



MICROBIOLOGY
SOCIETY

75
YEARS



ANNUAL REPORT 2020

Microbiology Society
(Limited by guarantee)

Report and financial statements
31 December 2020

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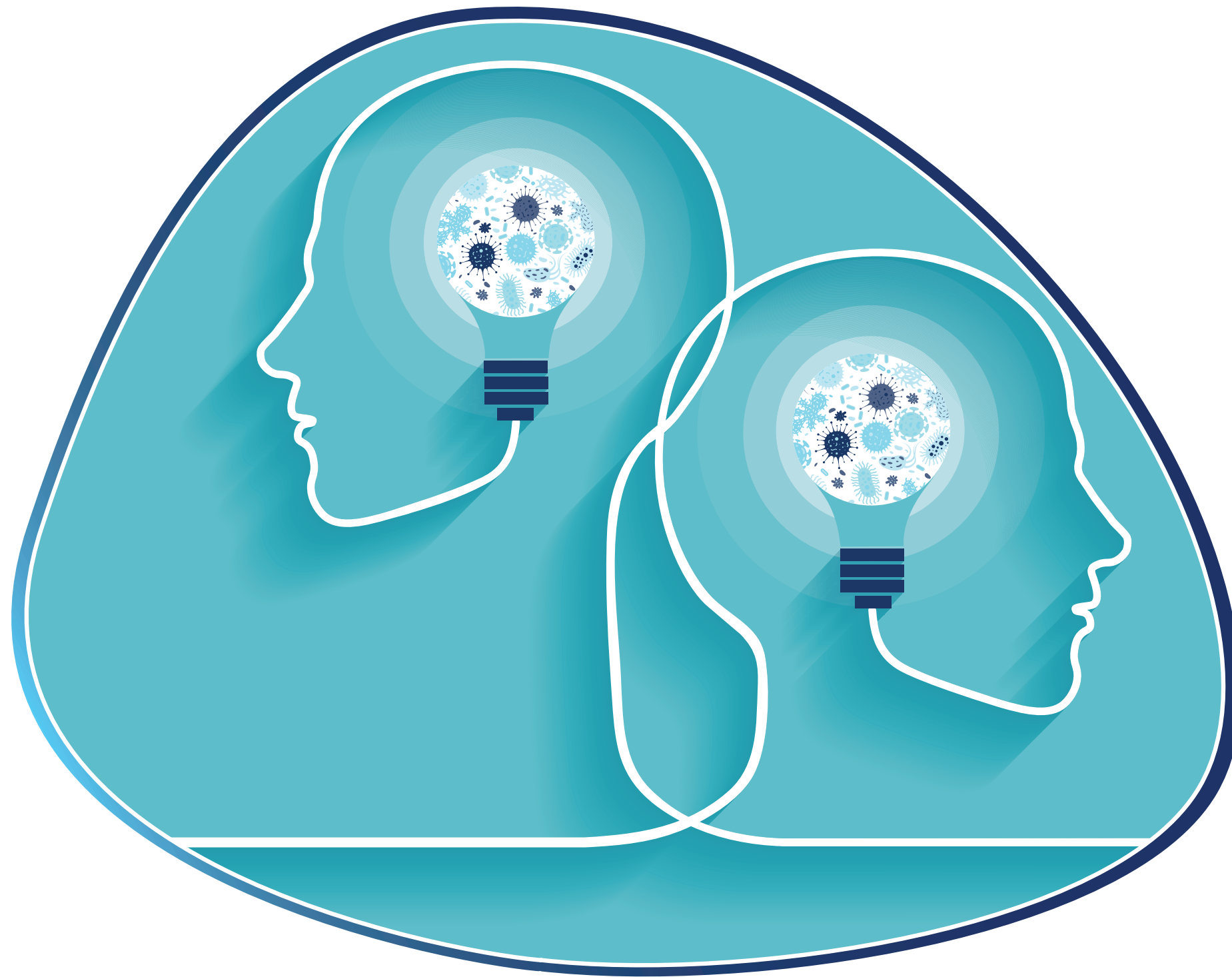
REGISTERED CHARITY NUMBERS
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Scotland SC039250

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Our purpose and strategy

Our principal goal is to **develop, expand** and **strengthen** networks available to our **members** so that they can generate new **knowledge** about microbes and ensure that it is **shared** with other **communities**.



Our strategic objectives

WE WILL ENABLE OUR MEMBERS
TO **STRENGTHEN** THEIR EXISTING
RELATIONSHIPS AND GAIN ACCESS TO NEW
COMMUNITIES,
UNLOCKING THE POTENTIAL
FOR KNOWLEDGE EXCHANGE.



This has been an interesting year for microbiology. Globally, we have seen countries enter lockdowns, implementation of social distancing from strangers and loved ones alike, and major changes in our lifestyles – all due to a microbe. It has been a staunch reminder to the world about the importance of microbiology in our daily lives. Microbes are all around us (and in us!) and some can be deadly without therapeutic options to prevent or treat them. This pandemic has also emphasised that a science-literate public and government is now absolutely necessary and something we should all be working towards. Accordingly, science-outreach is now more important than ever before and as scientists we need to be able to make science accessible and engaging to non-experts.

I've run the Dive for Antibiotics (DFA) outreach project since early 2018 with two main aims; firstly, to generate useful data on marine Actinobacteria and potentially discover novel species with antimicrobial activity and, secondly, to engage and educate divers about microbiology, antibiotic discovery and science in general.

Through social media, including Instagram, Facebook and Twitter, the project has also been able to reach the general public, hopefully being of interest to those who previously had a limited education about microbiology. It's my hope to help inspire the public to become passionate about the microbial world around them and to realise how important it is to our everyday lives, how critical it is to our health, and how fascinating and beautiful it can be.

At the beginning of this year before we all went into lockdown, I had the privilege of talking about the DFA project at the Microbiology Society 75th Anniversary Roadshow at the University of Strathclyde. It was one of the first opportunities I'd had to present the project to fellow microbiologists of all career stages and the response I got was enthusiastic and humbling. I walked away with a number of new ideas for the project and offers from peers who were keen to get involved. Unfortunately, with the SARS-CoV-2 pandemic ongoing, time in the lab is limited and, as a final-year PhD student, I've had fewer opportunities to work on the project. However, it's my hope that in the next few months I'll be able to put these new ideas to work and see DFA grow further. If circumstances allow, I aim to continue with the project and with science communication after completing my PhD. I hope that my experience enthuses other early career researchers to engage in science outreach and share their microbiological passions and knowledge with the public. I can absolutely and wholeheartedly recommend it to anyone who is considering it – do it, you won't regret it! *Member Emily Addington describes her experience developing an outreach project called 'Dive for Antibiotics'. Emily carried out this project with a grant from the Microbiology Society and she presented the project at the President's Roadshow in Strathclyde.*

Our strategic objectives

WE WILL **ADVANCE** UNDERSTANDING
OF **MICROBIOLOGY** AND
CHAMPION THE CONTRIBUTION
MADE BY MICROBIOLOGY, OUR
MEMBERS AND THEIR WORK
IN ADDRESSING **GLOBAL CHALLENGES**.



Positivity is a feeling that has often been difficult to find since the pandemic started, but thanks to an opportunity initially highlighted by my supervisors and then signposted to me by the Microbiology Society, it has recently become easier. For the past month I have been helping run COVID-19 diagnostic assays at the National Biosample Centre in Milton Keynes. Each day, this site is processing up to 30,000 samples from key workers as well as symptomatic members of the public. Being part of this operation has helped me rediscover a sense of positivity during a difficult time.

The Lighthouse Laboratories (located in Milton Keynes, Chester and Glasgow) were established as part of the fight against COVID-19 and are tasked with ramping up testing by recruiting researchers from across the country. I applied to be part of this recruitment drive and my colleagues at the Milton Keynes laboratory represent a varied cross-section of biological scientists, from plant scientists and cell biologists, to microbiologists and virologists. This variety is complemented by the mixture of PhD students and postdocs, to group leaders and institute directors. The sense of camaraderie working within a group containing such varied experiences is incredible and during a period of such limited social contact, is something I value greatly.

Getting back to normal life still seems distant, but this experience is providing me with a refreshed appreciation for what my 'normal' day-to-day involves. Initially the prospect of moving to a new city and processing samples for 12 hours a day was daunting, but a rapid sense of camaraderie and belonging soon overcame any fears and the positive feeling of being part of something that is of benefit to the current pandemic settled in. I take pride in the small part I am playing in the fight against Covid-19 and feel very grateful for the chance to do so.

In April 2021, members of the Microbiology Society were given the opportunity to assist with testing efforts for COVID-19 in one of three 'Lighthouse Laboratories'. Connor Hayward, member, and PhD student at the University of Leeds, signed up to contribute to the testing efforts.

Our strategic objectives

WE WILL REINFORCE THE
**SOCIETY'S LONG-TERM
SUSTAINABILITY**
AND RESILIENCE BY DIVERSIFYING
INCOME STREAMS, INCREASING EFFICIENCY AND
ENSURING **ROBUST GOVERNANCE**.



Towards the end of June 2020, I was invited to participate in a Microbiology Society online focus group on interdisciplinary collaboration to tackle antimicrobial resistance (AMR). While we all agreed that there was a general interest in interdisciplinary research, we also recognised that we needed more opportunities to develop such projects. I was the only PhD student in the session, yet I was happy to see that the entire group recognised the importance of early career researchers (ECRs) in that context. ECRs represent the future generation of leading scientists, therefore giving us the tools to cooperate with each other across scientific disciplines as early as possible is essential to develop further interdisciplinary collaborations over the next few years.

More generally, we identified the need for opportunities to bring together the entire AMR community. As a PhD student, I am lucky to have access to the excellent National AMR PhD Training Programme conference by the Medical Research Foundation, which brings together students from all disciplines working on AMR. However, a similar platform for discussions is currently missing for the broader AMR community. I was already impressed to see how much we could cover with just a small focus group, so I am certain that, for the Microbiology Society, there is definitely value in further facilitating these exchanges across the entire AMR community, either via a conference or a forum.

Overall, taking part in this focus group was a great experience. I learned a lot about different points of view from high profile researchers with various backgrounds but was also happy to have the opportunity to represent the perspective of ECRs. Interdisciplinary work is definitely the way forward for AMR research, so we must do our best to generate opportunities for such projects, and ECRs have a key role to play in this! *In June and July 2020, as part of the 'A Sustainable Future' project, we ran a series of online focus groups to explore the challenges and opportunities for microbiology in the fields of antimicrobial resistance (AMR), the circular economy and soil health. Quentin Leclerc, member and PhD student at the London School of Hygiene and Tropical Medicine, took part.*

Introduction from the President and Chief Executive

2020 was an extraordinary year for the Microbiology Society on many levels. It was the year we recognised 75 years since our founding by Sir Alexander Fleming, Marjory Stephenson and other visionary microbiologists. They knew that providing a common meeting ground for scientists working in specialised fields through the formation of a new society would advance microbiology. In our 75th year a bigger spotlight could not have been thrown on the discipline than the emergence of a novel virus – SARS-CoV-2, causing COVID-19 and the pandemic.

In 2020 our ability to bring groups of microbiologists together for knowledge exchange and to forge new collaborations was especially valuable. In July we established the first online meeting for researchers in the virology community working on SARS-CoV-2, with the aim of building a research community to coordinate efforts against the pandemic. Earlier in the spring we called upon our entire network to provide the expertise needed to get the first Lighthouse Lab up and running, and our members helped further populate COVID-19 testing facilities throughout the year.

By April 2020 we knew that to deliver the support our members need we had to transition our activities to digital formats as quickly as possible. In July we held our first major and solely online event for our Early Career Members. ECM Online was run on the LinkedIn platform over two days with a virtual poster session

dedicated to showcasing early career research and building networks.

As the 2020 Teaching in Higher Education session at Annual Conference was cancelled, our working group proposed shorter webinar style sessions across the year that would enable members to share their experiences during unprecedented times of remote teaching, which allowed them to continue building the community that the original Symposia had created. The Microbiology Educators' Network was established as a result and the successful webinar series will continue into 2021.

In November 2020 we brought our community together for a week-long series of digital events designed to explore the impact of microbiologists past, present and future – including the career journeys of many of our members who have won our Fleming Prize since its inception in 1976. The week's events brought online our Fleming Prize Lecture 2020, the Outreach Prize Lecture, the final of the Young Microbiologist of the Year Competition, and our Annual General Meeting. Another important part of our anniversary was an ambitious project to demonstrate the value and raise the profile of microbiology in addressing the world's biggest challenges, including the achievement of the United Nations Sustainable Development Goals (UN SDGs). With a high level of member input from virtual focus groups, coupled with the sharing of relevant studies on our website, in December we released three

policy reports and an overall statement highlighting challenges and opportunities for our discipline as we seek a more sustainable future, as well as a set of recommendations that will serve to engage and inform decision-makers involved in sustainability debates in Ireland and the UK.

Through the Society's publishing platform, we serve specific research communities with each of our academic journals. We aim to foster a community of editors, from our early career editors to our former Editors-in-Chief, who remain committed to and engaged with the Society. Early career researchers have expressed a preference for more open and transparent publishing avenues, which we aim to address in the next year with the evolution of *Access Microbiology* into a wholesale open research platform. We are committed to Open Access and through our Publish and Read programme we have approached institutions with a long record of publishing with us and often offered them a financially better deal for unlimited publications. We recognise the value of our community of authors and subscribers, and our commitment to these transformative agreements should make research free to access to all the research community, while removing the burden for securing funding from authors.

In April 2020 we temporarily removed the paywall from our journals platform – providing a practical solution to researchers away from their usual workplaces who

found online access to information compromised. We recognise the extraordinary efforts scientists around the world have made – coming together across borders to collaborate on research into SARS-CoV-2 and COVID-19. Microbiology is at the centre of everyone's attention and this level of interest will undoubtedly benefit research in our field in the longer term. Our mission to advance the understanding and impact of microbiology by connecting and empowering communities worldwide has never been more relevant.



Professor Judith Armitage
President

Dr Peter Cotgreave
Chief Executive

Strategic plan 2018–2022

**Our vision: a world
in which the science
of microbiology
provides maximum
benefit to society.**



Our 75th anniversary year in 2020 coincided with the SARS-CoV-2 pandemic. As the world faced the biggest scientific challenge of our time, there was more focus than ever on the role of and value provided by microbiologists working to overcome the impacts of the virus.

During the year we recognised 75 years since our founding by releasing eight major new content hubs to demonstrate the impact of microbiologists past, present and future. We recognised the challenges faced by microbiologists unable to connect in usual

ways, and so to help them to continue to collaborate we transitioned our activities to digital formats to support knowledge exchange.

Our 'A Sustainable Future' project provided focus on three important areas: antimicrobial resistance, which has been described as one of the biggest threats to humanity; the circular economy, a system which aims to maximise the efficient use of the world's finite resources; and soil health, which is essential to feed our growing population.

Our mission: advancing the understanding and impact of microbiology by connecting and empowering communities worldwide.

In 2020 we worked to connect groups within our community despite global lockdowns in response to the pandemic. This included our first online event for our Early Career Microbiologists, in place of their summer conference, a new digital workshop for researchers working on SARS-CoV-2 and Covid-19 and a week-long online event series dedicated to 'Why Microbiologists Matter' – reinforcing the value of microbiology during a period of change and challenge for scientists across our community.

The programme of activities associated with our 'A Sustainable Future' project evolved to allow members and the wider community to contribute digitally, for example transitioning our face-to-face workshop programme to a series of virtual focus groups held in June and July. These groups brought together over 100 microbiologists and representatives from various stakeholder organisations to discuss the role of microbiology in transitioning to a more circular economy, addressing the threat caused by antimicrobial resistance and achieving healthier soils. We identified expert members within our community to support journalists reporting on the science behind

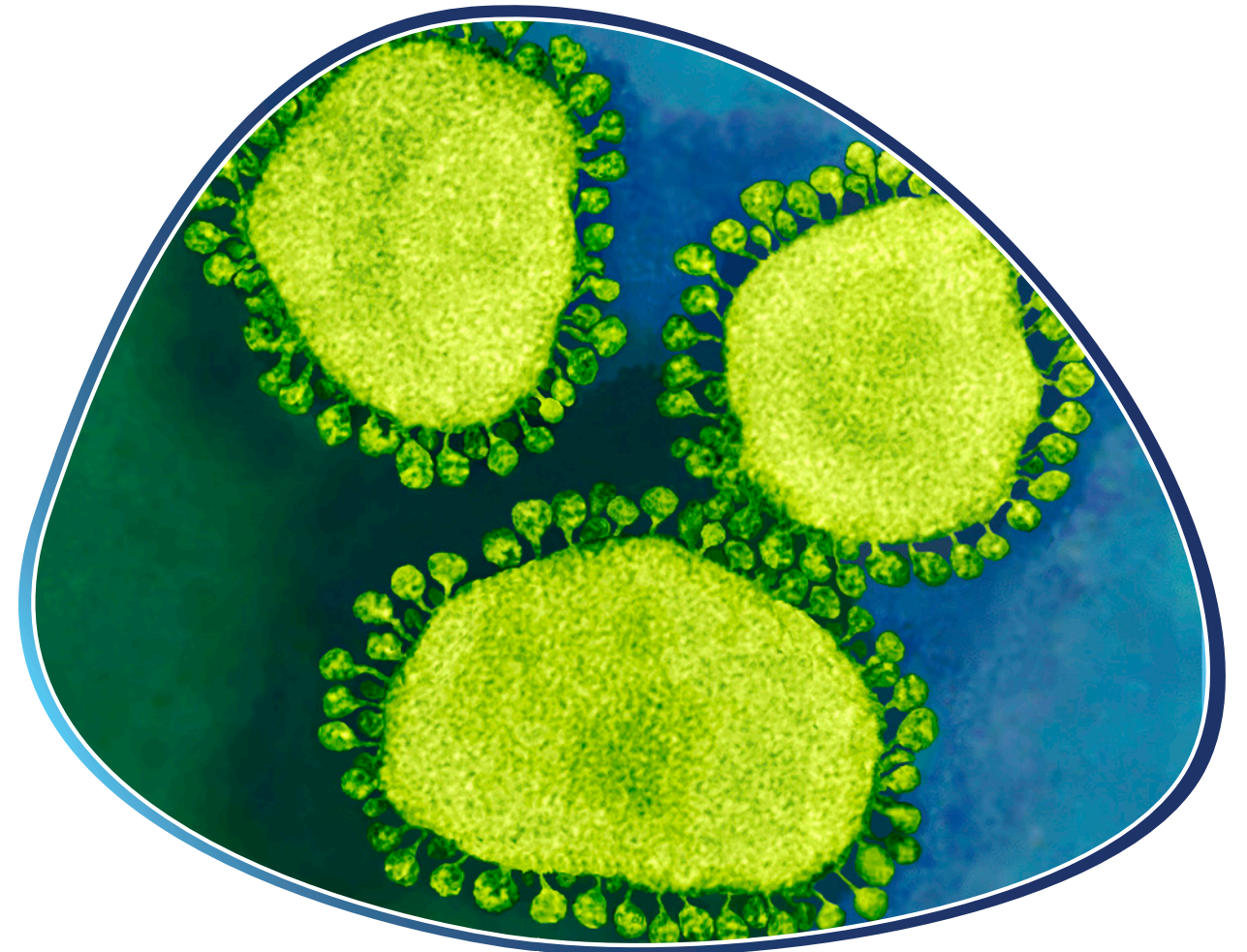
the pandemic, in print and broadcast. We worked in partnership with the Science Media Centre (SMC), providing them with a greater pool of expert comment to draw on in support of accurate scientific reporting on the pandemic. In addition, we responded to media enquiries directly, working on several prime-time broadcasts on the virus featuring our members. Our members have been quoted across every outlet, from the UK nationals to digital media platforms – on every UK broadcast channel and many across the world. Above all, their efforts continue to help ensure everyone has access to good quality science. Through the Society's publishing platform in 2020 we worked to serve specific research communities through each of our academic journals. We continue to serve the research communities' needs in a rapidly developing publishing space. We are developing our open access offer, including the evolution of *Access Microbiology* into an open research platform. Alongside this are the constant platform improvements we add to the journal's website, making it faster, more intuitive and more useful for researchers.

Why microbiology matters

Microbes are everywhere and affect almost all aspects of our lives. We cannot see them, but our world would not function without them. Bacteria, viruses, fungi, protists, archaea, algae and other microscopic life forms are on us and in us, in the air, soil and water, and in our food. They are in and on the surfaces of everything in our homes, workplaces and other environments. Most do not harm us, and many are essential for the good health of humans, animals and the planet. Microbes help keep the planet healthy by recycling waste and supplying nutrients. Agricultural systems would not function without some, while others are harmful pests. Industry uses microbial processes to produce foodstuffs and drugs, benefiting society and creating wealth. Microbes are very diverse; they are fascinating and modern imaging techniques show that they can be very beautiful.

The huge variety of microbes and the range of ways in which they affect us mean that microbiology is an enormously varied and constantly changing subject. Reflecting this diversity, microbiology intersects with many other disciplines in the natural and social sciences and is a vital element of studies in a large range of different fields. Basic research in

microbiology has led to the development of most of the important molecular techniques that are now used to study organisms from microbes to humans. Biotechnology, synthetic biology, the production of therapeutic proteins and many medical diagnoses are all dependent on these molecular tools. The study of microbes helps us to understand our world and our place within it. It gives us insights into the complexity of nature and society, which in turn provide many different health, environmental, social, cultural, industrial and economic benefits. Microbiology answers big questions by giving us knowledge of very small things. Microbiologists are involved in addressing challenges that vary from urgent problems demanding immediate solutions, such as new and emerging diseases, through to long-term issues, like antimicrobial drug resistance, food security and environmental sustainability. When the discipline of microbiology is strong and intellectually vibrant, we have a better chance of finding solutions to these problems and building a healthier, more sustainable and more prosperous future.



Our work

The Microbiology Society is a membership charity for scientists interested in microbes, their effects and their practical uses. It is one of the largest microbiology societies in Europe with a worldwide membership based in universities, industry, hospitals, research institutes and schools. Our members have a unique depth and breadth of knowledge about the discipline. The Society’s role is to help unlock and harness the potential of that knowledge. We do this by bringing together and empowering communities that shape the future of microbiology.

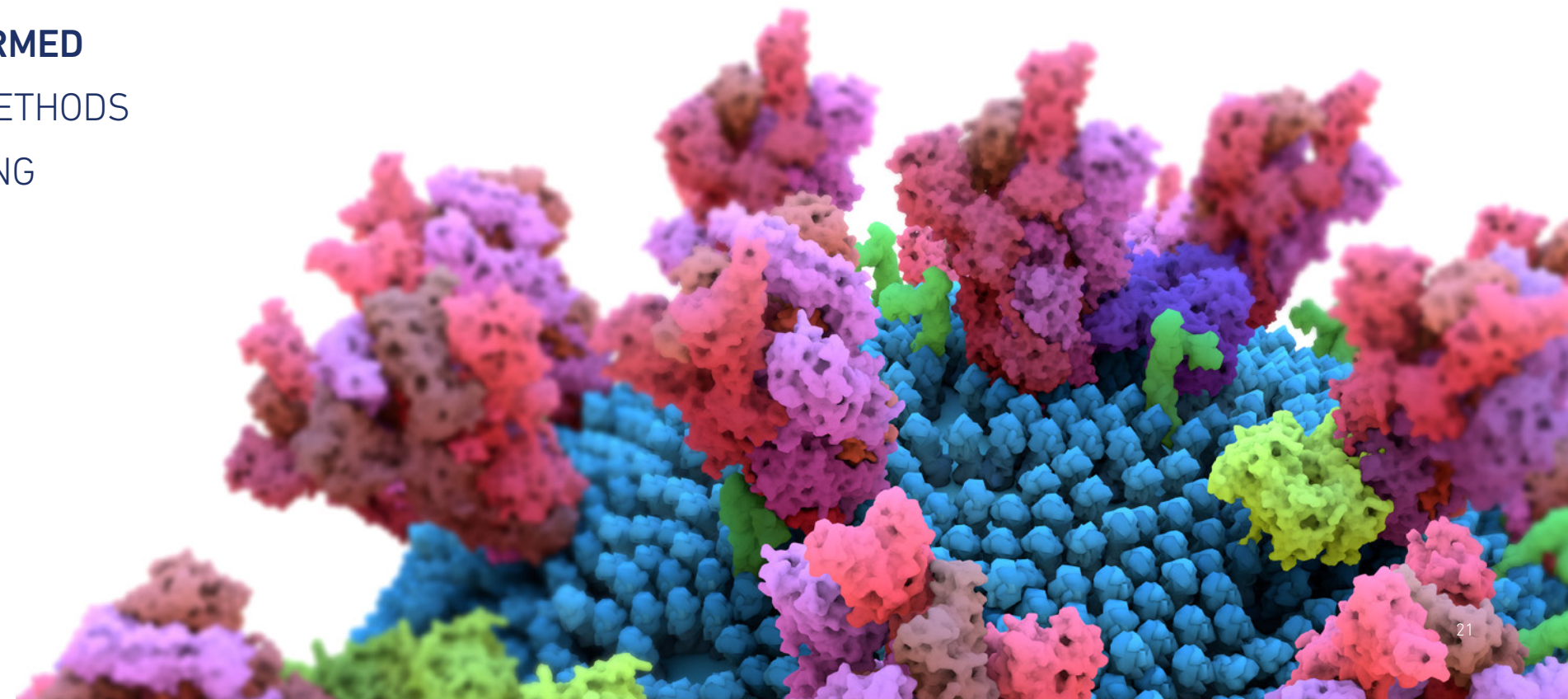
We generate public benefit by fostering communication both among communities of microbiologists and between microbiologists and other communities who can translate that knowledge in useful ways. Because of the diverse range of challenges and opportunities our members encounter, the Society works in a variety of modes. In some circumstances, it is a leader, in others it works in partnership with like-minded scientific organisations and in others by convening different communities.



WE ARE **WELCOMING** TO ANYONE INTERESTED IN MICROBES, THEIR EFFECTS, AND THEIR USES. OUR REPUTATION AS A FRIENDLY, NURTURING, AND **APPROACHABLE COMMUNITY**, DRIVEN BY THE EXPERIENCE OF **A DIVERSE SET OF MEMBERS**, IS EXTREMELY IMPORTANT TO US.

WE ARE **TRANSPARENT** AND **PROFESSIONAL** IN EVERYTHING WE DO. WE BELIEVE THAT DECISIONS SHOULD BE **INFORMED BY EVIDENCE AND EXPERTISE**, AND THAT SCIENTIFIC METHODS FORM A **ROBUST AND DEPENDABLE WAY** OF DEVELOPING **RELIABLE EVIDENCE**.

WE ARE **DEDICATED** TO OUR **CHARITABLE AIMS**. WE ARE **NOT FOR PROFIT** AND STRIVE TO ENSURE THAT ALL OUR RESOURCES ARE **APPLIED OPTIMALLY** TO FURTHERING **THE SCIENCE OF MICROBIOLOGY** AND ITS **APPLICATION**.



Progress towards our strategic objectives

Objective 1

We will enable our **members** to **strengthen** their existing **relationships** and gain access to new communities, **unlocking the potential** for knowledge exchange.

The Society will **maximise national** and international **networking** opportunities for our **members** among existing and new **communities**.

The Society will **increase** the **involvement** of groups of **microbiologists** who are not currently well **represented** in our **activities**.

The Society will **increase engagement** and **collaboration** between our **members** and other societies, industry, funders, educators, regulators, and decision makers.

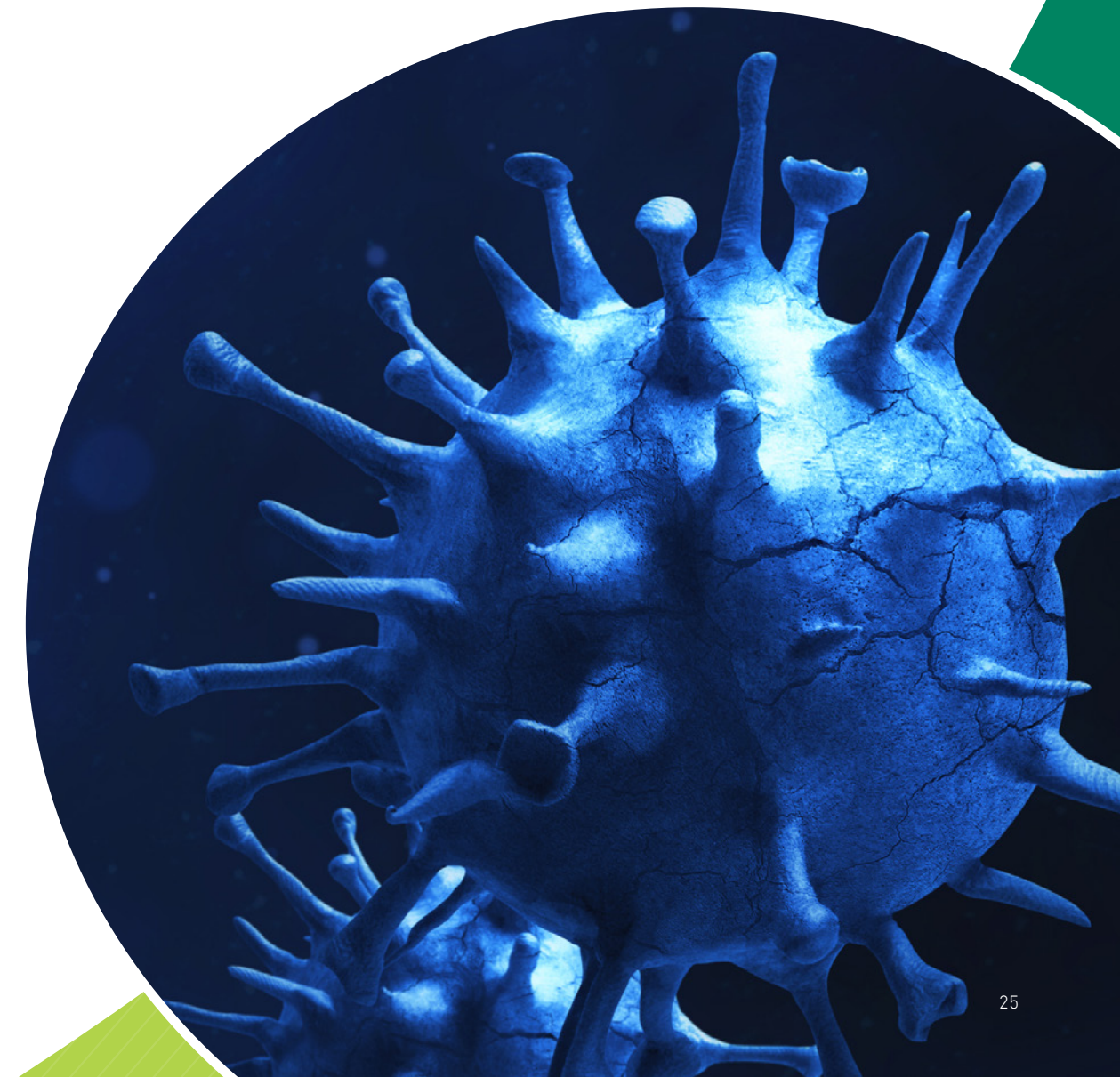


Bringing the SARS-CoV-2 community together

The Society held an online workshop on SARS-CoV-2 and COVID-19 in July in response to member requests for the organisation to play a proactive role in bringing virology communities together during the pandemic. It had been established that many virologists within the UK and Ireland had necessarily pivoted their research to work on coronaviruses throughout 2020. This had happened rapidly and in an uncoordinated way, meaning there was a clear need to bring these scientists together to provide a description and understanding of the research that was taking place. The workshop was used as an opportunity to identify those institutions at the forefront of coronavirus research and to secure their attendance so that others could learn from them. The day consisted of 29 talks given by speakers from across the UK and Ireland who gave brief overviews of work being carried out by their institutions and presented their early research findings. It also brought together over 200 members

of the virology community to build a network to coordinate the efforts of researchers in tackling the pandemic.

The workshop generated high levels of interest and engagement from members of the Society, with 93% of those that responded rating their experience of the workshop as 'excellent' or 'good' and 100% stating that they would attend another online Microbiology Society event on the same subject. In response to this request the Society developed further online meetings for this community in the form of the new monthly Scientific Seminar Series to be launched in 2021. These free regular meetings are designed to investigate ongoing and planned SARS-CoV-2/COVID-19 research and to build national and international cooperation between virologists and other scientists.



Building digital communities

Meetings and events were heavily disrupted by the COVID-19 pandemic, which clearly generated challenges for live event delivery in 2020 due to lockdown restrictions and requirements for social distancing.

The Society pivoted several of its meetings to online delivery during the year– including its SARS-CoV-2 and COVID-19 Workshop, the Microbiology Educators Network and The Early Career Microbiologists' (ECM) Forum. These all offered the organisation opportunities to establish 'proof of concept' for virtual delivery in a variety of formats. ECM Forum Online hosted its first online event in the ECM Forum LinkedIn group in July 2020. The event was aimed at all early career members, from undergraduate students to postdoctoral students. ECMs from around the world participated in the event, which helped to increase activity in this member-exclusive online space. As the event was run on LinkedIn, all content is still

available for people to review and reach out to fellow ECMs for advice and collaboration. As well as providing ECMs with the opportunity to present their work and discuss its impact, the event expanded the LinkedIn Group as several ECMs joined to take advantage of increased interaction.

It was well-publicised in the UK that universities were experiencing great difficulties due to the coronavirus pandemic, not least due to the rapid transformation in the way that lecturers had to work. This, coupled with the cancellation of the Teaching Symposium, led to the creation of the Microbiology Educators' Network: a series of lunchtime sessions that brought together teaching-active members to share lessons learned during a time of great change. The sessions have covered several aspects of remote teaching, including motivating students, pivoting to online practicals, and avoiding burnout. The series continues through 2021.



Everyone is struggling to teach in these challenging times. The [Microbiology Educators' Network] presenters are doing a good job sharing their innovative experiences, and they like us all are learning along the way. We need to keep communicating. I appreciated the humility and open mindedness of the speakers.

Survey respondent

Building digital communities

The Society ran its 'Why Microbiologists Matter: a digital celebration of the journeys of our members' event series in November. The one-week online event was designed to explore the impact of microbiologists' past, present and future and comprised of workshops and lectures from leading microbiologists across the UK. It also included several elements designed to increase engagement and collaboration between

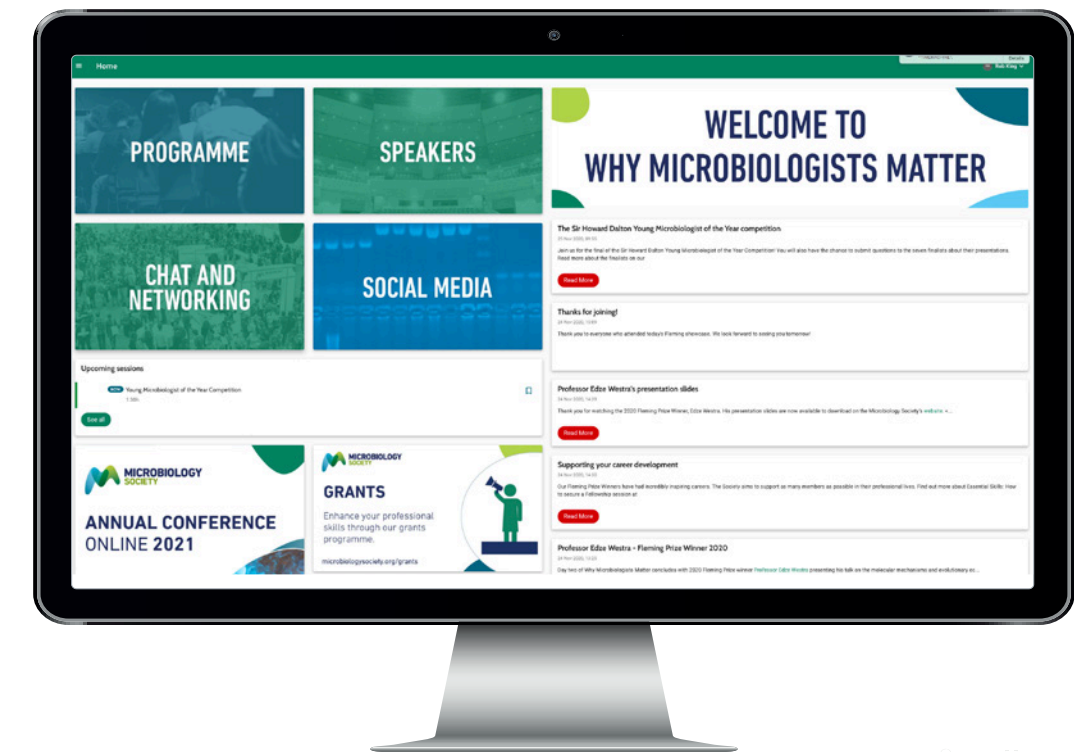
members, including the Young Microbiologist of the Year Competition and the Outreach Prize. 2020's outreach award was given to Sreyashi Basu from University College London and Sanjib Bhakta from Birkbeck, University of London, for their project, which has helped to educate the public and reduce the disease burden of tuberculosis (TB) in the community.



Building digital communities

All the Society's 2020 events were delivered virtually and will continue to be delivered online for 2021, although this digital event model comes with clear limitations. It proved difficult to replicate the sense of community or energy that comes from in-person meetings despite innovative technologies. In addition, their perceived lower value made income generation more challenging. However, the Society recognised that ECMs had been disproportionately affected by the global public health crisis and wanted to continue to positively leverage event platforms to build communities regardless of their unprofitability. As such, Council agreed to subsidise all ticket prices for the Society's online meetings. This has ensured that everyone—particularly those at the start of their

careers—was still able to access our scientific content regardless of their ability to pay. Whilst the virtual format in all its iterations has come with some constraints, there remained consolatory advantages to this approach. In-line with the Society's strategy, virtual events are a particularly good way to reach a wider scientific community. Technology proved broadly successful in enabling and fostering collaboration for scientists and researchers during lockdown in 2020. As such, the best of these online technologies will be retained post-Covid as an effective mechanism by which to increase engagement and collaboration between our members and other scientific groups.



Progress towards our strategic objectives

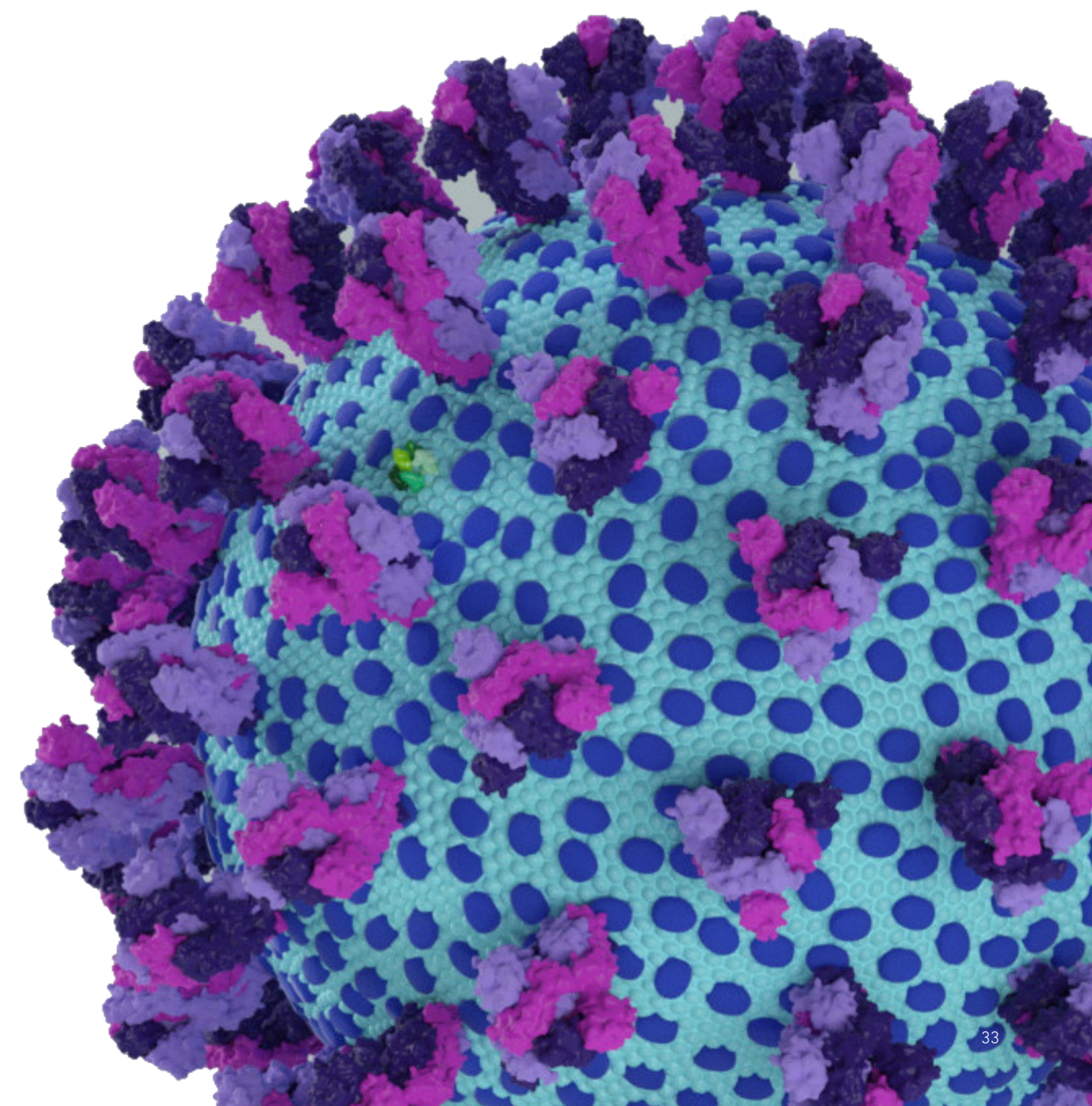
Objective 2

We will **advance** understanding of **microbiology** and **champion** the contribution made by microbiology, our **members**, and their work in addressing **global challenges**.

The **Society** will **increase** capacity and **opportunities** for **members** to **communicate** microbiology and their work.

The **Society** will promote activities for **communicating microbiological research** across a range of disciplines.

The **Society** will raise the profile of **microbiology**, our **members**, and **increase** the **influence** of the Society with the public, policymakers, and other stakeholders.



Why Microbiology Matters

Our 75th anniversary programme ran throughout 2020 and illustrated the impact of microbiologists' past, present and future. During a year which threw a spotlight on the discipline of microbiology, we launched seven new content hubs that were two years in the making, following a call to our community in 2018 to nominate the discovery or event that best showcases why microbiology matters.

We received 20 nominations, which we grouped into themes. Each theme became a digital content hub, bringing together the experiences of our members working in the area via case studies and interviews, as well as a host of resources, from our membership magazine *Microbiology Today* and our journals to podcasts, blogs, policy reports and more. Hubs launched during 2020 included:

Objective 2

January Unlocking the world of microbiomes: exploring microbial communities

February Understanding bacteria and challenges in microbiology

March Vaccines: the global challenge for microbiology

June Microbes and where to find them

July Understanding viruses and challenges in microbiology

October New frontiers in microbiology

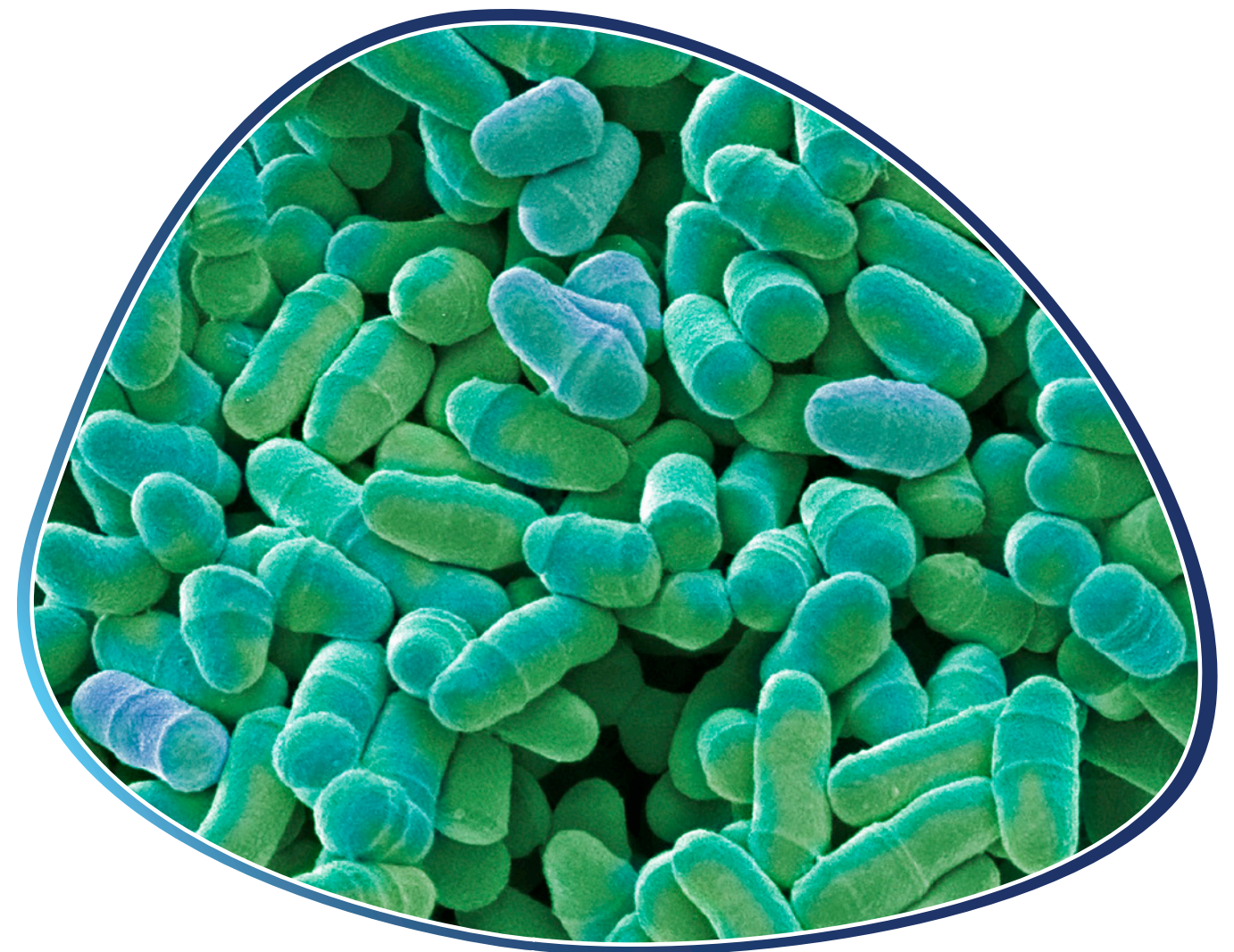
December Exploring microbiology and genetics with the public, policymakers and other stakeholders

Why Microbiology Matters

The vaccines hub had originally been intended to launch late in 2020 but we brought it forward in recognition of the value of the content as a resource not only within our community but also for the public, keen to develop an understanding of how SARS-CoV-2 might eventually be overcome through vaccine development. Using the hubs, we have also been able to surface content of relevance to the pandemic, including our 'What is herd immunity?' video on our YouTube channel, which had 251,000 views in the year. We are adding new content to the hubs all the time, as a result they will continue to grow and evolve as

a resource for the microbiology community beyond our anniversary year. We recently added a new hub devoted to SARS-CoV-2 and COVID-19 to the collection, highlighting the work of our members during the pandemic and bringing together all available resources in one place.

Since launch, the hubs have had over 21,000 unique views. While 'Understanding bacteria and the challenges in microbiology' is the most popular hub, content highlighted across the vaccines and viruses hubs have been particularly relevant during the year.



The view of our members



As part of our research into the 75th anniversary project 'Why Microbiology Matters' (page 34), we contacted members working in each area and interviewed them on their life in science, the impact of their research and their experience of the Microbiology Society. These are their stories.

For our 'Unlocking the world' of microbiomes hub, we interviewed Dr Thuy Do, a Lecturer in Oral Microbiology and Deputy Director of Postgraduate Research Studies at the University of Leeds. She is a member of the Microbiology Society and an Editorial Board member for the *Journal of Medical Microbiology*. She explained why microbiology matters and the value of being a member: "Micro-organisms have existed long before us and may possibly remain in existence long after us. We have a lot to learn from their resilience and evolution, be it for our own sustainability and future survival as a species. They are key to our

existence.

The Microbiology Society is a fantastic platform that provides the most up to date, high quality information regarding all aspects of microbiology. It brings together the brightest minds in each specialisation and puts an emphasis on educating the next generation of scientists. I have noticed its expansion in the last two decades, which is testimony to its success and the importance of microbes in the world, which are recognised more and more by industry and the general public."

For our Understanding bacteria and challenges in microbiology hub, we interviewed Dr Chloe James, Senior Lecturer at the University of Salford, Manchester. She is a member of the Microbiology Society and co-Chair of the Society's Impact and Influence Committee. Her research focuses on bacteria and bacteriophages in multi-species biofilms. She explained why microbiology matters and the value of being a member: "Pick up a newspaper on any day and there are microbiology stories there. The field has always been incredibly relevant and if you look at any niche on the planet or even other planets usually it's micro-organisms that are at the bottom of any process. Micro-organisms began life, they were the first forms of life. I think it's actually more challenging to ask me to think of an instance where microbiology doesn't matter, as microorganisms are just so integral in every aspect of life. It feels more and more, that an understanding of microbiology is needed to maintain

the health of human and animal populations. I have been a member of the Microbiology Society since my PhD days and all the way through I felt very supported, going to conferences every year but also there being this network of people that understand what you're excited about and why you are excited about it. I think the online resources are fantastic, for both research and teaching activities, and I think there are just so many things that I think can be useful for people at all career stages. Being part of the Society makes me feel connected to people across the country, but also across the world. It makes my work and my interests feel so much broader and more relevant. They also offer a wide variety of grants that I have benefitted from, as well and I think that it is a very inclusive Society. For anyone wanting to stay in a career in a specialist area, being a member of one of these societies is very important."

The view of our members

For our 'Vaccines: the global challenge for microbiology' hub, we spoke to Vera Unwin, a PhD student at the Liverpool School of Tropical Medicine and member of the Microbiology Society. Her research is providing perspective on the transmission cycle of malaria and many other mosquito borne diseases. She explained why microbiology matters and the value of being a member: "Microbiology encompasses a wide range of study areas. In terms of my work, microbiology offers a vital perspective throughout the transmission cycle of malaria and many other mosquito-borne diseases. The microbiota of a mosquito can affect the development of many viruses and parasites, a phenomenon that is currently being exploited for disease control. The biology of the

pathogen itself is also essential for drug and vaccine development. Even the microbiome of the human host has been shown to impact the development and severity of several infectious diseases. Understanding microbiology is key to maximizing the efficacy of disease control programs. Being a member of the Microbiology Society opens up unique training and funding opportunities that can be hard to come by as a PhD student, e.g. travel funding from the Society enabled me to attend a conference in Australia. Being part of the Society also offers access to a community of leading experts, support for public engagement events and useful online resources for professional development."

For our 'Microbes and where to find them' hub, we interviewed Professor André Antunes, a member of the Microbiology Society's Impact and Influence Committee. He is based at China's State Key Laboratory of Lunar and Planetary Sciences at Macau University of Science and Technology. His research focuses on extreme environments. He explained why microbiology matters and the value of being a member: "Several microbes have been shown to be able to survive space travel which could compromise the success of space missions looking for life and might cause the collapse of alien ecosystems before we even know they are there. My research on extreme environments allows me to contribute to clarifying the resilience of life and defining its limits. From a more philosophical perspective, my area of research allows me to help in finding an answer to the most important question that humankind has ever asked: Are we alone in the Universe?"

I'm a big fan of the Microbiology Society and believe that membership is relevant for researchers at all stages of their career. Being a member allows me to reach a wider audience and increase the visibility of my research; network with fellow researchers in my field, but also learn new things from different areas. I like the fact that the Society is very supportive with its variety of research and travel grants and can't praise them enough. I think it's everyone's responsibility to help the Society to represent the full diversity of research in microbiology and make sure that your voice is heard. After complaining for two years about under-representation of some research fields at the Annual Conference (during its several coffee breaks), I decided to do something about it. I proposed a topic for the next edition, which was readily approved, and that's how I ended up as a convener for a session in the following year."

The view of our members

For our 'Understanding viruses and challenges in microbiology' hub, we interviewed Dr Karen Buttigieg, a Senior Project Team Leader at Public Health England and specialist in viruses.

She told us about the development of new vaccines and explained why microbiology matters: "I work on the research and development of vaccines against emerging diseases using recombinant virus vectors. This technology harnesses harmless viruses and reprograms them to protect people against other diseases.

I've worked on almost all stages of vaccine development: designing vaccines at the DNA level, making them on an experimental small scale, and testing to see if they prevent disease in animal models. I'm now working on a project taking effective vaccines for larger scale manufacture ready for phase I clinical trials.

This will be the first time these new vaccines are tested in humans, so there are very strict regulations to follow and everything has to be very carefully controlled and monitored. If the initial trials confirm the vaccines are safe in healthy volunteers, then we can move on to the next phase.

Sadly, there is a lot of inequality in the world. I believe the best way out of poverty is through education, but children need good health in order to attend school. I think microbiology matters because it can make a difference to people's health – their education and ultimately their wellbeing, wealth, and quality of life – particularly in the area of neglected diseases and the developing world.

Once people are no longer living hand-to-mouth, they can live more fulfilling, creative lives and help develop society."

For our 'New frontiers in microbiology' hub, we interviewed Terry McGenity, Professor of Environmental Microbiology at the University of Essex, and a member of the Microbiology Society. His research focuses on investigating haloarchaea and the biodegradation of volatile organic compounds. He explained why microbiology matters and the value of being a member: "Harnessing microbial activities is vital to achieving the United Nations' Sustainable Development Goals. Microbes control our atmosphere, providing half of the oxygen we breathe. They are vital to maintaining healthy soils and plants, and thus in feeding the world.

Microbes are the master recyclers, for example, taking our pollution and waste and turning them into fuels, biodegradable plastics etc. Yes, some microbes can cause terrible suffering, but in turn, they provide us with the means to improve planetary

and human health, e.g. pharmaceuticals and genome-editing tools. Moreover, our microbiomes are essential to our health, and as pathogens are part of a community, we are learning to restrict their activities by using ecological countermeasures, like phage therapy and faecal transplants. Quite simply, microbes rule the world.

The primary advantage of being a member of a learned society is that it enables you to network and share ideas with a diverse, but like-minded community. My first talk at a conference was at a Microbiology Society meeting in Edinburgh and it is pleasing to see that there are still plenty of opportunities for early career researchers to give offered presentations or posters, often generously supported by the Society. Also, the Harry Smith Vacation Studentships have proven to be a great way to allow enthusiastic undergraduate students to experience research in microbiology."

The view of our members

For our 'Exploring microbiology and genetics' hub, we interviewed Dr Prateek Sharma, a Postdoctoral Research Fellow at the University of Birmingham and member of the Microbiology Society. His research is in the field of genetics, specifically transcription, which is an important stage for regulation of gene expression. He explained why microbiology matters and the value of being a member: "The simple answer is that we can't live without microbes; we depend on them directly or indirectly. The world would become uninhabitable without them. However, some microbes can be pathogenic and that's where we as humans have to have curiosity to struggle and solve problems. Microbiology is the answer to help society and make

the world a better place.

The Microbiology Society is one of the largest microbiology societies in the world. The Society plays an important role for anyone who is pursuing their research in microbiology. It helps you to network with the like-minded people, and you are treated not just like an individual but as a whole team, which helps you make advancements of microbiology. The Society's Annual Conference helps you to showcase your own research to scientists across the globe and can provide you funding for important training and meetings. Moreover, the prize nominations provided by the Society are an excellent motivation for carrying out high quality research."

A Sustainable Future

In 2020, the Covid-19 pandemic brought into focus the profound social and economic impact that micro-organisms can have on our society. Microbiology has been at the forefront of the coronavirus response and can be harnessed to tackle some of the greatest threats facing future generations, from the emergence and spread of drug-resistant pathogens to the impact of waste pollution and the effects of climate change on ecosystems. Our policy work aims to share our community's excitement for the profoundly positive effects that microbes have on the wider society by championing the contribution made by microbiology, our members and their work in addressing global challenges.

This year saw the completion of 'A Sustainable Future', a membership-focused policy project aiming to demonstrate the value and raise the profile of microbiology in achieving the United Nations Sustainable Development Goals (UN SDGs). Focusing on three core areas, soil health, antimicrobial

resistance (AMR) and the circular economy, we gathered evidence from our members and created new partnerships to support knowledge exchange and unlock the potential of microbiology to achieve a sustainable future.

'A Sustainable Future' enabled us to develop and implement an innovative new way of delivering policy and engagement work, with members at the heart of this ambitious project. One of its key outcomes was the collection of 62 case studies (22 AMR, 20 circular economy, 20 soil health) published on the website, which provided a powerful tool for members and external experts to showcase their research to a wide range of stakeholders, outside of the traditional boundaries of academic publication. As more case studies were published on the website and shared on social media, levels of engagement increased, and it became clear that authors enjoyed sharing their work through a new and versatile format.



I cited the case study as part of a Wellcome Trust early career fellowship (Sir Henry Wellcome Fellowship) application which I was successful for. I think that the case study helped to showcase my research.

Dr Michael Bottery, University of York

I found this most useful to make some more people aware of what I was doing, thanks to this being shared through various channels in the Microbiology Society (Twitter, email, website). Overall, I think that these case studies are great opportunities for early career researchers to talk about their work, and to increase their visibility.

Quentin Leclerc, London School of Hygiene and Tropical Medicine

A Sustainable Future

Marking the end of the project, we launched three policy reports and an overall statement informed by our digital workshop discussions and other engagement activities carried out throughout the year. The reports set out recommendations to engage and inform decision-makers involved in sustainability debates in Ireland and the UK, to ensure that microbiology’s potential is fully achieved. Recommendations include the need for sustained microbiology research and innovation in the fields of AMR, soil health and the circular economy to help deliver the SDGs, and a call for better collaborative

efforts to create and adopt the evidence-based policies that will be needed to ensure a sustainable future for the generations to come. A Sustainable Future gave us a platform to champion the cutting-edge research which is currently being undertaken within the microbiology community and helped us promote the role of our discipline in sustainable development. It also served to empower our members to see the vital importance of their work and that of the wider research and innovation base in tackling the world’s greatest challenges.

Key facts

- Total project: **20,053** page views
- Case studies highlighted: **62** (**22** AMR, **20** Circular Economy, **20** Soil Health), **12,845** page views
- A podcast series
- 15** digital workshops, **105** attendees
- 5** articles in *Microbiology* and a journal special collection
- Responses to **2** inquiries from the House of Commons Environmental Audit Committee

Progress towards our strategic objectives

Digital growth in our anniversary year

Following outstanding growth in engagement in 2019, the website had another record-breaking year in 2020, with a 140% increase in unique page views to over 2.8 million (1.19 million in 2019) and a 180% increase in web users to 1.6 million.

The blog – the main communications channel authored by our members – also went from strength to strength, with a 76% increase in views (over 154,000 in 2020 compared to 87,000 in 2019). The podcast, where we regularly interview members for monthly episodes, increased its downloads by 19% to over 46,000, up from 38,000 in 2019.

We have seen a major increase in viewing figures across our YouTube channel, with 220% more views this year (over 581,000 in 2020, compared to 181,000 in 2019) and our 'What is herd immunity?' video has had 251,000 views alone. Due to the ongoing success of our YouTube channel, we were admitted to the Google Partner programme during the year, allowing

us access to a small percentage of the income Google draws from adverts shown on our videos within our channel.

Recognising the legacy of our Fleming Prize and the fascinating and inspiring careers of those who have won, we interviewed former winners including Peter Fineran, Sarah Coulthurst, David Grainger, Greg Challis, Tracy Palmer, David Richardson, Ian Roberts, Charles Dorman, Gordon Dougan, Chris Higgins and Douglas Kell, to create a series of three short films highlighting the impact of the Prize on their careers, as well as their personal lives. The first in the series was released on our YouTube channel to coincide with the second anniversary issue of our membership magazine, *Microbiology Today*, which focused on the legacy of our Fleming winners. We hope the films will be an inspiration to many people at all career stages working in microbiology.

Objective 2



Winning the Fleming award was probably the proudest moment of my research career. It put me in the company of some absolute giants of the microbial world and the award carried the name of one of the greatest microbiologists of all time.

David Richardson, Fleming Prize Winner 1999

Winning the Fleming Prize was just amazing. I think it's the best prize I have ever been awarded. It was the very first prize I won as an independent scientist and it was validation, really, for my own ideas and research.

Tracy Palmer FRS, Fleming Prize Winner 2002

It was a great honour as somebody who was trained as an organic chemist and so I was very grateful to the Microbiology Society for accepting the research from other disciplines in order to make positive contributions to microbiology.

Greg Challis, Fleming Prize Winner 2007

Winning this award is an immense honour. Hopefully, I will make important contributions to the field of microbiology over the course of my career.

David Grainger, Fleming Prize Winner 2016

I was delighted to hear that I have been awarded the Fleming Prize. I have been a member of the Society since the beginning of my PhD and have been inspired and supported by the community it represents ever since.

Sarah Coulthurst, Fleming Prize Winner 2018

Digital growth in our anniversary year

This year we launched the Society's first Instagram account, bringing our content to a new audience and reinforcing our relationship with existing followers who are social media natives. As part of our 75th anniversary programme we spent two years collecting images from our members across our Microbiology Images project and to illustrate the 'Why Microbiology Matters' hubs. The Microbiology Images project asked our members to submit images related to the microbiological world to help highlight how microbiology answers big questions by giving us knowledge of very small things.

We welcomed images of science, of nature, of people, places and from the laboratory, all of which serve to inspire, inform and demonstrate how the study of microbes helps us to understand our world and our place within it. The aim of the project is to help promote the research efforts and journeys of microbiologists across our community and due to its initial success, it will remain ongoing in 2021.

Through detailed exploration of our archives held by the Wellcome Trust, we have unearthed images of the founding years of the Society and its early members, including Alexander Fleming, Marjory Stephenson and Muriel Robertson. A digital exhibition of these images, as well as some previously unseen images provided by Public Health England Culture Collections, were released as part of the 'Why Microbiologists Matter'—a digital celebration of the journeys of our members' series of events in November 2020.

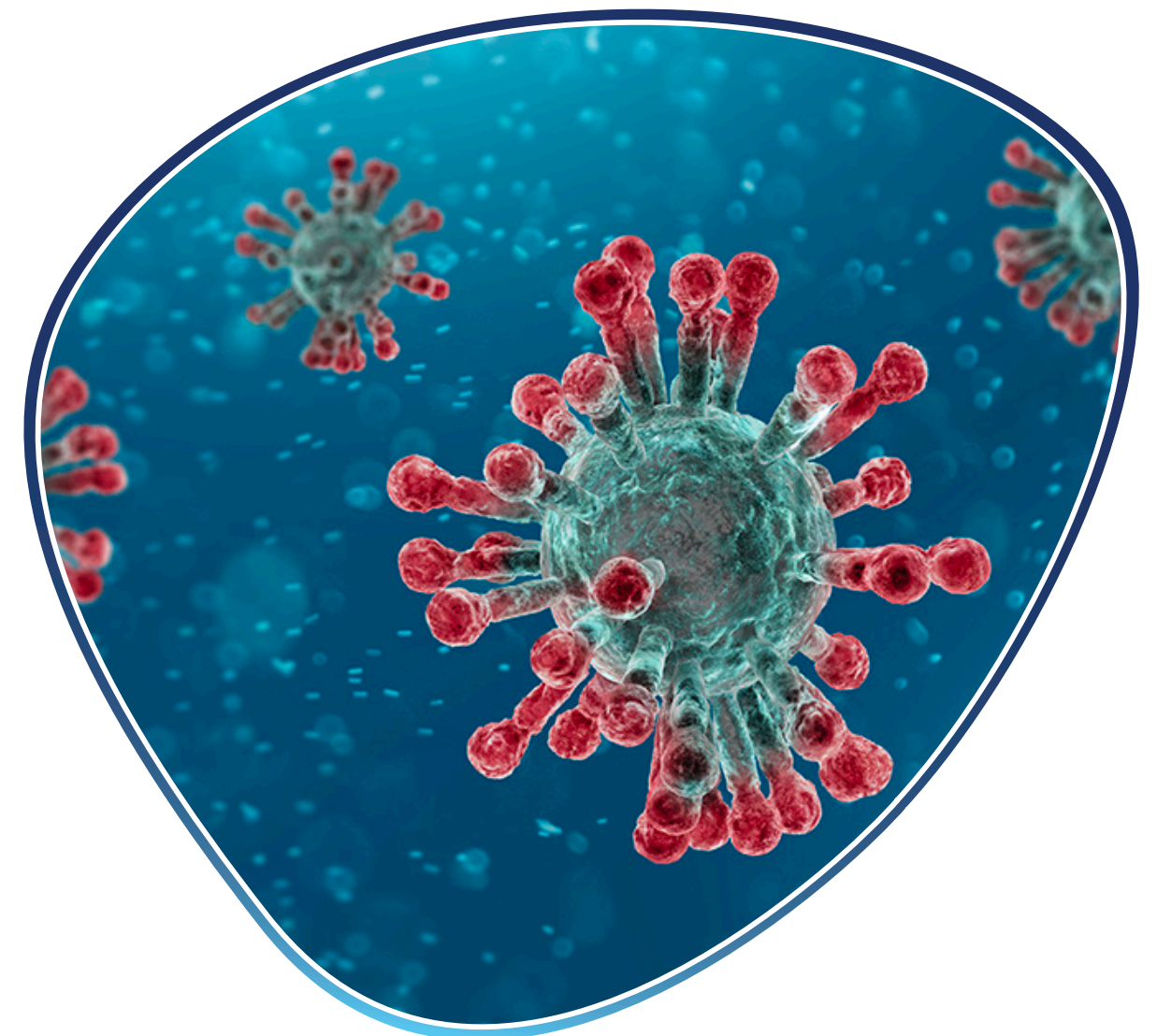
Inspired by Professor Jo Verran's Bad Bugs Book Club, to coincide with World Book Day in March 2020, the Society launched digital guidance and support to encourage members of the microbiology community to get together and discuss microbiology in literature through their own book clubs. This has enjoyed success with our Book Clubs web page receiving thousands of unique views, and Jo has reported an upsurge in interest in her Book Club as a result of the publicity.



SARS-CoV-2 COVID-19: the media story

In early January 2020 we became aware of the story brewing about a novel virus in China and by the middle of the month we were receiving a significant number of media requests – largely focused on the source of the virus and animal-to-human transmission, as well as the inevitable comparisons to the SARS and MERS outbreaks. Many journalists wanted to know about the safety of travel to China before it quickly became clear the virus was already rampaging around the world. In early March the UK media wanted to know if efforts at surveillance were likely to work and we were already responding to requests about the efficacy of face masks in non-medical settings. By mid-March the safety of international travel was a hot topic, which soon moved on to the nature of human-to-human virus transmission and what would happen in the UK, as the first cases were diagnosed. Many of the first media requests remained topical throughout the year, including estimating the worst-case scenarios for UK infection and death rates, the severity of infection amongst various groups and the impact of children in spreading the virus. We are still asking our members to help answer questions on the potential for transmission amongst various

groups, how vaccines will contribute to herd immunity, how viruses mutate and develop, and whether social distancing will need to remain in place in the future. We are grateful to the group of expert members who have dedicated so much time to helping journalists in print and broadcast. In order to maximise impact we worked in partnership with the Science Media Centre (SMC), providing them with a greater pool of expert comment to draw on in support of accurate scientific reporting on the pandemic. In addition, we respond to media enquiries directly, working with the BBC and Channel 4 on prime-time broadcasts on the virus featuring our members, including a two-part *Panorama* programme. We have also provided advice to a cohort of members not used to the intense level of media attention, supporting their appearances on live television and radio – in some cases for the first time. Our members have been quoted across hundreds of media outlets, from the UK nationals to major digital news services – on every UK broadcast channel and many across the world. Above all, their efforts continue to help ensure we all have access to good quality science.



Growing engagement across digital channels in 2020

Our website

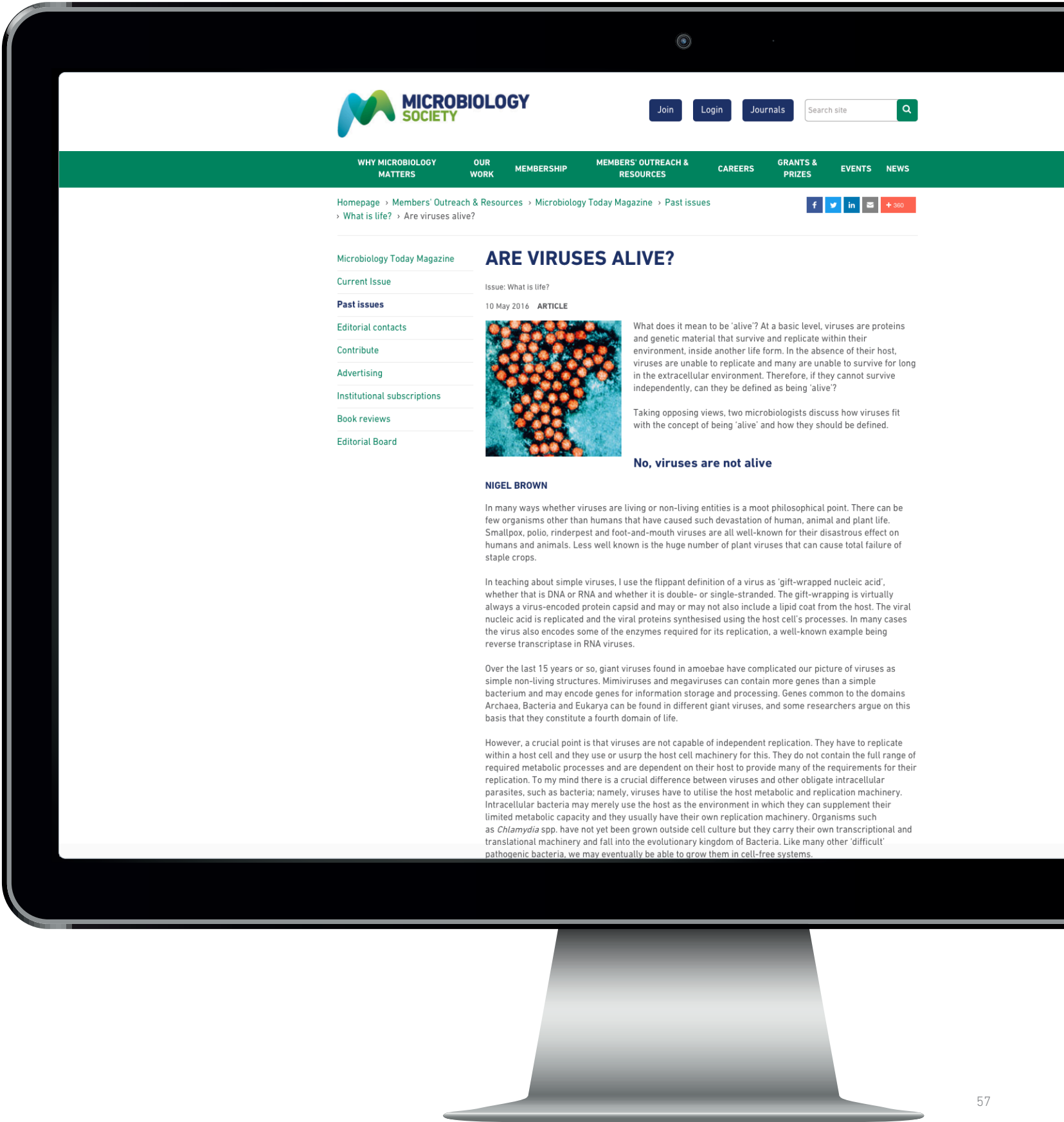
140% increase in website unique views to over 2.8 million

Most popular content in the year included:

‘Are viruses alive?’

‘What is microbiology? Bacteria’

‘What is microbiology? Microbes and disease’



The view from Twitter

26% increase in Twitter followers to **51,385**

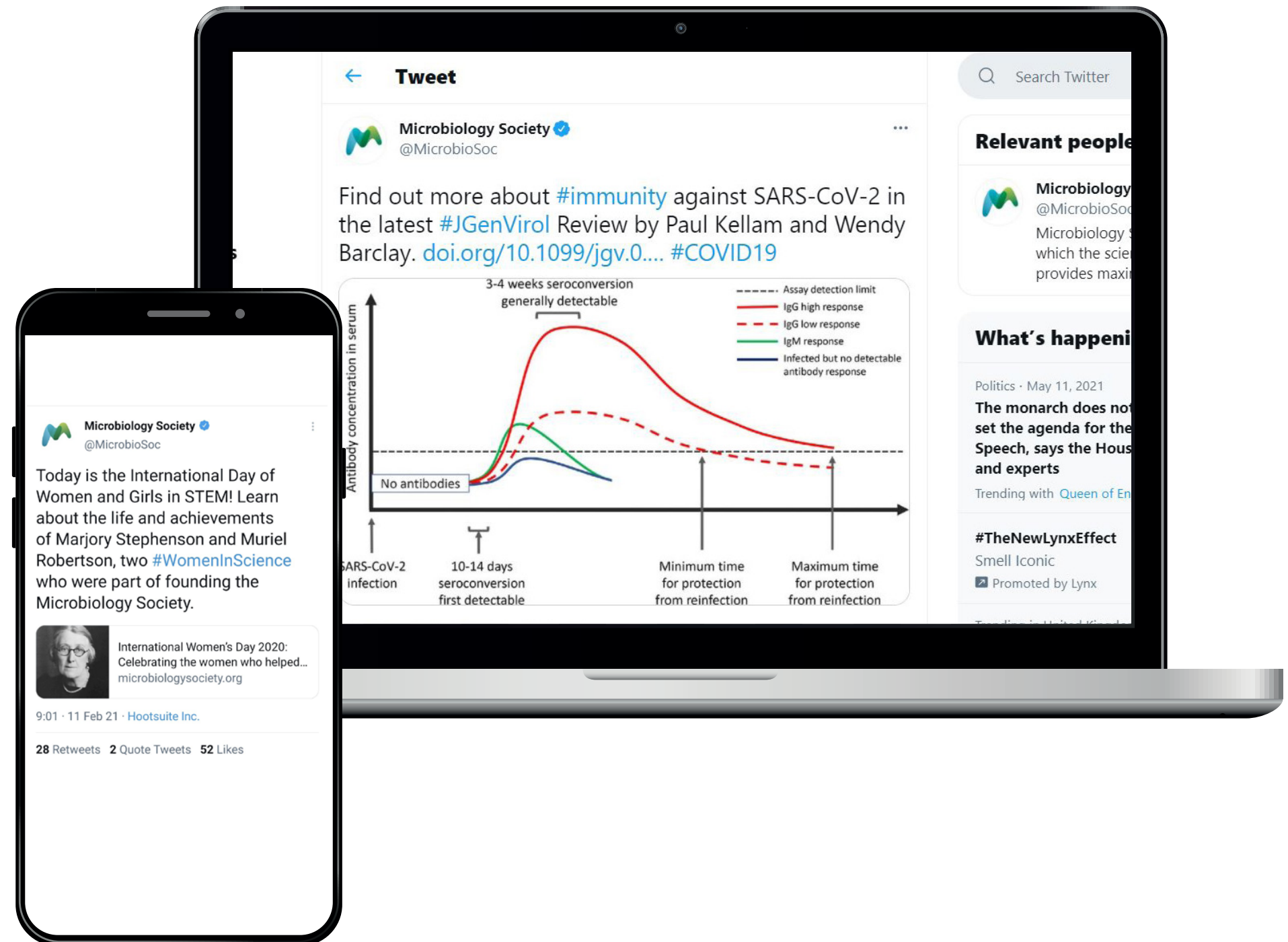
Most popular content in the year included:

‘SARS-CoV-2 Paul Kellam and Wendy Barclay’

‘2021 Prize winners’

‘75th anniversary’

‘Women and girls in science’



The view from LinkedIn

40% increase in LinkedIn followers to **33,649**

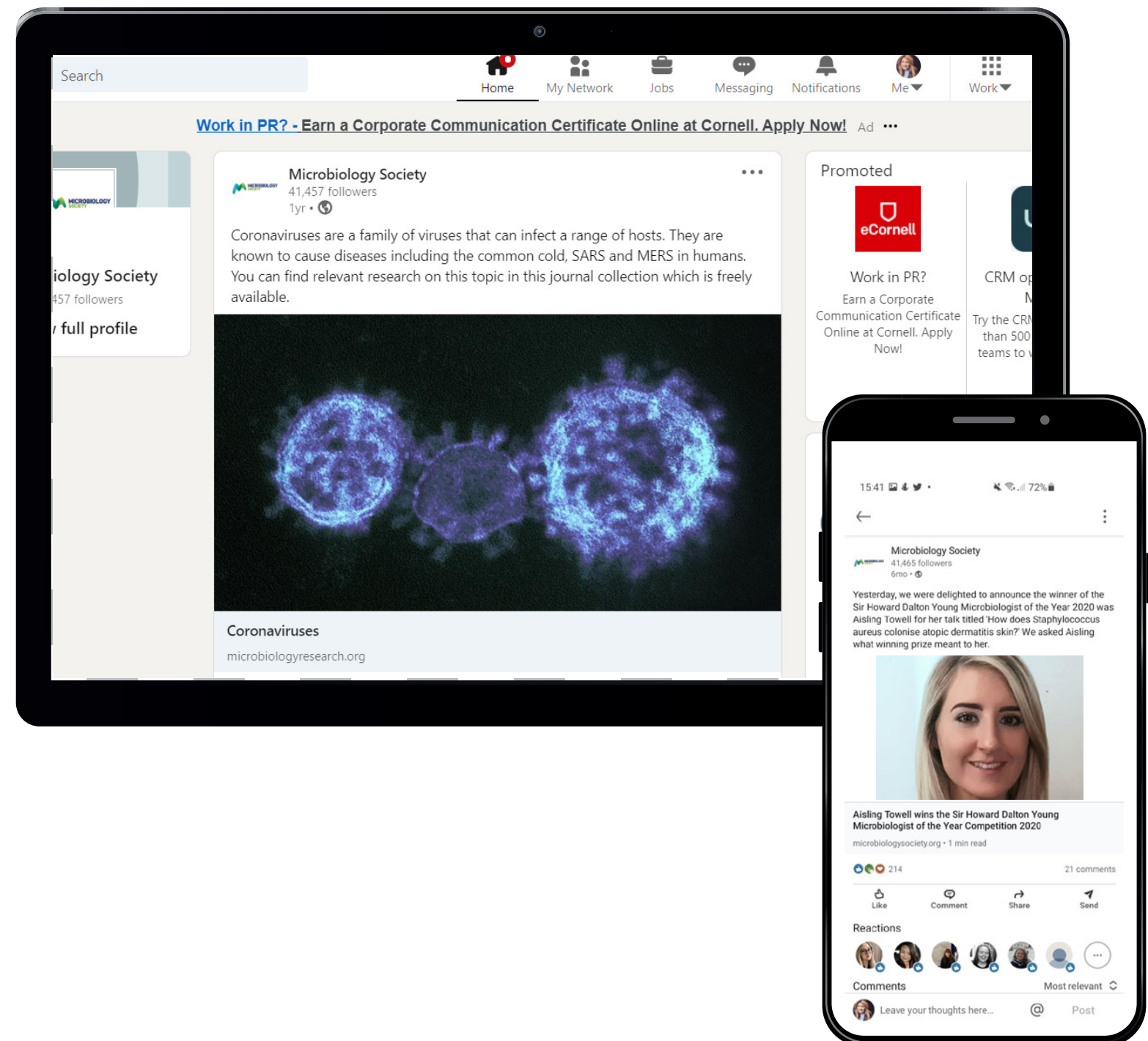
Most popular content in the year included:

‘What coronaviruses are’

‘Winner of Young Microbiologists of the Year 2021’

‘Study of the gut in *Microbiology*’

Member involvement in ‘A Sustainable Future’



The view from YouTube

220% increase in views of our videos watched on YouTube to **581,313**

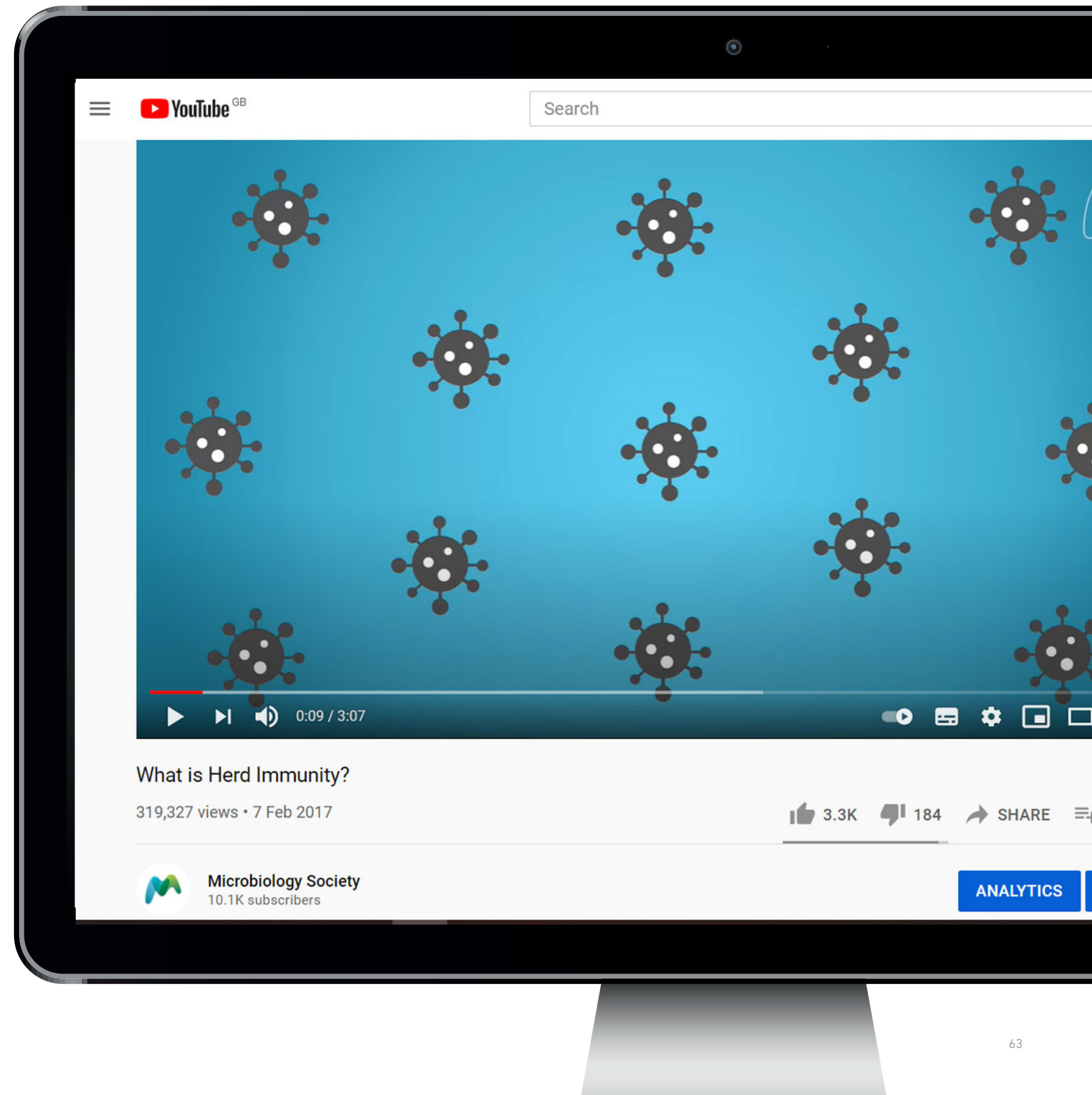
Most popular video was '**What is herd immunity?**', with **251,000** views in the year

Other popular videos in the year included:

'Let's Play - Plague Inc.: Evolved (with a scientist)'

'How to give a great oral presentation'

'What is CRISPR-Cas?'



We will **reinforce** the **Society's** long-term **sustainability** and resilience by **diversifying income streams**, increasing efficiency and **ensuring robust governance**.

The **Society** will **increase** opportunities for generating **income** from a range of **commercial** and **philanthropic** sources.

The **Society** will increase the emphasis on **placing members** at the **heart of Society** activities and **growing future leaders**.

The **Society** will **maximise** cost **savings** and **efficiencies**.



Growing future leaders

Sir Howard Dalton Young Microbiologist of the Year Competition

The organisers of Annual Conference 2020 strongly felt that the Society should continue to recognise excellent early career researchers and their work, despite the cancellation of the conference. We pivoted quickly to running the competition by video submissions – all entrants were welcome to submit a short video presentation from which a shortlist

was formed. During the 'Why Microbiologists Matter' week, the shortlisted presenters competed for the title of Young Microbiologist of the Year and Dr Aisling Towell, Scientific Writer at Novartis Pharmaceuticals, won with her talk, 'How does *Staphylococcus aureus* colonise atopic dermatitis skin?' based on her previous research.



Thank you so much to the Microbiology Society for this award, and for continuously giving early career researchers a platform to showcase their research and abilities. And *bualadh bos* (as we say in Ireland) for adapting this conference to the virtual world!

Dr Aisling Towell (1st place, Sir Howard Dalton Young Microbiologist of the Year Competition 2020)

Growing future leaders

Shadowing scheme

Our Council and Committees Shadowing Scheme continued for a fourth year in 2020. The scheme gives members an exclusive opportunity to gain insight into the inner working of the Society. By experiencing first-hand the activities and decision-making processes of key governing groups of the organisation, members can add to their CVs, gain a wealth of knowledge and behind-the-scenes information, and network with other microbiologists. In 2020 our second Council Shadow, Sharon Brookes, was elected to Council, with her term beginning in January 2021.

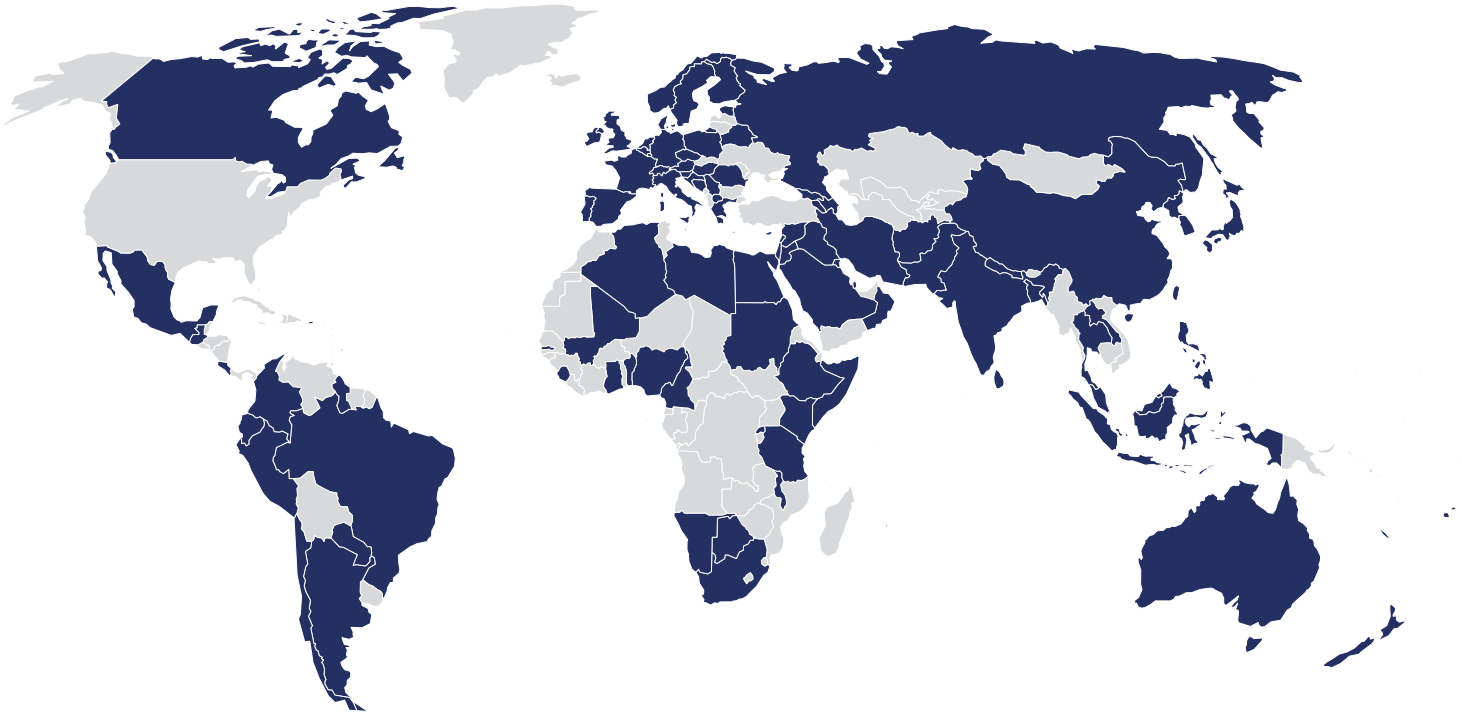
We interviewed Sharon Brookes in 2020 about her experience on the Shadowing Scheme and she said "I think the Shadowing Scheme is a good option to understand how you can contribute more to the Society. It's a good opportunity for early career microbiologists to be exposed to the different ways to influence the Society functions and to help the Society to better serve the membership. At this stage in my career, I've become more aware of the value of coaching and mentoring and I see the shadowing scheme as part of that process."



Membership

The Society’s membership continues to grow. Membership stood at 6145 at the end of December 2020 – an increase from 5345 at the end of 2019.

Our ECM Forum community continues to grow too, with 590 members at the end of December 2020.



- | | | |
|--------------------|--------------------------------|--------------------------------------|
| Afghanistan | Guyana | Paraguay |
| Algeria | Hong Kong | Peru |
| Argentina | Hungary | Philippines |
| Armenia | India | Poland |
| Australia | Indonesia | Portugal |
| Austria | Iran | Puerto Rico |
| Azerbaijan | Iraq | Qatar |
| Bangladesh | Ireland | Romania |
| Barbados | Israel | Russian Federation |
| Belarus | Italy | Rwanda |
| Belgium | Jamaica | Saudi Arabia |
| Benin | Japan | Serbia |
| Bosnia–Herzegovina | Jordan | Sierra Leone |
| Botswana | Kenya | Singapore |
| Brazil | Korea (Democratic Republic of) | Slovakia |
| Brunei Darussalam | Korea (Republic of) | Slovenia |
| Cameroon | Kuwait | Somalia |
| Canada | Laos | South Africa |
| Chile | Latvia | Spain |
| China | Lebanon | Sri Lanka |
| Colombia | Libyan Arab Jamahiriya | Sudan |
| Costa Rica | Luxembourg | Sweden |
| Croatia | Macau | Switzerland |
| Cyprus | Macedonia | Syrian Arab Republic |
| Czech Republic | Malawi | Taiwan |
| Denmark | Malaysia | Tanzania |
| Ecuador | Mali | Thailand |
| Egypt | Malta | Tunisia |
| Estonia | Mauritius | Turkey |
| Ethiopia | Mexico | Turkmenistan |
| Fiji | Namibia | Uganda |
| Finland | Nepal | UK |
| France | Netherlands | Ukraine |
| Gambia | New Caledonia | United Arab Emirates |
| Georgia | New Zealand | United States Minor Outlying Islands |
| Germany | Nigeria | United States of America |
| Ghana | Northern Ireland | Uruguay |
| Greece | Norway | Vietnam |
| Guatemala | Oman | |
| Guernsey | Pakistan | |

Progress towards our strategic objectives

Champions

Towards the end of 2020, in preparation for a review of the Champions scheme in 2021, we made efforts to contact all 84 of our Champions to obtain their feedback on the scheme. We were able to speak to

two-thirds of our Champions, who provided essential insights into their experiences which will be crucial for improving the programme.



I have through these activities been able to apply as an Associate Fellow of the Higher Education Academy. I also received the Queen's University postdoctoral Prize in Outstanding Engagement Award in 2018. Furthermore, it is very rewarding to see children light up and engage with the hands-on activities during events and to hear their resolve to study science/biology, etc.

Dr Linda Oyama, Microbiology Society Champion

I am happy to be in the scheme, to find out more about the Society. It gives me a sense of belonging; I like the fact that I receive emails with the latest news, and I get involved and spread the word about the Society's work.

Angela Coral Medina, Microbiology Society Champion

As a Champion, I could organise outreach activities to increase awareness of the role of microbes, do hands-on activities with participants who are both from science and non-science backgrounds. I could also collaborate with other scientists and increase awareness to reach students and the public.

Arindam Mitra, Microbiology Society Champion

Being a champion gives me the opportunity to develop my career and communicate with others. I've had more visibility within the Society and opportunity to participate in events such as Science at Stormont.

Yinka Somorin, Microbiology Society Champion

Developing the Society's journals

The quality of peer-reviewed journal content across all the Society's journals supports our members in sharing and generating new knowledge. As expected, much of the most popular research published this year focused on SARS-CoV-2 and the most downloaded article in any of the Microbiology Society's journals was a review into the human immune response to coronaviruses by Professor Wendy Barclay and Professor Paul Kellam.

2020 was also a crucial year for open access in our journals. One of the main consequences of lockdowns for microbiology researchers around the world was immediacy of access to Society-published content for all who were no longer at their regular places of work. In this environment, institutional authentication no longer guaranteed friction-free access and in response we made all content freely available from the beginning of April through to September. During this period, usage across the journals platform increased by 15%.

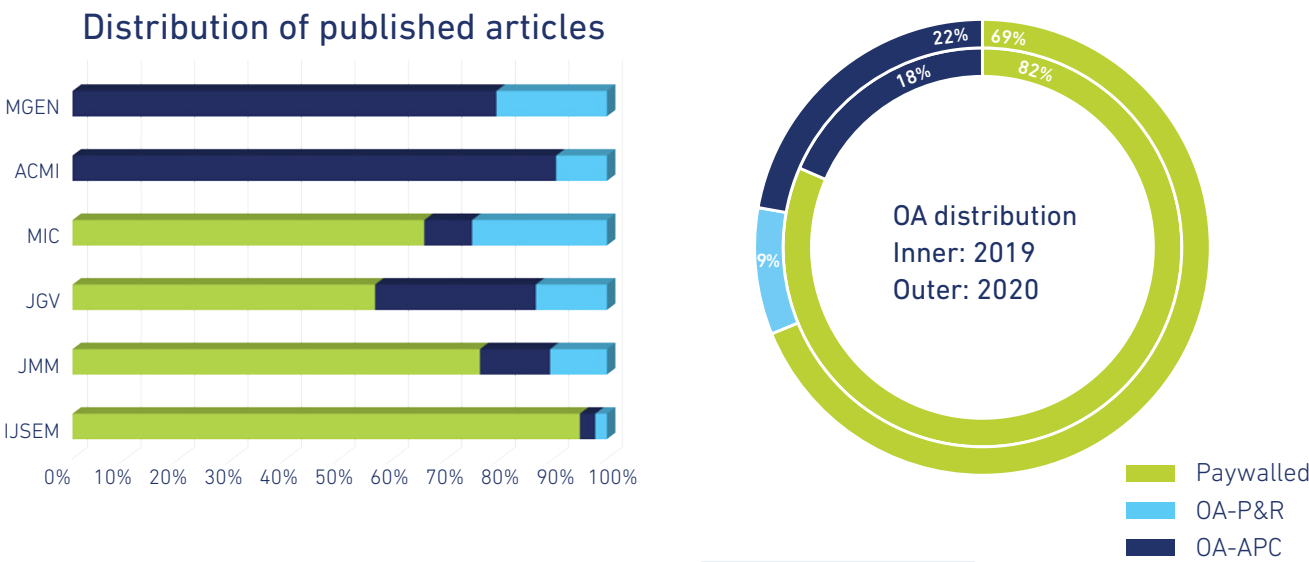
This was the launch year for Publish and Read, our transformative arrangement in response to Plan S, an initiative mandating all publicly funded research be

published open access. During 2019 this new business model was designed, researched, and launched in time for the 2020 renewal cycle and two important national deals were signed with Jisc Collections in the UK and the CAUL consortium in Australasia.

Institutions were also able to sign up on an individual basis – therefore extending institutionally funded open access to universities in the Netherlands, Finland, the USA and Canada. As Just de Leeuwe, Delft University of Technology, commented: "The Microbiology Society's Publish and Read helps change classic publishing models, is easy to implement, removes financial administration from the workflow of our researchers, and helps us to fulfill the Open Science agenda of our organisation".

The take-up of Publish and Read exceeded all expectations and looks set to increase our open access footprint further in 2021, with consortia groups in Ireland and Spain joining other early adopter institutions throughout the year.

A snapshot of the impact achieved from Publish and Read is provided opposite:



61 Participants

- National consortia
 - JISC: 31 UK institutions
 - CAUL: 17 institutions in Australia & New Zealand
- 13 other institutions worldwide

121 OA-P&R articles

- 33% in OA journals
- 67% in hybrid journals

Performance indicators

- UK P&R cohort increased OA output by 300%
- UK Institutions overall increased OA output by 200%
- OA output in Australasia increased by 150%

Journals covered

- Fully OA titles:
 - Microbial Genomics
 - Access Microbiology
- Subscription/hybrid titles
 - Microbiology
 - Journal of General Virology
 - Journal of Medical Microbiology
 - International Journal of Systematic and Evolutionary Microbiology

What's next

- More consortia and national groups join for 2021: Ireland, Norway, Spain
- Conversion from traditional subscription to Publish and Read incentivised
- Improvements planned for infrastructure, author workflow and reporting

Publish and Read results – 2020

The Society's transformative agreement badged as 'Unlimited' Publish and Read, means:

- uncapped OA publishing across the portfolio and
- read access to all content.

Diversification of income
'Unlocking Potential Fund' fundraising activity

In 2021 the Society will launch its first fundraising initiative for members who may require support for a variety of reasons, in order to help them to progress and to reach their full career potential. This new initiative follows the success of our Early Career Microbiologists Forum and recent focus on microbiologists at the mid-career stage, recognising a need for support in career development across levels. The fundraising appeal will generate funds to underwrite a new grant, known as the 'Unlocking Potential Grant'. It will make funds available to early and mid-career members who may require an extra level of support to help them deal with a situation that threatens to hold them back from achieving what they could. Everyone faces a career challenge at some stage – even knowing which career step to take next can be

difficult to navigate. We may suffer from imposter syndrome or lack confidence. We may face a deep-rooted and fundamental problem like discrimination; we may need support to overcome a change in circumstances; or we may just need someone to point us in the right direction. Overcoming these issues requires a variety of routes to the right support. It may be in the form of a careers coach, resilience expert or mentor, or it may be a career development package. Whatever form it takes, it will be tailored to the grant recipient and unique to their needs. With the help of our community we will fundraise to open this important new 'Unlocking Potential' grant stream to sustain microbiology and develop future leaders, who might in turn one day provide solutions to global challenges.

UNLOCKING POTENTIAL FUND



Progress towards our strategic objectives

Wellcome Grant

In July 2020, the Society received fantastic news that we had been awarded a grant by the Wellcome Trust and the Howard Hughes Medical Institute as part of their Learned Society Curation Awards. The grant was awarded in 2020 but is due to be launched in 2021. No income or expenditure was incurred in 2020. Our application was to set up an open research platform (ORP), offering a new publishing model to the microbiology community that delivers peer-review transparency and a fast-track for communicating research, maximising its potential for impact and influence. There is a great deal of overlap between what an ORP could offer and the scope of our sound science journal, *Access Microbiology*, and as such

being awarded the grant means we are able to make a significant investment in creating an innovative new model for this journal. With the pandemic accelerating the need for authors to disseminate their work more rapidly than ever, it has uniquely changed the way researchers view and interact with preprints. *Access Microbiology's* ORP will become a home for the entire life cycle of an article, from the author's very first preprint all the way to the published, final version of record. This platform is an exciting and unique opportunity to diversify our income and to increase the opportunities to our authors and members, thereby supporting the Society's long-term sustainability.

Objective 3



The proposal was innovative with clear potential for wide-reaching impact. It was highly feasible and if successful would be a good catalyst for change.
Learned Society Curation Awards grant panel, Wellcome Trust, UK

It is a daring project, but I think the Society is well placed to be leading this new era of publishing.
Robert Will, Microbiology Society ECM Forum Communications and Audit, Risk and Evaluation Committee Representation

It provides an excellent platform for everybody to get out studies...not everything shows something important, but it is still important to get that information out there.
It is a good platform for getting projects out, such as Masters, PhD, and postdoc projects, but also providing a platform for adding to the body of evidence. From a reproducibility perspective that is fantastic. For the work that we do this would be a natural place for that to go, but it would also be really good for a career development perspective for everybody.
Participant, Open Research Platform focus group

I am very much in favour of this model because it is fundamentally subversive. The worst problem we have in our societies is hierarchy, and particularly in biological science. What we need is much more democracy and opportunity...it puts back the judgement of the quality to the reader. It is both subversive and egalitarian in a way that I think science really needs.
Participant, Open Research Platform focus group

Progress towards our strategic objectives

Supporting members through Society grants

The events of 2020 led to a great deal of change for our members' activities due to restrictions being placed on their movement. We wanted to ensure we could still support as many members as possible to gain professional development opportunities through transparent and fair processes. We changed our conference-associated grants so that members could apply for virtual event registration fees. We extended claim periods so that members could postpone their research visits and plans that required international

travel, without concern for the funding of their activities. We changed the process for our Harry Smith Vacation Studentships – affording undergraduate students their first experience of research; awardees were able to submit amended plans so that students could continue their research projects either remotely or in COVID-secure settings. This required a great deal of flexibility from our reviewers and award panels; we are grateful for members supporting members, especially in these challenging times.

Objective 3



Thanks so much to [the] Society and all others for continuing with these grants. Vacation studentships, whether in person or remote, are so much more important right now for allowing students to access research beyond the classroom.

Remy Chait (Member, Harry Smith Vacation Studentship 2021 applicant)

It is brilliant that the Microbiology Society provides the opportunity for early career researchers to fully manage a research project and to supervise an undergraduate student. This experience has been vital in enhancing my skills as a researcher and has helped to kick-start my independent academic career.

Angharad Green (Member, Harry Smith Vacation Studentship 2020 awardee whose project was adapted due to the pandemic)

I have learnt a lot about building a cohesive research group when we are only able to come together virtually and have also learnt a lot about how to best support students who are missing out on the team atmosphere of a lab environment. I can see myself developing similar computer-based data-driven projects again in the future to explore new areas of research. This experience has really helped consolidate how I design the projects, supervision and targets to guide the student through these sorts of projects in a structured way.

Kevin Maringer (Member, Harry Smith Vacation Studentship awardee whose project was adapted due to the pandemic)

Thank you for your help with this award, and please pass on our thanks to the Society for the flexibility we were allowed in moving the activities online due to the pandemic.

Jody Winter (Member, International Development Fund 2019 awardee whose project was delivered remotely)

Governance review

In 2020 Council announced changes to its governance structure, developed in 2019 but with a formal launch date of 1 January 2021, to better fit with our strategic objectives to deliver our principal goal to develop, expand and strengthen the networks available to our members so that they can generate new knowledge about microbes and ensure that it is shared with other communities.

The simple but fundamental change was that instead of having Committees that govern specific activities, Council created three new Committees to govern the strategic objectives of the Society. To that end, there are three new Committees of Council that sit alongside three Committees of Council already in existence, the Finance Committee (formerly Finance and Operations Committee); the Audit, Risk and Evaluation Committee and the Early Career Microbiologists' Forum Executive Committee.

The three new Committees are:

- Building Communities
- Impact and Influence
- Sustainability

During 2020, a transition to the new Committee structure commenced and in October 2020 the three new Committees met as 'shadows', including incoming members and also outgoing members of existing Committees. The session began with a plenary introduction from the President and ended with a plenary conclusion from the General Secretary. A co-Chairing scheme for the new Committees was also developed and a meeting of the Chairs and co-Chairs of Committees, with the General Secretary in the Chair, known as the General Secretary's Group, will take place twice per year.

Our existing Divisions and Editorial Boards remain in place, contributing so valuably to the ongoing success of our events and journals programmes and these feed into the Building Communities Committee via two new standing panels, the Publishing Panel and the Scientific Conferences Panel. *The Microbiology Today* Editorial Board also remains and reports to the Impact and Influence Committee.

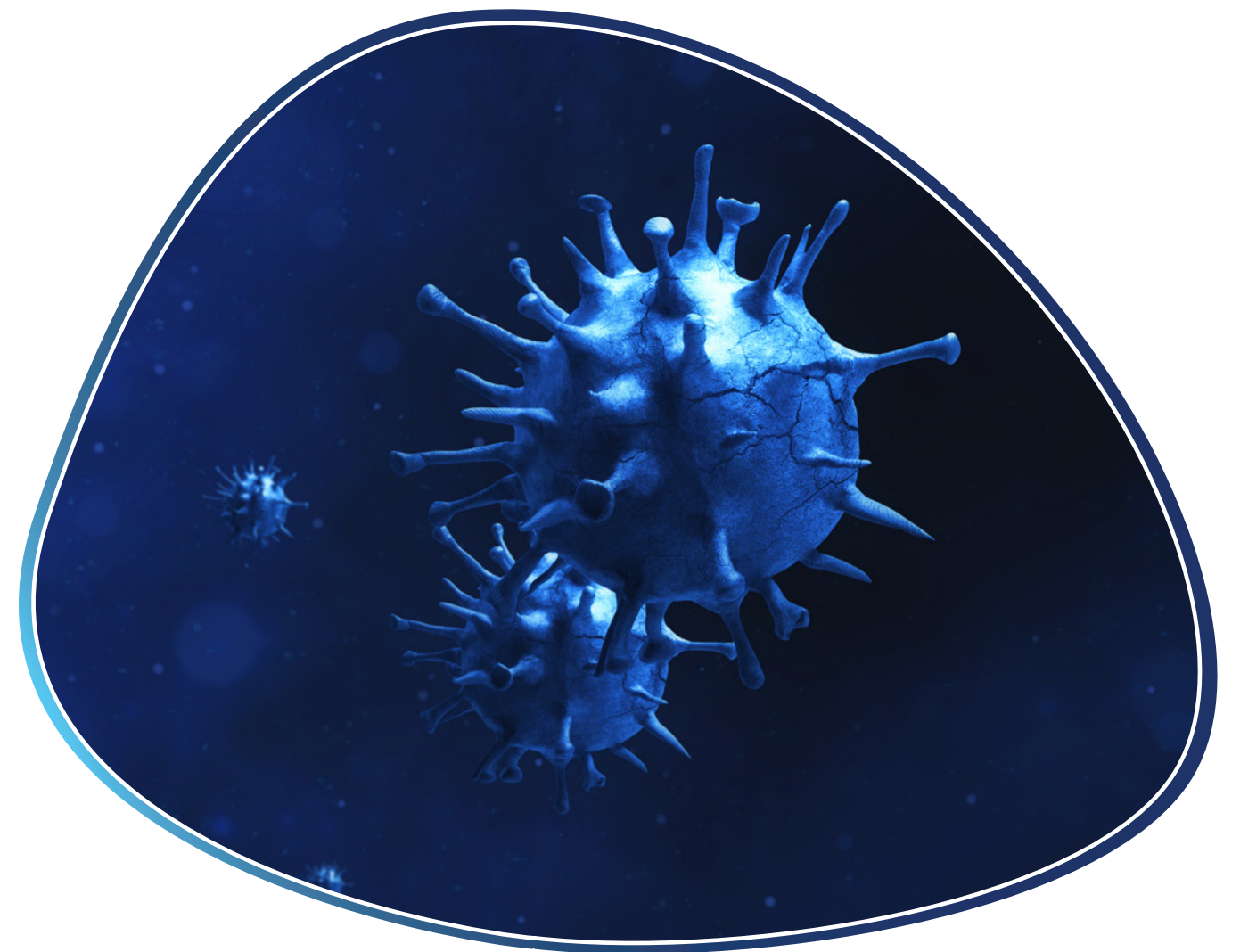


Forward look

SARS-CoV-2 – seminar series

In 2021 we look to support our members in additional ways to aid collaboration and knowledge exchange as the impacts of the pandemic continue to be felt. An important aspect of this work is our events programme. The Society runs a range of conferences and events – all meetings aim to bring together scientists to shape the future of microbiology, strengthen membership networks and enable knowledge exchange. The programme helps us achieve our principal goal to develop, expand and strengthen the networks available to our members so that they can generate new knowledge about microbes and ensure that it is shared with other communities. For 2021 we have designed a new Scientific Seminar Series. Working with our members, the aim of the series is to reach a specific microbiology community to support it in disseminating information and sharing

expertise. The events are designed as a regularly repeated series of short (typically one or two hour) online meetings. The virtual event platform format offers an opportunity to those who typically would not be able to attend regular live meetings due to event and travel costs, for example. There are plans for this new series to begin with regular meetings for members involved in combatting the impacts of SARS-CoV-2 and COVID-19. Our expert members are contributing to UK and worldwide efforts to combat the impacts of SARS-CoV-2 and the Society has been working with them on several activities and initiatives to help build this community and further their research. The new regular events series will help this group to continue to share information on research activity and promote and facilitate collaboration throughout next year.



Forward look

Supporting our community beyond Brexit

As the UK left the European Union at the end of 2020, the impact of this on the scientific community is extremely worrying. The Society intends to 'lead rather than follow' in ensuring that the impact of Brexit does not stifle collaboration and cooperation across the international scientific community. Over 2021 we will be implementing a process to (i) review the Society's current activities that cross borders; (ii) consider current limitations and gaps in provision; and (iii) identify next steps for increasing international opportunities at the Society.

The Society has real strength in that it has always been a UK and Ireland Society, before either country was even in the European Union. We will celebrate this, use it as an example of working across borders and supporting our community no matter where they are based, and build on our activities here. An opportunity already in the frame is for the Society to respond to the Royal Irish Academy (RIA) Higher Education Taskforce's consultation on the future direction of higher education on the island of Ireland. This new project comes as we consolidate our policy and engagement activities across the island directly

following-up on our position statement 'Science for Ireland: Propelling Research and Innovation Success', on how the government can ensure the nation remains at the forefront of international science. In light of Brexit we want this response and other engagement activities with the RIA to highlight how imperative it is that future negotiations between Ireland, the EU and the UK continue to allow scientists to move and collaborate easily between countries, and especially within the island of Ireland. We will also keep encouraging increased funding, support and recognition for 'all-island' fora where scientists, policy makers, investors and users of research and innovation can further opportunities for collaboration. Dr Tadhg Ó Cróinín (University College Dublin) said of our response to the RIA call for input: "I think it not only represents the views of the respondents to the recent survey but also the broader themes identified from previous surveys [...] focusing on research funding in Ireland. Also, great to see the Microbiology Society maintaining a commitment to engage on policy in Ireland as well as the UK".



Forward look

Equality, Diversity and Inclusion at the Society

In 2020, the senseless killing of George Floyd caused a global ripple of awareness of the continued threat of racism. This led to many organisations examining their practices to appropriately represent and include underrepresented groups, and more specifically Black people. This led us to establish a staff action group, and to begin an audit of our practices both internally and in interactions with our members. We recognise that while we have made changes to vastly improve the representation of women at the Society, there is much to improve about our practices across the board for all other underrepresented groups as defined by UK protected characteristics, and particularly for

minority ethnic groups in the UK. In 2020 we surveyed our decision-making groups for their thoughts on equality, diversity and inclusion at the Society. In 2021 we will improve the inclusivity of our policies and practices and seek to actively demonstrate our values of being welcoming, dedicated and transparent so that all members feel that they are able to actively engage with their Society. This will include specific action to improve the diversity of our decision-making groups, and we will redouble our efforts to communicate existing opportunities for members to get involved, including our Council and Committees Shadowing Scheme.



Forward look

Celebrating 75 years of *Microbiology*

In 2022, our flagship journal *Microbiology* reaches its 75th year since launch – where it was published initially as the *Journal of General Microbiology*. To celebrate this milestone, the Microbiology Society is planning a series of events and activities across 2022, with many of the preparations for these taking place throughout 2021.

Next year, *Microbiology* will launch a series of article collections built around the microbiology communities of our authors and members. These cover topics from marine microbiology to the interactions of metals and microbes. These collections will highlight the

expanded scope on the journal, as well as the areas the journal has historically published in; and we hope to encourage the next generation of microbiologists to continue to support the journal and the Society. The anniversary itself will cast an eye forward to what the near future looks like for microbiology by delving into the history of the journal, with insights from our earliest issues and editorial boards, and highlights of common themes seen across this work with implications for today's cutting-edge microbiology research.



Forward look

Building the antimicrobial resistance (AMR) community

The 'A Sustainable Future' project provided valuable insights into the needs of the AMR community as well as the role the Society could play in supporting our members going forward. One of the main recommendations from the project was the potential for the Society to promote interdisciplinary research and partner with other Societies to bring both people and sectors together. In 2021, we will be leading on a series of meetings of the Learned Societies

Partnership on Antimicrobial Resistance (LeSPAR). Members will be invited to share their views and to discuss what future they see for the partnership. After a six-month 'foundation' period, LeSPAR will be evaluated and it will be decided whether it should remain a platform for learned societies to share information or if more resources should be invested to grow its capacities.



As we all know AMR is a vitally important area where we, as a Society, can have a huge input into research, publishing and policy. Unifying our voice, using the expertise within the membership is a great way to make a difference. I'm excited to see this develop.

Professor Paul Hoskisson, University of Strathclyde.

We have to take multiple approaches to address the issue of AMR, to see what works. It cannot be solved by tackling the problem from one perspective and with one group of stakeholders. The problem lies with all of us, as does the solution.

Professor Laura Bowater, University of East Anglia.

Forward look

Developing the Society's Champions scheme

The Champions scheme was established in 2014. By December 2020 we had 84 Champions across the world and across different disciplines. Champions have been an important element in our efforts to have a greater, more engaged presence where members are rather than being London-centric. As the Champions scheme has been in place for several years, and has grown organically in that time, it is appropriate to reflect on its progress so far, note how the scheme

has evolved over the years and determine its future direction in order to better deliver the Society's strategy and support the Champions themselves. Over 2021 a working group of members will consider the Champions scheme and feedback directly from Champions, to improve the programme and provide better recognition and support for these essential local representatives.

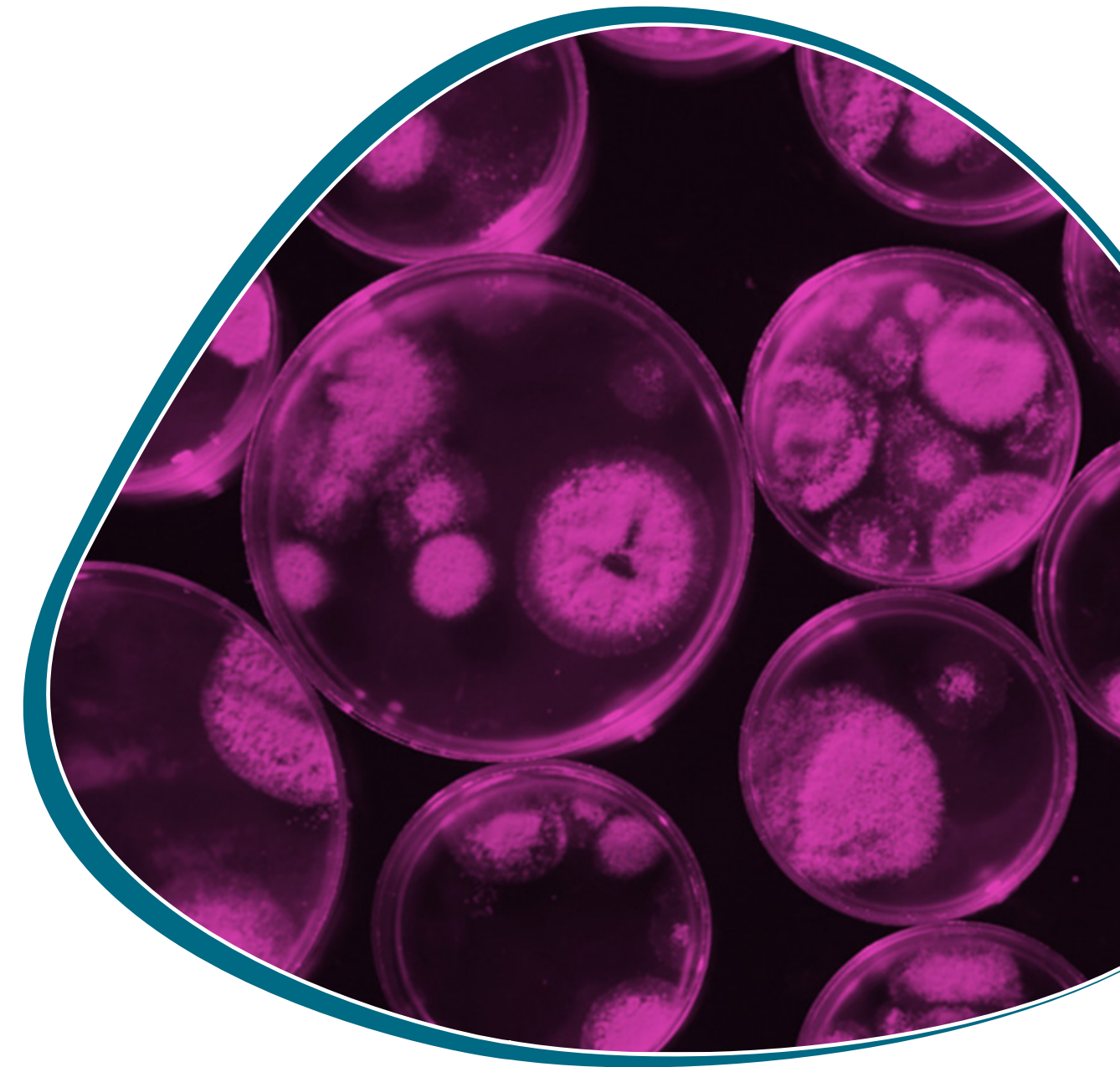


Forward look

Launching an open research platform

The open research platform project is an innovative and exciting publishing platform that will convert our sound science journal, *Access Microbiology*, to an open research platform by the end of 2021. As part of this we will be conducting extensive research with our community through focus groups, and we will use this feedback to develop the model further. Over the course of 2021 we will be working with our current peer review and platform providers to build

the new platform, which will include the ability to use AI tools during the submission process to improve the author's work, and the posting of all article versions and associated peer reviews publicly. In keeping with the platform's transparent ethos, we will be publishing the results of our focus groups, as well as providing a regular blog series to update the community and presenting a short webinar at Annual Conference Online 2021.



Risk management

A vital element to ensuring our sustainability is the diligent and prudent management of risk. Council has identified the specific risks that may be faced by the charity and put in place policies to mitigate them. The Audit, Risk and Evaluation Committee, launched in 2019, includes external members and two members of Council with responsibility for the detailed examination of risk. One of its duties is to identify the major risks that Council needs to consider. The Committee developed an improved critical risk register, which was launched in 2020, with 10 broad categories of risk rather than a long list of more specific challenges. The principal risks which Council has identified are:

- Failure to manage relationships
- Failure to diversify income
- Inertia or unwillingness to change
- Failure to keep pace with the external environment
- Loss of members, authors and /or readers to competing groups
- Failure to manage reputation
- Failure to nurture existing business
- Failure to communicate or implement strategy
- Failure to manage themes of different groups
- Failure to operate effectively and efficiently

Council's usual process is to review the critical risk register twice a year, following detailed scrutiny and proposed amendment of the register by the senior staff, but due to the circumstances in 2020, Council reviewed the risk register at each of its meetings throughout the year and the Audit, Risk and Evaluation Committee carried out an additional examination of the register, concluding it was a robust assessment of risks, even in light of the pandemic.

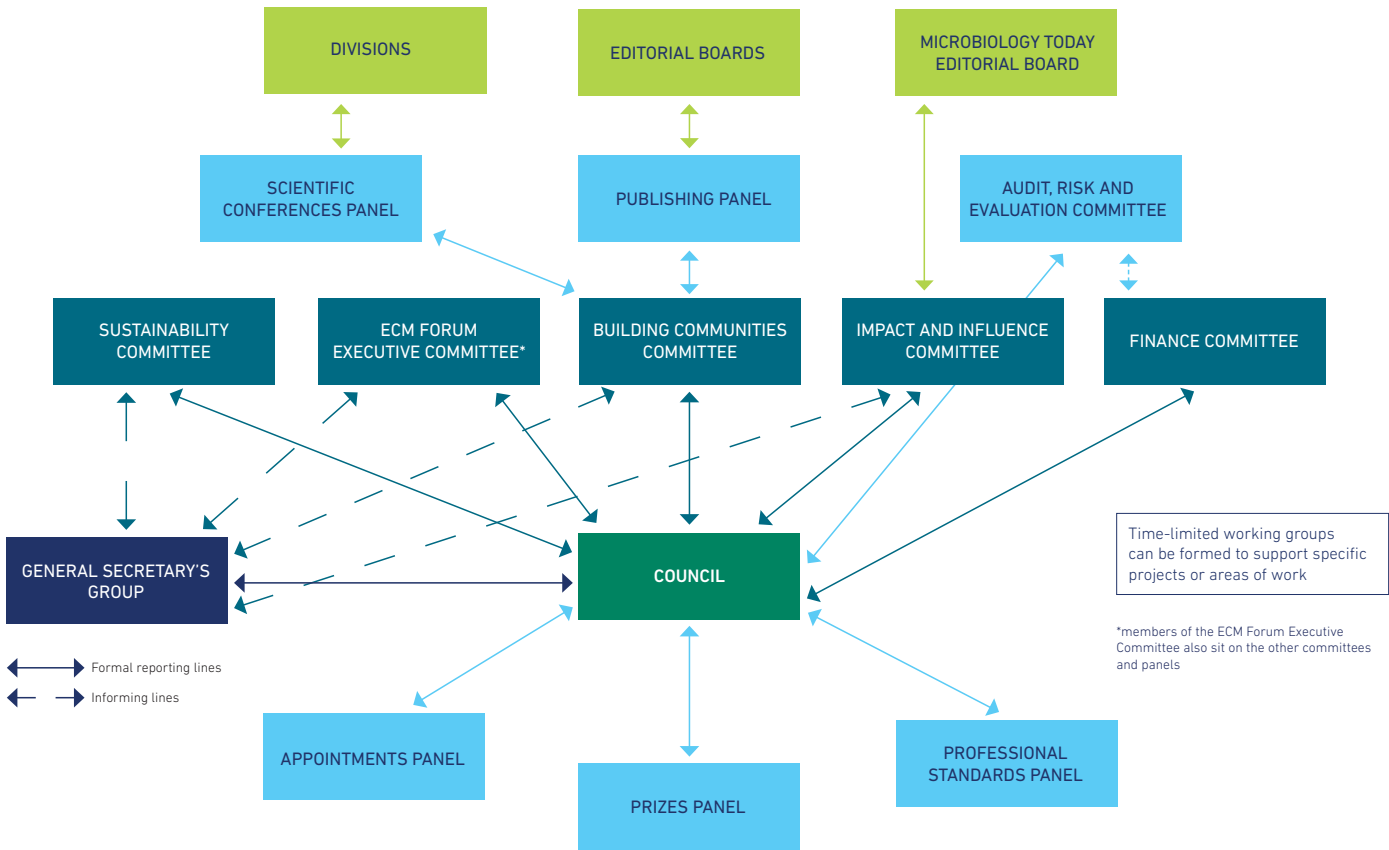
Income and expenditure

The Society continues to be highly dependent on its journal subscriptions for its main source of income. In 2020, the Society piloted a new business model called Publish and Read, where in return for a fee, institutions get access to our journal content and authors have unlimited opportunity to publish in our journals. This was in response to the push towards Open Access, known as Plan S, by a coalition of funding bodies. We also worked to mitigate this risk by ensuring our Open Access policies were compliant with even the most stringent funder mandates and further engaging with the Open Access policy community to influence the development of pragmatic guidelines around an open publishing future.

Structure, governance and management

The Microbiology Society is a company limited by guarantee, first incorporated in 1972, and a registered charity with the charitable object of advancing the art and science of microbiology. Its governing document comprises the Articles of Association, which incorporates the Memorandum of Association. These documents are all available on the Society's website. The Trustees have given careful consideration to the Charity Commission's public benefit guidance in defining the Society's Vision and Mission statements and in ensuring that the Society continues to achieve the advancement of science and of education.

The Society is led by a Council who are the Trustees of the charity and the directors of the company. Council is made up of three Executive Officers (President, Treasurer and General Secretary), five elected members and seven co-Chairs of three strategic committees: Building Communities Committee, Impact and Influence Committee, Sustainability Committee, and the Early Career Microbiologists' Forum Executive Committee. The Treasurer is the Chair of the Finance Committee. We also have an Audit, Risk and Evaluation Committee with an external independent Chair, which reports to Council annually.



Structure, governance and management

The Executive Officers and Chairs of Committees are appointed by Council. The Society continually reviews the process for recruitment for these positions, balancing the need for an open and transparent process, provision for equality, diversity and inclusion, and the importance of engaging suitable and motivated individuals. For all Executive Officer posts and Committee Chairs, there is an open call for nominations from the eligible categories of membership. Nominations are then reviewed by an appointments panel, comprising members of Council, and chaired by the General Secretary. The panel may also approach and invite nominations from potential candidates. The panel brings recommendations to the full Council for consideration before appointment. In the case of the President, a formal, anonymous vote is undertaken by Council for those candidates considered suitable by the appointments panel. In the case of Elected Members of Council, nominations are also sought from the membership and candidates elected via open election. The Chair of the Early Career Microbiologists' Forum is elected by the members of the Forum.

- Professor Judith Armitage took office as President on 1 January 2019.
- Professor Ian Roberts stepped down as Treasurer on 31 December 2020 and Professor Robin May took

office on 1 January 2021.

- Professor Mark Harris took office as General Secretary on 1 January 2020.

All newly appointed or elected members of Council receive induction information and are required to complete a declaration that they are not disqualified from serving as company directors and charity trustees. Members of Council also complete a Register of Interests form and abide by the Society's policy on potential conflicts of interest. The Society provides short training sessions to Council members on their duties and responsibilities as trustees and directors, and governance best practice as well as providing access to external governance training courses and supporting Council members to attend these. Council normally meets quarterly to transact the business of the Society, but in 2020 met five times in March, July, September, November and December. Committee members provide knowledge and expertise to oversee and inform delivery of relevant projects. The Committees are formed of members of the Society who are elected to positions by the full membership. Each Committee also has provision to co-opt members who can be non-members if the Committee identifies particular skills requirements. The Early Career Microbiologists' Forum Executive Committee is supported by the wider Early Career

Microbiologists' Forum to ensure early career members can help shape the future of the Society. The Divisions of the Society feed into the Building Communities Committee via the Scientific Conferences Panel to ensure coverage from a range of microbiological areas in the meetings programme. Three of these are taxonomically defined, dealing with Eukaryotic microbes, Prokaryotes and Viruses. The Society also has an Irish Division to oversee its activities in Ireland. The Society's journal Editors-in-Chief and Deputy Editors-in-Chief form the Publishing Panel, which reports into the Building Communities Committee and is responsible for advising on the publishing strategy and overseeing the delivery of the operational aspects of the journals programme. Members of Council, Committees and Divisions serve on a voluntary basis with no remuneration but claim reimbursement of expenses incurred whilst on Society business. The day-to-day management of Society business is delegated to the Chief Executive, supported by the Senior Management of the Society. During 2020 there were three directors (until November 2020), covering Members' Programmes and Strategy; Technology; and a Chief Operations Officer. The Society employs over 45

staff; staff names, job titles and key contact details can be found on the Society website. All salaries, including those of key management personnel, are reviewed and benchmarked by reference to external agencies as well as being regularly reviewed by the Finance Committee. It is the aim of the Society to attract highly talented individuals who are motivated to work in the charity and scientific sectors. In order to support the new governance structure and to better enable the delivery of our strategic objectives, Council agreed some staff structure changes in 2020, which included the creation of a new Associate Director level and two new Associate Directors; the Associate Director of Members Programmes and the Associate Director of Communications, Brand and Marketing. The Society's remuneration policy is the same for all members of staff, including the Chief Executive. Remuneration for staff is reviewed by the Finance Committee in March each year, and if a percentage change is recommended and approved by the Society's Council this is implemented from April of each year. In deciding on the percentage change, the Finance Committee and Council consider a whole range of factors, including affordability and inflation rates. Salaries are regularly benchmarked against sector norms to ensure they remain in line.

Financial Review

Results for the year

The Society’s results for the year are set out in detail in the statement of financial activities on page 112, which incorporates the income and expenditure account. Council has reviewed the results for the year and the position at the year end and considers them to be satisfactory.

The principal funding sources have continued to be income from sale of subscriptions and Publish and Read access to the Society’s publications, investment income and membership subscriptions. In 2020 following the cancellation of several Society’s events, income from event registration fees and exhibitor and sponsorship fees was significantly reduced. The Society has continued expenditure on journal publishing, conferences and events, grants, policy and membership activities.

It is the objective of the Society over a period of time to utilise each current year’s net income after providing for non-recurring items and, as planned, ended 2020 with a surplus against the main operating budget of £102,317. However, following a review of the Society’s reserves in 2018, a plan was agreed to spend down £1,783,573 of reserves, which commenced in 2018. The expenditure in 2020 included investment in the Society’s technology (particularly to support the development of online events), fundraising activities, member activities, the Society’s 75th Anniversary and staffing to support these. The overall outturn for 2020 therefore is -£584,000.

Reserves policy

It is the policy of Council to maintain sufficient funds to meet its strategic objectives contained in its 5-year strategic plan 2018–2022. The reserve is intended to provide a source of funds for situations such as a change in circumstances, a sudden increase in expenses, unanticipated loss in funding, or uninsured losses.

The current reserves policy has a target reserves figure of £7,650,000. Actual free reserves are £11,231,000. The target minimum reserves level is equal to 2 years, operating costs for publishing operations plus 1-year operating costs for all other activities. The calculation includes all recurring, anticipated expenditure such as salaries and benefits, the programme of current activities and ongoing professional services, but is unusual for 2020 due to lower than expected turnover caused by the impact of the pandemic, coupled with a significant return from the investment portfolio as at 31 December 2020. The reserve may also be used for one-time, non-recurring opportunities that will build long-term capacity, such as research and development, investment in infrastructure or collaboration opportunities. We are investing our reserves in the following activities, which span the 5 years of the 2018–2022 strategy: 75th Anniversary activities; investments in technology to support the publishing process; investment in physical infrastructure such as IT; and investment in people, both our members,

through engagement activities, and staff.

The Society has not engaged in public fundraising in 2020 or in previous years and does not use professional fundraisers or commercial participators. Council modelled scenarios and developed and analysed the Society’s long-term financial forecast before carrying out a detailed evaluation of the potential risks to its income, of which 85% comes from journal sales. The changing external environment in this area, including external pressure to provide all content as open access, remains a significant risk, and the target reserves level was developed to take into consideration the fact that a radical change to the current publishing model would take time to take effect and would require additional investment.

The target amount will be calculated each year after approval of the annual budget, reported to the Finance Committee and Council. The Council of the Microbiology Society will carry out a full review of this policy every three years or more frequently if income changes significantly.

The reserves will be funded with surplus unrestricted operating funds. The Council of the Microbiology Society may from time to time direct that a specific source of revenue be set aside for reserves. Examples may include one-time gifts or donations, special grants, or special appeals.

The Council of the Microbiology Society confirm that there are no material uncertainties in relation to going to concern in the foreseeable future.

Investment policy and objectives

Following the development of an explicit Investment Policy document in 2014 and a review of the Society’s investment managers in 2019, the Society’s assets are now invested primarily in a portfolio of good-quality funds worldwide that are chosen for both the long-term value of their shares and their profitability and their potential to generate dividend income. The objective is to maximise the long-term total return of the fund, subject to certain limitations and restrictions. In addition, during 2014, the Society appointed Asset Risk Consultants (ARC) to assist in reviewing the Society’s current investment management and support in appointing new managers when appropriate. ARC attend the quarterly Finance Committee meetings to review the performance of the investments and Tilney Investment Managers also attend each meeting.

Restrictions on distribution

The Memorandum of Association prohibits the distribution of income and property of the Society to the members. Upon dissolution or winding up of the Society, the assets shall be given or transferred to some similar institution having objectives similar to those of the Society.

Tax status

The Society is entitled to exemption from taxation on income and capital gains to the extent that its funds are applied for charitable purposes.

Statement of responsibilities of the Trustees

The Trustees (who are also Directors of Microbiology Society for the purposes of company law) are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice). Company law requires the Trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charitable company and of the incoming resources and application of resources, including the income and expenditure, of the charitable company for that period. In preparing these financial statements, the Trustees are required to:

- Select suitable accounting policies and then apply them consistently

- Observe the methods and principles in the Charities SORP
 - Make judgements and estimates that are reasonable and prudent
 - State whether applicable UK Accounting Standards and statements of recommended practice have been followed, subject to any material departures disclosed and explained in the financial statements
 - Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in operation
- The Trustees are responsible for keeping adequate accounting records that disclose with reasonable accuracy at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies

Act 2006. They are also responsible for safeguarding the assets of the charitable company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities. In so far as the Trustees are aware:

- There is no relevant audit information of which the charitable company's auditor is unaware
- The Trustees have taken all steps that they ought to have taken to make themselves aware of any relevant audit information and to establish that the auditor is aware of that information

The Trustees are responsible for the maintenance and integrity of the corporate and financial information included on the charitable company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Auditor

Sayer Vincent LLP was appointed as the charitable company's auditor during the year and has expressed its willingness to continue in that capacity. The Trustees' Annual Report has been prepared in accordance with the special provisions applicable to companies subject to the small companies' regime. The Trustees' Annual Report has been approved by the Trustees on 9 July 2021 and signed on their behalf by:



Name: Professor Judith Armitage
Title: President



Name: Professor Robin May
Title: Treasurer

Independent auditor’s report to the members of Microbiology Society

Opinion

We have audited the financial statements of Microbiology Society (the 'charitable company') for the year ended 31 December 2020 which comprise the statement of financial activities, balance sheet, statement of cash flows and notes to the financial statements, including significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion, the financial statements:

- Give a true and fair view of the state of the charitable company's affairs as at 31 December 2020 and of its incoming resources and application of resources, including its income and expenditure, for the year then ended
- Have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice
- Have been prepared in accordance with the requirements of the Companies Act 2006, the Charities and Trustee Investment (Scotland) Act 2005 and regulation 8 of the Charities Accounts (Scotland) Regulations 2006 (as amended)

Basis for opinion

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

Conclusions relating 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 Microbiology Society'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 other information comprises the information included in the trustees' annual report, other than the financial statements and our auditor's report thereon. The trustees are responsible for the other information contained within the annual report. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Opinions on other matters prescribed by the Companies Act 2006

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

- The information given in the trustees' annual report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- The trustees' annual report has been prepared in accordance with applicable legal requirements.

Independent auditor’s report to the members of Microbiology Society

Matters on which we are required to report by exception

In the light of the knowledge and understanding of the charitable company and its environment obtained in the course of the audit, we have not identified material misstatements in the Trustees’ annual report. We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 and the Charities Accounts (Scotland) Regulations 2006 (as amended) require us to report to you if, in our opinion:

- Adequate accounting records have not been kept, or

returns adequate for our audit have not been received from branches not visited by us; or

- The financial statements are not in agreement with the accounting records and returns; or
- Certain disclosures of trustees’ remuneration specified by law are not made; or
- We have not received all the information and explanations we require for our audit; or
- The trustees were not entitled to prepare the financial statements in accordance with the small companies regime and take advantage of the small companies’ exemptions in preparing the trustees’ annual report and from the requirement to prepare a strategic report.

Responsibilities of trustees

As explained more fully in the statement of trustees’ responsibilities set out in the trustees’ annual report, the trustees (who are also the directors of the charitable company for the purposes of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the 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 charitable company’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the charitable company or to cease operations, or have no realistic alternative but to do so.

Auditor’s responsibilities for the audit of the financial statements

We have been appointed as auditor under section 44(1) (c) of the Charities and Trustee Investment (Scotland) Act 2005 and under the Companies Act 2006 and report in accordance with regulations made under those Acts. 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.

Independent auditor’s report to the members of Microbiology Society

Auditor’s responsibilities for the audit of the financial statements

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 are set out below.

Capability of the audit in detecting irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, our procedures included the following:

- We enquired of management and the audit, risk and evaluation committee, which included obtaining and reviewing supporting documentation, concerning the charity’s policies and procedures relating to:
 - Identifying, evaluating, and complying with laws and regulations and whether they were aware of any instances of non-compliance;

- Detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected, or alleged fraud;
- The internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations.
- We inspected the minutes of meetings of those charged with governance.
- We obtained an understanding of the legal and regulatory framework that the charity operates in, focusing on those laws and regulations that had a material effect on the financial statements or that had a fundamental effect on the operations of the charity from our professional and sector experience.
- We communicated applicable laws and regulations throughout the audit team and remained alert to any indications of non-compliance throughout the audit.
- We reviewed any reports made to regulators.
- We reviewed the financial statement disclosures and tested these to supporting documentation to assess compliance with applicable laws and regulations.
- We performed analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud.

- In addressing the risk of fraud through management override of controls, we tested the appropriateness of journal entries and other adjustments, assessed whether the judgements made in making accounting estimates are indicative of a potential bias and tested significant transactions that are unusual or those outside the normal course of business. Because of the inherent limitations of an audit, there is a risk that we will not detect all irregularities, including those leading to a material misstatement in the financial statements or non-compliance with regulation. This risk increases the more that compliance with a law or regulation is removed from the events and transactions reflected in the financial statements, as we will be less likely to become aware of instances of non-compliance. The risk is also greater regarding irregularities occurring due to fraud rather than error, as fraud involves intentional concealment, forgery, collusion, omission or misrepresentation. A further description of our responsibilities is available on the Financial Reporting Council’s website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor’s report.

Use of our report

This report is made solely to the charitable company’s members as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and section 44(1) (c) of the Charities and Trustee Investment (Scotland) Act 2005. Our audit work has been undertaken so that we might state to the charitable company’s members those matters we are required to state to them in an auditor’s report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charitable company and the charitable company’s members as a body, for our audit work, for this report, or for the opinions we have formed.

Signed:



Joanna Pittman (Senior statutory auditor)
Date
for and on behalf of Sayer Vincent LLP, Statutory Auditor
Invicta House, 108-114 Golden Lane, LONDON, EC1Y 0TL

Sayer Vincent LLP is eligible to act as auditor in terms of section 1212 of the Companies Act 2006

Statement of financial activities (incorporating the income and expenditure account) For the year ended 31 December 2020

	Notes	2020 total £'000	2019 total £'000
Income from:			
Donations and legacies		22	
Charitable activities			
Publishing		3,548	3,452
Professional development (includes membership)		217	225
Scientific conferences		7	779
Other income		6	42
		3,800	4,498
Investments		88	270
Other income: Profit on disposal of fixed assets	10		1,477
Total income		3,888	6,245
Expenditure on:			
Charitable activities			
Publishing		1,690	1,868
Members' programmes		1,636	2,196
Grants and awards	2	187	244
Raising awareness and influencing policy		887	1,040
		4,400	5,348
Raising funds			
Investment management costs		72	67
Total expenditure	6	4,472	5,415
Net income/(expenditure) before net gains (losses) on investments		(584)	830
Net gains/(losses) on investments	11	1,434	1,041
Other recognised gains: foreign exchange		53	
Net income/(expenditure) and movement in funds for the year		903	1,871
Fund balances brought forward		15,148	13,277
Fund balances carried forward		16,051	15,148

All the above results relate to continuing activities.
The charity had no restricted income or expenditure in the year or the previous year.

The annexed notes form part of these financial statements
Company Registration Number: 1039582

Balance sheet As at 31 December 2020 Microbiology Society (Limited by guarantee no. 1039582)

	Notes	2020 total £'000	2019 total £'000
Fixed assets			
Intangible assets	9	221	334
Tangible assets	10	4,600	4,602
Investments	11	10,702	9,745
		15,523	14,681
Current assets			
Debtors	12	401	530
Cash at bank and in hand (including deposits)		2,275	2,445
		2,676	2,975
Creditors: amounts falling due within one year		2,148	2,508
		528	476
Net current assets/(liabilities)		528	476
Net assets		16,051	15,148
Unrestricted funds			
General	15	16,051	15,148
Total funds		16,051	15,148

These financial statements have been prepared in accordance with the special provisions for small companies under part 15 of the Companies Act 2006.

Approved and authorised for issue on 9 July 2021 and signed on behalf of Council.



Name: Professor Judith Armitage
Title: President



Name: Professor Robin May
Title: Treasurer

The annexed notes form part of these financial statements
Company Registration Number: 1039582

Statement of cash flows

For the year ended 31 December 2020

	2020 £'000	2019 £'000
Cash flows from operating activities:		
Net income/(expenditure) for the year before net gains/losses on investments (as per the statement of financial activities)	(584)	830
Adjustments for:		
Amortisation charges	113	116
Depreciation charges	97	40
Dividends and interest from investments	(88)	(270)
Profit on the sale of fixed assets	-	(1,477)
(Increase)/decrease in debtors	129	(100)
(Decrease) in creditors	(360)	(7)
Net cash (used in) operating activities	(693)	(868)
Cash flows from investing activities:		
Dividends and interest from investments	88	270
Purchase of intangible assets	-	(37)
Purchase of fixed assets	(95)	(4,633)
Proceeds from sale of fixed assets	-	3,460
Net sales of investments	477	2,178
Net cash (used in)/provided by investing activities	470	1,238
Change in cash and cash equivalents in the year	(223)	370
Cash and cash equivalents at the beginning of the year	2,445	2,075
Change in cash and cash equivalents due to exchange rate movements	53	-
Cash and cash equivalents at the end of the year	2,275	2,445

The annexed notes form part of these financial statements
Company Registration Number: 1039582

Notes to the financial statements

Year ended 31 December 2020

Basis of accounting

These financial statements have been prepared under the historical cost convention as modified by the revaluation of investment property and fixed asset investments, and are prepared in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102). The Charity is a public benefit entity for the purposes of FRS 102 and therefore has also prepared the financial statements in accordance with the Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (The FRS 102 Charities SORP), the Charities Act 2011, the Charities and Trustee Investment (Scotland) Act 2005 and the Charities Accounts (Scotland) Regulations 2006.

Going Concern

The trustees have assessed whether the use of the going concern basis is appropriate and have considered possible events or conditions that might cast significant doubt on the ability of the Charity to continue as a going concern. The trustees have made this assessment for a period of at least one year from the date of approval of the financial statements. The trustees have given due consideration to the effects of the Covid-19 pandemic plus other major factors, such as Brexit or the Society's changing business model; that may have an impact on the Society both financially and operationally. The Society continues to operate very well despite the ongoing effects of the pandemic with journal income for 2021 in line with 2020 despite expectations that the pandemic may have a negative effect on this income for 2021. All events the Society had planned to deliver in 2021 have been converted to digital events, including the flagship annual conference. Income from events for 2021 is therefore expected to be lower than it would have been had it been possible to hold them in person. However, the Council of the Society has significant reserves to enable it to absorb this reduction in income. The trustees have concluded that there is a reasonable expectation that the Charity

has adequate resources to continue in operational existence for the foreseeable future. The Charity therefore continues to adopt the going concern basis in preparing its financial statements. The presentational currency used is British pound sterling, and balances are rounded to the nearest £1,000. A separate income and expenditure account has not been prepared as the information required by the Companies Act 2006 is given in the statement of financial activities and in the notes to the financial statements.

Critical accounting judgements and key sources of estimation uncertainty

In the application of the charity's accounting policies, Trustees are required to make judgements, estimates, and assumptions about the carrying values of assets and liabilities that are not readily apparent from other sources. The estimates and underlying assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects the current and future periods.

The key estimates used in the preparation of these Financial Statements are the depreciation rate and amortisation rate of fixed assets (as detailed later in this note) and the recoverability of trade debtors. In the view of the Trustees, there are no other key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

Financial instruments

The company has elected to apply the provisions of Section 11 'Basic Financial Instruments' and Section 12 'Other Financial Instruments Issues' of FRS 102 to all of its financial instruments. Financial instruments are recognised in the company's balance sheet when the company becomes party to the contractual provisions of the instrument. Financial assets and liabilities are offset, with the net amounts presented in the financial statements, when there is a legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis or to realise the asset and settle the liability simultaneously.

With the exceptions of prepayments and deferred income all other debtor and creditor balances are considered to be basic financial instruments under FRS 102.

Intangible assets

Assets with a cost in excess of £1,000 and which have an expected useful life of over one year are capitalised.

Amortisation is provided on all intangible assets at rates calculated to write off the cost, less the estimated residual value, of each asset over its expected useful life, as follows:

- CRM - at 20% p.a. on a straight line basis
- Website - at 25% p.a. on a straight line basis

Tangible fixed assets

Assets with a cost in excess of £1,000 and which have an expected useful life of over one year are capitalised.

Depreciation is provided on all fixed assets at rates calculated to write off the cost, less the estimated residual value, of each asset over its expected useful life, as follows:

- Office equipment, fixtures and fittings – 25% or 20% p.a. on a straight line basis
- Freehold property – building 2% p.a. on a straight line basis
Fit out costs at 5% p.a. on a straight line basis
Freehold land is not depreciated

Fixed asset investments

The fixed asset investments are carried at market value, The fixed asset investments are carried at market value based on the bid price at the balance sheet date. Unrealised and realised gains are both recognised in the Statement of the Financial Activities.

Investment income includes the appropriate tax deductions and tax credits and interest accrued on all fixed-interest stocks.

Income

Income is recognised in the Statement of Financial Activities in the period in which the Society is entitled to the income, it can be measured reliably and receipt is probable. Income from membership and publication subscriptions is included in the statement of financial activities in the period to which it relates. Subscription receipts in advance are recorded as deferred income. Income from memberships, publications and conferences is recognised in the period to which it relates. Any amount received in advance is deferred. Investment income is recognised on an accruals basis.

Expenditure

All expenditure is accounted for on an accruals basis and has been classified under headings that aggregate all costs related to the category. Grants payable are recognised where the grant has been approved and the recipient has been informed it has been awarded. Where costs cannot directly be attributed to particular headings they have been allocated to activities on a basis consistent with the use of resources. In particular, support costs are apportioned to direct activities based on the direct staff costs allocated to those activities.

Foreign currencies

Transactions in foreign currencies, principally US dollars, are recorded at the rate ruling at the date of the transaction. Assets and liabilities denominated in foreign currencies are converted at the year end exchange rate. All exchange differences are reflected in the income and expenditure account.

Pensions

The Society operates defined contribution pension arrangements, the assets of which are held separately from those of the Society in independently administered funds. Contributions are charged to the income and expenditure account as they become payable.

Notes to the financial statements

Year ended 31 December 2020

2. Grants awarded

	2020 £'000	2019 £'000
Institutional grants		
Harry Smith Vacation Studentships (24 grants, 2019: 28)	61	51
Education and Outreach Grants (5 grants to fund microbiology promotion, 2019: 7)	5	5
ECM Forum Event Fund (0 grants, 2019: 6)	-	3
International Development Fund (4 grants to fund microbiology training in developing countries, 2019: 3)	20	15
Total institutional grants	86	74
Individual grants		
Research Visit Grants (4 grants for research visits, 2019: 9)	10	28
Society Conference Grants (357 grants for travel and accommodation at Society meetings,)	87	91
Travel Grants (18 grants, 2019: 91)	8	49
Microbiology in Society Award (2 grant, 2019: 1)	9	5
Total grants to individuals	114	173
Grants approved in the prior year not taken up	(13)	(3)
Total grants	187	244

3. Turnover

At 31 December 2020, Included within Publication Income and Membership fees is overseas income amounting to 80% of the total income generated from these activities.

4. Expenditure

	2020 £'000	2019 £'000
Costs include:		
Auditor's remuneration: audit fees	16	17
Amortisation	113	116
Depreciation	97	40

5. Expenses reimbursed to members of Council

7 (2019: 13) members of Council were reimbursed expenses of £2,871 (2019: £10,426) relating to travel and subsistence.

Notes to the financial statements

Year ended 31 December 2020

6. Total expenditure

CURRENT YEAR

	Staff costs £'000	Other costs £'000	Support allocation £'000	2020 £'000	2019 £'000
Publishing	670	478	542	1,690	1,868
Members' programmes	607	538	491	1,636	2,196
Grants and awards	-	187	-	187	244
Raising awareness and influencing policy	425	118	344	887	1,040
Investment management	-	72	-	72	67
Support	602	775	(1,377)	-	-
Total expenditure	2,304	2,168	-	4,472	5,415

Support costs are apportioned to direct activities based on the direct staff costs allocated to those activities.

PRIOR YEAR

	Staff costs £'000	Other costs £'000	Support allocation £'000	2019 £'000
Publishing	561	627	680	1,868
Members' programmes	538	1,006	652	2,196
Grants and awards	-	244	-	244
Raising awareness and influencing policy	372	217	451	1,040
Investment management	-	67	-	67
Support	524	1,259	(1,783)	-
Total expenditure	1,995	3,420	-	5,415

7. Support costs

	2020 £'000	2019 £'000
Governance costs		
Council and committee meetings and events	10	83
Audit fees	16	15
	26	98
Other support costs:		
Human resources	48	98
Premises and general office	109	425
Information technology	149	160
Professional and legal	169	285
Depreciation and charges	274	193
Staff costs	602	524
Total	1,377	1,783

Notes to the financial statements

Year ended 31 December 2020

8. Staff costs

	Notes	2020 £'000	2019 £'000
Salaries		1,810	1,609
Social security costs		189	158
Other pension costs	15	266	228
Redundancy		39	–
Total		2,304	1,995

The average monthly number of persons employed by the Society during the year was 47 (2019: 44).

No member of Council received any remuneration in respect of their services to the Society.

The number of employees whose emoluments amounted to over £60,000 in the year, not including pension contributions and employer National Insurance contributions, were as follows:

	2020 No.	2019 No.
£70,000 – £80,000	–	1
£80,000 – £90,000	2	1
£100,000 – £110,000	1	1
£110,000 – £120,000	1	1
	4	4

Contributions to the pension scheme on behalf of the employees noted above amounted to £69,853 (2019: £64,214).

The key management personnel of the Charity comprise the trustees, the Chief Executive and Senior Management team. The total employee benefits of the key management personnel, inclusive of employer pension contributions and employer National Insurance contributions, were £525,310 (2019: £473,335)

9. Intangible assets – CRM and Website

	Total £'000
Cost or valuation	
At 1 January 2020	584
Additions	–
Disposals	–
At 31 December 2020	584
Amortisation	
At 1 January 2020	250
Provided during the year	113
Released on disposal	–
At 31 December 2020	363
Net book value	
At 31 December 2020	221
At 31 December 2019	334

Notes to the financial statements

Year ended 31 December 2020

10. Tangible fixed assets

	Freehold land and buildings £'000	Office equipment, fixtures and fittings £'000	Total £'000
Cost or valuation			
At 1 January 2020	4436	202	4,638
Additions	95	–	95
Disposals	–	–	–
At 31 December 2020	4,531	202	4,733
Depreciation			
At 1 January 2020	17	19	36
Provided during the year	54	43	97
Released on disposal	–	–	–
At 31 December 2020	71	62	133
Net book value			
At 31 December 2020	4,460	140	4,600
At 31 December 2019	4,419	183	4,602

Notes to the financial statements

Year ended 31 December 2020

11. Investments

	2020 £'000	2019 £'000
Market value at 1 January	9,745	9,502
Additions at cost	9,555	2,474
Sales proceeds	(9,605)	(3,158)
Net gain/(loss) on revaluation	1,434	1,051
Net movement in cash	(427)	(124)
Market value at 31 December	10,702	9,745

	Cost		Market value	
	2020 £'000	2019 £'000	2020 £'000	2019 £'000
Equities	7,142	4,912	8,563	6,245
Bonds	797	1,454	811	1,490
Alternatives	1,569	1,857	1,205	1,468
Cash	123	542	123	542
	9,631	8,765	10,702	9,745

The following investments held on 31 December 2020 represented over 5% of the total investment portfolio at the year end:

	% of total portfolio holding
AMP Capital Global Companies Fund B GBP Acc	9.7%
Fundsmith Sustainable Equity Fund I Inc	9.3%
Findlay Park American GBP Unhedged	9.1%
GuardCap Global Equity Fund I GBP Inc	8.5%
Lindsell Train Global Funds plc - Lindsell Train Global Equity Fund D GBP Inc	8.2%
TB Evenlode Global Income Fund F Income GBP	8.1%
Morgan Stanley Investment Funds - Global Sustain Fund ZX	8.0%
Brown Advisory Global Leaders Fund Sterling Class SI Distribution	8.0%
Smithson Investment Trust plc	7.0%

Notes to the financial statements

Year ended 31 December 2020

12. Debtors

	2020 £'000	2019 £'000
Other debtors	85	173
Prepayments and accrued income	316	357
Total	401	430

13. Creditors

	2020 £'000	2019 £'000
Trade creditors	126	315
Sundry creditors	182	203
Other taxation and social security	55	47
Income received in advance (see Note 14)	1,785	1,943
Total	2,148	2,508

14. Income received in advance

	2020 £'000	2019 £'000
Institutional sales of publications in advance	1,726	1,882
Members' subscriptions in advance	69	61
Total	1,785	1,943
Balance at 1 January	1,943	2,112
Amount released to income	(1,943)	(2,112)
Amount deferred in the year	1,785	1,943
Balance at 31 December	1,785	1,943

Notes to the financial statements

Year ended 31 December 2020

15. Pensions

The Society operates defined contribution pension arrangements, the assets of which are held separately from those of the Society, in independently administered funds. The pension cost charged represents contributions payable by the Society to the funds amounting to £266K (2019 – £228k). At 31 December 2020, the amounts payable to the pension fund amounted to £Nil (2019 – £20k)..

16. Unrestricted fund – General

	2020	2019
	£'000	£'000
Balance at 1 January	15,148	13,277
Net (expenditure) / income before net gains on investments	(584)	830)
Net gains on revaluation of investment assets	1,434	1,041)
Other recognised gains:foreign exchange	53	–
Balance at 31 December	16,051	15,148

17. Financial Instruments

The year-end carrying value of financial assets and financial liabilities (measured at amortised cost, with the exception of investments which are measured at fair value), was as follows:

	2020	2019
	£'000	£'000
Financial assets measured at amortised cost	90	129
Financial liabilities measured at amortised cost	308	518

18. Related party transactions

There were no related party transactions in the year (2019: none).

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The Microbiology Society is a membership charity for scientists interested in microbes, their effects and their practical uses. It is one of the largest microbiology societies in Europe with a worldwide membership based in universities, industry, hospitals, research institutes and schools.

Our members have a unique depth and breadth of knowledge about the discipline. The Society's role is to help unlock and harness the potential of that knowledge.