the Survey Statistician

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INTERNATIONAL ASSOCIATION OF SURVEY STATISTICIANS

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In this Issue

Letter from the Editors

Dear Readers,

We are happy to present you the contents of the latest issue of *The Survey Statistician!*

The IASS EC members welcome the readers. The President of IASS, Natalie Shlomo, in her *Letter from the President*, and the Scientific Secretary of IASS, Annamaria Bianchi, in her *Report of the Scientific Secretary*, overlook the activities of IASS during the first half of 2024. Although these activities are presented in a comprehensive and timely manner on the IASS homepage, the concentrated information in the TSS once again ensures that the IASS is a very active institution. Natalie Shlomo draws readers' attention to the IASS Strategic Document and invites its members to attend the IASS Annual General Meeting on 17 July at 14.00 CET.

Next, Kirk Wolter, Eric Rancourt and Wesley Yung pay tribute to two past presidents of IASS who recently passed away: Barbara Bailar and Nanjamma Chinnappa. They made significant contributions to the fields of statistics in which they worked and left good memories in the hearts of their colleagues and friends. On this occasion, we recall Nanjamma Chinnappa's congratulations to IASS members on the occasion of IASS's 50th anniversary: "May the institution continue to grow, and be effective in promoting good survey methods all over the world".

The issue covers a wide range of topics, from the analysis of historical facts to recent methods in survey statistics. The composition of the IASS Jubilee special issue (Vol. 88, July 2023) opened an interesting topic on the history of survey statistics. The historical development of survey statistics varies greatly between countries and continents, and it is worth revealing this history in TSS to make it easier to understand for future generations. Thomas Laitila gives an overview of the early Scandinavian contributions to survey sampling. Some surprising facts await the reader.

The following articles focus on recent methods in survey statistics: machine learning and the use of big data, as well as statistical inference with non-probability samples. Machine learning methods are becoming particularly popular in the era of big data and powerful computers. They can also be used in survey statistics. Camelia Goga gives an overview of some theoretical issues of machine learning in survey statistics. She and her collaborators have made an important contribution in this area.

Early career survey statisticians Camilla Salvatore and Angelo Moretti solve a modern statistical problem. They estimate the proportion of people worried about climate changes in small areas using web data as auxiliary information to improve the estimates. This work complements the topic presented in the January 2024 issue of TSS by the Italian statisticians Stefano Marchetti and Schirripa Spagnolo on the use of big data in small area estimation applications.

In the *Book & Software Review* section, Angelo Moretti reviews the book "Sampling and estimation from finite populations" by Yves Tillé, and an overview of software for statistical inference with nonprobability samples is provided by the Spanish statisticians Beatriz Cobo, Ramón Ferri-García, Jorge L. Rueda-Sánchez and María del Mar Rueda. This review therefore presents software for the application of some recent methods in survey statistics.

Finally, the current issue includes the traditional country reports which overlook the activities of survey statisticians around the world. Recent publications in other journals and planned workshops and conferences in 2024-2025 are listed as usual.

The TSS editorial team is changing. Alina Matei is the new Associate Editor of TSS and this is the first issue published with her contribution. She replaces Eric Rancourt, who worked for TSS for almost ten years - since January 2015 - and wrote the history of TSS in the July 2023 issue. We

thank Eric for his important editorial work. We are delighted that Alina has joined the editorial team. A new person usually brings some freshness to the work, and we expect to see some updates in future issues of TSS. The Technical Editor of TSS, Maciej Beręsewicz, is making his last compilation of TSS and will hand over his task to another statistician. The essence of the technical editor's work is to collect information from the content pages of other journals, to assemble the articles and all materials into a complete whole, including some editing and merging of .pdf files obtained from MS Word and Latex into a common .pdf file. Maciej has learned this from the previous Technical Editor, Martiņš Liberts, and the work is going smoothly. We thank Maciej for his important contribution and his patient work in compiling an issue again and again due to the endless editorial changes.

Most of the articles published in TSS are solicited by the editors. We encourage readers of TSS to take the initiative and submit articles themselves, outlining some topics in survey statistics, its history and choosing the appropriate section. You can contact any of the Editorial Board members listed on the 2nd page of TSS.

Danutė Krapavickaitė

TSS Editor

Letter from the President

Dear IASS Members,

The IASS Executive Committee have been working very hard to promote and support the many activities that serve our community of survey statisticians. I'm very grateful to Partha Lahiri, Eric Rancourt, Andres Gutierrez, Jiraphan Suntornchost and Annamaria Bianchi for their dedication in undertaking all of the IASS initiatives. I am also grateful to the ISI Permanent Office, particularly to Conchita Kleijweg and her team, for supporting IASS operations and administration and ensuring that everything is run smoothly.

Our IASS Strategic Document is open for consultation and available here: [Strategic Document]. Please provide comments to natalie.shlomo@manchester.ac.uk before we bring it to the vote at our 2024 IASS Annual General Assembly (AGM) to be held on July 17th at 2 pm CET. It is important that you make your voice heard on the future direction of the IASS by attending the AGM. The registration page is here: [2024 Annual General Assembly].

In the Strategic Document, we have identified new avenues to increase our visibility and support for our community. The first strategy is to actively support relevant survey statistics conferences by organizing special invited sessions. I am pleased to say that we will now have a sponsored session at the Statistics Canada International Methodology Symposium (October 29–November 1, 2024) titled: Developments in Small Area Estimation. We are also sponsoring an invited session at the upcoming 3rd Workshop on Methodologies for Official Statistics at ISTAT (December 4–5, 2024) titled: Innovations in Small Area Estimation, focusing on the use of innovative non-survey data in small area estimation.

Another important strategy is to sponsor an IASS satellite conference prior to the 65th World Statistics Congress to be held in The Hague. The IASS has a tradition of providing monetary support to various conferences in survey statistics, but does not necessarily brand an official IASS satellite conference to the WSC. This will now change. The IASS is happy to join with the biannual 2025 9th Italian Conference on Survey Methodology (ITACOSM 2025). The joint conference will be held July 1–4, 2025 in Bologna, Italy. Moreover, we are also delighted to announce that the 2025 Small Area Estimation (SAE 2025) conference will be held during the second week of July also in Italy. Therefore, both conferences will be labelled as IASS satellite conferences to the 65th WSC. Note that although the 65h WSC has had to be moved from July to October 5–9, 2025, we have decided to keep the IASS satellite conference in July as originally scheduled to allow for more flexibility during the summer months. Watch this space as more information emerges on these exciting July 2025 conferences now in planning.

This year the IASS supported two events: a Workshop on Survey Data Visualization using R, held in Ogun State, Nigeria on January 24, 2024, and the upcoming 13th edition of the International Francophone Conference on Sample Surveys to be held on November 5–8, 2024 in Luxembourg. The list of upcoming conferences and workshops are featured on our events page on the IASS website: [Events], in our monthly newsletters: [Newsletters], as well as listed in The Survey Statistician.

The Survey Statistician (past issues can be found here: [The Survey Statistician]) continues to be our flagship IASS publication. An essential and historical part of The Survey Statistician are the country reports and we are very grateful to the IASS country representatives for their dedication in submitting timely articles. We are also very grateful to our editorial team of The Survey Statistician,

in particular our Editor-in-Chiefs, Danutė Krapavickaitė and Alina Matei, for producing and publishing this outstanding publication.

The Survey Statistician serves our community scientifically with informative articles, particularly highlighting new developments and opportunities as we make the cross-over into AI and Data Science. Beyond traditional components of survey statistics covering survey design, questionnaire development, data collection and modes of response, nonresponse adjustments and weighting, small area estimation and confidentiality practices, the field of survey statistics is moving into more formal statistical and modelling theory as we deal with ongoing challenges related to the quality of probability-based surveys. New directions of research include measuring and compensating for measurement errors and informative nonresponse, nonprobability sampling, data integration and multi-source statistics, and Bayesian survey estimation. We aim to ensure that The Survey Statistician remains relevant with timely articles dedicated to these areas and to the future of survey statistics.

Our highly successful IASS webinar series continues to provide stimulating and informative talks from leading survey statisticians around the world and I thank Andres Gutierrez for organizing this successful series. We provide regular updates on our IASS website [Home] and through our increasing social media presence and I thank Annamaria Bianchi for posting and coordinating our social media accounts on Facebook, LinkedIn and X. We are also now in the process of selecting the recipient of the 2024 Hukum Chandra Prize and I thank Eric Rancourt for chairing the selection committee.

Now is the time to spread the word about IASS to your networks and to help increase our membership. The website for joining the IASS is here: [Join IASS]. Please download our brochure here: [Brochure] to help recruit new members from your networks. I am also pleased to say that we continue to expand our institutional members and have recently welcomed two new institutional members to the IASS: the Office for National Statistics in the UK and IPSOS Italy. We thank all institutional members for their continuing support to the IASS. The list of institutional members to the IASS are included in the back page of The Survey Statistician.

Please get in touch with me at Natalie.shlomo@manchester.ac.uk if you have ideas, suggestions, comments, improvements, or criticisms, regarding IASS activities and strategic priorities, particularly related to organizing sessions at relevant conferences and workshops.

With best wishes,

Natalie Shlomo

President IASS, 2023-2025

Report from the Scientific Secretary

One year has already passed since my election and appointment as Scientific Secretary of the IASS. It has been a very intense year, with a lot of existing and new activities sponsored by the IASS.

The organization of the monthly **Webinar series** has continued, and we are particularly thankful to Andrés Gutiérrez for his engagement in organizing the webinars. We have now reached Webinar number 41 with the speaker Andrew Mercer, Senior Research Methodologist at Pew Research Center, and we are happy to have made it a monthly event that has attracted an audience of over **two hundred registered participants**. Please, visit the IASS events page for upcoming webinars: http://isi-iass.org/home/events/. Also visit the webinar section of our website http://isi-iass.org/home/webinars/ for slides of past webinars, and that of ISI https://isi-web.org/courses-webinars-workshops?type=2&field_type_courses=All for recorded past webinars. Contact Andrés (andres.gutierrez@cepal.org) if you have suggestions for topics and/or speakers for an upcoming webinar. Those webinars held in the first six months of 2024 have covered Latent Variable Models for Finite Population Inference by Maria Giovanna Ranalli (University of Perugia), New Developments in Small Area Estimation from a Practitioner's Perspective by David Newhouse (World Bank), Data Integration, Data Linkage, and Linked Data Analysis by Tiziana Tuoto (Istat, Italian National Institute of Statistics), Model-Based Optimal Designs for a Multipurpose Farm Survey by Jay Breidt (NORC at the University of Chicago), An Estimation of Variance of Random Effects to Solve Multiple Problems in Small Area Estimation by Masayo Y. Hirose (Institute of Mathematics for Indystry, Kyushu University, Japan).

One upcoming **webinar** in October will be devoted to the **winner of the second edition of the Biennial Hukum Chandra Memorial Prize.** The prize will be awarded by the end of July to a mid-career researcher, defined as someone with more than 10 years of experience after PhD or in employment, who has made an important contribution in research areas of Hukum Chandra's work, namely survey sampling, small area estimation, official statistics, spatial analysis applied to official and survey statistics and agricultural statistics. The definition of a mid-career researcher in this call aims to recognise researchers who are close to Dr. Chandra's career trajectory. The prize committee has been appointed by the IASS EC and is composed by Eric Rancourt (Statistics Canada), Nancy McBeth (New Zealand), Siu-Ming Tam (Australian Bureau of Statistics), and Sharon Lohr (Arizona State University). Please follow the updates on our social media pages and our Newsletter.

As we approach the next **ISI World Statistics Congress** in The Hague, we have been working on it. The Invited Paper Session (IPS) submissions have closed and there have been 14 submitted proposals sponsored by the IASS. Also the Call for Contributed Paper Submissions (CPS) closed on 17 June 2024. Furthermore, we are planning an **IASS satellite meeting to the WSC**. Details on it will be announced shortly. For more information, visit the WSC webpage https://www.isi-next.org/conferences/isi-wsc2025/.

Turning to our social media activity, during these past months I have continued posting about webinars, conferences, books, articles, prizes, the newsletter release and its contents. The number of followers to the pages are increasing: since January, the followers increased from 392 to 416, LinkedIn followers from 1434 to 1801 and Facebook followers from 178 to 216. Thus, please, follow the updates on the life of the IASS via **social media** and reading our **monthly Newsletter** available at http://isi-iass.org/home/services/newsletters/. Other than webinars, information on conferences, on the recipients of awards and on call for nominations, it also features a **reading of the month**

section in which we suggest monographs, special issues or edited books on topics of interest to the members of IASS. Please, feel free to contact us for news and information to be added in the Newsletter by the 15th of each month.

Annamaria Bianchi

IASS Scientific Secretary 2023-2025

Barbara A. Bailar's passing

I write to inform her many friends and colleagues that Barbara Bailar passed away June 13, 2023, at her home in Houston, Texas, where she had moved during the pandemic to be near family

Barbara grew up in upstate New York and received a bachelor's degree in mathematics from the State University of New York at Albany. She was trained in statistics at Virginia Tech in Blacksburg (MS) and American University in Washington, DC (PhD).

She spent most of her career at the US Census Bureau, where she worked from 1958 to 1987. She rose to become Associate Director for Statistical Standards and Methodology and, in that role, was instrumental in establishing a Computer Assisted Telephone Interviewing capability (then a relatively new mode of data collection) and survey methodology as a distinct discipline at the Census Bureau. Barbara sought and organized the financial resources and institutional backing necessary to develop a cognitive-laboratory organizational unit within the Bureau. She defended the 1980 Decennial Census in federal court and led efforts to develop and test new methods of census taking that would reduce differential undercount in future censuses. Barbara founded the Census Bureau's annual research conference in the mid-1980's, a forerunner of today's FCSM Research and Policy Conference. She was an executive with NORC at the University of Chicago from 1995 to 2001.

Barbara conducted research on non-sampling errors in social surveys and censuses. She designed and analysed special studies to measure the correlated component of response variance brought by interviewer effects. Her work on rotation group bias and an error profile for the Current Population Survey is well known.

Barbara was a prominent statistician. She was the 82nd president of the American Statistical Association (ASA) in 1987, president of the International Association of Survey Statistician in 1989-1991, and vice president of the International Statistical Institute in1993-1995. She served as Executive Director of the ASA for seven years in the late 1980s and early 1990's. She was active in the Washington Statistical Society throughout her career. Barbara was a Fellow of the ASA and an Elected Member of the International Statistical Institute.

Barbara was married to John C. Bailar III (deceased), a prominent bio-medical statistician who was founding chair of the Department of Public Health Sciences, University of Chicago. She is survived by two daughters, Pamela Monaco (Ocean County College) and Melissa Bailar (Rice University), and one grandchild.

I had the distinct honour and great pleasure of working with Barbara for 20 years.

Kirk Wolter

Tribute to Nanjamma Chinnappa

Dr. Boverianda Nanjamma Chinnappa, loving wife to Boverlanda Chinnappa and dear mother to Kaveri and Gouri passed away peacefully in Mysuru, India on March 31, 2024, at the age of 89.

Nanjamma held a master's degree in Statistics from Madras University and one in Advanced Statistics from the Indian Statistical Institute, Kolkata. She joined Statistics Canada as a Senior Methodologist in the Institutions and Agriculture Survey Methods Division (IASMD) in 1975. In 1987, she became the Director of the Business Survey Methods Division (BSMD) and retired in 1995. During her statistical career, she was also an international consultant and was very active in professional associations. From 1997 to 1999, she was president of the IASS. A renowned scholar, she was elected as a Fellow of the American Statistical Association in 1993 and was awarded an honorary doctorate degree (D. Litt.) by Mangalore University in 2006.

Prior to joining Statistics Canada, she was a Visiting fellow at Cambridge University. After retiring, she and her husband went back to India where they deployed enormous amounts of effort in successfully contributing to the preservation and publication of information on local sacred heritage sites. This included the publication of two books related to the Kodava community.

As soon as anyone would pronounce the name Nanjamma, anyone who had the great chance of working with her or meeting her would immediately have recollections of how an exceptionally nice and genuinely caring person she was. At Statistics Canada, her office door was always opened to listen to and advise any and all on any topic. She approached issues in ways that often left people struck by her openness and by how she made so many work problems become easier to solve when looked at more humanly.

Nanjamma was icon. She will be dearly missed by all who knew her.

Eric Rancourt and Wesley Yung