
| **Governance structure**<br>Governance structure fails to provide the right level and diversification of expertise to make decisions and run the Society effectively. | | • Oversight of election process by Officers and other Council members.<br>• Clear role descriptions for Officers and Council members.<br>• Identify potential members with broad Trustee experience.<br>• Board Effectiveness Review commissioned.<br>• Work to embed the strategy and develop management reporting and KPIs.<br>• Council to consider possible changes to Statutes and Standing Orders.<br>• Include non-Fellows with relevant expertise on Society committees.<br>• Continue to enable willing Fellows to contribute to the Society's work.<br>• Provide induction and ongoing training and workshops from legal and audit specialists.<br>• Engage with internal and external audit functions to provide support as appropriate.<br>• Annual self-assessments against the Charity Governance Code. | Status:<br>Prior year status: |
| **Strategy delivery**<br>The Society does not deliver against its mission and strategy and does not act effectively in its three key roles (Charity, Fellowship and National Academy). | | • Strategic Plan and financial planning (including annual budget) approved by Council.<br>• Implementation plans in place for key workstreams.<br>• Financial planning processes in place, including monthly reviews of performance to budget and forecast.<br>• The Society has a system of committees that report to Council and are responsible for key areas of the Society's work .<br>• Regular meetings of the Officers and regular communication from the Officers to Council.<br>• Annual review of the Strategic Plan and the Society's priorities.<br>• Implementation of measures relating to internal audit review on Governance in 2021/22. | Status:<br>Prior year status: |
| **Business continuity**<br>Events adversely impact reputation and/or operations, including loss of operations due to a major incident (cyber-attack, serious data security breach, a serious fraud, major health and safety incidents, internal control failures or an outbreak of a communicable disease). | | • Engage senior-level management, committees and Council in policy setting and monitoring.<br>• Regular review, test and update of information security policies and procedures.<br>• Regular review and update of business continuity and disaster recovery plans to help minimise disruption to operations from unexpected events. | Status:<br>Prior year status: |
| **Employees**<br>Talented staff not recruited, developed and retained. | | • A salary benchmarking exercise will take place in 2023 to ensure pay and benefits are in line with equivalent organisations.<br>• Employee engagement surveys informing areas of change.<br>• Schedule of internal courses available for employees.<br>• Launch of new staff values in 2021/22. | Status:<br>Prior year status: |
| **Reduction in funding**<br>Funding reduced or remaining static has a negative impact on the Society's ability to support excellent science. A reduction of income could be due to a reduction in funding from Government, reduced income generated by publishing activities due to open access journals strategy, failure of trading activities to perform and/or reduced investment returns due to financial crises. | | • Strengthen existing relations and develop new relationships, seeking to secure additional funding and diversify sources of funding.<br>• Improved arrangements for financial planning and closer link between annual budgets and organisational strategy.<br>• High levels of discretionary expenditure that do not have a long-term commitment attached to them and grant awards include termination clauses in the event of funding withdrawal.<br>• Continuous review of funding context and income streams and regular reporting to Council. | Status:<br>Prior year status: |
| **Safeguarding**<br>The Society does not effectively safeguard its people or those with whom it comes into contact. | | • Relevant and appropriate policies are in place, and regular review of such policies.<br>• Internal safeguarding working group and safeguarding officers appointed.<br>• Council member with designated responsibility for safeguarding.<br>• Agreed a code of conduct for staff, Fellows and other relevant stakeholders.<br>• Employees consulted on health and safety arrangements in relation to the return to work in the office. | Status:<br>Prior year status: |

# Principal risks and uncertainties CONTINUED

| Risk | Key strategic priorities at risk | Management | Status of risk |
|---|---|---|---|
| **Diversity**<br>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.<br>• Unconscious bias training provided to those in positions to make decisions.<br>• Continual consideration and engagement with experts in relevant fields. | Status:<br>Prior year status: |
| **Influence and support**<br>The Society loses influence and support, and the Fellowship does not support the activities of the Society. | | • Fellowship programme – Fellowship engagement manager appointed.<br>• Regular communication with the Fellowship and other key stakeholders.<br>• Implemented a new customer relationship management system, which will more effectively track and monitor communications and contributions of Fellows across the Society.<br>• Fellowship engagement events across the UK to consult with the Fellowship on key issues.<br>• Preparing to launch an annual survey of Fellows. | Status:<br>Prior year status: |
| **Quality of the science**<br>Dilution in the quality or perceived quality of the science funded or produced 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'.<br>• Regular review of performance against strategy.<br>• Policies and procedures in place with disciplined adherence, to govern sign-off and decision-making processes.<br>• Periodic scheme evaluations to ensure offerings remain relevant and competitive. | Status:<br>Prior year status: |
| **Investment performance**<br>The Society does not effectively safeguard its assets.<br>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 DB pension scheme. | | • Triennial valuation complete.<br>• Appropriate legal advice sought and steps followed.<br>• Review of investment-management arrangements.<br>• Regularly review the investment portfolio and performance of the investment manager.<br>• Trained and competent staff in senior positions, and professional pension Trustees appointed. | Status:<br>Prior year status: |
| **Legal and regulatory requirements**<br>The Society does not comply with legal and regulatory requirements. | | • Appropriate legal advice sought and followed.<br>• Trained and competent staff in senior positions.<br>• Approved policies and procedures with significant exceptions reported to the Audit Committee.<br>• Internal and external audit functions in place. | Status:<br>Prior year status: |

# Governance

## Structure and management

The Society is a registered charity and the Royal Society Council is the Trustee body under charity law. The Society was founded in 1660 and incorporated by Royal Charter in 1662, 1663 and 1669. A Supplemental Charter was granted in 2012, and that now serves as the Society's governing document. The members of its Council are elected by and from the Fellowship. Under the Charter, the Royal Society 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 currently has 20 members.

## Membership of Council

Among the members of Council are the President, who is the Chair of Council, and five Officers: the Biological Secretary, the Physical Secretary, the Foreign Secretary (a post held by two Fellows on a jobshare basis), and the Treasurer. At the start of the year, there were 17 Ordinary Members of Council. One resigned in December 2022, meaning that there were 16 at the close of this period. The President and the Officers normally serve five-year terms and the Ordinary Members serve three-year terms. There have been 62 Presidents of the Royal Society since it was founded in 1660. Previous Presidents of the Royal Society have included Christopher Wren, Samuel Pepys, Isaac Newton, Joseph Banks, Humphry Davy and Ernest Rutherford.

### Appointment of Officers

1. Nominations are sought from amongst the Fellowship.
2. Nominations Committee recommends a shortlist for interview to Council.
3. A panel consisting of Officers and Council Members, and chaired by the Chair of Nominations Committee, interviews shortlisted candidates and recommends a candidate to Council.
4. Council approves a candidate to recommend to the Fellowship.
5. The candidate's name is put to the Fellowship for ratification.

### Appointment of Ordinary Members of Council

1. Nominations are sought annually from amongst the Fellowship.
2. Nominations Committee recommends a shortlist of Fellows for a ballot to Council.
3. Council approves a slate of 12 Fellows to be put to the Fellowship for election.
4. The Fellowship elects six candidates.

Most changes in the membership of Council took place as usual on 30 November, which is the Society's Anniversary Day. New members included Professor Jon Keating FRS, who became Treasurer and whose appointment came into effect on 11 April 2023. The new members received an induction, which included a review of relevant documents and presentations on Trustee duties by a partner in a leading charity law practice. 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 the day-to day management of the Society's affairs to the Executive Director.

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. With a view to increasing the diversity of Officers, the Charity Commission approved the application submitted by Council to make grants to Officers' parent institutions to reimburse some of the costs that arise for them from the significant time commitment involved in Officers' roles.

## Committees

The Council is supported by a number of committees and working groups to which it has delegated some of its functions. Its Standing Committees include committees that oversee key strands of the Society's work, committees that make recommendations to Council of recipients of medals and awards, and committees that assess applications for and make grant awards. All Standing Committees have terms of reference agreed by Council that set out the delegations of responsibility to that committee and a member of Council sits on most committees. The committee structure diagram on the following page illustrates the Society's committee structure by type of business and provides additional information on committees relevant to central business on finance and planning.

## The Board

The Board is a sub-committee of Council formed of the President and the four Officers of the Society. It plans Council's work programme throughout the year and reports regularly to it. The terms of reference of the Board are currently under review.

## Key business in the year

In the year, Council received regular reports from the Executive Director and Board as well as reports from its key Standing Committees. Following the adoption of the Society's Strategic Plan for 2022 – 2027 in March 2022, Council has focused this year on its implementation, taking reports from its major standing committees on work conducted on its behalf over the past year, and plans for 2023/24. Some common themes included the challenges and opportunities presented by the adoption of hybrid ways of working, and the Society's aim to expand its reach beyond the traditional centres of London, Cambridge and Oxford. Consideration of the impact on science and science funding of the UK's decision to leave the EU again formed a key topic for Council throughout this year, with remaining uncertainty regarding whether the UK will associate with EU science programmes, and the potential role of the Society in taking responsibility for any programmes introduced as a result of failure to do so.

After considerable work and consultation with the Fellowship exploring what might be done to increase the diversity of the Fellowship, reforms to the way in which elections take place were another key theme for Council through the year. Council agreed a package of reforms, including changes in the maximum number of different categories of Fellow that might be elected in a given year – expanding the Society's scope to elect applied, general, and honorary Fellows, and more Foreign Members.

The relevant reforms to the Society's Statutes and Standing Orders were formally agreed by Council after a Special General Meeting of the Fellowship held on 7 February 2023, following the procedure prescribed in the Statutes of the Society. More work will continue in 2023/24, and Council agreed to the creation of a working group looking at the processes regarding 'mainstream' Fellows. Council reviewed the Society's safeguarding policy, considered and agreed the Council risk register, and approved the Society's budget for the 2023/24 financial year. Continuing reform and improvement of the Society's governance processes remains a priority for Council, and the terms of reference for a Board Effectiveness Review to be carried out in 2023/24 were agreed.

# Governance CONTINUED

**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 reference 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 oversees audit and risk management processes on behalf of Council, ensuring internal controls are robust, proportionate and that they comply with relevant regulatory frameworks. The Audit Committee regularly reviews the Society's governance systems, making recommendations to Council on financial reporting, risk management and associated matters.

**Planning and Resources Committee**

The Planning and Resources Committee monitors financial performance, 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.

**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.

**Remuneration Committee**

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

## Charity Governance Code

Council reviews its compliance with the Charity Governance Code annually. Some of the ways in which the Society meets the Code's standards, and areas where it is committed to further work, are listed below:

| Principle | |
|---|---|
| **Organisational purpose** | The Society's underlying mission – to promote excellence in science and its application for human benefit – remains relevant and is widely understood at all levels of the Society.<br><br>The Strategic Plan for 2022 – 2027 identifies the key outcomes that the Society seeks to secure in pursuit of this mission.<br><br>The Society will be working to align Committees' work programmes and internal audit processes more closely with the Strategy in the coming year. |
| **Leadership** | Council agendas are designed to provide Council with the opportunity to provide high-level insights on the Society's strategic aims and planning.<br><br>A Board Effectiveness Review has now been commissioned, which will give Council the opportunity to review the way it provides leadership to the Society. |
| **Integrity** | Regular briefings are provided to Council from the Society's legal advisers on its members' duties of trustees, in general and in specific matters (for instance safeguarding).<br><br>The Code of Conduct makes clear the Society's expectations regarding standards for Fellows' conduct and the accompanying Disciplinary Regulations detail the processes that the Society follows. |
| **Decision making, risk and control** | Council is routinely provided with opportunities to consider aspects of the Society's strategy across the range of its work.<br><br>Standing Committees report regularly to Council on their work, seeking approval where appropriate on key decisions.<br><br>There will be a review of the Society's risk management processes throughout the year, and Council will work closely with the Society's Audit Committee to improve reporting and prioritisation. |
| **Board effectiveness** | Oversight of Council's work programme by the Officers of the Society allows for effective planning.<br><br>A dedicated Nominations Committee provides advice to Council on the appointment and election of new members. The Society's approach to such appointments (which are constrained by the rules set out in the Charter, which limits such appointments to Fellows of the Society) will be reviewed as part of the Board Effectiveness Review. The Review will look broadly at Council's effectiveness and make recommendations. |
| **Equality, diversity and inclusion** | There is regular reporting to Council on the Society's relevant work programmes. The importance of these themes are highlighted in the Society's values and Code of Conduct.<br><br>The Society publishes key diversity data regarding its work annually, and work is under way to make the information easier to engage with. |
| **Openness and accountability** | The Society conforms to key reporting requirements.<br><br>The Officers and Executive Director meet regularly with the Fellowship in question and answer sessions to provide accountability on the Society's work programmes. A programme of Fellowship Forums to be held throughout the UK will be launched in 2023/4. |

# 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 United Kingdom 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 UK 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 Council's 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 4 July 2023 and signed on their behalf by

**Sir Adrian Smith**
President of the Royal Society

# Independent auditor's report to the Trustees of the Royal Society

## Opinion on the financial statements

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 2023 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.

We have audited the financial statements of The Royal Society ("the Parent Charity") and its subsidiaries ("the Group") for the year ended 31 March 2023 which comprise the consolidated statement of financial activities, the consolidated and charity balance sheets, 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).

## Opinion on other matter as required by the Department for Science, Innovation and Technology ("DSIT") Grant Letter

In our opinion, in all material respects, the Core and Investment in Research Talent Funding grant payments received from the Department for Science, Innovation and Technology ("DSIT") have been applied for the purposes set out in the grant letter and in accordance with the terms and conditions of the grants.

## Basis for opinion

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

## Independence

We remain independent of the 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.

## Conclusions related to going concern

In auditing the financial statements, we have concluded that the Trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group and the Parent Charity's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

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

## Other information

The Trustees are responsible for the 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. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the 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.

# Independent auditor's report to the Trustees of the Royal Society CONTINUED

## 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 (Accounts and Reports) Regulations 2008 requires us to report to you if, in our opinion:

- the information given in the Trustees' Report for the financial year for which the financial statements are prepared is inconsistent in any material respect with the financial statements; 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.

## 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 determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the 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 151 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.

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

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

Based on our understanding of the Group and the sector in which it operates, we identified that the principal laws and regulations that directly affect the financial statements to be the relevant Charities Acts and the financial reporting framework in the UK. We assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items. We considered the Group's and Parent Charity's own assessment of the risks that irregularities may occur either as a result of fraud or error. We considered financial performance, key drivers for bonus or other performance targets. We also considered the risks of non-compliance with other requirements imposed by the Charity Commission and we considered the extent to which non-compliance might have a material effect on the Group financial statements.

In addition, the Group and Parent Charity are subject to many other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements, for instance through the imposition of fines or litigation. We identified the following areas as those most likely to have such an effect: employment law, data protection and fundraising regulations. Auditing standards limit the required audit procedures to identify non-compliance with these laws and regulations to enquiry of Those Charged with Governance and other management and inspection of regulatory and legal correspondence, if any.

Our tests included agreeing the financial statement disclosures to underlying supporting documentation, enquiries of the Audit Committee, management and internal audit, and a review of minutes of meetings of Council, Audit Committee, Investment Committee and Planning and Resources Committee. We held a discussion amongst the engagement team as to how and where fraud might occur in the financial statements. We made enquiries regarding any matters identified as a Serious Incident as reportable to the Charity Commission. We also performed analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud.

We challenged assumptions made by management in their significant accounting estimates, in particular in relation to the assumptions related to the valuation of the defined benefit pension scheme and the assumptions related to the valuation of heritage assets.

We did not identify any matters relating to irregularities, including fraud. As in all of our audits, we also addressed the risk of management override of internal controls, including testing journals throughout the year which met a defined risk criteria, including those which potentially impact remuneration and other performance targets and evaluating whether there was evidence of bias by management or Those Charged with Governance that represented a risk of material misstatement due to fraud.

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

A further description of our responsibilities for the audit of the financial statements is located at the Financial Reporting Council's ("FRC's") website at:

https://www.frc.org.uk/auditorsresponsibilities.

This description forms part of our auditor's report.

## Use of our report

This report is made solely to the 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.

DocuSigned by:
Fiona Condron
BC8C15A11E97446...

BDO LLP, statutory auditor

Gatwick, UK

Date: 31 July 2023

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).

# Consolidated statement of financial activities (incorporating an income and expenditure account)

## For the year ended 31 March 2023

| | Notes | Unrestricted funds £'000 | Restricted funds £'000 | Expendable endowment funds £'000 | Permanent endowment funds £'000 | **2023 Total funds £'000** | 2022 Total funds £'000 |
|---|---|---|---|---|---|---|---|
| Income and endowments from donations and legacies | 1 | 356 | 994 | – | – | **1,350** | 543 |
| **Income from charitable activities** | | | | | | | |
| Grants for charitable activities | 4 | – | 119,211 | – | – | **119,211** | 108,290 |
| Trading in furtherance of charitable activities | 3 | 9,757 | 654 | – | – | **10,411** | 8,396 |
| | | 9,757 | 119,865 | – | – | **129,622** | 116,686 |
| Other trading activities | 3 | 25 | 40 | – | – | **65** | 137 |
| Income from investments | 2 | 1,330 | 1,074 | 1,443 | 4,888 | **8,735** | 7,200 |
| Other income | | – | 14 | – | – | **14** | 15 |
| **Total income** | | **11,468** | **121,987** | **1,443** | **4,888** | **139,786** | **124,581** |
| | | | | | | | |
| Expenditure on raising funds | 5 | 1,213 | 538 | 309 | 1,021 | **3,081** | 3,562 |
| | | | | | | | (restated figures) |
| **Expenditure on charitable activities** | 6 | | | | | | |
| Grants to fund scientific research | | 2,379 | 100,108 | – | – | **102,487** | 89,634 |
| Providing scientific advice for policy | | 2,463 | 2,879 | – | – | **5,342** | 4,712 |
| Promoting science education and engagement | | 7,900 | 2,052 | – | – | **9,952** | 8,659 |
| Supporting scientific collaboration, nationally and internationally | | 5,444 | 15,076 | – | – | **20,520** | 20,736 |
| Recognising scientific excellence | | 64 | 245 | – | – | **309** | 351 |
| | | 18,250 | 120,360 | – | – | **138,610** | 124,092 |
| **Total expenditure** | | **19,463** | **120,898** | **309** | **1,021** | **141,691** | **127,654** |
| **Net (expenditure)/income before net gains/(losses) on investments** | | **(7,995)** | **1,089** | **1,134** | **3,867** | **(1,905)** | **(3,073)** |
| Net (losses)/gains on investments | 17 | (2,873) | (859) | (3,949) | (14,490) | **(22,171)** | 17,719 |
| **Net (expenditure)/income for the year** | | **(10,868)** | **230** | **(2,815)** | **(10,623)** | **(24,076)** | **14,646** |
| Gross transfers between funds | 23 | 6,622 | (2,592) | (1,604) | (2,426) | – | – |
| Actuarial gains on defined benefit pension scheme | 25 | 2,431 | – | – | – | **2,431** | 6,971 |
| **Net movement in funds** | | **(1,815)** | **(2,362)** | **(4,419)** | **(13,049)** | **(21,645)** | **21,617** |
| | | | | | | | |
| Total funds brought forward | | 93,123 | 42,340 | 49,587 | 171,157 | **356,207** | 334,590 |
| **Total funds carried forward** | | **91,308** | **39,978** | **45,168** | **158,108** | **334,562** | **356,207** |

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 £139.8m (2022: £124.4m). The Charity's total funds decreased by £21.6m in the year (2022: £21.6m increase).

The notes that follow form part of the financial statements.

# Consolidated and charity balance sheets

## As at 31 March 2023

| | | Group | | Charity | |
|---|---|---|---|---|---|
| | Notes | **2023 £'000** | 2022 £'000 | **2023 £'000** | 2022 £'000 |
| **Fixed assets** | | | | | |
| Tangible assets | 14B | **8,297** | 9,378 | **8,297** | 9,378 |
| Intangible assets | 14A | **1,261** | 256 | **1,261** | 256 |
| Heritage assets | 16 | **49,300** | 49,247 | **49,300** | 49,247 |
| Investments | 17 | **283,369** | 308,310 | **283,369** | 308,310 |
| | | **342,227** | 367,191 | **342,227** | 367,191 |
| **Current assets** | | | | | |
| Stocks | | **51** | 37 | **51** | 37 |
| Debtors receivable within one year | 18 | **5,162** | 3,057 | **5,198** | 3,192 |
| Cash at bank and in hand | | **15,176** | 11,626 | **15,125** | 11,459 |
| | | **20,389** | 14,720 | **20,374** | 14,688 |
| Creditors: amounts falling due within one year | 19 | **(27,530)** | (21,361) | **(27,515)** | (21,329) |
| **Net current liabilities** | | **(7,141)** | (6,641) | **(7,141)** | (6,641) |
| **Total assets less current liabilities** | | **335,086** | 360,550 | **335,086** | 360,550 |
| Creditors: amounts falling due after more than one year | 19 | **–** | (39) | **–** | (39) |
| **Net assets before pension scheme liability** | | **335,086** | 360,511 | **335,086** | 360,511 |
| Defined benefit pension scheme liability | 25 | **(524)** | (4,304) | **(524)** | (4,304) |
| **Total net assets** | | **334,562** | 356,207 | **334,562** | 356,207 |
| | | | | | |
| Permanent endowment funds | 23 | **158,108** | 171,157 | **158,108** | 171,157 |
| Expendable endowment funds | 23 | **45,168** | 49,587 | **45,168** | 49,587 |
| Restricted funds | 23 | **39,978** | 42,340 | **39,978** | 42,340 |
| | | | | | |
| **Unrestricted Funds** | | | | | |
| Revaluation reserve | 23 | **47,541** | 47,541 | **47,541** | 47,541 |
| Defined benefit pension reserve | 23 | **(524)** | (4,304) | **(524)** | (4,304) |
| Unrestricted income funds | 23 | **44,291** | 49,886 | **44,291** | 49,886 |
| **Total funds** | | **334,562** | 356,207 | **334,562** | 356,207 |

The financial statements were approved and authorised for issue by Council on 4 July 2023 and signed on its behalf by

Jon Keating

**Professor Jon Keating FRS**
Treasurer

# Consolidated statement of cash flows

## For the year ended 31 March 2023

| | Notes | 2023 £'000 | 2023 £'000 | 2022 £'000 |
|---|---|---|---|---|
| **Net cash used in operating activities** | A | | **(4,609)** | (5,467) |
| **Cash flows from investing activities:** | | | | |
| Investment income | 2 | **8,735** | | 7,200 |
| Purchase of intangible assets | 14A | **(501)** | | (84) |
| Purchase of tangible fixed assets | 14B | **(666)** | | (763) |
| Purchase of heritage assets | 16 | **(53)** | | (84) |
| Purchase of investments | 17 | **(85,320)** | | (99,297) |
| Proceeds from sale of investments | 17 | **85,964** | | 103,331 |
| **Net cash provided by investment activities** | | | **8,159** | 10,303 |
| **Increase in cash and cash equivalents** | | | **3,550** | 4,836 |
| Cash and cash equivalents at 1 April | | | **11,626** | 6,790 |
| **Cash and cash equivalents at 31 March** | | | **15,176** | 11,626 |

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

| | | 2023 £'000 | 2022 £'000 |
|---|---|---|---|
| **Net (expenditure)/income as per the statement of financial activities** | | **(24,076)** | 14,646 |
| Adjustments for: | | | |
| Depreciation and amortisation charges | 14 | **1,206** | 1,134 |
| Losses/(gains) on investments | 17 | **22,171** | (17,719) |
| Investment income | 2 | **(8,735)** | (7,200) |
| Losses on the disposal of fixed assets | 14 | **37** | 34 |
| Investment management fees charged to portfolio | 17 | **2,126** | 2,685 |
| Increase in stocks | | **(14)** | (16) |
| Increase in debtors | 18 | **(2,105)** | (493) |
| Increase in creditors | 19 | **6,130** | 2,404 |
| Difference between pension charge and cash contributions | 25 | **(1,349)** | (942) |
| **Net cash used in operating activities** | | **(4,609)** | (5,467) |

B. Analysis of changes in net debt

| | Balances at 1 April 2022 £'000 | Cash flows £'000 | Balances at 31 March 2023 £'000 |
|---|---|---|---|
| Cash and cash equivalents | 11,626 | 3,550 | **15,176** |
| **Total** | 11,626 | 3,550 | **15,176** |

# Accounting policies

## For the year ended 31 March 2023

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 2019 ('the SORP 2019 2nd Edition') together with the reporting requirements of the Charities Act 2022.

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. This conclusion has been reached after careful consideration of reserves levels, future forecasts and changes in external factors. The Society manages uncertainties through risk management processes with mitigations in place for key risk areas, and has a robust reserves position and availability of liquid assets in cash at hand and as cash within the investment portfolio. 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.

Royal Society Trading Limited, a trading subsidiary of the Royal Society, was dormant in the year.

### Basis of consolidation

These financial statements consolidate the results of the Royal Society and its active wholly owned subsidiary, 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 assumptions relate to the defined benefit pension scheme and the valuation of heritage assets.

### 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. The final active member of the USS multi-employer pension scheme left the Society in the year. The Society is required to either enrol a member into the USS multi-employer pension scheme or pay the Section 75 debt. As at 31 March 2023, the Society could not reliably estimate the liability and a decision had not been made as to whether a member would be enrolled in the USS multi-employer pension scheme therefore it was a possible but uncertain obligation. The latest estimate of the value of the debt as at 31 March 2022 was £1.4 million. This is disclosed as a contingent liability in Note 20 of these financial statements.

### Defined benefit pension scheme

The cost of the defined benefit pension scheme and 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 £0.7 million change in the value of the scheme liabilities.

# Accounting policies CONTINUED

**For the year ended 31 March 2023**

## Impairment of heritage assets

Heritage assets held at valuation or cost totalled £49.3 million at 31 March 2023 (2022: £49.2 million). In 2022, a rolling schedule of valuations per asset class was agreed. In 2022, printed books were valued and the archives were valued in 2023. There were no indicators of impairment identified in these reviews.

The last detailed impairment assessment of the collections was last performed in 2015. The valuation assumes that since 2015: (a) the physical condition of the assets has not deteriorated; and (b) there have not been any significant changes in the markets of these assets. A review of the indicators of impairment is undertaken annually and should this review identify any indicators, then a detailed impairment assessment would be undertaken. No indicators of impairment were identified in this annual review.

## Income

Income is accrued and recognised when conditions on entitlement are met, and when 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. Receipt of a legacy, in whole or in part, is only considered probable when the charity has been notified of the executor's intention to make a contribution.

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 or service is provided. Income for the sales of subscriptions, package subscriptions and consortium deals is recognised evenly over the period of the subscription or service.

## 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.

## 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 foregone.

## Leased assets

Rentals payable under operating leases are charged to the statement of financial activities 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 cost 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:

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.

## Intangible assets

Intangible assets consist of computer software, which is not an integral part of its related hardware, and digital archives. Intangible assets are capitalised at cost, including purchase price of computer software licences and any other costs directly attributable to bringing the software and digital archives into use, such as configuration or implementation costs. Software development costs are recognised as an intangible asset when all of the conditions of FRS 102 are met.

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 cost more than £5,000.

Intangible assets are measured at cost less accumulated amortisation and any impairment losses.

Amortisation is charged to write off the cost of the intangible asset on a straight-line basis over their expected useful lives as follows:

- CRM software: 5 years
- Digital archives: 20 years

## Heritage assets

Heritage assets comprise:

- printed books;
- archives;
- pictures, sculptures and other works of art; and
- 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 was last performed in 2015. Impairment reviews of these collections are undertaken every 5–10 years and when changes in circumstances indicate. A review of indicators of impairment is undertaken annually.

In 2022, a rolling schedule of valuations per asset class was agreed. In 2022, printed books were valued and the archives were valued in 2023. There were no indicators of impairment identified in these reviews and the recent valuations were significantly in excess of the deemed cost included on the balance sheet.

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.

# Accounting policies CONTINUED

**For the year ended 31 March 2023**

## 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. Private equity investments are valued at fair value based on the latest information from the fund managers. Realised gains and losses on investments sold in the year and unrealised gains and losses on revaluation of investments are included in the statement of financial activities.

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

The Enterprise Fund is accounted for as a mixed-motive investment, owing to the dual benefits expected to be received.

The investments 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 and expendable endowments with the exception of the Theo Murphy Australia Fund. Income from the endowments and investment gains and losses are recognised in the endowment column of the statement of financial activities. 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 statement of financial activities.

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 five-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 that 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 consumer price index (CPI) as determined by the Office for National Statistics).

## Impairment of fixed assets

Tangible fixed assets, intangible 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 statement of financial activities category in the year in which it occurs.

Heritage assets are reviewed for indicators of 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 statement of financial activities.

## 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 are subsequently measured at amortised cost.

## Fund accounting

Restricted funds can only be used for particular purposes specified 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 statement of financial activities 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 is 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 statement of financial activities.

The amounts charged to the statement of financial activities for defined contribution pension schemes represent the employer's contributions payable in the year. The method for the allocation of pension costs between funds is to allocate on a pro rata basis using departmental salary costs as a base.

## Contingent liabilities

A contingent liability is either a possible but uncertain obligation or a present obligation that is not recognised. Contingent liabilities are disclosed in the financial statements when the following circumstances arise:

- A past event gives the Society a possible obligation, the existence of which will only be confirmed by the occurrence or otherwise of uncertain future events not wholly within the Society's control; and
- A provision would otherwise be made but either it is not probable that an outflow of resource will be required, or the amount of the obligation cannot be measured reliably.

## 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 statement of financial activities 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 of the 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 can be found as follows:

- Consolidated statement of financial activities – Note 27;
- Analysis of net assets between funds – Note 28;
- Movement on trust and specific funds in year – Note 29.

# Notes to the financial statements

For the year ended 31 March 2023

## 1 Income and endowments from donations and legacies

| | Unrestricted funds £'000 | Restricted funds £'000 | Expendable endowment funds £'000 | Permanent endowment funds £'000 | **2023 Total funds £'000** | 2022 Total funds £'000 |
|---|---|---|---|---|---|---|
| Gifts and donations | 57 | 445 | – | – | **502** | 280 |
| Legacies | 65 | 549 | – | – | **614** | 38 |
| Fellows' contributions | 234 | – | – | – | **234** | 225 |
| **Total** | 356 | 994 | – | – | **1,350** | 543 |

## 2 Income from investments

| | Unrestricted funds £'000 | Restricted funds £'000 | Expendable endowment funds £'000 | Permanent endowment funds £'000 | **2023 Total funds £'000** | 2022 Total funds £'000 |
|---|---|---|---|---|---|---|
| Dividends and interest | 1,264 | 1,074 | 1,443 | 4,888 | **8,669** | 7,199 |
| Bank deposit interest | 66 | – | – | – | **66** | 1 |
| **Total** | 1,330 | 1,074 | 1,443 | 4,888 | **8,735** | 7,200 |

## 3 Trading

| | External income £'000 | Recharged internal lettings £'000 | Gross expenditure £'000 | **2023 Net surplus £'000** | 2022 Net surplus/ (deficit) £'000 |
|---|---|---|---|---|---|
| **Trading activities through subsidiary companies** | | | | | |
| Sponsorships | 65 | – | (7) | **58** | 132 |
| **Trading in furtherance of charitable activities** | | | | | |
| Publishing | 7,522 | – | (3,713) | **3,809** | 4,151 |
| Conferencing activities in furtherance of objectives – Carlton House Terrace | 2,195 | 1,394 | (2,599) | **990** | (157) |
| Other | 694 | – | – | **694** | 640 |
| | 10,411 | 1,394 | (6,312) | **5,493** | 4,634 |
| **Total** | 10,476 | 1,394 | (6,319) | **5,551** | 4,766 |

The costs of the Society's publishing operation and the costs associated with the lettings in furtherance of charitable objectives are included in 'Promoting science education and engagement' and 'Supporting scientific collaboration, nationally and internationally' respectively 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 | **2023 Total funds £'000** | 2022 Total funds £'000 |
|---|---|---|---|---|---|---|
| **From Government and other public bodies** | | | | | | |
| Core grant from Department for Science, Innovation and Technology (DSIT) | – | 108,435 | – | – | **108,435** | 50,699 |
| DSIT Long-Term Talent Schemes | – | 101 | – | – | **101** | – |
| DSIT Transitional Funding | – | 34 | – | – | **34** | – |
| DSIT Newton Fund | – | 87 | – | – | **87** | 541 |
| DSIT Global Challenges Research Fund | – | 3,620 | – | – | **3,620** | 7,706 |
| DSIT Investment in Research Talent Fund | – | – | – | – | **–** | 38,625 |
| DSIT COVID-19 Costed Extensions fund | – | – | – | – | **–** | 4,257 |
| Department for International Development | – | (304) | – | – | **(304)** | 802 |
| Other grants from government and public bodies | – | 556 | – | – | **556** | 435 |
| **From other external bodies** | | | | | | |
| Contribution to charitable activities | – | 6,682 | – | – | **6,682** | 5,225 |
| **Total** | – | 119,211 | – | – | **119,211** | 108,290 |

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

The Society's core grant from the Department for Science, Innovation and Technology (DSIT), previously from BEIS, was consolidated with the Investment in Research Talent Fund into one fund.

## 5 Expenditure on raising funds

| | Unrestricted funds £'000 | Restricted funds £'000 | Expendable endowment funds £'000 | Permanent endowment funds £'000 | **2023 Total funds £'000** | 2022 Total funds £'000 |
|---|---|---|---|---|---|---|
| Direct costs on raising funds | 480 | – | – | – | **480** | 421 |
| Support costs on raising funds | 459 | 9 | – | – | **468** | 451 |
| Cost of trading | 7 | – | – | – | **7** | 5 |
| Investment management fees | 267 | 529 | 309 | 1,021 | **2,126** | 2,685 |
| **Total** | 1,213 | 538 | 309 | 1,021 | **3,081** | 3,562 |

# Notes to the financial statements CONTINUED

**For the year ended 31 March 2023**

## 6 Expenditure on charitable activities

| | Staff costs £'000 | Grant costs £'000 (Note 9) | Other direct costs £'000 | Support costs £'000 (Note 7) | **2023 Total £'000** | 2022 Total £'000 (restated figures) |
|---|---|---|---|---|---|---|
| **Charitable activities** | | | | | | |
| Grants to fund scientific research | 2,088 | 97,367 | 606 | 2,426 | **102,487** | 89,634 |
| Providing scientific advice for policy | 2,131 | – | 734 | 2,477 | **5,342** | 4,712 |
| Promoting science education and engagement | 2,759 | 351 | 3,636 | 3,206 | **9,952** | 8,659 |
| Supporting scientific collaboration | 2,440 | 10,964 | 4,292 | 2,824 | **20,520** | 20,736 |
| Recognising scientific excellence | 4 | 166 | 135 | 4 | **309** | 351 |
| **Total for costs of charitable activities** | 9,422 | 108,848 | 9,403 | 10,937 | **138,610** | 124,092 |

Following a review of the Society's expenditure, the expenditure on charitable activities has been restated to reflect the core activities the Society performs to fulfil its purpose for public benefit. The comparative figures have been restated to show a like-for-like comparison.

## 7 Support costs

| | Media relations and public engagement £'000 | Facilities and building management £'000 | Support services £'000 | Governance £'000 | **2023 Total £'000** | 2022 Total £'000 |
|---|---|---|---|---|---|---|
| **Support costs on raising funds** | 39 | 140 | 267 | 22 | **468** | 451 |
| **Charitable activities** | | | | | | (restated figures) |
| Grants to fund scientific research | 202 | 728 | 1,383 | 113 | **2,426** | 1,651 |
| Providing scientific advice for policy | 207 | 743 | 1,411 | 116 | **2,477** | 2,246 |
| Promoting science education and engagement | 267 | 962 | 1,827 | 150 | **3,206** | 2,908 |
| Supporting scientific collaboration | 236 | 847 | 1,609 | 132 | **2,824** | 2,270 |
| Recognising scientific excellence | 1 | 1 | 2 | – | **4** | 3 |
| | 913 | 3,281 | 6,232 | 511 | **10,937** | 9,078 |
| **Total support costs** | 952 | 3,421 | 6,499 | 533 | **11,405** | 9,529 |

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.

## 8 Staff costs

| | **2023 £'000** | 2022 £'000 |
|---|---|---|
| **Costs by type** | | |
| Salaries | **12,154** | 10,525 |
| Social Security costs | **1,291** | 1,065 |
| Pension costs | **1,238** | 1,167 |
| **Total** | **14,683** | 12,757 |

As required by FRS102, included in 2023 staff costs is an amount of £326,000 (2022: £301,000) relating to holiday pay owed to staff at 31 March 2023.

Pension costs include employer contributions to two Royal Society pension schemes, a defined contribution scheme and a defined benefit scheme, and the Universities Superannuation Scheme (USS) pension scheme as follows:

- The Royal Society Group Personal Pension Plan (defined contribution): £716,000 (2022: £641,000).
- The Pension and Life Assurance Plan of the Royal Society (defined benefit): £337,000 (2022: £375,000).
- USS: £27,000 (2022: £26,000).

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

| | **2023** | 2022 |
|---|---|---|
| £60,001 – £70,000 | **16** | 11 |
| £70,001 – £80,000 | **7** | 4 |
| £80,001 – £90,000 | **2** | 3 |
| £90,001 – £100,000 | **1** | 3 |
| £100,001 – £110,000 | **3** | 4 |
| £110,001 – £120,000 | **3** | – |
| £120,001 – £130,000 | **1** | 1 |
| £130,001 – £140,000 | **1** | 2 |
| £140,001 – £150,000 | **1** | – |
| £150,001 – £160,000 | **–** | 2 |
| £160,001 – £170,000 | **2** | – |
| £380,001 – £390,000 | **–** | 1 |
| £390,001 – £400,000 | **1** | – |

The 13 key management personnel of the Royal Society (2022: 12) received total remuneration of £1,998,000 including employer's NIC (2022: £1,921,000).

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

| | **2023** | 2022 |
|---|---|---|
| Raising funds | **6** | 5 |
| Charitable activities | **167** | 149 |
| Support (including governance) | **61** | 59 |
| **Total** | **234** | 213 |

The average full-time equivalent was 230 (2022: 207).

No redundancy and termination payments were made during the year (2022: 4). Total redundancy and termination payments in respect of these employees were £nil (2022: £67,000).

# Notes to the financial statements CONTINUED

**For the year ended 31 March 2023**

## 9 Grants

| | Grants to institutions £'000 | Grants to individuals £'000 | **2023 Total £'000** | 2022 Total £'000 |
|---|---|---|---|---|
| **Fellowships** | | | | |
| University Research Fellowships | – | 60,523 | **60,523** | 55,519 |
| Royal Society Research Professorships | – | 19,506 | **19,506** | 12,087 |
| Dorothy Hodgkin Fellowships | – | 8,537 | **8,537** | 8,315 |
| Newton International Fellowships | – | 4,151 | **4,151** | 3,502 |
| FLAIR Fellowships | – | (54) | **(54)** | 3,865 |
| Sir Henry Dale Fellowships | – | 4,054 | **4,054** | 4,298 |
| International Collaboration Awards (previously disclosed as RS Visiting Research Professorship) | – | 2,033 | **2,033** | 1,318 |
| Newton Advanced Fellowships | – | (642) | **(642)** | (90) |
| Challenge Grants (previously disclosed as RS Challenge Grants) | – | (59) | **(59)** | – |
| Wolfson Research Merit Award | 504 | – | **504** | 912 |
| Industry Fellowships | – | 1,697 | **1,697** | 1,908 |
| Royal Society Wolfson Fellowship and Wolfson Visiting Fellowship (previously disclosed as Wolfson Advanced Fellowships) | 3,345 | – | **3,345** | 2,606 |
| Leverhulme Trust Senior Research Fellowships | – | 350 | **350** | 398 |
| International Fellowship Grants | – | 316 | **316** | 112 |
| Professorship of Public Engagement | – | 27 | **27** | (10) |
| **Education Schemes** | | | | |
| Partnership Grants Scheme | 235 | – | **235** | 204 |
| Other Education Grants | – | 41 | **41** | 137 |
| **Other Grant Programmes** | | | | |
| FCDO Africa Capacity Building Initiative (previously disclosed as DFID Africa Awards) | – | (438) | **(438)** | 596 |
| International Exchanges | – | 2,864 | **2,864** | 3,698 |
| Entrepreneur in Residence | – | 815 | **815** | 806 |
| APEX Awards (previously disclosed as Leverhulme Trust APEX Awards) | – | 745 | **745** | 716 |
| Wolfson Laboratory Refurbishment Grants | – | – | **–** | 28 |
| Commonwealth Science Conference | – | (3) | **(3)** | 60 |
| Australian Academy of Science Think Tank | – | 154 | **154** | 410 |
| Paul Instrument Fund | – | 8 | **8** | 27 |
| Awards and Prizes | – | 201 | **201** | 216 |
| Newton International Exchanges | – | (120) | **(120)** | (84) |
| Other | – | 58 | **58** | 92 |
| **Total** | 4,084 | 104,764 | **108,848** | 101,646 |

## 9 Grants CONTINUED

### Recipients of institutional grants

| | **2023 Number** | 2022 Number | **2023 Total £'000** | 2022 Total £'000 |
|---|---|---|---|---|
| University of Cambridge | **11** | 10 | **331** | 217 |
| University of Edinburgh | **9** | 7 | **331** | 163 |
| Imperial College London | **10** | 14 | **328** | 276 |
| University of Bristol | **11** | 10 | **322** | 166 |
| University of Glasgow | **8** | 20 | **291** | 304 |
| University College London (UCL) | **9** | 9 | **245** | 292 |
| University of Birmingham | **7** | 7 | **195** | 177 |
| The Francis Crick Institute | **2** | 2 | **188** | 172 |
| University of East Anglia | **2** | 1 | **136** | 74 |
| University of Manchester | **3** | 3 | **115** | 75 |
| University of Nottingham | **4** | 4 | **110** | 60 |
| University of Leicester | **3** | 3 | **102** | 115 |
| University of Southampton | **3** | 6 | **90** | 138 |
| University of Leeds | **3** | 5 | **85** | 93 |
| Nottingham Trent University | **2** | 2 | **84** | 96 |
| University of Warwick | **5** | 4 | **79** | 49 |
| Liverpool School of Tropical Medicine | **2** | 3 | **77** | 86 |
| University of Sussex | **2** | 2 | **75** | 10 |
| King's College London | **3** | 4 | **74** | 119 |
| Swansea University | **2** | 2 | **63** | 65 |
| Durham University | **4** | 5 | **57** | 64 |
| University of Northumbria | **1** | 2 | **57** | 41 |
| University of Oxford | **4** | 4 | **51** | 70 |
| Brunel University London | **1** | 1 | **49** | 48 |
| University of Portsmouth | **1** | 1 | **47** | 44 |
| Diamond Light Source Ltd | **1** | 1 | **43** | 40 |
| Queen's University Belfast | **1** | 1 | **40** | 37 |
| University of Bath | **4** | 4 | **37** | 55 |
| University of York | **2** | 4 | **32** | 149 |
| University of Liverpool | **1** | – | **27** | – |
| University of St Andrews | **1** | 1 | **22** | 52 |
| University of Dundee | **2** | 2 | **15** | 18 |
| University of Exeter | **1** | 1 | **14** | 19 |
| Queen Mary University of London | **1** | 1 | **8** | 20 |
| Newcastle University | **1** | 1 | **1** | 15 |
| Aberystwyth University | **–** | 2 | **–** | 41 |
| University of Sheffield | **–** | 1 | **–** | 28 |
| Cardiff University | **–** | 3 | **–** | 15 |
| Other organisations | **90** | 81 | **263** | 247 |
| **Total** | **217** | 234 | **4,084** | 3,750 |

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

**For the year ended 31 March 2023**

## 10 Reconciliation of grants payable

| | 2023 Total £'000 | 2022 Total £'000 |
|---|---|---|
| Liability at 1 April | **8,014** | 5,725 |
| New grants awarded in year | **113,491** | 104,443 |
| Grants paid in year | **(106,482)** | (99,357) |
| Grants refunded to the Society | **(4,644)** | (2,797) |
| **Liability at 31 March** | **10,379** | 8,014 |

All grants payable fall due within one year.

## 11 Payments to Trustees and Related Party Transactions

| | 2023 Total £'000 | 2022 Total £'000 |
|---|---|---|
| Expenses: Travel and subsistence | **93** | 22 |

No Trustees received remuneration from the Society in the year (2022: Nil). Expenses were reimbursed to or paid on behalf of 16 Trustees (2022: 15 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 £14,000 (2022: £14,000). No claims have been made under this policy.

### Grants and awards

Professor Peter Bruce FRS is an award holder of the International Exchanges Cost Share (NSFC) grant. The total value of the award is £12,000. All payments were made in 2020/21. He is also a co-applicant on a Newton Advanced Fellowship grant. The total value of the award is £111,000. This was awarded and taken up in the 2018/19 financial year. No payment was made in 2022/23.

Professor Stephen Barnett FRS is an award holder of the Royal Society Research Professorships grant. The total value of the award is £1,014,000. This was awarded and taken up in 2021/22. A payment of £312,000 was made to the University of Glasgow in 2022/23 in respect of this award. Professor Barnett is also a collaborator on a University Research Fellowship grant. The total value of the award is £777,000. This was awarded and taken up in 2021/22. A payment of £212,000 was made to the University of Glasgow in 2022/23 in respect of this award.

Professor Jennifer Thomas FRS is an award holder of the Royal Society Research Professorships grant. The total value of the award is £1,313,000. This was awarded and taken up in 2020. A payment of £270,000 was made to University College London in 2022/23 in respect of this award.

Professor David Baulcombe FRS is an award holder of Royal Society Research Professorships grant. The total value of the award is £807,000. This was awarded and taken up in 2017. A payment of £122,000 was made to the University of Cambridge in 2022/23 in respect of this award. Professor Baulcombe is also a collaborator on a University Research Fellowship grant. The total value of the award is £817,000. This was awarded and taken up in 2020/21. A payment of £209,000 was made to the University of Cambridge in 2022/23 in respect of this award.

## 11 Payments to Trustees and Related Party Transactions CONTINUED

### Other

Sir Adrian Smith, President of the Royal Society, has use of the President's flat at Carlton House Terrace. Sir Adrian Smith's wife, Lucy Heller, is Chief Executive Officer of ARK, an educational charity. During the 2022/23 financial year, ARK held three events at the Royal Society and paid the Royal Society a total of £6,000 for these events.

Dr Julie Maxton DBE, Executive Director of The Royal Society, is a Trustee Board member of The Foundation for Science and Technology (FST). The Royal Society provides an annual grant to FST to support its activities. The grant paid this year was £36,500 (2022: £35,000). FST holds regular stakeholder events in the Royal Society's premises and pays for the venue hire. During the 2022/23 financial year, FST paid the Royal Society total of £88,000 for these events.

With a view to increasing the diversity of Officers, the Charity Commission approved the application submitted by Council to make grants to Officers' parent institutions to reimburse some of the costs that arise from the significant time commitment involved in Officers' roles. The grants paid this year were £200,000 (2022: £165,000). The term of Officers is not aligned to the Society's financial year and payments are paid pro-rata to the time served in the year. In the year, grants were paid to two institutions (2022: two).

### 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).

Details of transactions with these subsidiaries are set out in Note 26.

## 12 Total expenditure includes the following amounts:

| | 2023 Total £'000 | 2022 Total £'000 |
|---|---|---|
| **Operating lease rentals** | | |
| Plant and machinery | **77** | 55 |
| Rent | **490** | 490 |
| | **567** | 545 |
| **Fees payable to the Charity's auditors for:** | | |
| The audit of the Charity and Group accounts | **75** | 50 |
| The audit of the Charity's subsidiaries accounts pursuant to legislation | **4** | 3 |
| Tax returns of the Charity and trading subsidiaries | **6** | 6 |
| **Total auditors' remuneration** | **85** | 59 |
| | | |
| **Charges on owned assets** | | |
| Depreciation and amortisation | **1,206** | 1,134 |
| | **1,206** | 1,134 |

# Notes to the financial statements CONTINUED

## For the year ended 31 March 2023

## 13 Financial memoranda

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

| | 2023 Total £'000 | 2022 Total £'000 |
|---|---|---|
| **Department for Science, Innovation and Technology – Core grant** | | |
| Income | **108,435** | 50,699 |
| Expenditure | **(108,435)** | (50,699) |
| | **–** | – |
| **Department for Science, Innovation and Technology – Investment in Research Talent Fund** | | |
| Income | **–** | 38,625 |
| Expenditure | **–** | (38,625) |
| | **–** | – |
| **Department for Science, Innovation and Technology – Faraday programme** | | |
| Income | **101** | – |
| Expenditure | **(101)** | – |
| | **–** | – |
| **Department for Science, Innovation and Technology – Transitions programme** | | |
| Income | **34** | – |
| Expenditure | **(34)** | – |
| | **–** | – |
| **Department for Science, Innovation and Technology – Global Challenges Research Fund** | | |
| Income | **3,620** | 7,706 |
| Expenditure | **(3,620)** | (7,706) |
| | **–** | – |
| **Department for Science, Innovation and Technology – Newton Fund** | | |
| Income | **88** | 541 |
| Expenditure | **(88)** | (541) |
| | **–** | – |
| **Department for Science, Innovation and Technology – COVID-19 Costed Extensions Fund** | | |
| Income | **–** | 4,257 |
| Expenditure | **–** | (4,257) |
| | **–** | – |
| **Foreign, Commonwealth and Development Office (formerly DFID) grant** | | |
| Income/(Refund) | **(304)** | 802 |
| Refund/(Expenditure) | **304** | (802) |
| | **–** | – |
| **Home Office Shared Service Centre** | | |
| Income | **556** | 423 |
| Expenditure | **(556)** | (423) |
| | **–** | – |

## 14 Intangible and tangible fixed assets

### 14A Intangible assets

### Group and Charity

| | CRM software £'000 | Digital archives £'000 | 2023 £'000 | 2022 £'000 |
|---|---|---|---|---|
| **Cost** | | | | |
| At 1 April | 334 | – | **334** | 250 |
| Additions | 58 | 443 | **501** | 84 |
| Transfers | – | 756 | **756** | – |
| **At 31 March** | 392 | 1,199 | **1,591** | 334 |
| **Accumulated amortisation** | | | | |
| At 1 April | 78 | – | **78** | 22 |
| Charge for year | 71 | 48 | **119** | 56 |
| Transfers | – | 133 | **133** | – |
| **At 31 March** | 149 | 181 | **330** | 78 |
| **Net book value at 31 March 2023** | 243 | 1,018 | **1,261** | – |
| Net book value at 31 March 2022 | – | – | **–** | 256 |

A Customer Relationship Management (CRM) system was completed and went live during 2020/21. The asset costs were reviewed and it met the criteria of an intangible asset. The CRM system continues to be developed and improved, with costs incurred during this process being capitalised.

A review of tangible fixed assets was carried out during the year and assets relating to the digitisation of the Royal Society's archives were deemed to have met the criteria of an intangible asset. These assets were subsequently transferred from leasehold improvements to intangible assets, under a newly created category, the Digital archives. The Digital archives continues to be developed and expanded, with costs incurred during this process being capitalised.

Amortisation of intangible fixed assets is included within the expenditure on charitable activities in Note 6.

There were no contractual commitments for acquisitions of intangible assets as at 31 March 2023 (2022: £Nil).

# Notes to the financial statements CONTINUED

## For the year ended 31 March 2023

### 14B Tangible fixed assets

### Group and Charity

| | Leasehold improvements £'000 | Computers and other equipment £'000 | Assets under development £'000 | 2023 £'000 | 2022 £'000 |
|---|---|---|---|---|---|
| **Cost** | | | | | |
| At 1 April | 21,850 | 3,745 | 502 | **26,097** | 26,209 |
| Additions | 463 | 131 | 72 | **666** | 763 |
| Disposals | (336) | (734) | – | **(1,070)** | (875) |
| Transfers | (615) | 326 | (467) | **(756)** | – |
| **At 31 March** | 21,362 | 3,468 | 107 | **24,937** | 26,097 |
| **Depreciation** | | | | | |
| At 1 April | 14,129 | 2,590 | – | **16,719** | 16,482 |
| Charge for year | 686 | 401 | – | **1,087** | 1,078 |
| Disposals | (302) | (731) | – | **(1,033)** | (841) |
| Transfers | (133) | – | – | **(133)** | – |
| **At 31 March** | 14,380 | 2,260 | – | **16,640** | 16,719 |
| **Net book value at 31 March 2023** | 6,982 | 1,208 | 107 | **8,297** | |
| Net book value at 31 March 2022 | 7,721 | 1,155 | 502 | | 9,378 |

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

Depreciation of tangible fixed assets is included within the expenditure on charitable activities in Note 6.

## 15 Capital commitments

### Group and Charity

| | 2023 £'000 | 2022 £'000 |
|---|---|---|
| Authorised and contracted for | **140** | 130 |
| Authorised but not contracted for | **1,313** | 3,008 |
| **Total Commitment** | **1,453** | 3,138 |

At the balance sheet date, £423,000 (2022: £1,575,000) of capital commitments were authorised for refurbishment of 6–9 Carlton House Terrace. A further spend of £787,000 (2022: £559,000) had been authorised on IT projects. Other general capital items total £243,000 (2022: £1,004,000). Of these commitments, £140,000 (2022: £130,000) has been contracted for by the year end.

## 16 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 78,000 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 over 360 years. The archive collection is a unique resource for academics, particularly historians of science. Over 260,000 items have been catalogued, including the manuscript of Isaac Newton's Principia Mathematica.

**Pictures, sculptures and other works of art:** The collection includes over 300 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, historic furniture 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 online presence, including a fully searchable catalogue and image library.

### Summary of heritage asset transactions

| | Assets held at cost £'000 | Assets held at valuation £'000 | 2023 £'000 | 2022 £'000 |
|---|---|---|---|---|
| **Purchases/donations** | | | | |
| At 1 April | 36,354 | 12,893 | **49,247** | 49,163 |
| Additions | 53 | – | **53** | 84 |
| **Valuation or cost at 31 March** | 36,407 | 12,893 | **49,300** | 49,247 |
| | | | | |
| **The heritage assets comprise:** | | | | |
| Printed books | | | **13,278** | 13,278 |
| Archives | | | **22,988** | 22,981 |
| Picture, sculptures and other works of art | | | **9,278** | 9,232 |
| Other artefacts | | | **3,756** | 3,756 |
| **Total** | | | **49,300** | 49,247 |

The printed books and archives were originally valued in August 2003 by Roger Gaskell, a rare book dealer, and the pictures and other artefacts were valued in 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. Assets are held at valuation as a proxy for cost. An annual impairment review was carried out in March 2023, which included an independent valuation of the archives by Bernard Quaritch Ltd, a rare book dealer. There was no indication of an impairment in the deemed cost of the archives as a result of this independent valuation and the valuation was significantly in excess of the deemed cost included on the balance sheet. There were no disposals in the current or prior year.

# Notes to the financial statements CONTINUED

For the year ended 31 March 2023

## 16 Heritage assets CONTINUED

### Five-year financial summary of heritage asset transactions

| | 2023 £'000 | 2022 £'000 | 2021 £'000 | 2020 £'000 | 2019 £'000 |
|---|---|---|---|---|---|
| **Purchases/donations** | | | | | |
| Printed books | **–** | – | – | 1 | 7 |
| Archives | **7** | 16 | – | 37 | 51 |
| Picture, sculptures and other works of art | **46** | 68 | 2 | 22 | 37 |
| Other artefacts | **–** | – | – | – | – |
| **Total purchases/donations** | **53** | 84 | 2 | 60 | 95 |

Donated heritage assets are recognised in the year they are received. There were no disposals of heritage assets during the year (2022: £Nil). Other than heritage assets disposed of in 2021, there have been no other 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, stored in a standard offsite facility, were last subject to a full audit 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 and 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.

## 17 Investments

### Group and Charity

| | 2023 £'000 | 2022 £'000 |
|---|---|---|
| **Valuation at 1 April** | **308,310** | 297,310 |
| Additions of investments | **74,288** | 100,801 |
| Disposal of investments | **(85,965)** | (103,331) |
| Net change in cash invested for trades within portfolio | **11,453** | 1,770 |
| Investment management costs | **(2,126)** | (2,685) |
| Net cash withdrawn from portfolio | **(420)** | (3,274) |
| Net (losses)/gains on valuation at 31 March | **(22,171)** | 17,719 |
| **Valuation at 31 March** | **283,369** | 308,310 |
| | | |
| **Total historical cost at the end of the year** | **246,619** | 242,508 |
| | | |
| **The valuation at 31 March 2023 comprises:** | | |
| Investments listed on a recognised stock exchange including investments and unit trusts: | | |
| UK | **147,009** | 168,060 |
| Overseas | **102,018** | 114,900 |
| Other Unlisted Securities: | | |
| UK | **10,013** | 10,116 |
| Overseas | **1,947** | 2,705 |
| Cash: | | |
| UK | **9,761** | 6,984 |
| Overseas | **12,621** | 5,545 |
| **Total** | **283,369** | 308,310 |

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

The Society owns 100% of the issued share capital of The Royal Society Trading Limited (Note 26). The company was dormant throughout the current and prior year.

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:**

| | 2023 £'000 | 2022 £'000 |
|---|---|---|
| Specific investments – Amadeus RSEF | **9,478** | 9,136 |
| Specific investments – Theo Murphy Australia Fund | **4,154** | 4,181 |
| Pooled investments | **269,737** | 294,993 |
| Total | **283,369** | 308,310 |

# Notes to the financial statements CONTINUED

**For the year ended 31 March 2023**

## 18 Debtors

| | 2023 Receivable within one year £'000 | 2022 Receivable within one year £'000 |
|---|---|---|
| Trade debtors | **2,404** | 1,441 |
| Grants receivable | **876** | 542 |
| Legacies receivable | **554** | – |
| Other debtors | **3** | 8 |
| Accrued income | **603** | 413 |
| Prepayments | **722** | 653 |
| **Total** | **5,162** | 3,057 |

Group debtors included £25,000 Royal Society (London) Ltd accrued income. In 2022, all Group debtors related to the Charity. As at 31 March 2023 and as at 31 March 2022, all debtors were receivable within one year.

## 19 Creditors

| | 2023 Due within one year £'000 | 2023 Due after one year £'000 | 2022 Due within one year £'000 | 2022 Due after one year £'000 |
|---|---|---|---|---|
| Trade creditors | **1,063** | **–** | 913 | – |
| Publications advanced sales | **4,572** | **–** | 3,835 | – |
| Grants payable | **10,379** | **–** | 8,014 | – |
| Other creditors | **468** | **–** | 402 | – |
| Accruals and provisions | **2,375** | **–** | 1,055 | 39 |
| Deferred income | **8,673** | **–** | 7,142 | – |
| **Total** | **27,530** | **–** | 21,361 | 39 |

Included in the Group creditors are creditors of £15,000 (2022: £32,000) relating to Royal Society (London) Ltd. All other creditors relate to the Charity.

As required by FRS102, included within accruals and provisions in 2022, was a provision for a liability under the deficit recovery plan for the Universities Superannuation Scheme (USS) multi-employer pension scheme. A total amount of £47,000 was provided for, comprising £8,000 due within one year and £39,000 due more than one year. This provision was released fully in March 2023 when the last member of USS left the Royal Society.

### Reconciliation of deferred income

| | 2023 £'000 | 2022 £'000 |
|---|---|---|
| Deferred income brought forward | **7,142** | 6,834 |
| Amount released from previous year | **(7,142)** | (6,834) |
| Income deferred in the year | **8,673** | 7,142 |
| **Total** | **8,673** | 7,142 |

## 20 Contingent liabilities

The final active member of the USS multi-employer pension scheme left the Society in the year. The Society is required to either enrol a member into the USS multi-employer pension scheme or pay the Section 75 debt. As at 31 March, the Society could not reliably estimate the liability and a decision had not been made as to whether a member would be enrolled in the USS multi-employer pension scheme therefore it was a possible but uncertain obligation. The latest estimate of the value of the debt as at 31 March 2022 was £1.4 million and the USS multi-employer pension scheme was unable to provide an accurate value of the debt as at the 31 March 2023.

## 21 Statement of total returns

| | Expendable endowment £'000 | Permanent endowment £'000 | 2023 Total £'000 |
|---|---|---|---|
| **Investment returns** | | | |
| Investment Income | 1,443 | 4,888 | **6,331** |
| Capital losses | (3,949) | (14,125) | **(18,074)** |
| Investment management costs | (309) | (1,021) | **(1,330)** |
| **Total return for year** | (2,815) | (10,258) | **(13,073)** |
| Indexation | (3,211) | (10,548) | **(13,759)** |
| Less application of total return | (1,604) | (2,426) | **(4,030)** |
| **Net total return for the year** | (7,630) | (23,232) | **(30,862)** |
| **Unapplied total return** | | | |
| **At 31 March 2023** | 10,155 | 39,981 | **50,136** |
| At 31 March 2022 | 17,785 | 63,213 | **80,998** |

## 22 Analysis of net assets between funds

### Group

| | Unrestricted funds £'000 | Restricted funds £'000 | Expendable endowment funds £'000 | Permanent endowment funds £'000 | 2023 Total funds £'000 | 2022 Total funds £'000 |
|---|---|---|---|---|---|---|
| Funds balances at 31 March are represented by: | | | | | | |
| Intangible assets | 1,261 | – | – | – | **1,261** | 256 |
| Tangible fixed assets | 8,297 | – | – | – | **8,297** | 9,378 |
| Heritage assets | 49,300 | – | – | – | **49,300** | 49,247 |
| Investments | 40,115 | 39,978 | 45,168 | 158,108 | **283,369** | 308,310 |
| Net current liabilities | (7,141) | – | – | – | **(7,141)** | (6,641) |
| Creditors: Due after one year | – | – | – | – | **–** | (39) |
| Defined benefit pension scheme liability | (524) | – | – | – | **(524)** | (4,304) |
| **Net assets** | 91,308 | 39,978 | 45,168 | 158,108 | **334,562** | 356,207 |

The net current liabilties in 2023 are funded by investments, which could be realised to meet the net liabilties as they fall due.

All net current liabilities in the Group accounts relate to the Charity.

There is no material difference in net assets between funds for the Group and the Charity.

# Notes to the financial statements CONTINUED

For the year ended 31 March 2023

## 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 2022 £'000 | Income £'000 | Investment losses £'000 | Expenditure £'000 | Indexation £'000 | Transfers/ application of total return £'000 | **Unapplied total return at 31 March 2023 £'000** | Total at 31 March 2023 £'000 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Life Sciences Trust | 12,374 | 1,250 | 13,624 | 7,049 | 566 | (1,636) | (118) | (1,250) | (675) | **3,936** | 17,560 |
| Maths and Physical Sciences Trust | 11,349 | 1,146 | 12,495 | 6,500 | 521 | (1,504) | (109) | (1,146) | (620) | **3,642** | 16,137 |
| RW Paul Instrument Fund | 12,170 | 1,229 | 13,399 | 7,997 | 588 | (1,699) | (123) | (1,229) | (82) | **5,452** | 18,851 |
| Theo Murphy – UK | 58,332 | 5,891 | 64,223 | 36,257 | 2,758 | (7,969) | (576) | (5,891) | (707) | **23,872** | 88,095 |
| Other Permanent Endowments | 10,212 | 1,032 | 11,244 | 5,410 | 455 | (1,317) | (95) | (1,032) | (342) | **3,079** | 14,323 |
| **Total permanent endowments part of the UTR** | 104,437 | 10,548 | 114,985 | 63,213 | 4,888 | (14,125) | (1,021) | (10,548) | (2,426) | **39,981** | 154,966 |
| Funds not part of the Unapplied Total Return | | | | | | | | | | | |
| Theo Murphy – Australia | 3,507 | – | 3,507 | – | – | (365) | – | – | – | – | 3,142 |
| **Total permanent endowments** | 107,944 | 10,548 | 118,492 | 63,213 | 4,888 | (14,490) | (1,021) | (10,548) | (2,426) | **39,981** | 158,108 |

| Expendable endowment funds | Relevant value b/f £'000 | Indexation £'000 | Relevant value c/f £'000 | Unapplied total return at 1 April 2022 £'000 | Income £'000 | Investment losses £'000 | Expenditure £'000 | Indexation £'000 | Transfers/ application of total return £'000 | **Unapplied total return at 31 March 2023 £'000** | Total at 31 March 2023 £'000 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| General Trust Fund | 11,865 | 1,198 | 13,063 | 8,073 | 580 | (1,588) | (124) | (1,198) | (681) | **5,062** | 18,125 |
| Life Sciences Trust | 7,251 | 732 | 7,983 | 4,040 | 328 | (899) | (70) | (732) | (394) | **2,273** | 10,256 |
| Maths and Physical Sciences Trust | 3,949 | 399 | 4,348 | 2,223 | 180 | (492) | (39) | (399) | (216) | **1,257** | 5,605 |
| Other expendable funds | 8,737 | 882 | 9,619 | 3,449 | 355 | (970) | (76) | (882) | (313) | **1,563** | 11,182 |
| Total expendable endowment funds | 31,802 | 3,211 | 35,013 | 17,785 | 1,443 | (3,949) | (309) | (3,211) | (1,604) | **10,155** | 45,168 |

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 2022 £'000 | Income £'000 | Investment and actuarial gain/(loss) £'000 | Expenditure £'000 | Transfers £'000 | **Carried forward at 31 March 2023 £'000** |
|---|---|---|---|---|---|---|
| **Restricted funds** | | | | | | |
| Life Sciences Trust | 4,551 | 107 | (111) | (1,915) | 851 | **3,483** |
| Maths and Physical Sciences Trust | 3,669 | 94 | (203) | (1,665) | 724 | **2,619** |
| Enterprise Fund | 9,136 | – | 679 | (337) | – | **9,478** |
| Nutrition in Old Age Fund | 7,631 | 215 | (489) | (45) | (18) | **7,294** |
| Other restricted funds | 17,353 | 121,571 | (735) | (116,936) | (4,149) | **17,104** |
| **Total restricted funds** | 42,340 | 121,987 | (859) | (120,898) | (2,592) | **39,978** |
| **Unrestricted funds** | | | | | | |
| General Trust Fund | 19,994 | 559 | (1,238) | (693) | 593 | **19,215** |
| Revaluation Reserve | 47,541 | – | – | – | – | **47,541** |
| Defined Benefit Pension Reserve | (4,304) | – | 2,431 | 1,349 | – | **(524)** |
| General Purpose | 29,892 | 10,909 | (1,635) | (20,119) | 6,029 | **25,076** |
| **Total unrestricted funds** | 93,123 | 11,468 | (442) | (19,463) | 6,622 | **91,308** |

### 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 Australia Fund will carry out activities in Australia in accordance with the will.

# Notes to the financial statements CONTINUED

**For the year ended 31 March 2023**

## 23 Movements on Trust and specific funds in year – Group CONTINUED

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.

The Nutrition in Old Age Fund was established following the receipt of a legacy for the study of nutrition in old age.

Other Restricted Funds comprise monies received to fund separate restricted projects in line with our charitable activites and are held as separate individual funds in our accounts. No individual balance is in excess of £3.5 million on 31 March 2023.

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

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 2023, 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:

| | 2023 £'000 | 2022 £'000 |
|---|---|---|
| Less than one year | **490** | 490 |
| One to five years | **1,960** | 1,960 |
| Over five years | **17,640** | 18,130 |
| **Total** | **20,090** | 20,580 |

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 at 31 March 2023 totalled £195,000,000 (2022: £144,000,000). Of these, £73,000,000 (2022: £77,000,000) are due in less than one year, and £122,000,000 (2022: £68,000,000) 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 £49,000 (2022: £46,000) 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 it 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 2023. The valuation of the Plan used the projected unit method and was carried out by Barnett Waddingham LLP, professionally qualified actuaries.

The Employer expects to make contributions to the Plan during the year to 31 March 2024 of around £1,740,000 (2023: £1,850,000).

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 2022 showed a decrease in the deficit from £8,732,000 to £5,967,000. It was agreed with the Trustees that the Employer would pay a lump sum of £310,000 on or before 30 April 2023, and £103,333 per month for the period 1 April 2023 to 31 December 2026 to meet the deficit.

Contributions payable by the Employer in respect of future benefit accrual and expenses are at the rate of 38.4% 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. Contributions payable by the Employer in respect of expenses are at the rate of £15,500 per month.

The Principal assumptions used to calculate Plan liabilities include:

| | 2023 % pa | 2022 % pa |
|---|---|---|
| Inflation (RPI) | **3.30** | 3.60 |
| Inflation (CPI) | **2.80** | 3.05 |
| Salary escalation | **2.00** | 2.00 |
| Increase to pensions in payment* – subject to LPI minimum 4% | **4.20** | 4.30 |
| Increase to pensions in payment* – subject to LPI | **3.20** | 3.40 |
| Statutory revaluation | **2.80** | 3.05 |
| Discount rate | **4.75** | 2.75 |
| Pre-retirement mortality table | **105% of S3NA** | 105% of S3NA |
| Post-retirement mortality table | **105% of S3NA** | 105% of S3NA |
| Post-retirement mortality projection | **CMI_2021 projections with LTR of 1.25% pa and initial addition of 0.25% pa. The 2020 and 2021 weight parameters are both 10%** | CMI_2021 projections with LTR of 1.25% pa and initial addition of 0.25% pa. The 2020 and 2021 weight parameters are both 10% |
| 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%.

# Notes to the financial statements CONTINUED

**For the year ended 31 March 2023**

## 25 Pension obligations – Group and Charity CONTINUED

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

| | 2023 | 2022 |
|---|---|---|
| Male currently aged 40 | **27.9 years** | 27.8 years |
| Female currently aged 40 | **30.7 years** | 30.6 years |
| Male currently aged 60 | **26.4 years** | 26.4 years |
| Female currently aged 60 | **29.3 years** | 29.2 years |

The assets in the Plan were:

| | Value at 31 March 2023 £'000 | Value at 31 March 2022 £'000 |
|---|---|---|
| Equities | **10,609** | 15,998 |
| LDI Portfolio | **9,962** | 9,740 |
| Multi-asset fund | **14,691** | 18,747 |
| Cash | **3,629** | 5,990 |
| Annuity policies | **3,873** | 4,193 |
| **Total market value of Plan assets** | **42,764** | 54,668 |
| Present value of scheme liabilities | **(43,288)** | (58,972) |
| **Net pension liability** | **(524)** | (4,304) |

The assets do not include any investment in the Employer.

### Reconciliation of present value of scheme liabilities

| | Value at 31 March 2023 £'000 | Value at 31 March 2022 £'000 |
|---|---|---|
| **Defined benefit obligation at 1 April** | **58,972** | 66,106 |
| Current service cost | **388** | 485 |
| Contributions by Plan participants | **89** | 94 |
| Interest cost | **1,603** | 1,339 |
| Benefits paid | **(1,447)** | (1,669) |
| Experience (gain)/loss on liabilities | **3,414** | 503 |
| Changes to demographic assumptions | **(866)** | 10 |
| Changes to financial assumptions | **(18,865)** | (7,896) |
| **Defined benefit obligation at 31 March** | **43,288** | 58,972 |

## 25 Pension obligations – Group and Charity CONTINUED

### Sensitivity analysis of the scheme deficit

The sensitivity of the present value of the scheme deficit to changes in the principal assumptions used is set out below.

| | Change in assumption | Increase/ (decrease) in liabilities £'000 |
|---|---|---|
| Discount rate | -0.10% | 665 |
| Rate of inflation* | -0.10% | (315) |
| Commutation | No commutation | 697 |
| Mortality – long-term improvements | 1% pa long-term rate of mortality improvements | (317) |
| Mortality – no weight on pandemic data | 2020 and 2021 weight parameters set to 0% | 491 |

* Other assumptions linked to the rate of inflation are also assumed to change appropriately.

### Reconciliation of fair value of scheme assets

| | Value at 31 March 2023 £'000 | Value at 31 March 2022 £'000 |
|---|---|---|
| **Fair value of scheme assets at 1 April** | **54,668** | 53,889 |
| Interest on assets | **1,510** | 1,106 |
| Contributions by the Employer | **2,122** | 1,843 |
| Contributions by Scheme participants | **89** | 94 |
| Benefits paid | **(1,447)** | (1,669) |
| Administration costs | **(292)** | (183) |
| Return on Plan assets less interest | **(13,886)** | (412) |
| **Fair value of scheme assets at 31 March** | **42,764** | 54,668 |

The actual return on Plan assets in the year was a loss of £12,300,000 (2022: £680,000).

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

| | Value at 31 March 2023 £'000 | Value at 31 March 2022 £'000 |
|---|---|---|
| Current service cost | **388** | 485 |
| Administration costs | **292** | 183 |
| Interest cost | **1,603** | 1,339 |
| Interest on assets | **(1,510)** | (1,106) |
| Past service cost | **–** | – |
| **Total charge** | **773** | 901 |

# Notes to the financial statements CONTINUED

**For the year ended 31 March 2023**

## 25 Pension obligations – Group and Charity CONTINUED

### Actuarial losses/(gains)

| | Value at 31 March 2023 £'000 | Value at 31 March 2022 £'000 |
|---|---|---|
| Losses on scheme assets in excess of interest | **13,886** | 412 |
| Experience losses on liabilities | **3,414** | 503 |
| (Gains)/losses from changes to demographic assumptions | **(866)** | 10 |
| Gains from changes to financial assumptions | **(18,865)** | (7,896) |
| **Actuarial gains** | **(2,431)** | (6,971) |

The Royal Society ('the Employer') operates two pension schemes and contributes to the Royal Society Group Personal Pension Plan (defined contribution). During the year ended 31 March 2023, employer contributions to this scheme totalled £716,000 (2022: £641,000).

During the year, one member of the Society's staff was a member of Universities Superannuation Scheme (USS), a defined benefit scheme (2022: one member). During the year ended 31 March 2023, employer contributions to this scheme totalled £27,000 (2022: £26,000). The employer contribution rates at the year end was 21% (2022: 21%).

USS is a defined benefit scheme that 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 2022), the scheme deficit was £1.6bn (2020: £14.1bn).

Based on expected contributions until 31 March 2028, 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 2022, £138,000 of this provision had been released. During the year, the Society's last active member in the Scheme left the Society and as at 31 March 2023 a decision had not been made as to whether another member would be enrolled in the Scheme. As there were no current active members as at 31 March 2023, the provision from previous years was released in full. Further information can be found in Note 20. Further information on the USS pension scheme can be found at uss.co.uk.

## 26 Subsidiary undertakings

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 | |
|---|---|---|
| | 2023 £'000 | 2022 £'000 |
| **Results for the year ended 31 March:** | | |
| **Trading income** | | |
| External income | **65** | 137 |
| **Gross profit** | **65** | 137 |
| Administrative expenses | **(7)** | (5) |
| **Operating profit** | **58** | 132 |
| Qualifying charitable donation payable to parent charity | **(58)** | (132) |
| **Result for the period** | **–** | – |
| Total funds brought forward at 1 April | **–** | – |
| **Total funds carried forward at 31 March** | **–** | – |
| **Balance Sheet as at 31 March:** | | |
| Current assets | | |
| Debtors | **25** | – |
| Cash at bank and in hand | **51** | 167 |
| | **76** | 167 |
| Creditors: amounts falling due within one year | **(76)** | (167) |
| **Net Current Liabilities** | **–** | – |
| **Capital and reserves** | | |
| Called up share capital | **–** | – |
| Profit and loss reserve | **–** | – |
| **Shareholder's funds** | **–** | – |

The Society owns 100% of the £1 called-up and issued share capital of Royal Society Trading Limited 06967016. Royal Society Trading Limited was dormant throughout the year ended 31 March 2023.

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 wholly owned by the Society.

# Notes to the financial statements CONTINUED

## For the year ended 31 March 2023

## 27 Prior year comparison – Consolidated statement of financial activities

(incorporating an income and expenditure account)
**For the year ended 31 March 2022**

| | Notes | Unrestricted funds £'000 | Restricted funds £'000 | Expendable endowment funds £'000 | Permanent endowment funds £'000 | 2022 Total funds £'000 |
|---|---|---|---|---|---|---|
| Income and endowments from donations and legacies | 1 | 295 | 248 | – | – | **543** |
| **Income from charitable activities** | | | | | | |
| Grants for charitable activities | 4 | 3,004 | 105,286 | – | – | **108,290** |
| Trading in furtherance of charitable activities | 3 | 7,789 | 607 | – | – | **8,396** |
| | | 10,793 | 105,893 | – | – | **116,686** |
| Other trading activities | 3 | 137 | – | – | – | **137** |
| Income from investments | 2 | 994 | 1,046 | 1,203 | 3,957 | **7,200** |
| Other income | | 6 | 9 | – | – | **15** |
| | | 1,137 | 1,055 | 1,203 | 3,957 | **7,352** |
| **Total income** | | **12,225** | **107,196** | **1,203** | **3,957** | **124,581** |
| Expenditure on raising funds | 5 | 1,220 | 522 | 415 | 1,405 | **3,562** |
| **Expenditure on charitable activities*** | 6 | | | | | |
| Grants to fund scientific research | | 1,651 | 87,983 | – | – | **89,634** |
| Providing scientific advice for policy | | 2,274 | 2,438 | – | – | **4,712** |
| Promoting science education and engagement | | 7,038 | 1,621 | – | – | **8,659** |
| Supporting scientific collaboration, nationally and internationally | | 3,219 | 17,517 | – | – | **20,736** |
| Recognising scientific excellence | | 46 | 305 | – | – | **351** |
| | | 14,228 | 109,864 | – | – | **124,092** |
| **Total expenditure** | | **15,448** | **110,386** | **415** | **1,405** | **127,654** |
| **Net (expenditure)/ income before net gains/ (losses) on investments** | | **(3,223)** | **(3,190)** | **788** | **2,552** | **(3,073)** |
| Net gains on investments | 17 | 1,936 | 3,390 | 2,688 | 9,705 | **17,719** |
| **Net (expenditure)/income for the year** | | **(1,287)** | **200** | **3,476** | **12,257** | **14,646** |
| Gross transfers between funds | 23 | 2,025 | 1,655 | (1,497) | (2,183) | **–** |
| Actuarial gains on defined benefit pension scheme | 25 | 6,971 | – | – | – | **6,971** |
| **Net movement in funds** | | **7,709** | **1,855** | **1,979** | **10,074** | **21,617** |
| Total funds brought forward | | 85,414 | 40,485 | 47,608 | 161,083 | **334,590** |
| **Total funds carried forward** | | 93,123 | 42,340 | 49,587 | 171,157 | **356,207** |

* The categorisation of expenditure on charitable activities in the financial statements was reviewed in 2022/23 and it has been aligned to reflect the core activities the Society performs to fulfil its purpose for public benefit. The categorisation of expenditure on charitable activities for the year ended 31 March 2022 has been revised to reflect the categories used in the Consolidated statement of financial activities for the year ended 31 March 2023.

## 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 | 2022 Total funds £'000 |
|---|---|---|---|---|---|
| Funds balances at 31 March 2022 are represented by: | | | | | |
| Intangible assets | 256 | – | – | – | **256** |
| Tangible fixed assets | 9,378 | – | – | – | **9,378** |
| Heritage assets | 49,247 | – | – | – | **49,247** |
| Investments | 45,226 | 42,340 | 49,587 | 171,157 | **308,310** |
| Net current liabilities | (6,641) | – | – | – | **(6,641)** |
| Creditors: Due after one year | (39) | – | – | – | **(39)** |
| Defined benefit pension scheme liability | (4,304) | – | – | – | **(4,304)** |
| **Net assets** | 93,123 | 42,340 | 49,587 | 171,157 | **356,207** |

# Notes to the financial statements CONTINUED

## For the year ended 31 March 2023

## 29 Prior year comparison

### Movements on Trust and specific funds in year – Group

| | Brought forward at 1 April 2021 £'000 | Income £'000 | Expenditure £'000 | Transfers £'000 | Investment and actuarial gain/(loss) £'000 | Carried forward at 31 March 2022 £'000 |
|---|---|---|---|---|---|---|
| **Permanent endowment funds** | | | | | | |
| Life Sciences Trust | 18,626 | 469 | (166) | (641) | 1,135 | **19,423** |
| Maths and Physical Sciences Trust | 17,117 | 431 | (153) | (589) | 1,043 | **17,849** |
| RW Paul Instrument Fund | 18,848 | 472 | (168) | (106) | 1,121 | **20,167** |
| Theo Murphy – UK | 88,419 | 2,213 | (786) | (515) | 5,258 | **94,589** |
| Theo Murphy – Australia | 3,251 | – | – | – | 256 | **3,507** |
| Other Permanent Endowments | 14,822 | 372 | (132) | (332) | 892 | **15,622** |
| **Total permanent endowments funds** | 161,083 | 3,957 | (1,405) | (2,183) | 9,705 | **171,157** |
| **Expendable endowment funds** | | | | | | |
| General Trust Fund | 19,148 | 483 | (167) | (604) | 1,078 | **19,938** |
| Life Sciences Trust | 10,870 | 275 | (95) | (375) | 616 | **11,291** |
| Maths and Physical Sciences Trust | 5,942 | 151 | (52) | (206) | 337 | **6,172** |
| Other Expendable Endowments | 11,648 | 294 | (101) | (312) | 657 | **12,186** |
| **Total expendable endowments funds** | 47,608 | 1,203 | (415) | (1,497) | 2,688 | **49,587** |
| **Restricted funds** | | | | | | |
| Life Sciences Trust | 4,846 | 117 | (1,638) | 1,089 | 137 | **4,551** |
| Maths and Physical Sciences Trust | 4,057 | 82 | (1,239) | 587 | 182 | **3,669** |
| Enterprise Fund | 7,555 | – | (270) | – | 1,851 | **9,136** |
| Nutrition in Old Age Fund | 7,252 | 153 | (52) | (19) | 297 | **7,631** |
| Other restricted funds | 16,775 | 106,844 | (107,187) | (2) | 923 | **17,353** |
| **Total restricted funds** | 40,485 | 107,196 | (110,386) | 1,655 | 3,390 | **42,340** |
| **Unrestricted funds** | | | | | | |
| General Trust Fund | 18,830 | 411 | (607) | 607 | 753 | **19,994** |
| BEIS Science and Research | – | 2,992 | (2,992) | – | – | **–** |
| Revaluation Reserve | 47,541 | – | – | – | – | **47,541** |
| Defined Benefit Pension Reserve | (12,217) | – | 942 | – | 6,971 | **(4,304)** |
| General Purpose | 31,260 | 8,822 | (12,791) | 1,418 | 1,183 | **29,892** |
| **Total unrestricted funds** | 85,414 | 12,225 | (15,448) | 2,025 | 8,907 | **93,123** |
| **Total for all trusts** | | | | | | |
| Life Sciences Trust | 34,341 | 861 | (1,899) | 73 | 1,888 | **35,264** |
| Maths and Physical Sciences Trust | 27,116 | 664 | (1,444) | (208) | 1,562 | **27,690** |
| RW Paul Instrument Fund | 18,848 | 472 | (168) | (106) | 1,121 | **20,167** |
| Theo Murphy – UK | 88,419 | 2,213 | (786) | (515) | 5,258 | **94,589** |
| Other permanent endowments | 14,822 | 372 | (132) | (332) | 892 | **15,622** |
| Theo Murphy – Australia | 3,251 | – | – | – | 256 | **3,507** |
| General Trust Fund | 37,978 | 894 | (774) | 3 | 1,831 | **39,932** |
| Other expendable endowments | 11,648 | 294 | (101) | (312) | 657 | **12,186** |
| Enterprise Fund | 7,555 | – | (270) | – | 1,851 | **9,136** |
| Nutrition in Old Age Fund | 7,252 | 153 | (52) | (19) | 297 | **7,631** |
| Other Restricted Funds | 16,775 | 106,844 | (107,187) | (2) | 923 | **17,353** |
| BEIS Science and Research | – | 2,992 | (2,992) | – | – | **–** |
| Revaluation Reserve | 47,541 | – | – | – | – | **47,541** |
| Defined Benefit Pension Reserve | (12,217) | – | 942 | – | 6,971 | **(4,304)** |
| General Purpose | 31,260 | 8,822 | (12,791) | 1,418 | 1,183 | **29,892** |
| **Total** | 334,590 | 124,581 | (127,654) | – | 24,690 | **356,207** |

# Reference and administrative details

### President

Sir Adrian Smith

### Treasurer

Sir Andrew Hopper
(until 11 April 2023)

Professor Jon Keating
(appointed 11 April 2023)

### Biological Secretary

Dame Linda Partridge

### Physical Secretary

Sir Peter Bruce

### Foreign Secretary

Sir Robin Grimes
(until 11 March 2023)

Professor Alison Noble
(appointed 2 May 2023)

Sir Mark Walport
(appointed 2 May 2023)

### Members of Council

Professor Judith Armitage

Professor Stephen Barnett**

Sir David Baulcombe

Professor David Beerling*

Professor Doreen Cantrell**

Sir Steven Cowley

Professor Anne Dell

Professor Annette Dolphin**

Dame Athene Donald

Professor Christl Donnelly*

Professor Alison Etheridge

Professor Richard Jones*

Professor Yvonne Jones**

Professor Alison Noble**

Professor Jane Langdale*

Professor Richard Morris*

Professor James Naismith***

Professor Robin Perutz

Dame Julia Slingo

Sir Jim Smith

Professor Jennifer Thomas

Professor Veronica van Heyningen*

Sir Mark Walport**

* Until 30 November 2022.

** Appointed 30 November 2022.

*** Until 1 December 2022.

### Audit Committee Chair

Sir John Beddington
(until 31 December 2022)

Richard Bacon
(appointed 1 January 2023)

### Executive Director

Dr Julie Maxton DBE

### Key Management Personnel

Andrew Allen,
Director of International Affairs
(until 13 June 2022)

Jennifer Cormack,
Director of Development
(until 24 March 2023)

Mary Daly,
Chief Financial Officer

Richard Gascoigne,
Director of IT

Bill Hartnett,
Director of Communications

Linda Kelly,
Director of Human Resources

Dr Rupert Lewis,
Chief Science Policy Officer

Dr Paul McDonald,
Director of Grants Programmes

Lesley Miles,
Chief Programmes,
Partnerships and Engagement Officer

Dr Alan Pitt,
Director of Fellowship,
Strategy and Governance

Dr Stuart Taylor,
Director of Publishing

Ian Wiggins,
Director of International Affairs
(appointed 19 September 2022)

### Statutory Auditor

BDO LLP
2 City Place,
Gatwick
RH6 0PA

### Bankers

Natwest Group
1 Princes Street,
London
EC2R 8BP

### Investment Managers

Rathbone Brothers PLC
8 Finsbury Circus,
London
EC2M 7AZ

### Internal Auditors

Crowe UK LLP
55 Ludgate Hill,
London
EC4M 7JW

### Lawyers

Stone King LLP
91 Charterhouse Street,
London
EC1M 6HR

Withers LLP
20 Old Bailey,
London
EC4M 7AN

### Registered address

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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:

- The Fellowship, Foreign Membership and beyond
- Influencing
- Research system and culture
- Science and society
- Corporate and governance

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Issued: July 2023 DES8520