



Foreword from the President



I have enjoyed my first year as President immensely and I was pleased to have the opportunity to meet so many fellows at our Conference in September. During what can only be described as an Indian Summer in the beautiful spa town of Harrogate, it was inspiring to observe the breadth and depth of the work undertaken by so many statisticians and data scientists. We welcomed around 640 delegates from 36 countries to the conference – our second largest attendance – with many saying it was our best yet. Thank you to Programme Chair, Mona Kanaan and the RSS team for making it so. Brighton awaits in 2024.

Continuing the membership theme, the RSS membership team have continued to recruit record numbers of members and in 2023 we have our highest-ever number of fellows at more than 6,700 – with around 19% subscribing via corporate membership schemes. I am particularly pleased to see the Data Science Professional certificate launched, adding to our professional pathway offering. Rachel Hilliam, Vice President for Professional Affairs, along with Ricky McGowan on the staff team, have done an exceptional job in moving this forward through their collegial approach with related societies and I look forward to Chartered Data Scientist emerging under the auspices of our Royal Charter. Importantly, this comes alongside the launch of our report funded by the Gatsby Foundation on alternative routes into data science careers.

The first half of 2023 saw Stian Westlake moving on to a new role and I would like to thank him for supporting me during those first few key months and for the strong legacy he leaves. Nicola Emmerson provided valuable support and continuity in the interim as acting CEO. I am delighted that Sarah Cumbers joined as our new CEO in September, just in time for Conference. Sarah has been busy getting to grips with all things RSS as she develops, amongst many other things, a five-year strategic plan alongside Strategy Chair, Jennifer Visser-Rogers. Thank you to all those fellows that responded to our call for input this year.

It has been a busy year in terms of policy and we have secured media coverage in publications such as the Guardian, Telegraph, Economist, BBC and the Times on some of the Society's key campaign areas, including Covid-19, cost-of-living and the UK Prime Minister's 'Maths to 18' plan. We also responded to a consultation regarding the proposed Academy for the Mathematical Sciences (AcadMathSci), expressing our support and committing to continued engagement with it over the course of its development.

The Society was invited to submit evidence to the UK Covid-19 Inquiry on resilience and preparedness and we were able to quickly bring together the incisive and thorough work that has previously been undertaken by the Covid-19 Task Force to formulate our response. We held a successful roundtable meeting to feed into the review of the UK Statistics Authority, being undertaken by review chair and RSS Fellow, Denise Lievesley, who was also in attendance. Through the work of the National Statistics Advisory Group, we have continued to promote the development and routine reporting of Household Cost Indices that include interest payments for mortgages and other loans that impact sections of society differentially in terms of inflation.

Artificial Intelligence (AI) continues to be a hot topic and we have responded to both the UK Government's White Paper on AI regulation and the Communications and Digital Lords Select Committee's inquiry into Large Language Models. We also participated in the AI Fringe (which complemented the UK Government's AI Safety Summit) with an Errol Street event. In these areas, the Society has benefited greatly from the expert input of its relevant Sections: Data Ethics and Governance, Data Science and AI, and Computational Statistics and Machine Learning.

Foreword from the President - Continued

We have launched a new initiative, Statistics Under Pressure, that aims to support statisticians in providing data to inform decision-making at pace, raising awareness around the need for trade-offs and how to best communicate uncertainty. Letters written on behalf of the Society include to the Chair of the Thirwall Inquiry following the trial, and subsequent convictions, of Lucy Letby. We proposed that the terms of reference include a consideration of the appropriate use of statistical evidence in this type of case. We have established a climate change task force this year to contribute to the statistical aspects of climate change and net zero with a focus on the public understanding of the statistical issues. It is apt that the topic for the William Guy lecture was climate change and environmental statistics, and a new approach means that we have appointed three lecturers this year, offering schools an online option to increase our coverage and impact.

Our journals and *Significance* successfully transitioned to our new publisher Oxford University Press and *Significance* published its 100th issue in June 2023, with glowing testimonials from VIP fans and contributors. *Significance* remains a wonderful outward facing publication to promote the work of our profession and its impact on society. Meanwhile, our Real World Data Science (RWDS) platform has gathered momentum with more than 50 articles published and 13,000 site visitors. This year, the American Statistical Association agreed to become a partner and financial contributor to RWDS, which will only strengthen the platform. On the training front, two new training courses have been developed, and we have delivered 20 commissioned courses.

We held a vibrant annual Statistical Excellence Awards ceremony at Errol Street in the summer with around 100 attendees from the media, government, the healthcare sector and industry. For the 2024 honours, we have appointed three search committees to actively seek out nominations for the Society's honours and awards that reflect the full diversity of our membership, and we remain committed to promoting equality, diversity and inclusion (EDI) across the Society and the profession. This year, the role of Honorary Officer for EDI has been taken up by Tricia Dodd, and we very much look forward to her input.

Our volunteering schemes have continued to grow in popularity in the past year. We now have 835 volunteers for our pro bono initiative, Statisticians for Society (S4S), with over 140 new member sign-ups, and 53 active projects underway. More than a dozen projects were completed in 2023.

As I enter my second year, I am pleased that John Aston will join Council as President-Elect and I look forward to working with him in 2024. Ably supported by RSS staff, the Society remains a member-led organisation whose influence depends upon volunteers who are generous with their time, expertise and energy. It is a privilege to work with so many talented people who care deeply about delivering on our charter and to represent over 11,000 members.

Thank you to all our members and staff for your continued support and best wishes for the festive season.



Andrew Garrett

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 our members continued to play an important role in the response to Covid-19 this year. Our policy work has focused on, with the support of a wide variety of RSS stakeholders, writing up the Covid-19 Evidence Sessions and preparing for the public inquiry. We are pleased that the Society was approached to give evidence, and submitted the final written submission on 21 April.

Policy

We have been delivering policy work that furthers our campaign priorities. We have fed in to the consultation on the government's AI white paper and also a House of Lords Select Committee inquiry into large language models. We are pushing via these and other avenues for investment in evaluation methodology and open source.

We have been engaging heavily around official statistics – arguing for a public statistics approach that emphasises the needs of a diverse range of users. This is how we have framed our engagement with the Cabinet Office's review of the UK Statistics Authority and our response to a House of Commons Select Committee inquiry into the UK's evidence base. We have also been engaging with the Office for National Statistics around their plans to replace the census with annual population statistics based on administrative data.

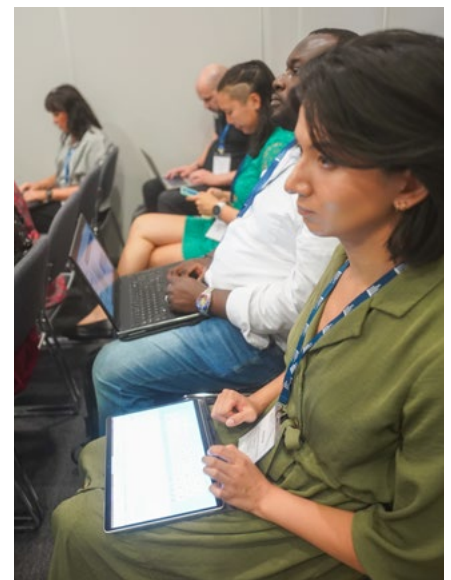
Looking forward, our newly established Climate Change Task Force will start to examine and develop outputs on statistical aspects of the public debate around environmental science. We have also reached agreement with the Engineering and Physical Sciences Research Council to analyse their funding data to assess if there is any evidence of bias in how grants are awarded, and we will report on this mid-2024.

Media

We have continued to engage with the media on a regular basis. We have had coverage in the majority of UK mainstream news publications on some of our key policy areas, including the government's proposals around Maths to 18 education, cost of living and Covid-19.

Our statistical ambassadors have provided their expertise to a number of publications throughout the year, including the i newspaper, the BBC and the Times.

We also celebrated best practice in statistical communication via our Statistical Excellence in Journalism Awards, with winners including journalists from the Guardian and Sky News and a category for best commentary by non-journalists, which this year was won by Christina Pagel.



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.

Significance

Significance magazine continues to attract a large readership in print and online. This year the Society completed the transition from Wiley to Oxford University Press (OUP). In June the Society published its 100th issue and further celebrated *Significance* with the launch of a redesigned magazine website in October 2023.



Training

This year we introduced two new courses and have delivered 20 commissioned courses, mainly for the civil service but also UKHSA, UKAEA and Sellafield. Public course sales are comparable to 2022.

Events

While many section and group events have returned to in-person meetings or used a 'hybrid' format, there has still been a strong programme of online events. Events organised have included a series of discussions with the Office for National Statistics on Beyond GDP: what matters most to measuring progress.

Education and Outreach

Our Education Policy Advisory Group continues to work on its three strategic objectives – on statistical literacy, teacher engagement with statistics and the curriculum. In April we relaunched the William Guy lecturer programme with changes to the scheme to focus on online delivery of material and the appointment of multiple lecturers.

Given that it is one of our key campaign priorities, we asked lecturers to focus on the role of statistics in climate change. We received nine applications for the scheme (which is around double the number of applications we had been receiving pre-pandemic) and appointed three lecturers; their videos are now available on the RSS website. Our statistical ambassadors also continue to deliver talks to various groups in their areas of statistical expertise.

We have also engaged on the prime minister's Maths to 18 proposals: we held a roundtable to discuss how we should place statistics at the heart of these plans, submitted a write-up of the event to the group who is advising the PM on these matters – and the VP for Education and Statistical Literacy met with the advisors to set out the RSS's views on this.

We have also been funded by the Gatsby Foundation to conduct policy research focusing on non-degree pathways into data science careers – publishing a detailed report with recommendations for how to improve data science apprenticeships. We continue to promote these findings to government.



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.

Corporate Membership Partnerships

During the later part of 2022 and 2023, the Society successfully registered five new corporate members; we now have a total of 31 partners. We welcomed our first university abroad as a corporate partner, University of Kuwait, with King's College London shortly following.

Data Science

The Society has maintained its focus on data science in 2023 by improving our offering for data science professionals in three main areas .

A new online open access journal, RSS Data Science, is due to be fully launched in early 2024 once the editorial board is complete and data science papers have been submitted for review. Currently, the new journal has agreed branding and logo, a test submission site and refined aims and scope.

The Society launched the Real World Data Science (RWDS) platform in mid-October of 2022. Start-up funding was awarded by the Alan Turing Institute, and in the summer of 2023, the American Statistical Association agreed to become a partner and financial contributor to RWDS. As of September 2023, RWDS has published 50 articles, and the site has received 12,000 visitors and 37,000 page views. Our video content has generated 2,700 views on YouTube.

And, as part of the Society's accreditation, the Advanced Data Science Professional has grown within the RSS with many applications being submitted. Several corporate partners have shown interest in the title and a graduate version of the certificate (Data Science Professional) went live in the last quarter of the year.

The Society remains a key player within the Alliance for Data Science Professionals. Rachel Hilliam, in addition to agreeing to remain as RSS VP for Professional Affairs for an additional year (until the end of 2023), agreed to remain Chair of the AfDSP until the end of the same year as we moved to an operational model and worked to recruit new member bodies.



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Honours

Each year we award medals and prizes to people who have made outstanding contributions to the development of statistics. The 2023 awards ceremony was held in September as part of the annual conference in Harrogate.

2023 honours and awards recipients

Guy Medal in Silver
Mark Girolami

Guy Medal in Bronze
Tengyao Wang

David Cox Research Prize
Oliver Stoner

Barnett Award
Marc Genton

Honorary Fellowship
Walter Radermacher

The Society made changes in the process to encourage diversity and inclusivity for the 2024 RSS Honours and Awards. 12 awards were open for nominations, and the Mardia Prize.

The Society would like to ensure all members are recognised for their hard work therefore have formed a search committee with the responsibility to find members who are deserving of this award. The search committee will focus on finding suitable nominations across the board to ensure we are being inclusive to all our members and providing equal opportunity.

The deadline for 2024 nominations is Tuesday October 31 and there will be two honours committee meetings commencing to discuss all 12 awards. The first meeting will focus on academic related awards whilst the second meeting will focus on particular area of discipline awards.

Two honours workshops have been organised. One was hosted at the RSS Conference on Tuesday 5 September with Andy Garrett and Richard Samworth who joined remotely. There will be an online workshop for those who did not get a chance to attend which will be held on Monday 25 September 2023 from 1pm – 2pm. Richard Samworth will inform the members on what the Honours Committee looks for in the nomination forms as he was previously part of this committee.

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.

Equality, diversity and inclusion

The Society continues its work to promote Equality, Diversity and Inclusion across the organisation and the profession. This year we re-appointed to the role of Honorary Officer for Equality, Diversity (EDI), and Inclusion and convened the first meeting of the EDI advisory group to discuss the group's remit and future work plan.

The group are likely to engage with the review of the Society's awards and honours processes, diversity across the Society's governance structures, and supporting the development of the next five-year strategy.

Statistical excellence awards

We celebrated the work of those in data related professions via our statistical excellence awards. The Champion award celebrates the work of UK government statisticians while the Trustworthiness, Quality & Value award celebrates those who voluntarily apply the Code of Practice to their work. The Florence Nightingale Award was presented to two teams working in healthcare data analytics. An in-person awards ceremony was held in July, with presentations from key RSS fellows and our award partners, with around 100 people in attendance.

Photo: RSS Poster Prize, Second place winner Daniel Perez Vicencio (University of Edinburgh) for 'Utility of Cardiovascular Risk Scores in Identifying Coronary Artery Disease in Observation-Zone-Patients with Chest Pain'.



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

This year the transition to the new publisher for journals and Significance was completed. Both are now published by Oxford University Press (OUP). New journal articles are now published on the OUP 'Advance Articles' site (they used to publish on Wiley Online Library), and all archived journal content was fully transferred to OUP in May.

The staff team grew this year with the recruitment in April of a publishing assistant to support daily journal business, drive forward the journal webinar programme and support the journals review and development of the new RSS Data Science journal. A webinar took place in the Autumn and a programme is in planning with the Journal Webinar Advisory Group (JWAG) for 2024.

As part of the Annual Conference in Harrogate, the team hosted an invited speaker session on 'Network Analysis' featuring one paper selected from each journal series.

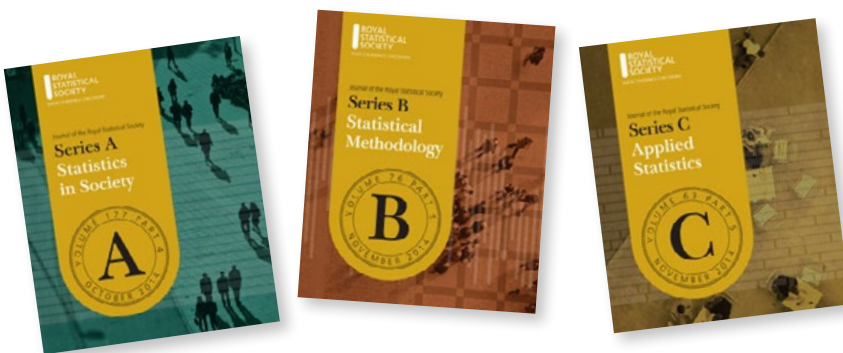
A multi-paper Discussion meeting on 'Probabilistic and statistical aspects of machine learning' was also held in Harrogate with papers for Series B from Li et al. and Benton et al. The Discussion meeting programme saw two papers read at successful hybrid meetings at Errol St. in May and June, with three more meetings planned for early October, December and in January 2024.

Sections and Local Groups

Our Sections, Special Interest and Local Groups continue to be very active and held over 100 events and meetings during 2023. Sections and Local Groups have been given support to understand their roles and responsibilities. This includes induction webinars at the start of 2023 and an AGM workshop in July. We are currently working on induction packs for new committee members and officers to get a better understanding of the role.

International Conference

In September 2023, the RSS International Conference took place in Harrogate which was attended by over 600 participants from around 30 countries. The programme featured the usual mix of keynote talks, invited topic sessions and contributed talks and posters. The Society has announced that the RSS 2024 International Conference will take place in Brighton, East Sussex from 2-5 September 2024.



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

We have continued to recruit record numbers of members in 2023 and still have our highest-ever number of fellows, at more than 6,700 – with more than 19% (the highest ever proportion) subscribing via corporate membership schemes.

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.

Statisticians for Society

Early in the year the programme linked with Charity Connect to launch an advertising campaign which resulted in 13 suitable enquiries which have been progressed. We have also surpassed the annual target of recruiting 100 new members, as 143 members have signed up to the initiative so far, giving us a total of 835 S4S members. We are also currently working with 53 active projects, with 13 having been completed so far in 2023.

This year we also hosted an S4S event at RSS HQ as part of London Data Week in July. Representatives of London Charities attended the event to meet with S4S volunteers, to learn about how statistics and statistical analysis can support the delivery of charitable objectives, and to discuss their strategic aims and challenges. The S4S Committee identified 6 projects for consideration at the event, 5 of which were accepted onto the programme.

Supporting small charities and socially useful initiatives

This initiative is funded by the Big Lottery Fund and aims to support UK registered charities and socially useful initiatives with an annual turnover of less than £1m.

Increasingly, these organisations are looking to demonstrate their impact, improve decision making, and deliver better services, but often their capacity and skills often limit them from doing so. Through this initiative, we will match members with charitable organisations in need of their data and statistical skills.

To find out more, visit rss.org.uk/membership/volunteering-and-promoting/statisticians-for-society-initiative/
Or contact us at s4s@rss.org.uk



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.

Governance

In 2023 the Council elected four candidates to fill vacancies left by Trustees who had concluded their four-year term in office. Furthermore, the Council appointed two new post holders to the roles of Vice-President for Academic Affairs and Honorary officer for Discussion Meetings.

The Society has focused its efforts on improving member engagement with the Council elections this year and saw an increase of 7.65% on the 2022 election turnout.

In September, the Society announced that John Aston has been appointed as President-Elect. John will take up the position at the start of 2024 and will succeed Andrew Garrett as Society President on January 1, 2025.

IT

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

Finances and operations

The financial position for 2023 is stable with a growth in membership income largely as a result of a low attrition rate. Income from journals is diminishing as a result of the move to open access publishing, and over the next few years the RSS will be concentrating on more income-generating activities to fill the funding gap. The RSS headquarters in London, which the Society owns outright, is no longer fit for purpose and solving that issue will be a major project in 2024.



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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