



Foreword from the President



What a year it has been! This time last year, I was looking forward to a full diary in 2020, visiting Local Groups up and down the land, and speaking at statistical meetings in Philadelphia, Finland, and Barcelona...

In January, we said goodbye to our outgoing Executive Director, Hetan Shah, as he moved on to run the British Academy. We knew life would be changing at the RSS; but by March SARS-CoV-2 was in the UK, and everything was about to be turned upside down.

What followed was an extraordinary period, but the Society rose to the challenge. In April, we established the RSS Covid-19 Task Force, led by Sylvia Richardson and David Spiegelhalter. At this time, I also chaired the online interview panel which resulted in the excellent appointment of Stian Westlake as our new Chief Executive. I must thank the RSS staff and Nicola Emmerson, who served as interim Chief Executive, for the way they stepped up during this period to allow business to continue seamlessly.

Since April, all RSS meetings have moved online, and I've been delighted to see how many people have been able to attend events ranging from our new members welcome to online Discussion meetings. The Society's first ever online conference attracted 550 registered participants, and it was a particular pleasure to hear Kerrie Mengersen giving the Champion Lecture live from Australia. I don't miss the trains and planes, but I do miss the chance to catch up informally with members. We will all be reflecting on the best balance of remote and face-to-face events once the latter become possible again.

The Society's media presence has increased substantially this year. August was a record-breaking month for us, with over 1,000 media hits on our work on school exam adjustments. The Covid-19 Task Force has also received widespread coverage, including a piece on the front page of the Times highlighting concerns about the UK government's 'moonshot' testing plans.

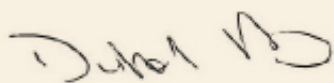
Another defining theme for 2020 has been Black Lives Matter. In June, I announced that Equality, Diversity and Inclusion would be a key priority for the remainder of my presidency. This work has four areas of focus:

- Promoting diversity in the statistical community and the RSS membership
- Promoting diversity in the RSS staff and operations
- Discussing the historical relationship between statistics and racism, and confronting the malign role that statistics has sometimes played
- Looking at how we can make better use of statistics today to tackle racism and discrimination, and build a better future

I hope that some of the work that has been done in the last few months will form the basis for strong leadership in this area from the RSS going forward.

Overall, it has been a privilege and a pleasure to lead the Society as it evolves and responds in this time of seismic change. At the end of this year, my successor Sylvia Richardson takes up the reins, and I look forward to seeing the Society continue to flourish under her leadership.

With very best wishes



Professor Deborah Ashby

Goal 1

For statistics to be used effectively in the public interest, so that policy formulation and decision-making are informed by evidence for the good of society.

Covid-19

In response to the pandemic, we created a Covid-19 Task Force, and a Working Group on Diagnostic Tests, comprised of senior fellows. We provided statistical expertise to inform policymaking around the pandemic, working with government officials, parliamentary committees and other scientific organisations.

Media

Our media presence has increased considerably in 2020. Both the Society and its fellows have had an active voice, commenting on Covid-19 and a number of other statistical issues. Coverage has included broadcast interviews with the BBC, Sky and ITV, and print comment featuring in the Guardian, Times, Financial Times and others. We also continue to assist journalists behind the scenes, offering expertise through our Statistical Ambassadors programme.

Exam grades

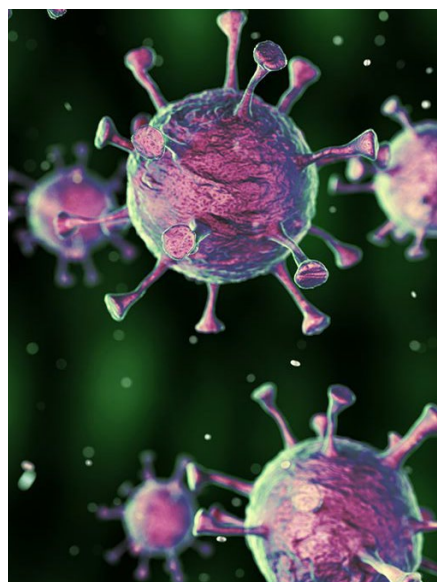
Since April, we have engaged extensively with government and parliamentarians regarding school exam grading during Covid-19. We repeatedly advocated for transparency and proper consideration of statistical issues. After A-Level results day, we successfully called for a review by the Office for Statistics Regulation – we hope that the recommendations from this review will mean that this type of situation does not happen again.

Inflation

The government has been consulting on plans to bring the Retail Prices Index (RPI) in line with the Consumer Prices Index. In April, we secured an extension to the consultation to ensure that proper discussion was possible during lockdown. In July, we hosted a lively open meeting to discuss the changes. We have expressed our strong disagreement with the plans and set out a positive alternative – aligning RPI with the Household Costs Index, which is currently being developed as a National Statistic.

UK Parliament

We responded to inquiries on issues including data transparency during the pandemic, lessons learned from Covid-19, the National Data Strategy and death registrations. A number of fellows have given evidence to Parliamentary Select Committees, including the Science and Technology Select Committee and the Public Administration and Constitutional Affairs Committee.



Goal 2

For society to be more statistically literate, so that people's understanding of data, risk and probability can inform their daily decision-making, leading to better outcomes.

Covid-19

Members have been active in seeking to increase public understanding of Covid-19 statistics. Our Vice-President for External Affairs is working with ITV News as their Covid statistician – helping to explain coronavirus numbers and what they mean. Members of the Covid-19 Task Force have regularly appeared on TV and radio as well as providing explanatory articles for newspapers.

Education

We have worked in collaboration with the Royal Society, the London Mathematical Society and the Institute of Mathematics and its Applications to promote the teaching of statistics. Our William Guy Lecturer – in spite of the difficulties caused by the pandemic – has given talks at a number of schools. And as part of Maths Week England, we ran a successful chart competition for primary school aged children.

Significance

Significance magazine, which we publish jointly with the American Statistical Association, continues to grow in popularity. At the time of writing, our articles in the Wiley Online Library have been downloaded more than 278,230 times this year.



Training

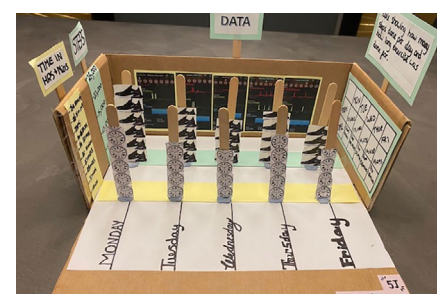
In the first quarter of 2020, we ran four face-to-face courses in London. Since the outbreak of Covid-19 in the UK, we have delivered 15 online public courses. By the end of November, 225 delegates had booked onto our public courses. We also delivered six commissioned courses to clients including the Guardian, the Foreign Office and the Ministry of Defence.

Events

We ran several well-attended public events. Equality, diversity and inclusion was a particular focus, with events on the ethnicity data gap and on the connections between some of the founding figures of statistics and racism. We also held an event in December in partnership with Bournemouth University on how the media has handled the reporting of Covid-19 statistics.



Discussion on exam algorithms at RSS Conference



Winner of primary school chart competition

Goal 3

For a strong body of professional statisticians to maintain and develop the skills they need so that they can critically apply methodology, interpret results and communicate findings.

Accreditation

This year, the Society and its Professional Affairs Committee launched the RSS Quality Mark. This measure will sit underneath our accreditation of statistics degrees, and will enable the RSS to accredit individual modules and training courses. This will, in turn, allow individuals to gain professional recognition for good statistical training, including the GradStat, CStat and Data Analyst titles.

Data Science Coalition

Following the *Dynamics in Data Science Skills* report by the Royal Society, the RSS has formed a steering group with the British Computing Society, Operational Research Society and other professional bodies. This group will lead a wider consortium of organisations in work to develop and shape the profession of data science. This initiative was referenced in the UK government's National Data Strategy.

Corporate Membership Partnerships

The Society now has 33 corporate partners.

Healthcare

This year, with support from the Health Foundation, we presented our inaugural Florence Nightingale Award for Excellence in Healthcare Data Analytics. In October, to coincide with Nightingale's bicentenary, we announced two joint winners - NHS Blood and Transplant, and Barking, Havering and Redbridge University Hospitals NHS Trust.



Lisa Mumford, joint winner of Florence Nightingale Award for Excellence in Healthcare Data Analytics.

Honours

Each year we award medals and prizes to people who have made outstanding contributions to the development of statistics. The 2020 awards ceremony was held in September as part of our first online RSS conference.

2020 honours and awards recipients

Guy Medal in Gold
David Spiegelhalter

Guy Medal in Silver
Arnaud Doucet

Guy Medal in Bronze
Rachel McCrea

Barnett Award
Byron JT Morgan

Research Prize
Thomas B Berrett

Honorary Fellowship
Judea Pearl



Goal 4

For statistics as a discipline to thrive, so that methodology is advanced, applied and made accessible, leading to greater understanding of an increasingly complex world.

Sections and Local Groups

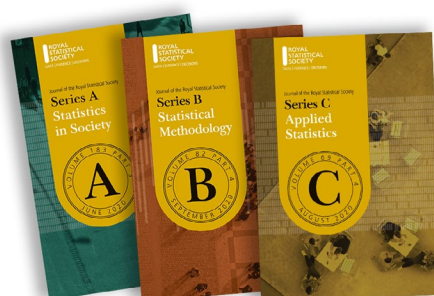
During 2020, our Sections and Local Groups ran dozens of online events and activities. For example, in June, the RSS Nigeria Local Group delivered a talk on 'Modelling the Covid-19 pandemic in Nigeria' to over 300 attendees. The Data Science Section launched 'Ethics Happy Hours', to encourage data scientists to share and discuss ethical challenges encountered in their professional life.

International Conference

In September 2020, we held our first ever online RSS International Conference, which was attended by 550 registered participants. The programme featured over 50 hours of content, including eight professional development workshops, 28 invited topic sessions and eight keynote talks from presenters including Ruth King and David Spiegelhalter. Feedback from attendees was extremely positive. The 2021 conference will take place next September in Manchester.

Journals

In 2019, we saw an increase in the impact factors for all three journals. By the end of 2020, we will have held five discussion meetings. In May, we held our first ever online meeting, followed by well-attended meetings in June and September. In total, this year the three series published over 4,200 pages and 183 articles, 44 of these being open access.



International Development

The Society continues to organise placements for RSS members to volunteer abroad with the African Institute for Mathematical Sciences (AIMS), and Partnership in Statistics for Development in the 21st Century (PARIS21). Both these initiatives help build capacity for low-income countries to develop their statistical systems.



Sir David Spiegelhalter, keynote speaker at the 2020 RSS Conference



Dr OM Olayiwola, Chair of the RSS Nigeria local group

A promotional graphic for the RSS International Conference 2020. It features a collage of images: a man speaking at a podium, a woman working on a laptop, and a man gesturing while speaking. The text on the right reads: 'RSS International Conference 2020', 'WELCOMING ALL STATISTICIANS AND DATA SCIENTISTS', 'ONLINE', and '7-10 September 2020'. The background is a light grey with yellow and blue geometric shapes.

Goal 5

For an engaged and energised membership and staff to work collaboratively with partner organisations and other stakeholders in meeting these goals, so that the Society can maximise its impact.



Membership

Member numbers remain strong at over 10,000 (a record high maintained since 2019). Of these, over 6,000 are fellows, and for the first time in 2020, we now have well over 1,000 e-Teacher members, as well as 3,000 e-Student members. We also have members in 114 countries worldwide.

Statisticians for Society

We have further developed our work on supporting RSS members to provide *pro bono* statistics expertise to small UK charities. In 2020, we matched 16 charities with volunteer statisticians.

Partnerships

The Society has continued to work with a wide range of partners throughout the year including government bodies (e.g. the Office for National Statistics); research councils (e.g. UK Research and Innovation); statistical societies (e.g. American Statistical Association, the International Statistical Institute); mathematical bodies (e.g. through the Council for the Mathematical Sciences); and scientific bodies (e.g. Royal Society).

Goal 6

For the RSS to be a financially stable and well-run organisation with effective governance and use of technology, so that it will grow in relevance, exert influence and have wider impact.



Awards

The RSS 'Statistics of the Decade' campaign was 'highly commended' in the 2020 Memcom Awards. The judges said this initiative 'really brought the topic to life, engaging audiences nationally and making highly effective use of a range of media'.

IT

In April 2020, the Society launched a new website and Customer Relationship Management database. This has led to significant improvements in the service we can offer to members, and the efficiency of our internal systems.

From past to present...

The image of the sheaf of wheat first appeared in our original seal. Being the end product of the harvesting and bundling of wheat, it was a pictorial way of expressing the gathering and analysis of data: the foundations of statistical work.

It also implied that statistical practice comprises more than the collection of data, but also its active interpretation and application as well (threshed for others, if the rural analogy is sustained). Rigorous data gathering is still at the heart of modern statistics, but as statisticians we also interpret, theorise and present the data we collect.



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