



Foreword from the President



It will soon be the end of my term as President, an opportune time to look back and to the future. I am gratified to see that the two main strategic initiatives that I triggered, namely the RSS Covid-19 Task Force and the Data Science Task Force, have functioned effectively and energetically thanks to the selfless support of many fellows and the dynamism of the RSS staff.

The breadth of activities conceived, detailed below, has enriched the four long-term objectives of the society¹ and built a solid foundation for the RSS future. The RSS demonstrated its commitment to support the role of statistics in policy decisions and to increase the public understanding of statistics. Its pivotal engagement with the changing world of data driven activities was crystalized and given shape.

Once again, this year, it has been reassuring to see our **membership** – particularly the paid membership categories – continue to grow at record levels despite the difficult economic climate. We now have our highest-ever number of fellows, at over 6,600. This is at least partly thanks to strengthening our **corporate membership** offering; members subscribed via corporate membership schemes now make up more than 17% of our fellowship; the highest ever proportion.

Our **professional membership** offering has expanded, too. 12th June saw the Alliance for Data Science Professionals launch the new standards for data science, with five RSS members being amongst the first 13 individuals to beta-test the accreditation process and receive the new Advanced Data Science Professional certificate. Members will soon be able to apply for the certificate online via My RSS. We have also partnered with PushFar to trial a new self-service **mentoring** platform, with plans to launch a wider mentoring scheme aimed at personal and professional development and accessible to all members at every level. Development of our new **data science** content platform; “*Real World Data Science*”, is continuing. The editorial strategy has been drawn up, setting out the vision and goals of the platform, basic site and content structure, and ways of working. An editorial board has been appointed and content development is underway.

We’ve continued to provide volunteering opportunities for RSS fellows, including via the **Statisticians for Society** initiative, which supports members to provide *pro bono* statistics expertise to small UK charities. In 2022, we have (so far) had 67 enquiries from charities and matched a further 25 charities with volunteer statisticians, and completed ten projects. To date, well over 730 fellows have registered their interest in volunteering via the scheme.

I’m pleased that we have made good progress in the past year with our commitment to promoting **equality, diversity, and inclusion** (EDI) across the organisation and the profession – with the appointment of Eugenie Hunsicker as the inaugural RSS Honorary Officer for EDI. Her remit is to work with a committee which will coordinate EDI activities to ensure that we consider EDI in all our activities, understand the diversity of our membership and promote the impactful work achieved by members in this area.

¹ (i) for statistics to be used effectively in the public interest, (ii) for statistics as a discipline to thrive, (iii) for a strong body of professional statisticians and (iv) for society to be more statistically literate.

Foreword from the President - Continued

Our **policy and external relations** work has continued apace. The past year has of course seen a continued focus on the issues surrounding the pandemic, and our **Covid-19 Task Force** held four successful Covid Evidence Sessions which brought together key members of the statistical community to explore the statistical aspects of the pandemic ahead of the UK official inquiries. A major focus going forward is to shape the RSS contribution to the UK Covid-19 Public Inquiry. After a two-year hiatus due to Covid, July saw a return to a successful in-person awards ceremony for our **Statistical Excellence Awards** with over 100 attendees from media, government and academia. We continue to engage with the media on various topics on a regular basis, with our survey of MPs' statistical skills released in February covered by the *Guardian*, *Times*, *The I*, *BMJ*, *the BBC* and others.

I was delighted to see so many of you in person at our **international conference** in Aberdeen in Scotland this September. Around 450 people attended, with another 50 accessing the online content, and the feedback from delegates has been very positive. I particularly enjoyed seeing so many young statisticians and witnessing their enthusiasm for statistics. Our **training** offering continues to thrive, too, and we will have delivered 30 courses on our public course programme by the end of this year, as well as delivering 27 in-company courses – a new record for us.

It's been a busy year for all our **publications**. RSS appointed Oxford University Press (OUP) as the new publisher of the **RSS Journal Series** and *Significance* magazine and we are transitioning our journal content to OUP's new RSS journal websites for early 2023. *Significance* published a special collection of articles in April to celebrate the life, career and contributions of the late Sir David Cox – and we also held a successful invited speaker talk at the conference in Aberdeen on journal papers from each series celebrating his outstanding work. JRSSA published a record number of special issue collections this year: a celebration of Harvey Goldstein's lifetime contributions; The Future of Online Data Collection in Social Surveys; a special issue in memory of Fred Smith and Chris Skinner; and a Special Topic Meeting supplement on Covid-19 transmission. In June, we held the first in-person discussion meeting at our Errol Street headquarters since the start of the Covid-19 pandemic, with papers about the pandemic itself. And in October, *Significance* published a guest-edited special issue in support of the first International Day for Women in Statistics and Data Science. In the coming year, we are planning to launch a new journal on Data Science, so watch this space!

I look forward to seeing the RSS flourish from all the fantastic work that has taken place in 2022, and wish Andrew Garrett a very successful presidency. I wish you a healthy and peaceful end of the year.

With very best wishes



Professor Sylvia Richardson

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

The Society and its members continue to play an important role in the response to Covid-19. Our Covid-19 Task Force has continued to have an active voice on statistical issues relating to the pandemic, from calling for better data on the vaccine roll-out to urging the government to publish the evidence behind its travel lists. The Society's sections have also played an active role in the debate. In March the Task Force published [its recommendations](#) on lessons to be learnt from the pandemic, which has proved to be the Society's most downloaded report to date. Our [Working Group on Diagnostic Tests](#) has set out detailed recommendations on how to improve regulation around testing, which we are now discussing with the government.

Policy

We have responded to a wide range of government and parliamentary consultations. These have included Covid-19 (both lessons learned and on the economic impact), reproducibility and research integrity, the use of health data in research and the use of new data-based technologies in law enforcement.

Media

We have continued to engage regularly with the media and while our coverage is not as extensive as it was during the height of the pandemic, we have received regular media hits throughout 2022. Our survey of MPs statistical literacy skills which was released in February of this year was covered by the *Guardian*, *Times*, *The I* and others. While our criticism of the dismantling of several covid surveillance studies was also covered in numerous major UK publications.



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.

Outreach

Our statistical ambassadors provide regular statistical expertise to journalists and stakeholders. We also celebrated the statistical communication skills of non-statisticians via our Statistical Excellence in Journalism award, with winners from the *Financial Times*, *Times*, *Sky News* and others attending our July awards ceremony at Errol Street.

Education

In our engagement with government and funding councils, we have continued to emphasise the message that statistical education needs to take place in a wide range of subjects in addition to mathematics – so that as many people as possible gain some meaningful statistical education at school-level. The Society continues its work on improving statistical literacy, and to this end, we continue to be a funder and supporter of the Royal Society's Advisory Committee on Mathematics Education.

Significance

Significance magazine continues to attract a large readership in print and online. At the time of writing, Wiley Journal Insights reports more than 200,000 downloads of *Significance* articles as of 31 August 2022 (the latest date for which figures are available). Downloads are lower than the record numbers seen in 2020 and 2021, when our extensive pandemic-related coverage was made freely available to all. However, downloads up to August are ahead of pre-pandemic levels.

In April 2022, *Significance* published a well-received collection of articles to celebrate the life, career and contributions of the late Sir David Cox. The magazine also published a guest-edited special issue in October 2022 in support of the first International Day for Women in Statistics and Data Science.



Training

The range and popularity of our training programme has grown this year; by the end of September we had booked over 300 people onto our public training courses. We will run 30 public courses in 2021, and have provided bespoke training for clients including Deloitte MCS Ltd, the Ministry of Defence and the Foreign, Commonwealth & Development Office.

Events

While many section and group events have continued to be held online, we saw a gradual return to in-person events with some being held in a 'hybrid' format. This included the series of 4 Covid evidence sessions held at the Society. The President's Address was held at the Society in October.



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

We have made major improvements to our accreditation programme, including:

- Launching a new professional membership title - Data Analyst - to recognise good statistical knowledge at a modular level.
- Developing a competency-based route to our GradStat title, for eligible career-young statisticians.
- Introducing the RSS Quality Mark, an accreditation route for individual degree modules and data skills training from other education providers.

Statistical excellence awards

We celebrated the work of UK government statisticians and non-statisticians through our statistical excellence awards programme, which this year had a focus on equality, diversity and inclusion.. An in-person awards ceremony was held in July, with presentations from key RSS fellows and our award partners, with over 100 people in attendance.

Corporate Membership Partnerships

During 2021, the Society successfully registered three new corporate members; we now have a total of 27 partners. One of these organisations brought over 50 individual members to the RSS. We also welcomed 16 members from the Big Data Lab, our first Japanese partner. We have been working closely with the Cabinet Office to renew their partnership status and have now agreed that all future entrants on the Civil Service Statistical Fast Stream will be joined as RSS members. Furthermore, we will soon have a University in Ghana (Takoradi Technical University) set up as a corporate partner.

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

Equality, diversity and inclusion

We are working hard to promote Equality, Diversity and Inclusion across the organisation and the profession. As part of this, we are recruiting a new Honorary Officer for Equality, Diversity and Inclusion, who will be supported by a committee of fellows to drive this work forward.

Projects in development include a partnership with the Royal Society on standards for the reporting of research on sex differences, and supporting work to “decolonize” mathematics curriculums.

in the 21st Century (PARIS21). Both these initiatives help build capacity for low-income countries to develop their statistical systems.



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.

Data Science

Deepening the Society's commitment to data science and improving our offering for data scientists is a major priority for us. We are developing a new data science content platform, which will feature case studies, explainers, training guides and advice, created and curated by expert data science practitioners and leaders to support the delivery of high quality, ethical, and impactful data science. An editorial board has been appointed and content development is underway.

We have co-founded the Alliance for Data Science Professionals with the British Computer Society, The Chartered Institute for IT, the Operational Research Society, the Institute of Mathematics and its Applications, The Alan Turing Institute and the National Physical Laboratory. This group will lead a wider consortium of organisations in work to develop and shape the profession of data science.

We have also assembled an RSS Data Science Task Force of international experts to help us plan future work in this area.

Several projects are already underway, including:

- The Alliance for Data Science Professionals mentioned above
- A partnership with the Alan Turing Institute to provide the Joint Biosecurity Centre with statistical modelling research capability
- The active work of our Data Science Section, who organise regular well-attended speaker meetings and events such as the Ethics Happy Hours



Honours

Each year we award medals and prizes to people who have made outstanding contributions to the development of statistics. The 2021 awards ceremony was held in September as part of the annual conference in Manchester.

2021 honours and awards recipients

Guy Medal in Gold
Nancy Reid

Guy Medal in Silver
Paul Fearnhead

Guy Medal in Bronze
Rajen Shah

Barnett Award
Ruth King

David Cox Research Prize
Dominik Rothenhäusler

2021 honours and awards recipients



Guy Medal in Gold
Nancy Reid



Guy Medal in Silver
Paul Fearnhead



Guy Medal in Bronze
Rajen Shah



David Cox Research Prize
Dominik Rothenhäusler



Barnett Award
Ruth King

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.

Journals

In April 2022, we appointed Oxford University Press (OUP) as the new publisher of the RSS Journal Series and *Significance* magazine after more than 30 years with Wiley. We began a substantial transition programme, launching new journal homepages at OUP in early September and switching the ScholarOne manuscript submission system from Wiley to OUP in early October. Transfer of the full journal content will be completed in January 2023.

JRSSA published a record number of special issue collections during the year: A celebration of Harvey Goldstein's lifetime contributions; The Future of Online Data Collection

in Social Surveys; Special issue in memory of Fred Smith and Chris Skinner and a Special Topic Meeting supplement on Covid-19 transmission.

We held six Discussion meetings as part of the 2022 programme. In June, the first in-person Discussion meeting since the 2020 pandemic took place at Errol St. with papers about the Covid-19 pandemic. We held a multi-paper Discussion meeting at the RSS Annual Conference in Aberdeen on the topic of Statistical Aspects of Climate Change. Also in Aberdeen, we held a well-received invited speaker talk on journal papers from each series celebrating the outstanding work of the late Sir David Cox.



Sections and Local Groups

Our Sections, Special Interest and Local Groups continue to be very active, and held over 900 events and meetings during 2022.

International Conference

In September 2022, the RSS International Conference took place in Aberdeen which was attended by over 500 participants both in-person and online. The programme featured the usual mix of keynote talks, invited topic sessions and contributed talks and posters, and over 30 hours of content was made available online via live streaming and on-demand post-conference. The Society has announced that the RSS 2023 International Conference will take place in Harrogate, North Yorkshire from 4-7 September 2023.



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

Our membership base continues to strengthen and grow and 2022 saw us achieve our highest-ever number of fellows, more than 6,600. The RSS is a member-led organisation and as such draws on the expertise of its member volunteers to increase the scope and scale of our activities. This is successfully achieved through the engagement of our members through a range of opportunities, including participation in our governance, committees, Local Groups and Sections, and other advisory and working groups. We have continued to profile the wide-ranging work of our engaged members to demonstrate and recognise the impact and value they bring to the RSS and to wider society.

Statisticians for Society

We have further developed our work on supporting RSS members to provide *pro bono* statistics expertise to small UK charities. In 2021, we matched 22 charities with volunteer statisticians. Since the project began, we have completed 48 projects in total, and over 600 fellows have registered their interest in volunteering.



Partnerships

The Society has continued to work with a wide range of partners throughout the year including government statistical 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).

Campaigns Advisory Group

The Society established a new advisory group – composed primarily of Council members – to improve the ability of members to set the direction of our campaign and policy work. This should provide greater transparency and accountability in how these areas of our work are pursued.



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.

IT

Online security has been a key focus with the RSS achieving the government-backed "Cyber Essentials" certification.

We have broadened our reach on social media and significantly increased subscribers to our wide range of newsletters. We have improved data collection and analysis of our members enabling us to target them with more personalised communications.

We have deepened the integration of our online systems and introduced automation to deliver cost and efficiency savings.

Finances and operations

Financially the Society has mostly returned to pre-pandemic levels.

Membership subscription income has continued to grow steadily and despite fees being frozen in 2020 we expect to achieve our highest record from member fees this year. Our commercial training activities have also performed well, with the exception of our venue hire business which has been stalled by the need to improve our facilities. We have also successfully secured external funds to primarily support our work in data science and expect to start 2023 in a strong financial position.



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.



Royal Statistical Society

12 Errol Street, London EC1Y 8LX

T +44 (0)20 7638 8998

E info@rss.org.uk

🐦 [@RoyalStatSoc](https://twitter.com/RoyalStatSoc)

rss.org.uk