



BRITISH  
PHARMACOLOGICAL  
SOCIETY

# ANNUAL REVIEW 2020



TODAY'S  
SCIENCE  
TOMORROW'S  
MEDICINES

# CONTENTS

About the Society	02	Prescribing safety assessment	22
Message from our President and Chief Executive	03	Our digital presence	23
Our year in numbers	06	Engagement	24
Meetings and events	08	Policy	26
Journals and publications	10	BPS Assessment	28
Employee wellbeing and development	12	Council, Committees and Groups	29
Equality, diversity and inclusion	14	Sponsors and donors	30
Careers, training and education	16	Prizes and awards	31
Clinical pharmacology	20	Finance	36

## ABOUT THE SOCIETY

The British Pharmacological Society is a collaborative, global community with members at its heart. Our vision is a world where pharmacology and therapeutics drive and support progress in science, medicine and healthcare.

Guided by our core principles and our blueprint for delivery, we are committed to achieving our long-term strategy by working closely with our membership and partners on a series of **strategic objectives**, designed to ensure maximum impact.

### These strategic objectives are:

- To set the agenda in education and skills; to support access and career progression; to support the next generation of learners undertaking education in pharmacology and clinical pharmacology; and to support pharmacology educators in their personal and professional development
- To be the leader in the dissemination of world-class research related to pharmacology and therapeutics
- To engage patients and partners in the NHS in our advocacy for fundamental and clinical research, as well as contributing to strategic leadership
- To sustain a skilled workforce that supports the development of novel therapeutics
- To lead the formation of valuable networks that reflect our position at the heart of the global pharmacology community
- To remove barriers to participation and success, while welcoming equality and celebrating diversity, and being inclusive in all we do
- To deliver clear, relevant and accessible advice to policy makers
- To nurture strategic partnerships across disciplines and sectors
- To define, monitor and respond to strategic areas of scientific priority



# MESSAGE FROM OUR PRESIDENT AND CHIEF EXECUTIVE OFFICER



**Professor Sir Munir Pirmohamed**  
President

## **Professor Sir Munir Pirmohamed, President**

During 2020, our members' work and our purpose as a Society was clearer than ever before. Pharmacologists have been at the centre of the response and recovery during the pandemic, from basic scientists to those in clinical and frontline roles or working in industrial and regulatory settings.

The Society's work influencing policy in 2020 centred around the role of pharmacology and clinical pharmacology in developing safe and effective therapeutics for COVID-19. Alongside the creation of a COVID-19 hub on the Society's website, the policy team developed position statements, including on the use of animal models for COVID-19, and submitted evidence to the House of Commons inquiry. The Society also coordinated member responses to media enquiries about therapeutics and regulation.

Throughout 2020, pharmacologists have been at the very heart of the advisory process, playing a crucial role in overcoming COVID-19 and its devastating global effects. I hope that this will inspire the next generation of scientists to aspire to a career in pharmacology. Our revamped career pages - and the exciting live interview initiative with AstraZeneca at Pharmacology 2020 - are just two ways in which the Society continued to communicate the vast and exciting opportunities that a pharmacology education provides.

One of the most valuable things the Society offers is facilitating connection between pharmacologists and the wider scientific community. In 2020, this became much more of a challenge as we could not meet in person safely. However, by working together as a strong staff and membership team, we were delighted to be able to continue this, albeit in a virtual format. Firstly, we launched our BPS Live webinar series. The series started with a webinar on the pharmacology of drugs for COVID-19. Then, thanks to the hard work of our meetings committee and meetings team, we reimaged Pharmacology 2020 into an online event and saw over 1,000 pharmacologists join us from around the globe over five days in December. We will learn from these successes, continuing initially with a programme of virtual meetings and restarting our training programme.

I hope you enjoy reading our annual review and learning more about the Society's varied and wide-reaching activities in 2020.



**Rachel Lambert-Forsyth**  
Chief Executive Officer

## **Rachel Lambert-Forsyth, Chief Executive Officer (CEO)**

I am delighted to share our 2020 annual review with you and I am proud of how much we have achieved in partnership with our members and staff across the year, despite the unanticipated challenges of 2020. I want to take this opportunity to acknowledge the support I have received from our Council and volunteers across our committees

and groups in this unusual first year as your CEO. Your advice, guidance and input has ensured the Society has continued to promote and advance all disciplines of pharmacology from discovery through to clinical application of medicines, for the benefit of Society throughout the global pandemic.

2020 became a year that changed the way we live, work, communicate, and connect with one another. Over the year we had to adapt to the ever-changing circumstances. We have tried to listen carefully to understand the challenges our members are facing, to make sure that the Society has kept its membership at the very heart of everything it does.

Many of our members pivoted to focus on tackling the pandemic, dropping, or dramatically changing their regular work or study to help each other and to understand how we could overcome the global crisis. As you will read in this review, as a Society we supported these impressive efforts in a number of ways, including facilitating online connection and sharing resources and information.

Like most organisations, our staff team also saw extreme changes to their ways of working. On 16 March 2020, we closed the doors to the Schild Plot, converted to remote working arrangements, and asked all staff to work from home for the rest of the year. I want to say thank you to our amazing employees, whose resilience and perseverance during this year has been astounding.

It has been an absolute pleasure to get to know our members and partners. I would like to express my deepest thanks and gratitude to our incredible members - your work is so important. I hope you take pleasure in reading our annual review. I would love to hear your views on how we have performed and your ideas for how we can support you. If you would like to get more involved with the Society, look out for opportunities in our various Committees and groups over the next year.

# OUR 2020



## JANUARY

Start of strategic partnership with ELRIG UK

In January, we celebrated the start of a two-year alliance with the European Laboratory Research & Innovation Group (ELRIG UK). The alliance brings together Society and ELRIG communities, providing access to new opportunities for scientific exchange and collaboration between industry, academia and the clinic.



## FEBRUARY

AJ Clarke studentships announced and Prescribing Safety Assessment begins

In February, we welcomed two new AJ Clarke students. Named after Professor Alfred Joseph Clarke (a leading UK pharmacologist during the 1930s), the AJ Clarke studentships provide talented students with funding and support their PhDs in pharmacology. February also saw the start of the delivery of the Prescribing Safety Assessment (PSA), which - due to the pandemic - had to be rolled out remotely. This made sure that thousands of new doctors were set up to prescribe medicines safely, at a time when we needed them more than ever.



## MARCH

New CEO and our response to COVID-19

In March, there were huge changes, not least because the Society welcomed our new CEO, Rachel Lambert-Forsyth. Rachel joined the team just as the virus began to substantially affect all our lives in the UK, so she worked swiftly with Directors to put together a proactive plan to support our members and staff team. This included the launch of our online COVID Hub – a space on our website where members could access the latest accurate information and resources, share information and stay connected with the Society.



## APRIL

eLearning resource launch

In 2020, the need for online learning tools was stronger than ever, and the Society was excited to launch a new eLearning resource in April. Working with expert educators, the team produced a new online resource focussing on experimental design and the importance of experimental blinding.



## MAY

Launch of the Community

As we could not meet in person, an area of concern for many of our members, especially those in early career stages, was networking. In May, we launched the online Community – an online space for our members to explore ideas, build supportive relationships, develop collaborations, and share research.



## JUNE

Cheltenham Science Festival

In June, the Society joined the Cheltenham Science Festival team for another exciting first - Cheltenham Science Festival@ Home. Our President, Professor Sir Munir Pirmohamed joined Vivienne Parry and Joanne Hackett for a fast-paced panel event exploring DNA testing, pharmacogenomics and the rise in popularity of at-home DNA testing kits. Over 800 people from around the world joined the DNA Testing: All In The Genes event to understand more about what our genetic information has the potential to tell us about our health, and the potential for pharmacogenomics to transform the NHS and revolutionise patient treatment.





## JULY

### Links Day

Parliamentary Links day is an annual event organised by the Royal Society of Biology, with support from our Society, that brings together scientists and MPs to discuss important topics. The 2020 event was digital for the first time and the theme was 'Public trust in Science', due to the increased public interest in science driven by the COVID-19 pandemic.



## AUGUST

### Supporting educators and students returning to studies

The Society's Education and Training Committee and staff team focussed on providing support to current and prospective pharmacology students receiving their exam results in August. The team brought together a series of free educational resources to help students and educators. Resources included eLearning and online assessment content.



## SEPTEMBER

### Careers pages

In September, we were excited to launch a series of new web pages and resources to help answer questions about pharmacology careers, with information tailored to different groups and career stages. You can find information for younger children (ages 7+) interested in where medicines come from, through to information for postgraduate and early career pharmacologists.



## OCTOBER

### BPS LIVE

In October, the Society's Journals – The British Journal of Pharmacology and the British Journal of Clinical Pharmacology – brought together an expert panel for 'The Pharmacology of Drugs for COVID-19' – the first in the BPS LIVE series of webinars. The event attracted 573 viewers from 46 countries.



## NOVEMBER

### EDI launch

The Society is committed to placing equality, diversity and inclusion at the heart of pharmacology, whether in terms of opportunities for successful careers (in pharmacology or at the Society) or in terms of benefitting from pharmacology research. Building on ongoing strategic aims, we launched our vision for equality, diversity and inclusion in November 2020.



## DECEMBER

### Pharmacology 2020

As we came to the end of the year, we were so excited to bring the global pharmacology community together for the first ever online annual meeting. The Meetings Committee and staff team co-created a brilliant five-day programme of online activity, including cutting-edge research, networking, social activities and wellbeing content.

# OUR YEAR IN NUMBERS

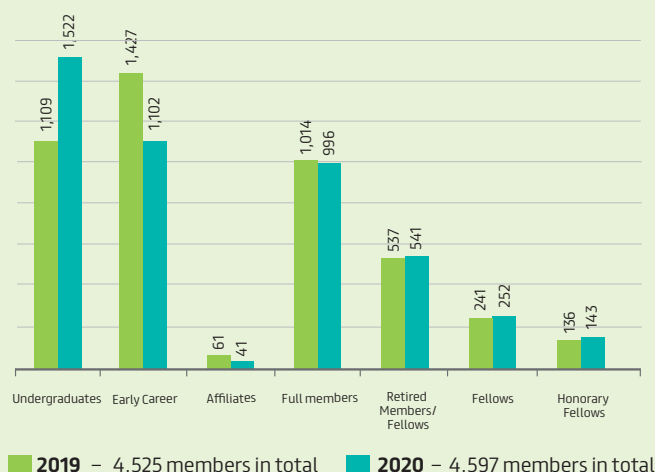
## Membership

### Update on our membership strategy

After making a start on our new membership strategy in 2019, in 2020 we began to take a closer look at who our membership and wider audiences are. This work was important so that we could improve the experience of using our website for current and prospective members, and other people who engage with the Society. We quickly identified that the best way to do this is to develop 'personas' or characters that represent typical user journeys for our website. This will help us to guide users to information that is relevant to them. This work will be finalised in 2021. We are continuing discussions about engagement with industry and the community of our strategic partner, ELRIG UK.

### Member numbers

The total membership on 31 December 2020 was 4,597, representing an increase of 2% in the space of a year. The Society was sad to report the deaths of 19 members.



### OF THOSE 4,597 MEMBERS:

**57%**

were early career pharmacologists  
(2019: 56%)

**25%**

were based outside of the UK  
(2019: 22%)

OF THE 1,683 WHO PROVIDED US WITH THIS DATA:

**30%\***

identified as part of a minority ethnic group  
(2019: unavailable).

OF THE 2,697 WHO PROVIDED US WITH THIS DATA:

**38%**

identified as female  
(2019: 38%)

\*Why do we collect and report this data? The Society is committed to promoting inclusive, accessible and diverse participation in pharmacology. We collect diversity monitoring data to better understand the composition of our membership so that we can more effectively remove barriers to support those who are underrepresented. We have started to report this data to hold ourselves publicly accountable to our commitments.



## AWARDS



**£299,680**

was awarded through prizes,  
grants and awards

(2019: £318,024)



**99**

applications were received

(2019: 113)



**62%**

of applications were for  
female candidates

(2019: 49%)



**118**

prizes were awarded

awarded (2019: 97)

## PRESCRIBING SAFETY ASSESSMENT (PSA) IN 2020:



**9696**

people completed the  
UK PSA exam



**2710**

people completed the UK  
PSA exam remotely



**5881**

mock exams were delivered  
to UK schools



**7854**

people completed our  
assessments globally



**4443**

people completed PSA  
exams globally



**1666**

people used our free  
COVID-19 resources



**1745**

people from the Royal College  
Canada completed the PSA



**3415**

people completed the PSA in  
Australia and New Zealand

# MEETINGS AND EVENTS

In line with government restrictions to reduce the spread of COVID-19, we had to cancel, reschedule or alter the format of all of the meetings and events we had planned in 2020. It was a challenging time for the events industry; however we are proud of how our Meetings and Events team adapted and upskilled to create a vibrant online annual meeting, and launched a successful webinar series.

## Annual meeting: Pharmacology 2020

In 2020, we held our annual meeting as an online event for the first time ever. The Meetings and Events team worked hard to develop a programme that was right for our members by breaking the event down into four key parts - scientific content, poster presentations, networking, and sponsorship.

To support healthy online hours and to avoid screen fatigue, we extended the meeting from the usual three days to five days. The extended programme created space for wellness breaks in-between sessions. During these breaks we encouraged delegates to stretch, hydrate, and rest their eyes. The

day after each session, we made the content available to view on-demand.

We included live poster sessions in the main programme so that delegates and authors had dedicated time to view the posters and engage with authors. Authors could upload a narration of their poster and chat live to any delegates, and the posters themselves were fully interactive.

The programme was made up of many fantastic speakers exploring fascinating topics across the spectrum of pharmacology, including:

- The UK Government's Chief Scientific Adviser, Sir Patrick Vallance, who reflected on the UK's response to the COVID-19 pandemic and his personal ambition to fully embed scientific advice into government.
- Professor Piet van der Graaf spoke on quantitative systems pharmacology for drug discovery and development.
- In our 'pioneers in drug discovery' symposium, a variety of speakers honoured Dr John Fozard's contributions to pharmacology.

We used the online Community during Pharmacology 2020 to host our networking programme. This included daily morning yoga sessions, talks on equality, diversity, and inclusion, and forums for delegates to continue asking questions of speakers.

Members tell us that social events at our annual meetings are always a highlight of attending. In 2020 we offered The Flavour Explorer

## Pharmacology 2020



**1200**  
**Registrations**  
**+13.5 %** on 2019



**Undergraduate attendees**  
**+268 %**  
on 2019

Experience, which was a great way to bring delegates together in a fun environment to experience more than 20 multi-sensory flavour experiments.

As shown in our infographic, Pharmacology 2020 was highly successful across all key



performance indicators, but we also received a lot of excellent feedback from attendees. The feedback demonstrated that although there are many benefits to in-person events, meetings with virtual options are valuable and can reduce barriers to attending. This is something we will certainly incorporate into future events.

**"This year I got to experience Pharmacology as a delegate, speaker, and exhibitor, and all three experiences were totally seamless and super easy to manage, despite the new format."**

**Dr Laura Ajram**, Medicines Discovery Catapult



Dr Niall Hyland, then VP Meetings

2020 was also the final year of a four-year tenure for VP Meetings, Dr Niall Hyland. Dr Hyland had many successes over his tenure, and Pharmacology 2020 was a credit to his hard work.

Visit [bps.ac.uk/news-events/events](https://bps.ac.uk/news-events/events) for the latest information about our meetings and events.

## The Launch of BPS Live

We were delighted to launch our new digital product, BPS LIVE, a series of webinars discussing hot topics in pharmacology. We began in October 2020 with a timely session, The Pharmacology of Drugs for COVID-19. The webinar was sponsored by the British Journal of Pharmacology and the British Journal of Clinical Pharmacology and was free to attend. The webinar was also available on demand for one month afterwards.



Sir Patrick Vallance speaking at the Pharmacology 2020 annual meeting

**"The core business of what this Society is about is central. Principles of pharmacology have been evident in government discussions – from dose, randomisation, evidence-based medicine, risk-benefit – they have been the bread and butter of discussions with the Prime Minister."**

**Sir Patrick Vallance**, Government Chief Scientific Adviser, speaking at Pharmacology 2020

## Working with the European Laboratory Research and Innovation Group (ELRIG)

In addition to running our own events, we also partnered with ELRIG on a webinar 'AI in Drug Discovery' in the early stages of the pandemic. We also shared our knowledge and experiences of 'flipping' events as we brought our annual Pharmacology 2020 and Drug Discovery events online.

# JOURNALS AND PUBLICATIONS



*Professor Andrew Lawrence, then Editor-in-Chief of Pharmacology Research & Perspectives*



*Dr Serge Cremers, Editor-in-Chief of the British Journal of Clinical Pharmacology*

## Editorial changes

As we grow the volume and scope of our journals, and as editors' terms come to an end, our journal Editorial Boards are constantly evolving. In 2020, Professor Andrew Lawrence completed his final year as Editor-in-Chief of the Society's Open Access journal, *Pharmacology Research & Perspectives* (PR&P). He left on a high note, as PR&P received its first Impact Factor in 2020 (of 2.052) and original submissions increased by 88%.

2020 was also Dr Serge Cremers' first year as Editor-in-Chief for the *British Journal of Clinical Pharmacology* (BJCP). Moving to the position after serving as Senior Editor, Dr Cremers began his programme of work on the journal supported by new and existing Editorial Board members. Dr Cremers said:

**"Despite being a challenging year, I am proud of the BJCP's accomplishments in 2020, including in growing our presence across the world, building a more diverse Editorial Board, and developing new article series. The journal was proud to organise the closing plenary for Pharmacology 2020, given by Sir Patrick Vallance. The plenary was a reminder of the continued importance of clinical pharmacology and therapeutics."**

**Serge Cremers**

Our editors are crucial to the success of the journals. Despite the difficulties of 2020, our editors have continued to drive growth of the journals into new areas and to build their presence across the world.

## Journal initiatives

The *British Journal of Pharmacology* (BJP) continued its work on raising standards for reproducibility and transparency. In April, after consultation with its Editorial Board, the BJP published new guidance on reporting natural product research. The BJP also updated its guidance on animal research, after the publication of the ARRIVE 2.0 guidelines (co-authored by the journal's Editor-in-Chief, Professor



Amrita Ahluwalia). The three journals continue to develop and improve their consultative approach to setting editorial policy, particularly as the pandemic has prevented in-person Editorial Board meetings.

## COVID-19 content

The journals received a considerable increase in submissions due to the pandemic, with nearly twice as many submissions in May 2020 than in May 2019. Combined, the BJP, BJCP and PR&P received, on average, three COVID-19-related manuscripts every day from April through to August. This was on top of the existing volume of submissions. Unsurprisingly, this created a lot of extra work for the Editorial Boards. Rising to the occasion, the journals committed to fast-track peer review for all COVID-19-related submissions. The journals achieved an average time to first decision of approximately eight days for the same April through August period. This was achieved without slowing down other manuscripts.

BJP and BJCP then published a freely available joint virtual issue on COVID-19 research and this was supported, in October, by the first of the BPS Live webinar series 'The Pharmacology of Drugs for COVID-19'. Authors from the joint BJP and BJCP issue presented their work at the webinar.



## Pharmacology Matters

In 2020, the Society's digital magazine, Pharmacology Matters, continued to work on its public engagement activities and launched a science writing competition for those aged 12 and under. We also continued our successful writing competition for early career pharmacologists.

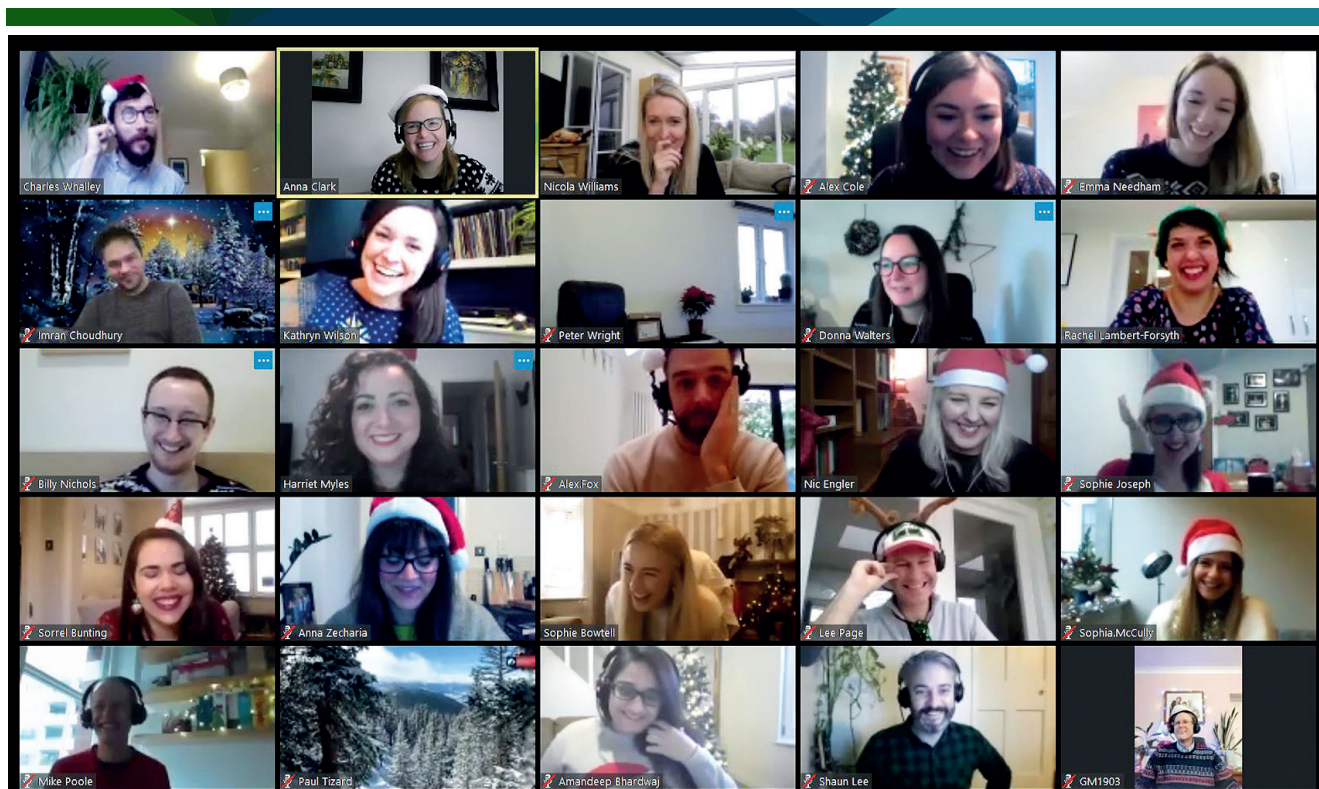
# EMPLOYEE WELLBEING AND DEVELOPMENT

## Supporting the staff team during the pandemic

When the extent of the impact of the pandemic in the UK became evident, we quickly realised that having a healthy, happy, and well-supported staff team would help us to continue serving our members. We wanted to meet our members' needs, and to help the global effort against COVID-19 by spreading the word about the crucial role that pharmacology and therapeutics

could play. We did not furlough any employees and adapted our support during the different phases of the pandemic.

After the office closed and we moved to remote working, the first step we took was to signpost the team to resources that were offered by the Society, and by external organisations. An example of this is Health Assured, our Employee Assistance Programme, which has a 24/7 confidential helpline for staff and can also arrange access to counselling.



The 2020 online staff Christmas party.



The Society staff team already used an instant messaging service called Slack to support our day-to-day work. During the pandemic, we realised we could use this to support employee wellbeing by keeping us connected while we were apart. We set up the following channels:

- **Wellbeing channel** where we shared useful tips for self-care, and created a space for employees to reach out to each other and share their own ideas
- **Remote working ideas** which focused on the practicalities of adapting to working from home
- **Parent life** for employees who have children, for sharing experiences of home-schooling, and ideas for games and activities

We also encouraged the use of existing channels for our book club, film club, birdwatching, plant growing, recipes, and our social channel for organising online quizzes and games.

Our senior management team and line managers were proactive about checking in with their teams on a regular basis. We also increased the regularity of our HR drop-in meetings for staff to ask any HR-related questions. Over the course of 2020, we found that keeping a good flow of information and communication (without over burdening the team) was crucial.

## Personal and professional development

We are committed to creating opportunities for our employees to grow in their personal and professional lives. This means that we have a skilled and capable team that can work to meet the mission and objectives of the Society. Every employee is encouraged to train with accredited training bodies and to explore relevant qualifications. The Society also offers coaching sessions to employees with qualified



Staff stayed connected by sharing photos of their hobbies with each other via Slack. This photo was from the 'plant growing' channel.



One of the many contributions to our 'bird watching' Slack channel.

coaches. 77% of our employees took up training and coaching over the year.


In 2020, we introduced a new benefit of paying for employee's professional membership subscriptions. We understand how important it is for staff to be recognised by an accredited body for their profession or role. Membership of a professional body can also support development and give employees access to resources, training, and communities. Almost 20% of employees have taken up this benefit.

The pandemic has affected us all in many ways. It was vital that the Society recognised this, and we are proud of the work we have done to support our incredible team, so that we can continue to serve our members.








# EQUALITY, DIVERSITY AND INCLUSION

In October 2020 we published our Vision for Equality, Diversity & Inclusion (EDI) in pharmacology. In our 2018-22 strategy, we said we would work to “remove barriers to participation and success, while welcoming equality and celebrating diversity, and being inclusive in all we do”. Our EDI Vision is an important part of delivering this.



The Vision acknowledges that pharmacology is part of wider society, which is not equal. It explains that as a Society, our values of fairness, respect for others and integrity motivate us. We want to be part of creating a socially just world. Our Vision explains how we will approach this work on a practical level, through each part of the Society's activities, including:

-  developing partnerships to identify and work on priority areas
-  aligning our codes of conduct and communicating these to our members and delegates
-  producing a strategy to collect and report Society diversity data
-  making sure our activities, funding and platforms are inclusive and accessible
-  introducing flexible working for our staff, in a way that works for everyone



**Dr Anna Zecharia,**  
the Society's Director of Policy & Public  
Affairs and who led the work, said:

" This Vision is a step forward for the Society in that it clearly articulates where we stand, where we are going and importantly, places our work in a broader societal context.

It builds on a period of deep reflection and learning over the first part of our current five-year strategy during which we commissioned an external review of our performance and approach, receiving the report in March 2019. This work helped us clarify - and stand by - our social justice motivations, but also anchored us in reality as we developed our 2020 business objectives and took some immediate action, such as to appoint a new Trustee with responsibility for EDI.

It has been inspiring to work with a staff team, Council and members who are truly committed to this agenda, and who recognise the Society's responsibility and influence. We are currently busy planning for 2021 and I am proud that equality, diversity and inclusion truly is at the heart of the Society's plans going forwards.

The next phase will be one of continued learning and development. We aim to create partnerships with members and those in the wider community who share our ambitions and who have the expertise – whether through lived experience, professional experience, or indeed both – and influence to drive this agenda. We are serious about making change, and we recognise that we do not have all the answers. I would really encourage anyone who wants to be involved, or who has questions, to come and talk to us – everyone is welcome on our journey. "



**Professor Sir Munir  
Pirmohamed,**  
the Society's President, said:

" This Vision is an important milestone for the Society – it represents both the culmination of work over a number of years, and the beginning of the next chapter.

I know I speak for the Society's Council and leadership team when I say that taking real action on equality, diversity and inclusion is fundamental to our values, and to everything we are trying to achieve.

When people come from a diversity of backgrounds - and feel able to share their views, experience and perspectives - collaboration, creativity and innovation thrive. Getting this right is about creating inclusive career support, recognition and culture.

When pharmacology research, drug development and clinical care address the needs and perspectives of all those who require it, our community will be playing our full part in improving health and reducing health inequalities. Getting this right is about establishing inclusive research and experimental design – and putting patients at the heart of research and care.

With this Vision and the work we are committing to, we are determined to make pharmacology relevant for everyone. "

# CAREERS, TRAINING AND EDUCATION



## Training activities in 2020

Every year we run high quality training workshops for postgraduate students, professional scientists, clinicians, and educators. Usually, we meet face-to-face so that attendees and workshop tutors can sit together and have productive discussions that lead to effective teaching and learning.

In 2020, we had planned to run our popular Pharmacokinetics

and Pharmacodynamics training workshop and launch two new workshops on Pharmacogenomics in Drug Development and Clinical Toxicology. Due to the pandemic, we made the tough but important decision to postpone these events to ensure the safety of our tutors and attendees.

We used this time to reflect on our training programme and plan for 2021, exploring online and hybrid training opportunities that could reach audiences in the UK and beyond. Together with workshop

leads and tutors, we redesigned our courses for new virtual formats. In doing this we tried to keep the valuable interactions and collaboration that you get from face-to-face events.

We are excited to grow our programme for future training workshops. We want to learn from the unexpected challenges of 2020 and keep prioritising the training needs of our pharmacology community.





## Supporting educators and students in the pandemic

The next generation of pharmacologists will be responsible for lifesaving discoveries and breakthroughs. Pharmacology educators make this possible, through the dedicated guidance and encouragement that they give their students. We provide career resources and professional development opportunities for educators, as well as support for undergraduates, to continue setting the agenda in education and skills.

In 2020, we decided to cancel our annual Educators' Networking Meeting. However, we started making plans to develop this into a series of webinars for 2021. Our Educators' Networking Meetings are ideal for sharing best practice, providing space for connection, and supporting educators with teaching difficult topics, so we look forward to this.

We collated useful educational resources for our COVID Hub so that students and educators could easily find free digital teaching and learning materials. Our Vice President for Academic Development, Dr Steve Tucker, wrote an insightful blog post about how universities were preparing for the academic year 2020-21. In the blog, he looked at solutions to issues posed by the pandemic and gave valuable information about how the pharmacology community could protect student wellbeing and success.

Finally, we launched the new Undergraduate Network on our online Community. This is a student-owned space to connect, collaborate, share, and learn, which was vital during 2020 when we were not able to meet in person.



**"The undergraduate network is a great platform for bringing pharmacology undergraduates across the world closer together, allowing us to connect with others over similar interests and experiences, and support one another in these challenging times."**

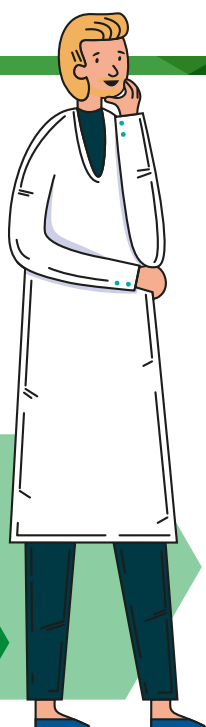
Network leaders **Alina Zorn, Blessing Oboro, Habibah Khan, Romessa Mahmood, Sophie Inthinathan and Weston James.**

# CAREERS, TRAINING AND EDUCATION CONTINUED



 RASES educator experts

 Pilot institutions



## Research Animal Sciences Education Scheme (RASES)

Studies using research animals have been instrumental in the discovery and development of new medicines and vaccines. We have developed a curriculum for the use of research animals for students who are studying bioscience degrees or masters programmes. However, we know that these programmes devote different amounts of time and expertise to the subject of animal research. This is why, in 2020, we joined with the Physiological Society to launch the

Research Animal Sciences Education Scheme (RASES), to help university educators teach our curriculum to a consistently high standard across the UK.

We worked with seven education experts across the year to provide mentorship, resources and support to university educators who had approached us about teaching animal research. This pilot project will continue to be funded throughout 2021 to assess the benefit to students and staff. The support is free and can be tailored to the needs of the educator. If you are an educator and interested in finding out how we can provide support on this topic, please get in touch.

## Careers in pharmacology

Where will a career in pharmacology take you?

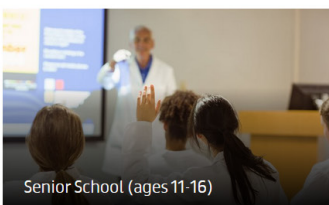
Whichever stage of education or career training you're at, these pages will help you find out more about the diverse career paths and opportunities that are open to you.

Choose the section that best describes you, and find resources and information to help you as you look at your next steps.

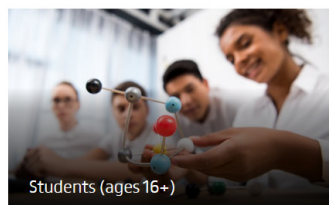
Have any questions that you can't find answers to here? [Email us](#) and we will be happy to help.



Junior School (ages 7-11)



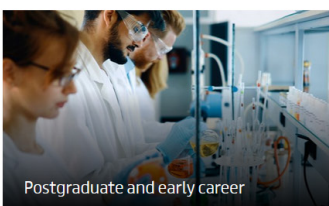
Senior School (ages 11-16)



Students (ages 16+)



Undergraduate



Postgraduate and early career



Medical School student

The new careers pages on our website.

“It is important that students understand the appropriate use of animals in biomedical research and appreciate how studies are carried out to the highest welfare and scientific standards. The UK is a leader in this area and the work of RASES in supporting educators and evaluating student understanding of the subject will help us to maintain these skills for future generations.”

Dr Michael Collis, RASES evaluation consultant.

## Careers in pharmacology

Careers advice and support is incredibly important throughout our education and working life. We aim to provide resources and support to help our members at all stages of their education or career progression to make the most of the opportunities available to them.

In 2020, the staff team worked with several committees to complete a project to update and expand our online careers resources. For the first time, this included content specifically aimed at younger children aged seven and up. We have also added information to help schoolteachers and careers advisors have important conversations with their students.



“Really fantastic work. This will be so helpful to us to signpost students to right from our schools outreach programmes through to postgraduates...Thank you to the team that put these together!”

Dr Christine Edmead

There are pages tailored to each career stage, including medical students and postgraduate and early career pharmacologists. There is also information specifically for educators who want to help their students understand more about career choices after a pharmacology or medical degree.

The new careers pages highlight the importance of pharmacology and use first-hand experiences, resources and advice to show how diverse pharmacology careers can be.

The team are now working on digital and printed resources to complement our online content, so look out for these in 2021.



# CLINICAL PHARMACOLOGY

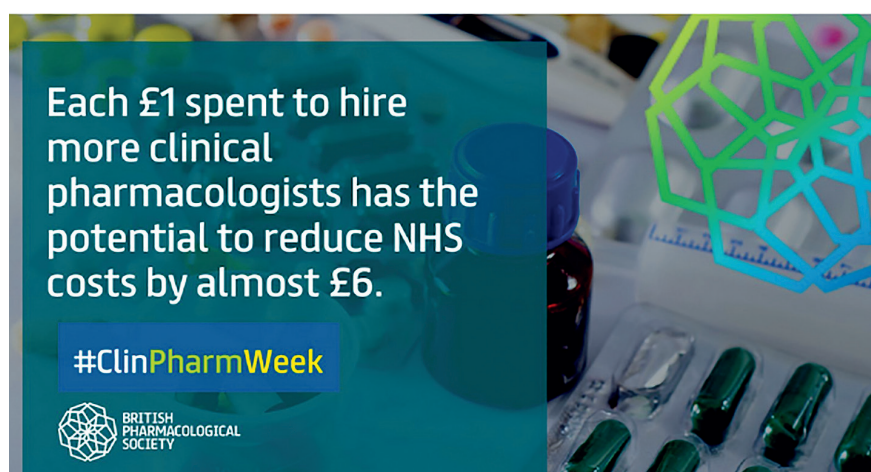
## Clinical Pharmacology Week

Despite the challenges of 2020, the Speciality Registrar (StR) sub-committee planned and delivered a number of successful activities for Clinical Pharmacology Week.

## Abstract Competition

The Early Career Clinical Pharmacology Abstract Competition encourages doctors and pharmacists at the start of their careers to consider specialising in clinical pharmacology. In 2020, we advertised the abstract competition earlier than usual to allow as many people to take part as possible. We invited abstract submissions from medical students, internal medicine and core medical trainees (IMT/CMT), re-registration pharmacists and pharmacists up to two years post qualification.

We expanded the type of abstracts that could be submitted to cover topics related to clinical pharmacology. This included audit or quality improvement projects on the use of medicines, education abstracts on safe prescribing and interesting case reports related to clinical pharmacology. We hoped that this would increase the number of entries, develop closer links with pharmacy, and spread greater awareness of clinical pharmacology among medical trainees who were about to choose their specialties. We received 27 entries in 2020,



which was nearly double the 2019 amount. The abstracts were high quality and the scoring was close. Three finalists from each category gave online presentations at Pharmacology 2020, with the overall winners (Khadija Meghrawi, Samya Sarfaraz and Eva Larkai from Bristol Medical School) awarded the £250 prize.

## Clinical pharmacology videos

Members of the Clinical Committee and the StR sub-committee recorded videos explaining how they were responding to the COVID-19 pandemic as clinical

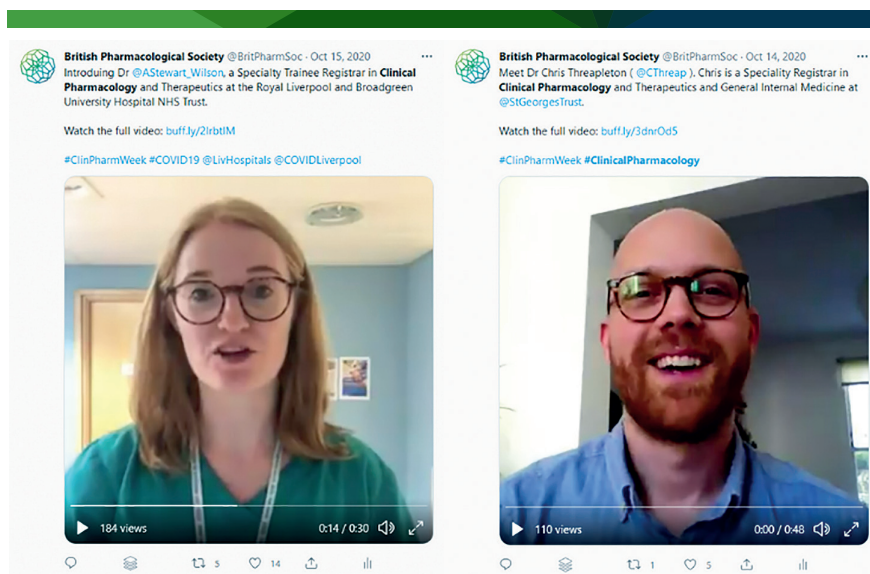


expertise to resolve issues that arise during conduct of studies. It is a varied role, supporting the discovery and development of new medicines, and improving understanding of existing ones.

The Department for Education formally approved the apprenticeship in October 2020, and we are now working with partners to enrol the first intake of apprentices.



The Clinical Pharmacology Skills Alliance is a partnership between the Association of the British Pharmaceutical Industry, the British Pharmacological Society, the Faculty of Pharmaceutical Medicine and Health Education England. It was formed in December 2017 to address urgent UK clinical pharmacology medical and scientific skills needs for the benefit of healthier patients, better medicines and a more efficient NHS.



Twitter videos from clinical members giving insights into how they responded to the pandemic.

pharmacologists. They explained what they learned during the COVID-19 pandemic that can help improve healthcare in the future.

## Social media awareness campaign

Throughout the week, we published thought-provoking questions across social media that were put together by the StR sub-committee. Dr Christopher Threapleton, member of the Society's Clinical Committee and Chair of the Registrar Sub-Committee, created a pharmacology quiz that we used as part of the campaign. This will also be used on virtual stands at meetings and exhibitions, can be adapted to face-to-face meetings when these are possible, and has been sent to the Royal Society of Biology online science festival. We reached out to our partners, including Clinical Pharmacology Skills Alliance (CPSA) members who showed their support by sharing content on Twitter. We also received great support from Society members including Professor Simon Maxwell, who tweeted every day during Clinical Pharmacology Week.

## Lunchtime talks

Dr Stefanie Lip and her team organised virtual lunchtime talks on medicines safety and safer prescribing from pharmacists, acute medical registrars and consultants, and clinical pharmacology consultants and registrars. In total there were 14 speakers, and prizes for attendees who participated in a short quiz and attended all sessions. Feedback from the sessions was that they were informative and concise.

## Apprenticeship

As part of the CPSA, we worked to develop a Clinical Pharmacology Scientist (level 7) apprenticeship in response to employer concerns that there was no clear training pathway for these important roles.

The Clinical Pharmacology Scientist will design, analyse, interpret and report clinical research and clinical trials aimed at understanding what a drug is doing to the body (pharmacodynamics), what happens to a drug in the body (pharmacokinetics), and how it works in terms of treating a particular disease. They will also offer clinical pharmacology

# PRESCRIBING SAFETY ASSESSMENT



Winner of  Excellence in Patient Care Award 2020

“ The Prescribing Safety Assessment (PSA) is now a well-established part of the UK undergraduate medical education calendar. The PSA is the first reliable national summative assessment of basic competency in prescribing and supervising the use of medicines, and is a model that is now being replicated elsewhere. Both UK medical education and clinical pharmacology can take pride in having delivered a process that strengthens training in medicines safety and makes an important contribution to delivering better care for NHS patients. ”

**Professor Simon Maxwell**, Medical Director of the PSA

In 2020, together with the UK Medical Schools Council, we celebrated 10 years of the Prescribing Safety Assessment (PSA). The PSA is the first large-scale national prescribing assessment and is probably one of the largest online medical assessments in the world. It is an excellent example of innovation in UK medical education and, in 2020, received the Royal College of Physicians Excellence in Patient Care Award in recognition of its impact.

The delivery of the PSA in 2020 proved to be the most challenging yet. The emerging pandemic and national response meant that many medical school facilities were unavailable. The years of experience of delivering a fully online assessment gave the PSA a degree

of resilience in these unusual times. The whole PSA team was pleased to be able to complete the assessment cycle, even though many candidates had to be supervised while taking the assessment in their own homes. As usual, PSA2020 also involved the Irish and Maltese medical schools.

The PSA's innovative approach and reputation for excellence continues to attract international attention. It has now been adapted for delivery to undergraduate and postgraduate doctors and pharmacists in Europe, North America, the Middle-East, Asia and Australasia. Around 100,000 candidates have now been involved in either summative or formative PSA events since BPS Assessment began trading in 2017.

At the time of writing, PSA2021 is underway and is once again being undertaken mainly in remote settings outside medical schools. The process of item peer review, Assessment Boards and Standard Setting are also being undertaken remotely to ensure that the item bank is replenished and ready for 2022. The PSA team are extremely grateful to our authors, reviewers, medical school staff and candidates who have all shown remarkable commitment and flexibility to ensure that the assessment has been able to continue through these most challenging of times.



# OUR DIGITAL PRESENCE



For much of 2020, meeting face-to-face was not an option, so it became even more important for the Society to stay in touch with its members through its digital channels.

Both the number of people visiting our website and the number of times they visited increased when compared to 2019. The biggest change, however, was that the number of webpages viewed in 2020 was 55% higher than in 2019, suggesting that people were

exploring more of the website than they would have before.

We continued to see growth across all social media channels. Our main Twitter account was the most popular account and ended the year with over 9,700 followers. Our YouTube channel saw the biggest growth, ending the year with 74% more subscribers than it had at the beginning of 2020. On top of that, users watched over 3,000 hours

of our content on YouTube – more than double the amount viewed in 2019. We suspect this is a result of our YouTube channel being a great resource for people who had limited access to labs, live events, and lectures during the pandemic. The pandemic has highlighted the importance of our online resources and communication platforms, and we will continue to review and develop them for our members and wider audiences.

## Website

### Page views:



# 1,047,276

(▲ 55% increase compared to last year)

### Sessions:



# 190,467

(▲ 1% increase compared to last year)

### Users:



# 135,416

(▲ 3% increase compared to last year)

### Top 10 most visited pages:

1. Home page
2. What is pharmacology?
3. British Journal of Pharmacology
4. Ten principles of good prescribing
5. What is clinical pharmacology?
6. Events
7. Society membership
8. Student internships
9. Pharmacology 2020
10. Apply for membership



### Top 10 countries

1. UK
2. USA
3. India
4. Australia
5. Nigeria
6. Netherlands
7. Philippines
8. France
9. Canada
10. Germany



## 7,608

Facebook Followers  
(as of 31 Dec 2020)

(▲ 3% increase compared to previous year)



## 9,703

Twitter Followers  
(as of 31 Dec 2020)

(▲ 20% increase compared to previous year)

## Social Media



## 7,731

LinkedIn Followers  
(as of 31 Dec 2020)

(LinkedIn did not previously record followers)

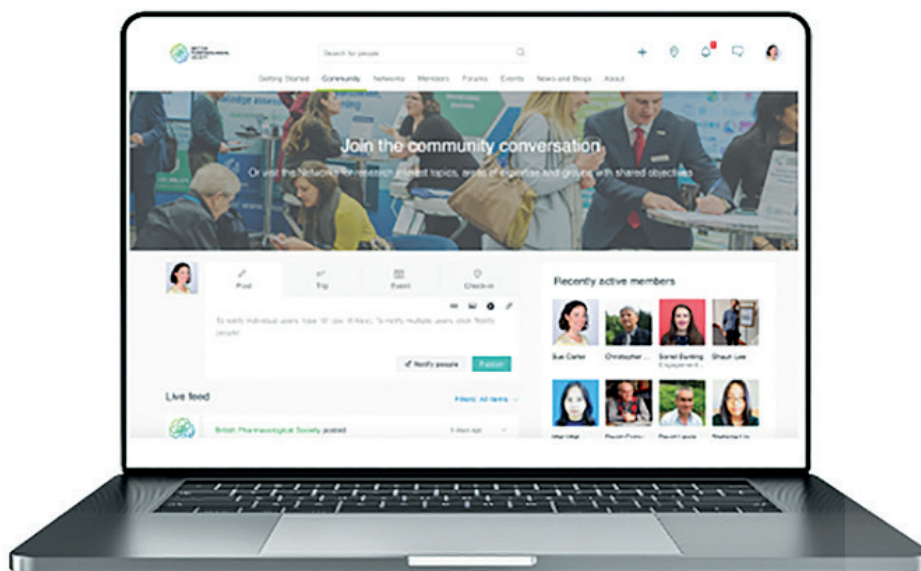


## 2,613

YouTube Subscribers  
(as of 31 Dec 2020)

(▲ 74% increase compared to previous year)

# ENGAGEMENT



## BPS Community

Following a successful pilot scheme in 2019, the new online BPS Community launched to all members in the spring of 2020.

The BPS Community is where our members come together online to explore ideas, build supportive relationships, collaborate, and share exciting research. Available both online and via a mobile app, the Community is accessible to all members whenever and wherever they need it. During 2020 this proved to be an invaluable resource while the global pharmacology community were unable to meet in person.



The Community enables members to:

- connect and collaborate
- share ideas and best practice
- access support from peers and join groups with shared interests
- keep up to date with the latest news, upcoming meetings and networking opportunities, both in the real world and online
- promote and access opportunities and activities on a global scale

The Community also provided opportunities for members to connect and network during the online Pharmacology 2020 meeting. Through the Community, Pharmacology 2020 attendees were able to access live and pre-recorded events, continue discussions following talks and sessions, and even take part in daily wellness and yoga sessions.

At the end of 2020, almost 1,000 members had joined the Community and there were 26 dedicated networks for members to join, related to specific topics and interest areas.

The Community is continuing to grow, so watch this space in 2021 for more exciting activity!

Members can join the Community at any time by visiting **[community.bps.ac.uk](https://community.bps.ac.uk)**

**“ The BPS Community is a fantastic way to keep in touch. The greatest benefit is highlighting all the amazing opportunities across the network. ”**

**Dr Andrew Scourfield**

### Ambassadors Scheme

Our Ambassadors are members who have a passion for sharing their science, promoting pharmacology and representing the Society. Explore our Ambassador pages to find out more about what our Ambassadors have been doing recently, the support available from the Society and how you can become an Ambassador.

What is the role of an Ambassador?

Meet our Ambassadors

What have our Ambassadors been doing?

Becoming an Ambassador

Society support for Ambassadors

Other ways to get involved with the Society

### CHELTHENHAM Science Festival@Home

in association with

#### DNA Testing: All In The Genes?

With Joanne Hackett, Munir Pirmohamed and Vivienne Parry (Chair)

Sponsored by

#CheltSciFest@Home

Our new website homepage for Ambassador resources.

Our event at the online 2020 Cheltenham Science Festival 'DNA Testing: All in the Genes?'

## Ambassadors

The Society's Ambassadors Scheme is an important part of the Society's engagement with current and future members, helping to raise awareness of the important global impacts of pharmacology with different audiences around the world. Our brilliant team of Ambassadors carry out activities and share information to:

- champion pharmacology research across the globe,
- raise awareness of the Society and the benefits of joining our global community,
- inspire the next generation of pharmacologists,
- help fellow pharmacologists to make the most of exciting opportunities to progress in their chosen career path

In 2020, two new Ambassadors were appointed, bringing the total number of Ambassadors to 19, with three Ambassador coordinators.

Throughout 2020, the newly formed Engagement Committee reviewed the information and guidance available to current and future Ambassadors. As a result of this review, we created new activities and resources for the Ambassadors, including a role description and a refreshed and revitalised website to support current and future

Ambassadors to shape their ideas in line with each individual's skills and interests.

The Ambassador team adapted their focus in 2020, organising and participating in digital events around the world. This included a number of presentations and Ambassador updates during Pharmacology 2020, and the first in a series of virtual round table meetings for all Ambassadors. A collaboration between the Ambassadors in November 2020 resulted in an international symposium for medical and health science students. The 'Teaching and Learning of Pharmacology during COVID 19: Students' Perspective' event brought together over 200 students and academics from Australia, Malaysia, Myanmar and the UK for a truly international discussion.

Visit [bps.ac.uk/ambassadors](https://bps.ac.uk/ambassadors) to find out more.

## Promoting pharmacology with different audiences around the world

### Cheltenham Science Festival – DNA testing: All in the genes?

In June 2020, the Society took part in the first ever virtual Cheltenham Science Festival – CheltSciFest@

Home. The Society sponsored an event focussed on at-home DNA-testing kits, what our genes can tell us about our health, and how this understanding paves the way for personalised medicine and pharmacogenomics. The event was chaired by Vivienne Parry and featured the Society's President, Professor Sir Munir Pirmohamed. Over 800 people attended the live, online event and many joined in the conversations. It was great to see audiences of different ages around the world engaging with an important area of pharmacology research.

### Drug Discovery of the Year

Each year, our Industry Sub Committee awards the Drug Discovery of the Year prize to recognise the achievements of teams of scientists who discover new drugs. The prize highlights how crucial pharmacology is in the development of new medicines. 2020 was no exception and more than 70 medicines were eligible. The Alnylam Pharmaceuticals team was awarded 2020 Drug Discovery of the Year prize for the development of Givosiran (Givlaari™). Givosiran is a pioneering treatment for acute hepatic porphyria – a rare genetic disorder of heme biosynthesis in which toxic molecules build up in the liver. Congratulations again to the Alnylam Pharmaceuticals team!



# POLICY

The Society's policy work in 2020 was focused on the COVID-19 pandemic - both the scientific implications and the important role pharmacology and clinical pharmacology played in developing safe and effective therapeutics.

We created a COVID-19 hub on our website, and released several statements, including our position on animal models for COVID-19. We shared our views on the UK therapeutic response by submitting evidence to the House of Commons Science and Technology Committee inquiry 'UK Science, Research and Technology Capability and Influence in Global Disease Outbreaks'. In this, we highlighted the global impact of the RECOVERY trial (led by Professor Peter Horby and clinical pharmacologist Professor Sir Martin

Landray) and the agility of funders and regulators. We advocated for a therapeutics strategy with platforms for phase I, II and III trials running concurrently to provide a seamless pathway to test existing repurposed drugs and new promising candidates. We subsequently welcomed clinical pharmacologist representation on the UK COVID-19 Therapeutics Advisory Panel (UK-CTAP) which advises which candidates should progress through national development.

In line with this work, we collaborated with the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists to publish a joint international statement calling on researchers to apply clinical pharmacology principles in the search for safe and

effective treatments for COVID-19 (see box below). The statement was endorsed by ten other international organisations.

Recognising the need for trusted expert voices during the uncertainty of the pandemic, we worked with clinical and pre-clinical expert groups to respond to media enquiries about therapeutics and regulation.

We responded to 36 requests, with a total of 45 comments or interviews – in 2020, 30 national and international outlets used comments or information from Society members. These include *BBC*, *The Times*, *New York Times*, *Daily Mail* and *The Telegraph*.

## Joint international statement advocates for application of clinical pharmacology principles in the search for safe and effective treatments for COVID-19

The statement welcomes international efforts to safely expedite clinical trials in the search for a treatment. However, it cautions that many studies do not include the information that is needed to safely translate a promising treatment from research to clinical practice. It sets out five principles that are intended to give research efforts the best chance of success to identify potential treatments:

1. The drug must work against the virus in cells or animal models at doses which are relevant for humans.
2. The amount of drug reaching the cells and organs affected by the virus must be adequate to either kill the virus and/or reduce inflammation.
3. There needs to be a good understanding of how the virus infects and multiplies within the body and how this relates to the clinical features of COVID-19.
4. The information from the above 3 principles should be used to define the optimal doses and duration of therapy (or therapies when more than one drug is used).
5. Well-designed trials must be undertaken to show that the drug works in treating the disease and is safe.



We also explored the impact of COVID-19 on early-career researchers, highlighting how the pandemic has exposed existing insecurities and inequalities in support of work by the Campaign for Science and Engineering and in line with our new Vision for Equality, Diversity and Inclusion in Pharmacology. We also recognised that the pandemic exposed broader social and health inequalities, and we responded by joining the Royal College of Physicians' 'Inequalities in Health Alliance' as a founding member. The Society's President, Professor Sir Munir Pirmohamed was a strong advocate of this work.

For the last couple of years, the Society has been working on exploring the safe use of opioids.

In 2020, we published a briefing to highlight and emphasise what we would like to see: in short, an improved and coordinated approach to opioid prescribing – opioid stewardship – to protect patients. We also put forward one of our members to speak to journalists at a Science Media Centre briefing. This received media interest and coverage. In September 2020, we heard that the Medicines and Healthcare products Regulatory Agency had strengthened warnings about the use of opioid medicines. This, in part, was due to the work of our members and the policy team.

We worked with experts in our membership to respond to consultations on UK Research and Innovation's Open Access policy,

the Advisory Council on Misuse of Drugs inquiry into research with controlled drugs, the National Institute for Health and Care Excellence's Methods review, the British Heart Foundation's Scottish Heart Plan, and the UK Research and Development Roadmap. We maintained our support for continued collaboration with European scientists – including being a signatory of a Wellcome briefing that continued to advocate for association with Horizon Europe. We are pleased that this, and other work in the area, has resulted in the UK becoming an associate member.

With our partners in the Clinical Pharmacology Skills Alliance, we have continued to advocate for investment in UK clinical pharmacology. As part of this, 2020 saw the start of our joint project with the Royal College of Physicians to develop a report to assist the implementation of pharmacogenomics into the NHS.

We were also pleased to support early-career members in their engagement with policy work, including a workshop run by Sense about Science's 'Standing up for Science' and Royal Society of Biology's 'Voice of the Future' events.

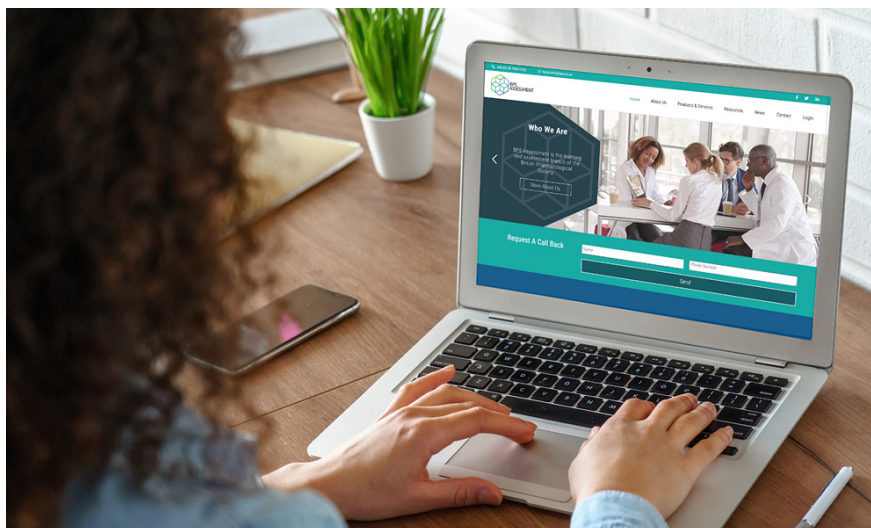
We would like to thank all members who contributed to the Society's policy work in 2020.

**"As a consultant in the NHS and an academic researcher, I am dedicated to giving patients the best chance of a healthy life. The work of healthcare professionals, researchers, and the public funds that are invested in both, are undermined by the serious negative health impacts caused by factors such as poverty and the stress of unemployment or insecure employment.**

**Prevention is better than cure. Health inequalities are avoidable and must move up the Government's agenda."**

**Professor Sir Munir Pirmohamed**, the Society's President

# BPS ASSESSMENT



## Platform development

Over the year, we worked on other new developments aimed at meeting our customers' needs, including the provision of new question styles to allow the delivery of any type of assessment, not just assessment of prescribing skills. We also implemented feedback on a question-by-question basis, to better support formative learning.

In 2020, we put the development of stable income streams at the forefront of our commercial activities for BPS Assessment. Working towards ambitious revenue targets, we continued to develop our digital products and services and grow our global sales pipeline. We experienced commercial challenges due to the COVID-19 pandemic, but we continued to increase our sales following the growth in demand for distance learning and online assessment.

## Responding to changing needs

After restrictions were put in place to deal with the pandemic, we adapted decisively and effectively. We changed the way the Prescribing Skills Assessment had previously been delivered, to ensure that those needing to take the exam could do so at home. As well as supporting assessments in invigilated centres, we provided options for remote invigilation. Remote invigilation

was a huge success and was warmly welcomed by our customers, especially in parts of the world most adversely affected by lockdown restrictions. In response to the growing clinical challenges that arose from the pandemic, we created a selection of free online resources, aimed at helping those returning to work in hospitals and general practice to re-familiarise themselves with latest prescribing practice.

In 2020, we worked closely with partners in Canada, the USA, Turkey, Belgium, Singapore, Australia, New Zealand, the Netherlands and the UAE. We delivered over 4,000 exam sittings involving more than 7,000 students in 2020. As well as providing assessments for students, we provided teaching resources for institutions in Belgium and Singapore. Following the early adoption of the PSA in the Middle East region in 2019, pharmacy and medical students at Gulf Medical University became the first in the region to sit a paper in 2020.

**"We are happy to be leading this initiative especially among colleges of pharmacy in the Middle East region. It is obvious that this will have an impact on the quality of pharmacists in the years to come. Another important outcome of this exercise is that the feedback from such exams will help identify areas of weakness in the curriculum and will be used for continuous quality improvement."**

The Dean of The College of Pharmacy,  
**Professor Sherief Ibrahim Khalifa**, Gulf Medical University



# COUNCIL, COMMITTEES AND GROUPS

## Move to virtual meetings

In mid-March 2020, all of the Society's committees and groups moved their meeting moved their meetings online as a result of the COVID-19 pandemic. Fortunately, the Society had a suitable video conference system in place which resulted in minimal disruption for committee meetings.

## New committees and roles for 2020

-  **Awards Panel** – to assesses nominations for Society awards and prizes
-  **Engagement Committee** – to oversee and advise on how best to engage members, stakeholders and the public
-  **Trustee for Equality Diversity & Inclusion** – this role was created to champion equality, diversity and inclusion at board level. Following a robust recruitment process, Council appointed Lenna Cumberbatch to the role in March 2020.

## Appointed Trustees Term of Office

Council consists of between nine and 12 Trustees in total, of which up to one third can be named Appointed Trustees from outside the membership to bring in specific skills. The remaining Elected Trustees are all elected by the Society's membership, which provides a safeguard for the appointments process from the membership's point-of-view. All Trustees, whether appointed or elected, usually serve for a three-year term. Appointed Trustees are recruited via a robust process which often involves significant investment and effort to recruit as they bring valuable skills to the Society. To maximise the value of these roles on Council, as part of the 2020 Annual General Meeting, members approved the recommendation to allow the term of Appointed Trustee to be extended by one further term of up to three-years at the discretion of Council.



Lenna Cumberbatch, Trustee for Equality, Diversity & Inclusion

## Vice Presidents 2020 (Committee Chairs):

**Emma Baker**  
Vice President - Clinical

**Niall Hyland**  
Vice President - Meetings

**Alister McNeish**  
Vice President - Policy & Public Engagement

**Steve Tucker**  
Vice President - Academic Development

## Council Members 2020

**Munir Pirmohamed**  
President

**Clive Page**  
President-Elect

**Christine Williams**  
Honorary Treasurer

**Laura Ajram**  
Elected Trustee (Early Career Pharmacologist)

**Edward Briffa**  
Appointed Trustee (Business)

**Lenna Cumberbatch**  
Appointed Trustee (Equality, Diversity & Inclusion)

**Ian McFadzean**  
Elected Trustee (Senior Academic Leadership)

**Jane Mitchell**  
Elected Trustee (Research Dissemination)

**Emma Morrison**  
Elected Trustee (Clinical)

**Rachel Quinn**  
Appointed Trustee (Policy Impact)

**Steve Rees**  
Elected Trustee (Industry)

**Lisa Wallace**  
Elected Trustee (General)

# SPONSORS & DONORS

The British Pharmacological Society is grateful to the following organisations for their donations to support our various activities, including prizes and training courses.

## Sponsors

AstraZeneca  
Atelerix  
BMG Labtech Ltd  
Charles River Labourites  
Digitimer  
Elsevier Limited  
Psychiatry Consortium  
J Wiley & Sons Limited  
Tocris Cookson Ltd  
ACS Pharmacology &  
Translational Science

## Donors

Medical Research Council  
The Physiological Society  
The Royal Society

“ Grateful for the opportunity to meet with an @AstraZeneca senior scientist as part of the AstraZeneca Interview Hub at #Pharmacology2020. I’m also thankful for the great organizers at @BritPharmSoc ”

Yazan Meqbil, Pharmacology 2020 attendee



## RECOGNISING ACHIEVEMENTS IN PHARMACOLOGY



# RECOGNISING ACHIEVEMENTS IN PHARMACOLOGY

## Award winners

Our 2020 prize and award winners are below – many congratulations to all of them:

## Prizes

### **Bill Bowman Prize Lectureship**

Dr Mark Soave, University of Nottingham

### **BJP Early Career Researcher Prize for Scientific Novelty**

Dr Yi Wang, Zhejiang University, China

### **BJP Editors' Performance Prize**

Professor Ralf Weiskirchen, RWTH University Hospital Aachen, Germany

Professor Javier Fernandez-Ruiz, Complutense University

Professor Ruth Andrew, University of Edinburgh

### **BJCP Prize**

Dr Kevin O'Gallagher, King's College London

### **BJCP Editors' Performance Prize**

Dr Michelle Rudek, Johns Hopkins University

Dr Daniel Marks, AstraZeneca/University College London

### **BPS Equality, Diversity and Inclusion Prize, sponsored by AstraZeneca:**

Dr Aidan Seely, University of Swansea

### **Drug Discovery of the Year**

The Alnylam Pharmaceuticals team for Givosiran

### **Grahame-Smith Prize**

Professor Joel Tarning, Mahidol University, Thailand

### **Rang Prize (clinical)**

Dr Derek Lang, Cardiff University

### **Rang Prize (non-clinical)**

Jointly awarded to Dr Sadani Cooray and Professor Nick Goulding, Queen Mary, University of London

### **Sir James Black Award for contributions to Drug Discovery**

Professor Graham Russell, Universities of Oxford and Sheffield

### **Vogt Prize**

Dr Harriet Allan, Queen Mary University of London

Dr Katy Sutcliffe, University of Bristol

## Pharmacology 2020 prizes

### **Best oral communications**

Matilda Kennard, King's College London

Helen Collins, Oxford University

James Boncan, Queen's University Belfast

Ailsa Angharad Jane Campbell, NHS Scotland

### **Education oral prize**

Aidan Seeley, Swansea University

### **Education poster prize**

Bethany Heaton, University of Liverpool

### **Clinical oral prize**

Rostam Osanlou, University of Liverpool

### **Clinical poster prize**

Shanali Thanthilla, Cardiff University

### **Clinical undergraduate poster prize**

Alice Ismail, University of Liverpool

### **Early Career Abstract Competition Winners**

Khadija Meghrawi, Samya Sarfaraz and Eva Larkai, Bristol Medical School

### **Dom Spina Prize for Experimental Design and Analysis**

Brentton Barrett, King's College London

### **Top 3 Undergraduate posters**

James Wallner, St. George's University of London

Bruna Oliveira de Almeida, University of São Paulo

Tavia Barry, University of Surrey

### **Top 3 Early Career posters**

Katerina Miari, Glasgow Caledonian University

Gerard Murphy, Glasgow Caledonian University

Roxanna Hajbabaie, University of Cambridge

## Our 2020 Honorary Fellows

Prof John Wallace



Prof Peter Barnes



Prof Robin Ferner

Prof Andrew Lawrence



Prof Clare Stanford

Prof Chris Whitty



Prof Steve Hill



Prof Anthony Davenport



Dr Malcolm Skingle



Prof David Crossman



Prof Miles Carroll



Prof Martin Michel

## Top 3 Late Breaking posters

Elizabeth Parke, Newcastle University, UK  
 Cibeles Martins Pinho, Federal University of Santa Catarina, Brazil  
 Shireen Mohammad, Queen Mary University of London

## Study awards

### AJ Clark Studentship

James Farmer, University of Nottingham  
 James Line, University of Liverpool

### BPS & ASCEPT Outstanding Young Investigator Award

Dr Simon Foster, Monash University  
 Dr Rob Hill, University of Nottingham

### Bülbring Award

Dr Natividad Garrido Mesa, Kingston University London

### Pickford Award

Dr Isra Marei, Weill Cornell Medicine – Qatar

### Schachter Award

Felix Trey Effah, St George's, University of London

### Vacation Studentship

Maria-Cristina Ardelean, University College London  
 Madison Bartley, University of Southampton  
 Kelvin Boateng-Aidoo, University of Edinburgh  
 Mark Chisnall, University of Liverpool  
 Kiran Devi Dontamsetti, Queen Mary, University of London  
 Sarah Feely, National University Ireland Galway  
 Daniya Khalid, St George's, University of London  
 Rebecca Rees, Newcastle University  
 Rose Wilcox, University of Bristol

## Lectureships

WDM Paton Memorial Lecture  
 Professor Roger Pertwee, University of Aberdeen  
 BPS keynote lecture at ASCEPT-APSA 2020  
 Professor Jackie Hunter, BenevolentAI

## Grants

### Education grants

Dr Nia Davies, Dr Aidan Seeley and Professor Lisa Wallace, Swansea University  
 Dr Jenny Koenig, Dr Olusola Olafuyi and Professor Michael Randall, University of Nottingham  
 Dr Mintu Nath and Dr Steve Tucker, University of Aberdeen  
 Dr Martin Hawes, University of Surrey  
 Dr Elizabeth Soares Fernandes, Instituto de Pesquisa Pelé Pequeno Príncipe, Brazil

## Engagement grants

Jon Hale, Beaulieu Convent School  
Dr Kenneth Watterson, Dr Craig Daly and Catherine MacRobbie, University of Glasgow

## Student prizes

### Clinical Undergraduate Prizes

UK Medical students, including intercalating students, were recognised for their performance in examination, the Prescribing Safety Assessment, or their work on a pharmacology research project or special study module.

**Ahmad Alabdulkareem**, Royal College of Surgeons in Ireland  
**Hannah Armstrong**, University of East Anglia  
**Jacob Bruten**, University of Exeter  
**Elsbeth Carruthers**, St George's, University of London  
**Thomas Christensen**, University of Manchester  
**Amy Cutler**, University of Leicester  
**Adam Dewji**, University of Leicester  
**Lakshiv Dhingra**, University of Cambridge  
**Charles Eddy**, Queen Mary, University of London  
**Zoe Harding**, University of Edinburgh  
**Naomi Head**, University College London  
**Lucy Hebden**, University of Nottingham  
**Louise Howe**, University College Cork  
**Alice Ismail**, University of Liverpool

**Daniel James**, University of Exeter  
**Georgios Kallikas**, Queen Mary, University of London  
**Gabriela Kopernicka**, University of Plymouth  
**Brian Martin**, University of Dublin  
**Olive McGrath**, University College Cork  
**Amelia Sampson**, University of Southampton  
**Donal Roche**, Royal College of Surgeons in Ireland  
**Eleanor McCrystal**, Queen's University Belfast  
**James Palmer**, Imperial College London  
**Aniket Paranjape**, Cardiff University  
**Katherine Parkin**, King's College London  
**Louise Gregory**, Brighton and Sussex Medical School  
**Sophie Talas**, University of Edinburgh  
**Christian Tang**, University of Leicester  
**Katie Vijayanathan**, St George's, University of London

### Undergraduate Pharmacology Prizes

Students are nominated by UK universities and were recognised for their performance in the final year of their degree, which includes a pharmacology research project.

**Sarah Baldwin**, St George's University London  
**Emily Beardmore**, University of Aberdeen  
**Caitlin Bellamy**, Swansea University  
**Felix Bijoy**, Newcastle University  
**Amy Chave**, London Metropolitan University  
**Ahmed Hassan**, Cardiff University  
**Molly Jackson**, University of Bristol





**Tariq Khattak**, University of Birmingham  
**Ananya Muthukumar**, King's College London  
**Ellen Packer**, University of Leeds  
**Stela Papa**, University of Westminster

**Leah Parcell**, University of Portsmouth  
**Georgina Pearson**, University of Manchester  
**Daniel Saffer**, University of East Anglia  
**Hannah Scott**, Queen's University of Belfast  
**Arun Somanathan**, University of Oxford  
**Kornilijus Stanaitis**, University of Central Lancashire  
**Zaneta Urbanczyk**, Glasgow Caledonian University  
**Guy Williams**, University of Bath  
**Emma Whitmey**, University of Southampton

### Student Contribution to Pharmacology

Students were recognised for their efforts to promote the discipline of pharmacology.

**Lauren Chance**, University of Leeds  
**Daniella Claude**, Queen Mary University of London  
**Neve Crosby**, Newcastle University  
**Grace Flower**, King's College London  
**Johanna Haszczy**, University of Portsmouth  
**Mark Mitra**, University of Aberdeen  
**Maddy Newby**, University of Southampton  
**Sahil Seyal**, University of East London  
**Megan Templeton**, Glasgow Caledonian University  
**Pranchalee Therasartyaem**, University of Westminster

## Honorary Fellowships

Honorary Fellows are elected for life by the British Pharmacological Society in recognition of sustained excellence and leadership in science, healthcare, and public service. 12 Honorary Fellows were elected in 2020:

- **Professor Peter Barnes**, Imperial College London
- **Professor Miles Carroll**, Health Protection Agency
- **Professor David Crossman**, University of St Andrews
- **Professor Anthony Davenport**, University of Cambridge
- **Professor Robin Ferner**, University of Birmingham
- **Professor Steve Hill**, University of Nottingham
- **Professor Andrew Lawrence**, University of Melbourne
- **Professor Martin Michel**, Johannes Gutenberg University
- **Dr Malcolm Skingle**, GlaxoSmithKline
- **Professor Clare Stanford**, University College London
- **Professor John Wallace**, University of Calgary
- **Professor Chris Whitty**, Department of Health and Social Care

## Fellowships

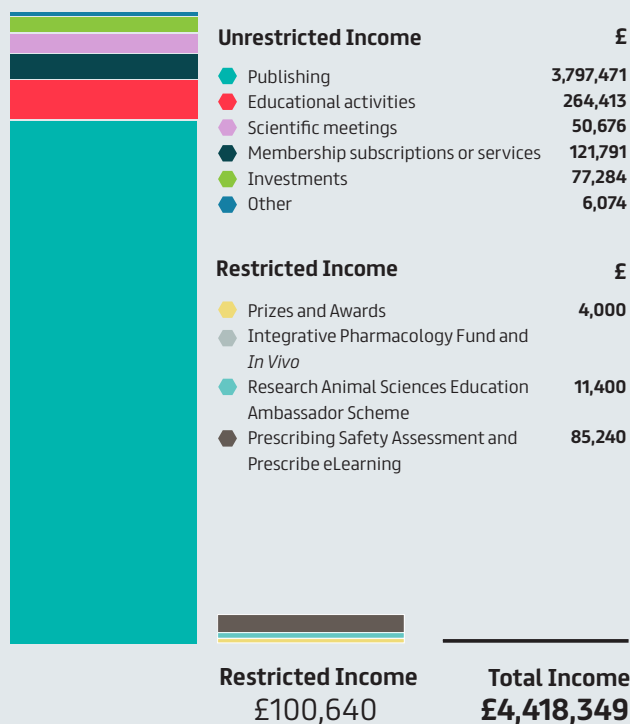
Our Fellows have made, and continue to make, substantial contributions to the disciplines of pharmacology, clinical pharmacology and therapeutics, through their work, publication and presentation of research, leadership, and contribution to Society life. 32 Fellows were elected in 2020:

- **Professor Elizabeth Allen**, Quintiles
- **Dr Daniel Anthony**, University of Oxford
- **Dr David Bell**, Queen's University Belfast
- **Dr Anthony Cox**, University of Birmingham
- **Dr Margaret Cunningham**, University of Strathclyde
- **Professor Jaime Davies**, University of Edinburgh
- **Professor Jan de Hoon**, University Hospital Gasthuisberg
- **Dr Pedro D'Orleans Juste**, Université de Sherbrooke
- **Dr Anthony Fenech**, University of Malta
- **Professor Christopher Goldring**, University of Liverpool
- **Dr Robert Henderson**, University of Cambridge
- **Dr Farideh Javid**, University of Huddersfield
- **Dr Aileen King**, King's College London
- **Professor Helen Kwanashie**, Ahmadu Bello University
- **Dr Graham Ladds**, University of Cambridge
- **Dr Rebecca Lever**, University College London
- **Dr Lionel Lewis**, Geisel School of Medicine at Dartmouth
- **Dr Dave Lewis**, University of Leeds
- **Dr Marco Martins**, Oswaldo Cruz Foundation
- **Dr Patricia McGettigan**, Queen Mary, University of London
- **Dr Alister McNeish**, University of Reading
- **Dr Aileen Milne**, Charles River Laboratories
- **Dr Colin Osborne**, Novartis
- **Professor Kenneth Paterson**, University of Glasgow
- **Dr Simon Pitchford**, King's College London
- **Dr Richard Prince**, University of Manchester
- **Professor Clive Robinson**, St George's, University of London
- **Professor Amin Rostami-Hodjegan**, University of Manchester
- **Dr Stephen Safrany**, Royal College of Surgeons in Ireland - Bahrain
- **Dr Christopher Southan**, University of Edinburgh
- **Dr Andrew Webb**, Kings College London
- **Professor Jeanette Woolard**, University of Nottingham

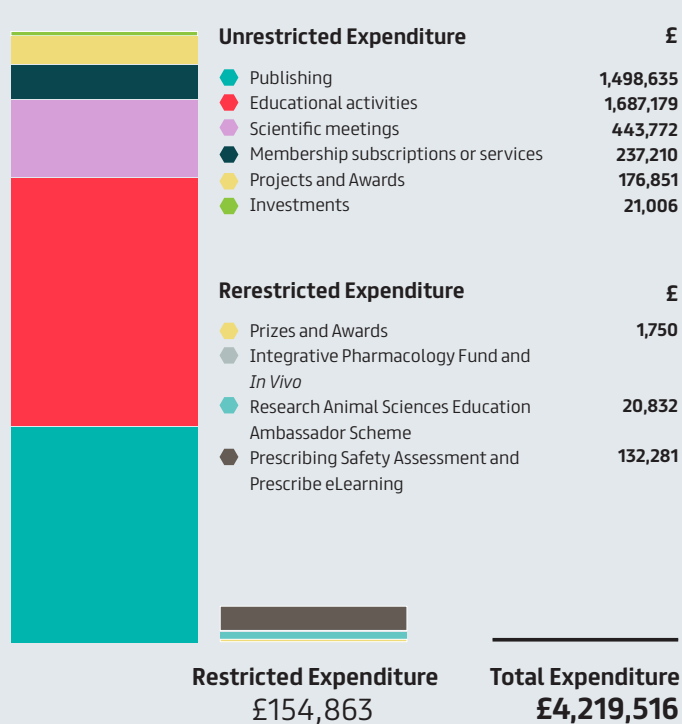
# FINANCIALS

## Income and Expenditure for 2020

### Unrestricted Income £4,317,709



### Unrestricted Expenditure £4,064,653



You can download a PDF of the Society's financial statements for the year ended 31 December 2020 from the website, available under 'About' and then 'What we do'. The financial statements include the Financial Review, Statement of Financial Activities and Balance Sheet, together with the Notes to the Accounts. They show the overall financial performance of the Society and provide an analysis of the incoming resources and how they were applied in the performance of the Society's objectives.

## Total Funds

The financial performance reported here is of the "Group", which means the Society together with its trading subsidiary, BPS Assessment Limited.

The total funds have increased by £361,146 (2019: £32,090). The resulting balance of total funds at 31 December 2020 amounted to £6,011,205 (2019: £5,650,059) of which £5,658,667 (2019: £5,279,698) is unrestricted funds.

### Income

- Income for the year totalled £4,418,349 (2019: £4,451,597) which is a decrease of 0.7%.
- Importantly, charitable activity income from journal publishing, which is the Society's main income source, has increased by 3.6% to £3,797,471 (2019: £3,664,013) mainly because of increased subscriptions income.
- Member numbers increased by 1.6% to 4,597 (2019: 4,525) although membership subscription income decreased by 7.0% to £121,791 (2019: £130,891). This is primarily because Undergraduate members do not pay a subscription and their numbers increased by 413. The overall maintenance of membership reflects the Society's longer term approach to strengthening and growing the discipline of pharmacology.
- Scientific meetings income decreased by £132,104 to £50,676 (2019: £182,780) as the impact of COVID-19 meant that all planned meetings had to be cancelled or postponed. Pharmacology 2020 was reimaged as a 5-day online event and lower fees were charged for attendance to reflect the virtual environment.
- Voluntary income totalled £30,000 (2019: £32,150) and is mostly for educational activities.
- Investment income was £18,924 lower at £77,284 (2019: £96,208) due to the impact of COVID-19 on the markets.
- In addition, there were net gains on investments totalling £162,313 (2019: £503,652).

### Expenditure

- Expenditure on charitable activities totalled £4,198,510 (2019: £4,898,803) which is a 14.3% decrease of £700,293 mainly due to the cancellation of in-person events due to COVID-19 with many activities moving online during the year.
- Journal publishing costs decreased by £67,303 to £1,498,635 (2019: £1,565,938) as in-person Editorial Board Meetings were moved online due to COVID-19 and other direct costs have been carefully controlled.
- Expenditure on educational activities at £1,840,292 was a 8.5% decrease of £171,552 over the previous year (2019: £2,011,844).
- Projects and awards expenditure at £178,601 was a 30.7% decrease of £78,919 over the previous year (2019: £257,520).
- Scientific meetings expenditure at £443,772 was a 45.6% decrease of £372,491 over the previous year (2019: £816,263).
- Capital expenditure totalled £24,151 (2019: £56,493) which was all (2019: £52,265) for the development cost of the new online platform that began supporting online assessment services in 2017.

## Financial effect of COVID-19 in 2021

The financial effects of the COVID-19 outbreak are expected to depress the Society's potential income in 2021 as universities worldwide are expected to have less funding available for the Society's established published content and emerging educational content delivered by BPS Assessment Limited. In the short term, these adverse income effects are expected to be offset by cost reductions associated with conducting scientific meetings and other activities online. The Society is therefore redoubling its efforts to develop and diversify sustainable ethical income streams.



# LOOKING AHEAD: OUR 2021 OBJECTIVES

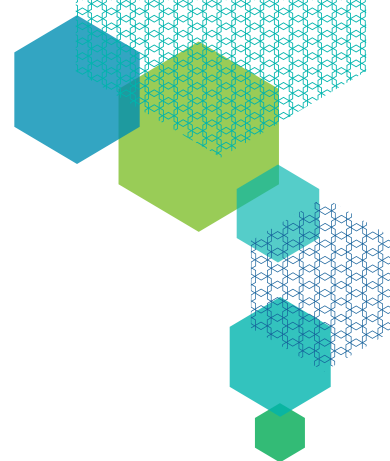


We have set out a series of objectives for 2021, aligned to our five-year strategy, that will enable the Society to continue progress on reaching its mission and vision by 2022.

**Strengthen the voice of our members in all that we do.**

**We will do this by:**

- Conducting a member survey (including questions about COVID-19) and consider findings as part of completing the membership strategy review.
- Completing the renewed membership strategy, identifying scope to expand the membership and reach of the Society, considering the industry review findings and membership survey responses.
- Working openly with ELRIG to progress our strategic alliance, building links and strengthening the position of both organisations.
- Learning from the pilot year of the Community project, work with the Network leads to build capacity and create content relevant to the membership.
- Continuing to grow the visibility of Clinical Pharmacology through a series of activities which include Clinical Pharmacology Week.
- Conducting and implementing agreed outcomes from the awards review.



## Live the values of, and communicate and implement, our Vision for Equality, Diversity and Inclusion in pharmacology.

### We will do this by:

- Developing partnerships with our membership and in the sector to help us further define and act on priority areas.
- Ensuring alignment across codes of conduct and developing a communications strategy for sharing these with members and delegates.
- Producing a unified strategy to collect and report Society diversity data.
- Reviewing, updating and implementing processes to ensure activities, funding and platforms are inclusive and accessible to under-represented groups.
- Agreeing and implementing an approach to flexible working that meets business and individual employee needs while supporting a productive and inclusive culture.

## Co-create stable, diverse and ethical income streams that support the Society's position as a charity with a mission to promote and advance the whole spectrum of pharmacology.

### We will do this by:

- Continuing to build our partnerships offering in 2021 including defining packages of content and establishing a sales target with a specific focus on responsible partnerships, income diversification and progression opportunities.
- Developing a journals portfolio plan and publishing strategy including a scenario plan for a transition to open access.

- Scaling up the sales pipeline and increase sales for BPSA. Setting realistic and stretch targets for the next 3 years and identifying key KPIs for monitoring purposes and STOP/GO decisions.
- Restarting our meetings and training programme; learning from 2020, building virtual and hybrid strategies into the in-person offering.
- Continuing to develop our strategy regarding Learning Pathways, developing on-demand content for priority training topics using the BPSA platform.
- Co-ordinating, supporting, advising and reporting on the identification and progression of income diversification and progression opportunities.

## Review and improve how we communicate impact and champion excellence in pharmacology, underpinned by robust technologies and procedures.

### We will do this by:

- Strengthening our digital presence through a review of the Society's website and social media channels to ensure the Society continues to effectively communicate with our members and wider networks in a virtual environment.
- Initiating a project to ensure the CRM becomes the Society's 'knowledge hub'.
- Reviewing and improving Governance practices and processes to ensure they are effective and appropriately class-leading.



## **ABOUT THE BRITISH PHARMACOLOGICAL SOCIETY**

The Society is a charity with a mission to promote and advance the whole spectrum of pharmacology, and leads the way in the research and application of pharmacology around the world. Connecting over 4,000 members from more than 60 countries, it is a global community at the heart of pharmacology.

### **British Pharmacological Society**

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