



# BIOMETRIC BULLETIN

International Biometric Society Internationale Biometrische Gesellschaft Société Internationale de Biométrie

*"Biometry, the active pursuit of biological knowledge by quantitative methods."* - R.A. Fisher, 1948

## President's Corner



It is sobering to realize how much has happened at the IBS and in the world since my last column back in late August. I'll restrict myself here to news and updates related to the IBS, acknowl-

edging only that it has been a very eventful period on the world front. Already old news by now is the very difficult decision of changing the location of next year's International Biometric Conference (IBC) from Buenos Aires, Argentina to Atlanta, Georgia, U.S.A. I will not revisit here the reasons behind that decision, as they have been shared in previous communications from the International Business Office (IBO). But I would like to give a heartfelt acknowledgement of the wonderful work that the Argentinean Region did, first in putting together a successful bid to host IBC2024, but also in all the follow-up activities that took place afterward. I am particularly thankful to the co-chairs of the Local Organizing Committee (LOC), Gabriela Cendoya and Silvia Sühling, who have been just wonderful partners in the IBC2024 Planning Committee and will remain involved in the organization of the conference. I am delighted to share that Lance Waller (ENAR) has agreed to join the Planning Committee as LOC co-chair, providing some much-welcome local representation in Atlanta. I am looking forward to working closely with Gabriela, Silvia, Lance, and the rest of the Planning Committee in making IBC2024 a great success.

On the scientific program front, the organization of IBC2024 has progressed as planned, unaffected by the site change. The International Program Committee (IPC), led by its chair, Dimitris Rizopoulos (Netherland Region), is in the final stages of completing the invited sessions program. Likewise, the Education Committee (EC), led by its chair, Annette Kopp-Schneider (German Region) is giving the final touches to the short course program. Both programs will be announced when the IBC2024 website is launched, which is expected to happen at the beginning of December. There were a large number of submissions for both invited sessions and short courses, which has allowed the IPC and the EC to put together an exciting scientific program for IBC2024. My sincere thanks to all committee members who have been involved in the selection process. The IBS Executive Board (EB) had a very successful face-to-face meeting during the Central European Network (CEN) conference in Basel, Switzerland, last September. All EB members were able to attend the meeting in person, which was particularly useful for the seven new EB members who have joined the group this year. Many of us were able to stay in Basel and attend the rest of the excellent conference organized by CEN, which was an additional treat. Many thanks to the CEN Conference Organizing Committee, who made it possible for the EB meeting to take place, especially the co-chairs Frank Bretz (Austro-Swiss Region - ROeS) and Annette Kopp-Schneider (German Region) for their wonderful hospitality.

Another highly successful IBS regional scientific meeting that took place the

*Continued on p. 3*

## IN THIS ISSUE

President's Corner .....	1
Region Key .....	2
From the Editor .....	3
Updates From the IBO .....	4
Editorial Updates .....	5
The Journal of Agricultural, Biological, and Environmental Statistics (JABES) .....	5
Software Corner .....	7
STrengthening Analytical Thinking for Observational Studies (STRATOS): Overview of methodological issues when analyzing high-dimensional biomedical data .....	7
Region News .....	10
* Australasian Region (AR) .....	10
* Austro-Swiss (ROeS) .....	10
* Brazilian Region (RBras) .....	11
* British and Irish Region (BIR) .....	11
* French Region (RF) .....	12
* German Region (DR) .....	12
* Italian Region (RIIt) .....	14
* Japanese Region (JR) .....	14
* The Netherlands (BMS-ANed) ...	14
* Polish Region (GPol) .....	16
* Western North American Region (VWNA) .....	17
Announcements & Upcoming Events ...	17

## BIOMETRIC BULLETIN

ISSN 8750-0434

Copyright © 2023

International Biometric Society

Biometric Bulletin will be published four times a year in March, June, September, December.

International Biometric Society

1120 20th Street, NW, Suite 750 • Washington, DC 20036-3441 USA

Telephone: +1 (202) 712-9049 • Fax: +1 (202) 216-9646

Email: [ibs@biometricsociety.org](mailto:ibs@biometricsociety.org) Website: <http://www.biometricsociety.org>

The Biometric Bulletin is available to members of the Society as part of their annual dues. The views and contributions to this publication should not be ascribed to the International Biometric Society. Reproduction for commercial purposes is allowed if the source is acknowledged.

### Editor

Ajit Sahai, Ex. Founder-Professor & Chair,

Department of Medical Biometrics; JIPMER, Pondicherry; India

EMAIL: [editor.bb2019@gmail.com](mailto:editor.bb2019@gmail.com)

### Associate Editor

Garth Tarr, University of Sydney, Australia; EMAIL: [garth.tarr@sydney.edu.au](mailto:garth.tarr@sydney.edu.au)

### Regional Correspondents

Marta Zanelli (ANed), Rina Perry (AR), Kirsty Hassall (BIR) Hein Putter (Channel Network), Xing Zhao (CHINA), Reinhard Vonthein (DR), Daniel Nevo (EMR), Saptarshi Chakraborty (ENAR), Olayemi Oluwasoga (GNI), Elzbieta Kubera (GPol), Iain McDonald, (GSAf), Wellington Mushayi (GZim), K T Harichandrakumar (IR), Takashi Daimon (JR), Esa Läärä (NR), Beatrijs Moerkerke (RBe), Cristian Marcelo Villegas Lobos and Marcelo Andrade da Silva (RBras), Novie Younger (RCAC), Ester Boixadera (REsp), Anne Thiébaud (RF), Francesco Stingo (RItl), Sangbum Choi (Rko), Sonja Zehetmayer (ROeS), Henry G. Mwambi (SUSAN), Jessica Minnier (WNAR), Jialiang Li (SING), Dan Kajungu (UGAN), Agnes Ankomah (GGA), John Mwangi (GKe), Njoku Ama (GBot), Cristian Meza (GCI), Katja Ickstadt (CEN), Alia Sajjad (PKSTAN), Gema Alexandra Zambrano (ECU), Jupiter Simbeye (GMal)

### International Biometric Society Executive Board

President: José C. Pinheiro, Eastern North American Region

Incoming President: Iris Pigeot, German Region

Treasurer: Vicente Núñez-Antón, Spanish Region

Secretary: Henry Mwambi, South African Region

Directors: Andrea Berghold (ROES); Clelia Di Serio (RITL);

Kate Crespi (WNAR); Ricardus Vonk (DR); Scarlett Bellamy (ENAR);

Thomas Achia (GKE); Taesung Park (RKO); Amy Herring (ENAR);

Christopher Triggs (AR); Maria Gabriela Cendoya (RARG); Ruth Keogh (BIR)

### Biometrics Editors

Geert Molenberghs (Executive Editor), Biostatistics & Statistical Bioinformatics Hasselt

University & K.U. Leuven I - Biostat; EMAIL: [geert.molenberghs@uhasselt.be](mailto:geert.molenberghs@uhasselt.be)

Alan Welsh, Australian National University Mathematical Sciences Institute,

EMAIL: [Alan.Welsh@anu.edu.au](mailto:Alan.Welsh@anu.edu.au)

William F. Rosenberger, Department of Statistics, George Mason University,

EMAIL: [wrosenbe@gmu.edu](mailto:wrosenbe@gmu.edu)

Mark Brewer, BioSS; EMAIL: [markb@bioss.ac.uk](mailto:markb@bioss.ac.uk)

Editor of Book Reviews, as of 1 January 2021: Chuhsing Kate Hsiao, EMAIL: [ckhsiao@ntu.edu.tw](mailto:ckhsiao@ntu.edu.tw)

Chantal Brodie and Ann Hanhart (Editorial Manager), EMAIL: [biometrics@biometricsociety.org](mailto:biometrics@biometricsociety.org)

### Journal of Agricultural, Biological and Environmental Statistics (JABES) Editor

Jorge Mateu; EMAIL: [mateu@uji.es](mailto:mateu@uji.es)

### International Business Office



Executive Director:  
Peter Doherty, CAE



Director of Special Projects:  
Heidi Lapka



Program Manager:  
Becca Anderson



Director of Operations:  
Alexander Iula, CMP



Communications &  
Engagement Manager:  
Courtney Fowler



Membership Manager:  
Ryan Dee

## Region Key

### Regions

RArg - Argentinean Region  
AR - Australasian Region  
ROeS - Austro-Swiss Region  
RBe - Belgian Region  
GBot - Botzwanian Region  
RBras - Brazilian Region  
BIR - British and Irish Region  
RCAC - Central American-Caribbean Region  
GCMr - Cameroon Region  
GCI - Chilean Region  
GCMr - Cameroon Region  
CHINA - Chinese Region  
EMR - Eastern Mediterranean Region  
ENAR - Eastern North American Region  
ECU - Ecuadorian Region  
GEth - Ethiopian Region  
RF - French Region  
DR - German Region  
GGha - Ghanian Region  
IR - Indian Region  
RItl - Italian Region  
JR - Japanese Region  
GKe - Kenyan Region  
RKO - Korean Region  
GMal - Malawi Region  
GNI - Nigerian Region  
NR - Nordic-Baltic Region  
PKSTAN - Pakistani Region  
GPol - Polish Region  
GRo - Romanian Region  
SING - Singaporean Region  
GSaf - South African Region  
REsp - Spanish Region  
ANed - The Netherlands Region  
GUgan - Ugandan Region  
WNAR - Western North American Region  
GZim - Zimbabwean Region

### Networks

CEN - Central European Network  
CN - Channel Network  
EAR - East Asian Network  
SUSAN - Sub-Saharan Network

# President's Corner

*Continued from p. 1*

week after the CEN conference was the Sub-Sahara African Network (SUSAN) conference held in Kumasi, Ghana. I had the honor of participating in the opening session, witnessing the high degree of engagement and excitement among the attendees. Henry Mwambi (South-African Region), IBS Secretary, and Thomas Achia (Kenyan Region), EB member, were able to attend both conferences in person, demonstrating their great dedication and commitment to the IBS – thanks much to both.

The coming year will be a period of renewal for the IBS leadership, with several officers, committee chairs and committee members coming to the end of their respective terms, and new ones being elected, or nominated. My fellow Officers Vicente Núñez-Antón (Spanish Region), IBS Treasurer, and Henry Mwambi will be rotating out of their roles, being replaced by the winners of the ongoing elections for the respective positions (who will be known by the time this column appears in the Biometric Bulletin). My own term as IBS President also comes to an end this year, though I'll remain as an officer in the role of Outgoing President for one more year. Come next January 1, Incoming President Iris Pigeot (German Region) will be taking over as IBS President, and I look forward to supporting her as she transitions into the new leadership role. Iris has been quite busy identifying replacements for retiring members of all six IBS standing committees, including five committee chairs. She will be presiding over a substantially renewed IBS leadership team, including a recently refreshed EB.

With the end of my term, this will be my last President's Corner column. It has been a real honor and privilege to serve in this position for the past (almost) two years. My deepest gratitude to the many remarkable volunteers and IBO staff who have served along with me, amazing me with their dedication and humbling me with their competence. There are too many to mention here by name, but I'd like to single out a few for the closeness with which we have worked over the past several years. My fellow officers, Henry, Iris, and Vicente, have shared with me each difficult decision that needed to be made, never shying away from their responsibilities, and always supporting me with their camaraderie. I'll still have weekly interactions with Iris for another year but will dearly miss Vicente and Henry in these, moving forward. Peter, Alexander, and the rest of the IBO staff have provided stellar support to the day-to-day operations of the Society, without which the IBS would not be able to function properly and fulfill its mission of promoting Biometry across the world. The IBO provides the essential continuity of the activities in the IBS, as the many volunteers who fill the leadership and committee roles in the Society come and go – many thanks for the great service you provide. Last, but certainly not least, a big thanks to the IBS members, who make our society a vibrant, thriving organization – the IBS belongs to all of you.

**José Pinheiro**

International Biometric Society President

[jcpinheir@gmail.com](mailto:jcpinheir@gmail.com)

---

## From the Editor

Inspired by the latest overview of the IBS activities outlined in the President's corner I had a look into the previous issues of the Biometric Bulletin. During the past five years we had the opportunity of publishing some twenty lead articles written by IBS Presidents under the designated column. The rich contents of the President's corner have always been of great importance and interest to the IBS fraternity. It is said that introspection is desirable for the continued progress of huge societies like IBS. It is well recognized and appreciated that most of the past Presidents have done justice to this aspect in their respective write-ups. We must express sincere gratitude to our outgoing President, Prof. José C. Pinheiro for his regular contributions to the Biometric Bulletin sharing the comprehensive updates on academic and organizational coordination activities.

Periodic changes in governance coordination is well planned in IBS and I am reminded of the fact that I have almost completed five years of my tenure of six years (including the second term) as Bulletin's Editor. The Editor's column from 2019 to 2021 had incorporated extra efforts to provoke and invite discussions by members on some basic academic issues.

An oversight view of topics covered as well responded, reveals the initial theme included was the nomenclature frequently and alternatively used for Statistics as Biometry, Biostatistics, Biometrics, Medical Biometrics or Medical Biostatistics. Also referred to was the definition of Biometry by R A Fisher, 1948; "Biometry, the active pursuit of biological knowledge by quantitative methods." And the definition of Biometrics by IBS - The terms "Biometrics" and "Biometry" have been used since early in the 20th century to refer to the field of development of statistical and mathematical methods applicable to data analysis problems in the biological sciences ----". The response to the Editor's column in the subsequent issue highlighted an article by Prof Abhaya Indrayan; "The Editor has raised a very pertinent question regarding prevailing confusion over the domain of Biometrics and Biostatistics (Biometric Bulletin, 36(1), 2019). The overlap in the use of these terms is indeed substantial and sometimes they are interchangeably used. My views on this issue are as follows ----"

I think the coming year being my last year to serve as Editor- BB, a self-analysis of the extra efforts put in by me is desirable to help

assess its effectiveness. Therefore, the upcoming issues of the BB shall have a focus on this aspect as well. But the fact remains that the sustained strength to Bulletin's academic content should be credited to the Editorials updates from Biometrics and JABES; STRATOS and Software columns. It is worth noting that more than thirty percent regional contributions loaded with events like seminars, CMEs and conferencing are reported regularly. In addition to these regional information resources, IBO, with its

CAE & Executive Director, Peter Doherty, has always been prompt and regular in sharing valuable updates of the activities coordinated by the headquarters. I am sure the new year would bring all round prosperity to global life.

**Ajit Sahai**  
Biometric Bulletin, Editor

## Update from the IBO

As I write this, it is mid-November and we are eagerly anticipating the launch of the website for our 2024 International Biometric Conference in mid-December!

At that time, we will also invite those interested in participating to apply to be a part of the conference program's lineup of contributed paper and poster sessions. But there is much more happening when it comes to the IBC. With the move to the new location (Atlanta, Georgia USA), we will have a new conference logo. We hope that the new logo will become a recognizable image that we may use for years to come. And ENAR member Lance Waller of Emory University has joined the Local Organizing Committee to help provide local support and a unique perspective on this vibrant, changing city. That experience will come in handy as we begin planning for our signature Thursday event during the IBC. We can guarantee a truly memorable event! Much more information will be forthcoming.

As important as the IBC is, I encourage you to make plans to join us for other IBS virtual events, such as the monthly Journal Club sessions. Holding the Journal Clubs on a monthly basis is a new initiative for us, and this initiative would not be possible were it not for the support of the Education Committee and Journal Club Chair Gen Li of the University of Michigan. Of course, new content is always being sought. Do you have a favorite paper that you just discovered? Or possibly a paper that you have bookmarked and revisit often? Let us know about it! We need your help with suggestions for upcoming discussion papers for the 2024 Journal Club webinars. Please email IBO staff with your suggested papers. And don't forget that the growing list of Journal Club

[recorded sessions](#) is always available for members. You must log in to view these and other sessions.

Speaking of sessions, here's a brief reminder that the [video sessions](#) from IBC 2022 are still available. But time is running out! Those who did not have an opportunity to join us in Riga may view all recorded sessions at a very reasonable price through the end of the year.

In other publications' news, the *Brazilian Journal of Biometrics (BJB)* has been added to the list of Region journals available for reference through the [IBS website](#). BJB is published by the Brazilian Region of the IBS and is an open-access publication that serves as a platform for the dissemination of original research papers exploring, promoting and extending statistical, mathematical, and data science methods in applied biological sciences. And the Society's flagship publication, *Biometrics*, will soon be managed by a new publisher. Starting in January, Oxford University Press will be managing access to the journal online. Instructions will be provided closer to the publishing of the first issue of Volume 80.

Finally, I'd like to thank our new Representative Council members for agreeing to serve. Please join me in welcoming them to the IBS leadership group!

There is much more in store for 2024. When you receive your notice to renew, I hope you will not hesitate to join us for another year. Thanks for your support of the Society!

**Peter Doherty**  
Executive Director

## Advertise in the Biometric Bulletin and on the IBS Website

Do you have vacancies to fill? Are you running a promotion, courses, selling software, or consultancy services of interest to statisticians, biometricians, and mathematicians? Consider advertising on the IBS Website and or in the Biometric Bulletin. Click below for additional information and ad rates. Please email the International Biometric Office ([ibs@biometricsociety.org](mailto:ibs@biometricsociety.org)) with any questions.

[Advertising Specs & Rates - 2023](#)

[View Current Industry Opportunities](#)





# Editorial Updates

## Biometrics

### March 2023 Issue Highlights

The March 2024 issue will be the first one published by Oxford University Press. It is also fitting to thank Wiley, our publisher until the end of 2023, for decades of fine collaboration and interaction, thereby supporting us in maintaining the highest academic and publishing standards.

The March 2024 issue features articles across a broad spectrum of applications and methodology.

- The Biometric Methodology section sets out with a Discussion paper on “The central role of the identifying assumption in population size estimation,” by Serge Aleshin-Guendel, Mauricio Sadinle, and Jon Wakefield.
- The papers discussed by: John Whitehead; Li-Chun Zhang; Ruth King, Rachel McCrea, and Antony Overstall; and Daniel Manrique-Vallier. Regular papers include:
- “Personalized treatment selection via product partition models with covariates,” by Matteo Pedone, Raffaele Argiento, and Francesco C. Stingo;
- “Multiple augmented reduced rank regression for pan-cancer analysis,” by Jiuzhou Wang and Eric F. Lock;
- “Homogeneity pursuit and variable selection in regression models for multivariate abundance data,” by Francis K.C. Hui, Luca Maestrini, and Alan H. Welsh;
- “Nonparametric predictive model for sparse and irregular longitudinal data,” by Shixuan Wang, Seonjin Kim, Hyunkeun Cho, and Won Chang;
- “A Bayesian survival treed hazards model using latent Gaussian processes,” by Richard D. Payne, Nilabja Guha, and Bani K. Mallick;
- “Changing interim monitoring in response to internal clinical trial data,” by Michael A. Proschan, Martha Nason, Ana M Ortega-Villa, and Jing Wang;
- “Robust data integration from multiple external sources for generalized linear models with binary outcomes,” by “Kyuseong Choi, Jeremy M.G. Taylor, and Peisong Han;
- “Efficient estimation for left-truncated competing risks regression for case-cohort studies,” by Xi Fang, Kwang Woo Ahn, Jianwen Cai, and Soyoung Kim;
- “Adaptive sequential surveillance with network and temporal dependence,” by Ivana Malenica, Jeremy R. Coyle, Mark J. van der Laan, and Maya L. Petersen;
- “Proportional rates models for multivariate panel count data,” by Yangjianchen Xu, Dongjin Zeng, and D.Y. Lin; and
- “Efficient designs and analysis of two-phase studies with longitudinal binary data,” by Chiara Di Gravo, Jonathan S. Schildcrout, and Ran Tao.

The Biometric Practice section includes papers on:

- “Longitudinal varying coefficient single-index model with censored covariates,” by Shikun Wang, Jing Ning, Ying Xu, Tina Ya-Chen Shih, Yu Shen, and Liang Li;
- “Incorporating participants’ welfare into sequential multiple assignment randomized trials,” by Xinru Wang, Nina Deliu, Yusuke Narita, and Bibhas Chakraborty; and
- “Bayesian meta-analysis of penetrance for cancer risk,” by Thanthirige Ruberu, Danielle Lakshika Braun, Giovanni Parmigiani, and Swati Biswas.

### Transition Between North American Co-editors

With the year 2023 drawing to a close, Bill Rosenberger’s (ENAR) Co-editor term is coming to an end. Bill has served as CE for the years 2021, 2022, and 2023. We wholeheartedly thank Bill for outstanding service to the journal and the Society. On 1 January 2024, Bill will pass the baton to Erica Moodie (ENAR). Her North American Co-editor term runs through the end of 2026. The continuing Co-editors are Katja Ickstadt (German Region, for Europe, until the end of 2024), and Matthew Schofield (Australasian Region, for Rest of World, until the end of 2025).

**Geert Molenbergh**  
Biometrics Executive Director

## The Journal of Agricultural, Biological, and Environmental Statistics (JABES)

There are a number of actions that are taking place during the last two quarters of 2023. We are running the following two special issues with related information and open calls published at <https://www.springer.com/journal/13253/updates>

a) Special Issue on The Hawkes Process: Theory, Methodology, Algorithms, Extension, and Applications in Environmental Sciences. Point process models are common in research as a natural tool to describe the patterns of discrete events that occur in a continuous space, time, or a space–time domain. In recent decades, the Hawkes point-process model, which was proposed by Alan G. Hawkes in the 1970s, has become one of the most useful point processes in event-type data analysis, such as earthquakes, crimes, forest fires, terrorist attacks, society networks, genomes, etc., due to its powers in detecting the clustering effect and the positive interactions among individual events/particles. Equipped with the Hawkes process and general statistical inference tools, we can determine the potential causal relationship among discrete events, especially for nowadays, with the rapid development of observation and data-storage technologies, big data has unavoidably become a hot issue in point-process data analysis. As the Hawkes process provides us with a quick tool and general framework to quantify and forecast the clustering or the triggering effect among events, it is important for us to develop more advanced theory, methodology and algorithms related to this process and its extensions, so that we can solve the challenging problems that are encountered in its applications.

Guest Editors: Jorge Mateu, Jiancang Zhuang, Feng Chen, Rick Schoenberg

Deadline for submission: 15 November 2023

b) Special Issue on New Perspectives in Statistics, Data Science and Econometrics for Agriculture, Land Use and Forestry. Human activities impact terrestrial sinks, through land use, land-use change and forestry (LULUCF), altering the carbon cycle between the terrestrial biosphere and the atmosphere (United Nations Climate Change, 2023). The 6th Intergovernmental Panel on Climate Change report (IPCC - The Intergovernmental Panel on Climate Change, 2023) finds that, on average, Agriculture, Forestry and Other Land Use were responsible for 13 to 21% of global total anthropogenic GHG emissions between 2010 and 2019. However, the report also states that the LULUCF sector offers significant near-term mitigation potential while providing food, wood and other renewable resources as well as biodiversity conservation. Improved and sustainable crop and livestock management, sustainable farming practices, and soil carbon sequestration in agriculture (including soil carbon management in croplands and grasslands, and agroforestry) are the most relevant tools for mitigation policies. In this context, the development of new data-driven, statistical, and econometric methodologies addressing the socio-economic and environmental challenges of agriculture and soil use are essential. We, therefore, invite methodological and applied contributions for a special issue on Template for Committee Reporting rev. 2 October 2017 the topic of statistics, data science methods and econometrics for the analysis and modelling of agricultural, forestry, land use and land change data. Submission topics of interest include but are not limited to:

- Spatio-temporal statistics methods (e.g., geostatistics, spatial point processes, areal models,
- Bayesian spatial and spatio-temporal models, spatio-temporal prediction) to analyze agricultural data, land use and land cover changes, and forestry data
- Small Area Estimation and Model-Assisted Estimation models applied to agro-industry surveys, land use and cover, and forestry inventories
- Econometrics methods, with a particular interest in spatial and spatio-temporal econometrics, focusing on the impact assessment of agricultural-related policies and the economic analysis of the agricultural sector and human-induced land use
- Statistical machine learning models, especially those accounting for the spatial and temporal dimensions of agricultural, land use and forestry data
- Data-driven analyses of remote sensing and satellite data related to land use, land cover, and farming
- Data-driven analyses of policy actions devoted to land and forestry protection, mitigation of human-induced land consumption and climate change
- Data-driven analyses of structural characteristics of the agro-industry, with particular attention to macro trends and evolution of the industry (e.g., self-sustainability of farms in terms of energy production, waste management and techno-productive innovations)

Guest Editors: *Felicetta Carillo, Paolo Maranzano, Philipp Otto*

**Deadline for submissions: 25 March 2024**

The open call for the 2023 competition of the Section on Statistics and the Environment (ENVR) of the ASA is now closed, and as in past editions, JABES will invite the winners and those receiving an honorable mention to publish their winning papers with us.

JABES is committed to highlight the best contributions through a year and we have set an internal voting system amongst the AE to select the winning ones. The announced winners will be invited to present their winning contributions in the following IBS

conference running every two years. We are proud to announce the 2022 best papers published in JABES:

- Winner Probabilistic Forecasts of Arctic Sea Ice Thickness Peter A. Gao, Hannah M. Director, Cecilia M. Bitz, & Adrian E. Raftery [JABES, 27, 2 (2022) pages 280-302]
- Honorable mention “A Bayesian Approach for Data-Driven Dynamic Equation Discovery” Joshua S. North, Christopher K. Wikle, & Erin M. Schliep [JABES, 27, 4 (2022) pages 728-747]
- December issue features a focus paper entitled “The Third Competition on Spatial Statistics for Large Datasets” by Yiping Hong, Yan Song, Sameh Abdulah, Ying Sun, Hatem Ltaief, David E. Keyes and Marc G. Genton, representing a key contribution summarizing the 2023 KAUST Competition on Spatial Statistics for Large Datasets, as a follow-up of the two previous ones in 2021 and 2022.

A general message from the EiC. JABES should be home for Data Science broadly defined as the science of learning from data, incorporating advances in computation and data analytics, with statistical theory and inference for problems coming from the branches that sustain the journal. I would like to encourage interdisciplinary submissions that involve collaboration between Template for Committee Reporting rev. 2 October, 2017 statisticians and other data scientists to find solutions to these challenges, through innovative methodological developments and applications, bringing together data science and statistics. The innovative methodology should be directly motivated by real world data problems in agricultural, biological and environmental settings.

For more information on upcoming issues, the editorial board, and the aim and scope of the journal, please visit our [website](#). We also accept submissions of books to review in the upcoming issues of JABES; to submit a book for review, please see the above website (click on “Editorial Board”) or contact Eleni Matechou ([e.matechou@kent.ac.uk](mailto:e.matechou@kent.ac.uk)). Please follow us on Twitter: @JabesEditor.

**Jorge Mateu**  
Editor in Chief

## Get Connected!



Follow IBS on Social Media!  
**Twitter • Facebook • LinkedIn**

# Software Corner

## Quarto: A New Tool for Reproducible Reporting

The landscape of computational statistics is dynamic, with new tools constantly reshaping how we conduct and report research. Posit (formerly RStudio) recently introduced a new open-source scientific and technical publishing system, [Quarto](#), which presents biometricians with an attractive alternative to the tried-and-tested R Markdown for creating reproducible reports or an epic leap forward if you're still using Sweave!

Quarto helps generate reproducible, production quality articles, presentations, dashboards, websites, blogs, and books in HTML, PDF, MS Word and ePub. Under the hood, [Pandoc](#) markdown is used to generate beautiful and detailed documents that include equations, citations, crossrefs, figure panels, callout blocks and much more.

### Language Compatibility

One of Quarto's most notable features is its support for multiple languages like Python, Julia, and ObservableJS, in addition to R. This inclusivity means that a researcher can weave together different threads of analysis into a single narrative, regardless of the programming language used. Importantly, Quarto is not tied directly to R in any way. Quarto is its own program.

### Flexible Output Formats

While the sprawling R Markdown ecosystem allows for a significant degree of document customization, Quarto offers much of this in a more coherent package. For example, the [revealjs](#) document type is a capable replacement for [xaringan](#), and Quarto natively supports a [book](#) document type which effectively replaces the capabilities of the [bookdown](#) package. There are also various [journal](#) formats already available and there is a growing range of [extensions](#) available.

### How do I get started?

If you're an RStudio user Quarto comes bundled with recent versions and you can create a new Quarto document or presentation in the same way you'd create a new R Markdown document. I highly recommend the [Quartostamp](#) addin for RStudio which helps with the syntax. You can also install [Quarto](#) as a stand-alone application and use it with VS code, Jupyter Rstudio, Neovim or directly from the command line.

If you'd like to know more, see the [Quarto homepage](#) to get started and for inspiration see the [Awesome Quarto GitHub](#) repository which call itself "The most up to date curated list of Quarto docs, talks, tools, examples & articles the internet has to offer."

### In Summary

Quarto offers features that could enhance the reproducibility and presentation of statistical analysis, particularly for those engaged in multi-language projects or seeking advanced customization. It represents another step forward in our collective effort to communicate statistical findings with clarity and precision in a reproducible way.

**Garth Tarr**  
Sydney, Australia

# BIOMETRIC BULLETIN

International Biometric Society Internationale Biometrische Gesellschaft Société Internationale de Biométrie

## Advertise With Us!



**GREAT OPEN RATE!**  
Large, loyal readership.  
Over 40% Open Rate



**GLOBAL AUDIENCE**  
Reach IBS Members in  
Over 60 Countries



**CONTACT US!**  
Interested? Email Us!  
ibs@biometricsociety.org

## STRengthening Analytical Thinking for Observational Studies (STRATOS):

### Overview of methodological issues when analyzing high-dimensional biomedical data

STRATOS: Six foci for the next three years

James Carpenter (1), Michal Abrahamowicz (2), Nan van Geloven (3), Paul Gustafson (4), Marianne Huebner (5), Ruth Keogh (1), Willi Sauerbrei (6), Pamela Shaw (7), Els Goetghebeur (8)

(1) Department of Medical Statistics, London School of Hygiene & Tropical Medicine, and MRC Clinical Trials Unit at UCL, London, UK.

(2) Department of Epidemiology, Biostatistics and Occupational Health, Faculty of Medicine and Health Sciences, McGill University, Montreal, Canada

(3) Department of Biomedical Data Sciences, Leiden University Medical Center, Leiden, the Netherlands

(4) Department of Statistics, University of British Columbia, Vancouver, Canada

(5) Department of Statistics and Probability, Michigan State University, East Lansing, USA

(6) Institute of Medical Biometry and Statistics, Medical Center, University of Freiburg, Freiburg, Germany

(7) Biostatistics Unit of Kaiser Permanente Washington Health Research Institute, Seattle, USA

(8) Department of Applied Mathematics, Computer Science and Statistics, Ghent University, Ghent, Belgium In August and September 2023, the STRATOS initiative held symposia at the ISCB (Milan) and the IBS Central European Network (Basel), where plans were made for the direction and foci for the next 3 years of STRATOS research. Here, we bring this thinking to the broader Biometric community, with the hope that further colleagues may support the initiative.

## Background

Notwithstanding some recent improvements, major concerns remain about the methodological quality and standards of empirical research. Especially in the analysis of observational data, problems arise from poor application and reporting of statistical methodology. In the recent COVID crisis, van Calster et al (2021) discussed research waste resulting from the current organization of scientific research, which tends to prioritize the 'need to publish' over publication quality. Their proposals for change refer to initiatives aiming to improve the methodology and reproducibility of research. Among these, our STRENGTHENING Analytical Thinking for Observational Studies (STRATOS, [www.stratos-initiative.org](http://www.stratos-initiative.org)) initiative is the only group with a primary focus on developing and disseminating evidence-supported guidance concerning statistical analyses.

Since its inception in 2013, the STRATOS initiative has grown to more than 100 members from 20 countries. Its activities are organised into 9 topic groups (TG) and 12 cross-cutting panels. Activities of all TGs and some panels were presented in articles in the Biometric Bulletin (BB) over the last 5+ years. In BB March 2022 we published a brief update on achievements of the STRATOS initiative in the last 5 years.

## Future foci

In discussions during the last 6 months, including our symposia in Milan and Basel, we identified the following six foci:

### 1. Simulation studies

Simulation studies are key tools for validating and comparing statistical methods, and hence critical to the development of evidence-based statistical guidance. STRATOS will maintain a focus on simulation studies and prioritize improving their methodology over the coming years. We will build on (i) the ADEMP framework for simulation (Morris et al, 2019), and (ii) recently described 'phases' of methodological research (Heinze et al, 2023), to delineate a framework for (a) appropriate evaluation of new methodology at each phase of its development and (b) performing and reporting

neutral simulation studies for comparing statistical methods in relevant settings and under plausible assumptions (Boulesteix et al 2018).

### 2. Open science

The importance of open science is evident, but it is an extremely broad topic, and still in its infancy. A STRATOS Open Science panel, started in 2022, is working on accessible guidance for making research more transparent, reproducible and hence credible. This goes beyond reporting guidelines, e.g. including advocating routine publication of peer-reviewed analysis and simulation code as supplementary material to each research article. For more details, see the short introduction of the panel in BB February 2023.

### 3. Initial Data analysis (IDA)

The 'Initial data analysis' TG3 aims to improve awareness of IDA as a critical component of the research process, and develop guidance on conducting IDA in a systematic, reproducible manner. TG3 proposed a framework for this (Huebner et al 2018), and showed in a review that many IDA analyses are not reported or not done systematically, if at all (Huebner et al 2020). Current work with TG2 (Selection of variables and functional forms in multivariable analysis), highlights the impact of poor IDA for model building. Looking forward, a comprehensive range of experiences from using our IDA framework will stimulate and inform its development and hence widen its utility and applicability.

### 4. Machine learning (ML) enhanced statistical methods

While ML methodologies promise quick automated data driven answers to many questions, it is obvious that both ML and established statistical methodologies have their specific strengths and weaknesses. Each could benefit from the insights offered by the other. How to do that best and when is not obvious. We plan to identify the ML enhanced statistical methods that are most important for different TG's, and systematically assess their properties in realistic settings.

Causal ML is such a highly active research topic. Sophisticated integration of statistical and ML methods has enhanced robustness and efficiency through using carefully crafted estimating equations (Chernozhukov et al., 2018). We seek to refine and apply analogous integrated methodology for survival analysis and high dimensional data, and to elucidate general properties of integrated methods in prediction and diagnostics.

### 5. Estimands in observational data analysis

The term 'estimand' essentially refers to what is being estimated and for whom. In the trials context, the ICHE9 addendum (ICH, 2019) formally defines it in terms of five components which make for clear targets and more transparent reporting.

The insights and benefits which the estimands framework is bringing to trials research are equally needed in observational studies, where (slightly ironically) much of the relevant methodological expertise was originally developed. New estimands and adapted estimation approaches all too rarely find their way into applied health research (Liu et al (2023). STRATOS will continue to work on bridging the gap in this area, not least in partnership with the EU IMI-SISAQOL project (<https://www.sisaqol-imi.org/>). This is developing methods and guidance for the evaluation of patient



reported outcomes in randomized trials and single arm oncology studies, where truncation due to death is a frequent complication.

## 6. More guidance for researchers with limited statistical knowledge and experience

At the start of the STRATOS initiative, Sauerbrei et al. (2014) highlighted that many methodological developments are not implemented in practice. Lack of guidance on practical issues is presumed to be an important hurdle. Researchers with only basic statistical knowledge and limited experience in using statistical methodology need much more help. To this end, STRATOS has provided an overview of papers published in the medical literature for such 'level 1' researchers (Wallisch et al 2022), and, importantly, has started to develop guidance in the form of Shiny apps, short videos and more. However, these projects are still in their infancy; an overview is given BB (January 2023). Discussing how to improve this work and initiate further educational contributions is an important aim for the near future. Development of a shared, curated, data set alongside these foci, STRATOS is working to develop a series of shared, curated real-world datasets, that present several analytical challenges, such as the one used in a recent pharmacoepidemiology study (Danieli et al, 2023). A procedure will be worked out to transform the resource into a fully anonymized synthetic dataset, which may be widely shared for open sciences purposes. The aim is that future STRATOS papers will use these data both to keep the methods anchored in the context where important problems co-emerge, and promote transparency and reproducibility.

Cross TG collaboration will enhance guidance development on co-occurring 'thorny issues' such as discovering data properties that result in updating planned statistical analyses, e.g. missing data, competing risks, measurement error, time-varying effects, confounding in causal questions, high dimensionality and more.

Finally, STRATOS is working on a glossary (Biometric Bulletin April 2020) including a flexible database interface. Input from other experienced methodologists and groups working on related projects are most welcome and appreciated.

## Conclusion

The above foci have emerged from discussions across what is now an established international network. They have been broadly embraced by the scientific community and we believe they represent priority areas for moving observational research methodology forward. The challenge remains to effectively operationalize solutions and get these integrated into routine data science. This requires distinct guidance for researchers with different levels of statistical training. Ultimately, the provision of such guidance will also help enhancing the review process, so that fewer poor and erroneous results will be published, which should accelerate scientific progress and help restore damaged public confidence in science. We believe the six foci described above provide a stimulating and exciting prospect for the STRATOS initiative in the next 3+ years. As we seek to drive forward both development and dissemination of guidance for researchers, we look forward to partnering with a range of colleagues to progress this work: for details of how to get involved, visit the STRATOS website: we will be pleased to hear from you.

## References

- Boulesteix AL, Binder H, Abrahamowicz M, Sauerbrei W for the Simulation Panel of the STRATOS Initiative (2018): On the necessity and design of studies comparing statistical methods. *Biometrical Journal*, 60, 216-218. DOI: 0.1002/bimj.201700129
- Van Calster, B., Wynants, L., Riley, R. D., van Smeden, M. & Collins, G. S. (2021). Methodology over metrics: current scientific standards are a disservice to patients and society. *Journal of Clinical Epidemiology*, 138, 219-226.
- Chernozhukov, V; Chetverikov, D, Demirer, M, Duflo, E., Hansen, C., Newey, W. and Robins, J (2017) Double/debiased machine learning for treatment and structural parameters. (2018) *The Econometrics Journal*, 21, C1-C68.
- Danieli C, Moura CS, Pilote L, Bernatsky S, and Abrahamowicz M.(2023) Importance of accounting for timing of time-varying exposures in association studies: Hydrochlorothiazide and non-melanoma skin cancer. *Pharmacoepidemiology and Drug Safety*, in press.
- Heinze G, Boulesteix AL, Kammer M, Morris TP, White IR for the Simulation Panel of the STRATOS initiative (2023): Phases of methodological research in biostatistics - Building the evidence base for new methods. *Biometrical Journal*, to appear. DOI: <https://doi.org/10.1002/bimj.202200222>
- Huebner M, Vach W, le Cessie S, Schmidt C, Lusa L. (2020) Hidden Analyses: a review of reporting practice and recommendations for more transparent reporting of initial data analyses. *BMC Med Res Meth*, 20:61. <https://doi.org/10.1186/s12874-020-00942-y>
- Huebner M, le Cessie S, Schmidt CO and Vach W (2018). A contemporary conceptual framework for initial data analysis. *Observational Studies*, 4, 171-192. <https://doi.org/10.1353/obs.2018.0014>
- International Council For Harmonisation Of Technical Requirements For Pharmaceuticals For Human Use (2019) Addendum on estimands and sensitivity analysis in clinical trials to the guideline on statistical principles for clinical trials E9(R1). Amsterdam: European Medicines Agency.
- Liu L., Choi J., Musoro J. Z., Sauerbrei W., Amdal C. D., Alanya A., Barbachano Y., Cappelleri J. C., Falk R. S., Fiero M. H., Regnault A., Reijneveld J. C., Sandin R., Thomassen D., Roychoudhury S., Goetghebeur E., and le Cessie S., on behalf of the SISAQOL-IMI Work Package. Single-arm studies involving patient-reported outcome data in oncology: a literature review on current practice. *The Lancet Oncology*, 24(5), e197-e206.
- Morris, TP, White, IR, Crowther, MJ. (2019) Using simulation studies to evaluate statistical methods. *Statistics in Medicine*. 38: 2074–2102. <https://doi.org/10.1002/sim.8086>
- Sauerbrei W, Abrahamowicz M, Altman DG, le Cessie S and Carpenter J on behalf of STRATOS initiative (2014): STRengthening Analytical Thinking for Observational Studies: The STRATOS initiative. *Statistics in Medicine*, 33: 5413-5432.
- Wallisch C, Bach P, Hafermann L, Klein N, Sauerbrei W, Steyerberg EW, Heinze G, Rauch G, topic group 2 of the STRATOS initiative (2022). Review of guidance papers on regression modeling in statistical series of medical journals. *PloS one*, 17(1), e0262918.

# Region News

## Australasian Region (AR)

### Joint IBS-AR/SEEM Regional Conference 2023

The 2023 International Biometric Society Australasian Region conference was held from 27 November to 1 December 2023 at the Copthorne Hotel and Resort Bay of Islands, Waitangi, New Zealand. Stay tuned for a full report in the next Bulletin!

### Joint meeting of the Western Australia Branch of the Statistical Society of Australia

The tradition continued at the August 'Mario's birthday' joint meeting of the Western Australia Branch of the Statistical Society of Australia combining with the Australasian Region of the International Biometric Society where the seminar is given by an IBS member. On 8 August 2023, Michael Dymock from the Telethon Kids Institute presented a talk on Designing Efficient Clinical Trials.

Michael gave a colourful and informative talk about how to design an adaptive clinical trial in the medical sciences with an artificial example comparing 2 vaccines and some possible uses in several real projects in the institute.

**Garth Tarr**  
Sydney, Australia

## Austro-Swiss (ROeS)

### 5th CEN Conference 2023 in Basel

The 5th Conference of the Central European Network (CEN) of the International Biometric Society took place from 3 to 7 September 2023, in Basel, Switzerland. The conference theme was "From Data to Knowledge. Advancing Life Sciences." Approximately 550 registered for in-person attendance and a further 100 participated virtually, from more than 30 countries. The scientific program started on Sunday with 7 short courses and the main conference from Monday through Thursday

consisted of 7 parallel tracks with almost 400 oral and poster contributions, including the three keynote presentations by Ruth Keogh, Alicja Szabelska-Beręsewicz and Peter Bühlmann. A special focus of the conference was on young statisticians, featuring four dedicated sessions that were particularly well attended. The social program included an apero with wine tasting from the region on Monday evening and a town hall reception by the City of Basel on Tuesday evening. The traditional excursion on Wednesday afternoon featured a five kilometers walk linking two countries, two municipalities, two cultural institutions – and countless stories. It was followed by the conference dinner with Stephen Senn offering an unforgettable banquet speech. The weather was fantastic during the conference, so attendees were able to explore the beautiful city of Basel on their own, which for some also included a swim in the Rhine. The organizers thank the generous support by the all sponsors and funding bodies: Amgen, Basel City, BeiGene, Boehringer Ingelheim, Bristol-Myers Squibb, CRC Press, Cytel, Datamap, Denali, Janssen, Karger, Novartis, PHRT Network, Posit, Roche, Sanofi, Springer, and the Swiss National Science Foundation. For more details, please visit the [conference website](#).

**Sonja Zehetmayer**  
Biometric Bulletin Correspondent



*Audience in the lecture hall*



*The CEN Conference took place in the beautiful city of Basel*

## Brazilian Region (Rbras)

The 68th Brazilian Region of the International Biometrics Society (RBras), promoted by International Biometric Society, will be 29-31 May 2024, at the Department of Exact Sciences of the Luiz de Queiroz College of Agriculture (ESALQ), University of São Paulo (USP), Piracicaba, Brazil. The event theme is "Data Science, Statistics and Postgraduate: opportunities and challenges." The Brazilian Region would like to invite everybody and with this opportunity, we will also celebrate the 60th anniversary of the creation of the Postgraduate Programme in Experimental Statistics at ESALQ/USP. Further details can be found on the website [www.68rbras.com.br](http://www.68rbras.com.br)

### Social networks, emails and new website

RBras recently started two Instagram profiles: @rbras2024 with currently around 1300 followers and @rbras.estadistica with 330 followers. The first, older, focuses on annual events and is managed by the local annual events committee. The second, more recent, on RBras general disclosures and communications, administered by the RBras board of directors. Furthermore, RBras activated its institutional emails: [president@rbras.org.br](mailto:president@rbras.org.br), [secretaria@rbras.org.br](mailto:secretaria@rbras.org.br) and [tesouraria@rbras.org.br](mailto:tesouraria@rbras.org.br). Additionally, a new website is in the process of being finalized. The new site is built in Rblogdown with Hugo templates. This will make future updates of the site by future members simpler, as they can be carried out directly in R Language. The site is in the process of being translated into English and will soon be released.

**Cristian Villegas**  
Biometric Bulletin Correspondent

## British and Irish Region (BIR)

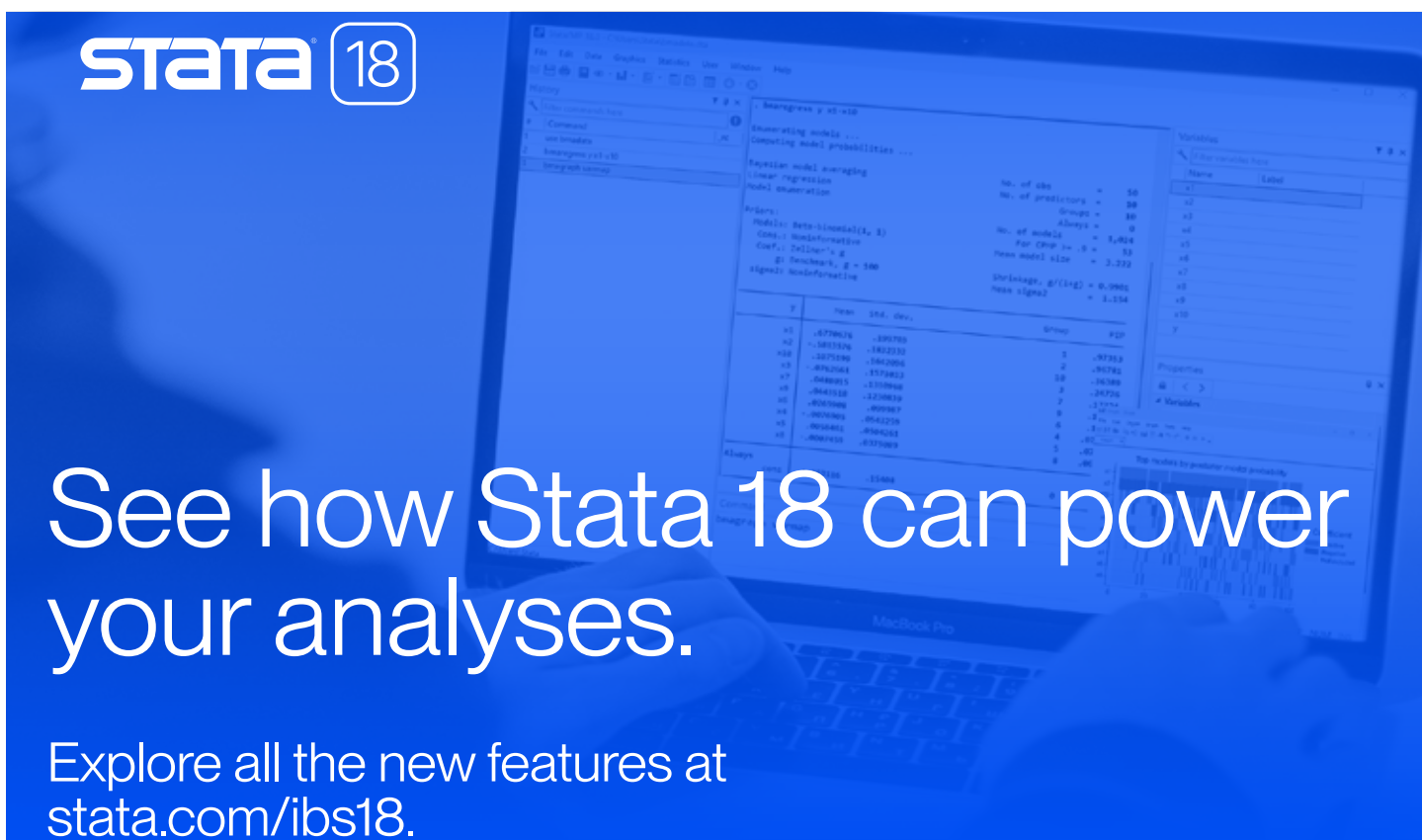
### 2023 Young Biometrician Award

The British and Irish Region of the International Biometric Society, jointly with the Fisher Memorial Trust, award a prize every two years for young biometricians who are members of the BIR. For more information on the award please visit <https://www.biometricsociety.org/bir/resources/honors-awards>.

The awarding panel are happy to announce that the winner of the 2023 Young Biometrician Award is Dr Oliver Crook, a Florence Nightingale Fellow (Senior Research Associate) in the Department of Statistics, University of Oxford, for his paper "Semi-Supervised Nonparametric Bayesian Modelling of Spatial Proteomics" (The Annals of Applied Statistics, 2022). Crook, O.M., Lilley, K.S., Gatto, L. and Kirk, P.D., 2022. Semi-supervised non-parametric Bayesian modelling of spatial proteomics. *The Annals of Applied Statistics*, 16(4).

The judges also felt that another nominee warranted an honourable mention – namely Dr John Addy, a Statistical Data Scientist, Rothamsted Research, Harpenden, for his work "A heteroskedastic model of Park Grass spring hay yields in response to weather suggests continuing yield decline with climate change in future decades" (*Journal of the Royal Society Interface*, 2022).

Addy, J.W., Ellis, R.H., MacLaren, C., Macdonald, A.J., Semenov, M.A. and Mead, A., 2022. A heteroskedastic model of Park Grass spring hay yields in response to weather suggests continuing yield decline with climate change in future decades. *Journal of the Royal Society Interface*, 19(193).



**STATA 18**

See how Stata 18 can power your analyses.

Explore all the new features at [stata.com/ibs18](http://stata.com/ibs18).



## Upcoming Events of the British and Irish Region

- 2023 BIR AGM: The AGM of the British and Irish Region of the International Biometric Society will take place on 12 December 2023 at the Royal Statistical Society Headquarters, 12 Errol Street, London, EC1Y 8LX. The exact timing is yet to be finalised, but it will be around lunchtime. The AGM will precede a joint meeting with the RSS on statistical ethics. Details on how to register for each event will follow soon.
- The BIR Region is co-organiser of a session at the one-day conference of the Young Statisticians' Section of the Irish Statistical Association, to be held at the University of Galway on 17 November 2023.
- We are delighted to announce a one-day BIR course in "Modelling continuous-time capture-recapture data". The course will take place 5th December at the University of Edinburgh and will be taught by Professor Paul Blackwell of the School of Mathematics and Statistics at the University of Sheffield. This one-day, in-person course will look at the basic ideas underpinning likelihood-based statistical methods and models for continuous-time capture-recapture data. The emphasis will be on situations where 'recapture' observations can occur at any instant, so that the modelling of the process of the observation times themselves is a necessary part of the analysis. For more information please visit <https://www.eventbrite.co.uk/e/modelling-continuous-time-capture-recapture-data-tickets-718374596757?aff=oddtcreator>

## Past Events of the British and Irish Region

BIR sponsored a two-day course "Introduction to modern Generalised Additive Models in R" (31/8/2023 – 1/9/2023) organised by the Centre for Statistics, Edinburgh University and was given by Simon Wood, School of Mathematics, University of Edinburgh. The course was well attended and received by 29 applied statisticians working in many different areas including medicine, epidemiology, forest science, agriculture, ecology, betting industry and genetics.

**Kirsty Hassall**

Biometric Bulletin Correspondent

## French Region (RF)

The Biostatistics Days, a joint conference with the research group "Statistics and Health", the group "Biopharmacy and Health" of the French Society of Statistics (SFdS) and the French Region of the IBS, took place 16-17 November 2023 in Toulouse, France. Invited speakers were: Thomas Filleron (IUCT Oncopole, Toulouse, France), Nikkie Freeman (Univ North Carolina, Chapel Hill, NC), Pierre Gloaguen (Univ Bretagne Sud, Vannes, France) and Julie Josse (INRIA, Montpellier, France). Later in that month, the French Region of the IBS held its annual general meeting 27 November 2023. More information can be found on our website: <https://sfb.pages.math.cnrs.fr/asso/>

**Anne Thiébaud**

Biometric Bulletin Correspondent

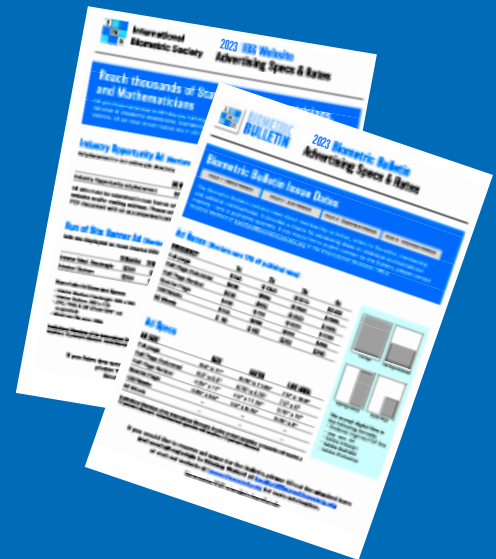
## German Region (DR)

### Young Statisticians

At the CEN in Basel from 3-7 September, the Early Career Working Group (AG Nachwuchs) organized the twelfth Young Statisticians Session (YSS) together with the Austro-Swiss Region (ROeS) and the Polish Biometric Society (PBS). Among the eight applications from four German cities (Dortmund, Munich, Lübeck, Darmstadt), four winners were selected to present their research results (bachelor and master theses as well as PhD projects) at the YSS. The winners – and thus invited speakers – were Lukas Klein (Darmstadt), Lea Kronziel (Lübeck), Hannah Kumpel (Munich), and Julian Lange (Munich). The program of the two YSS sessions was complemented by the winners chosen by ROeS and PBS in a separate selection process. This year's session chairs were Stefanie Peschel (spokesperson of the AG Nachwuchs) and Prof. Andrea Berghold (ROeS).

# Advertise with Us!

Do you have vacancies to fill? Are you running a promotion, courses, selling software, or consultancy services of interest to statisticians, biometricians, and mathematicians? Consider advertising on the IBS Website and or in the Biometric Bulletin. Click below for additional information and ad rates. Please email the International Biometric Office ([ibs@biometricsociety.org](mailto:ibs@biometricsociety.org)) with any questions.



**Advertising Specs & Rates - 2023**

**View Current Employment Opportunities**



In addition, the Early Career Working Group organized its fifth panel discussion as part of the CEN 2023. Five panelists from academia and industry answered questions from the panel and the audience: Anne-Laure Boulesteix (LMU München), Annika Hoyer (Universität Bielefeld), Antonella Mazzei (Bristol Myers Squibb), Christian Müller (Helmholtz Zentrum München; LMU München; Flatiron Institute New York), and Marvin Wright (BIPS Bremen). The session was chaired by Julia Duda and Ina Dormuth (both TU Dortmund). Topics like “the necessity of going abroad,” “optimal planning of stays abroad” or “compatibility of family and working abroad” were discussed. This format was primarily aimed at young statisticians and was intended to give them an orientation for their future careers in biometrics. As in previous years, we are pleased to report that, despite the late hour, the session was well received and had a good attendance.

**Stefanie Peschel**

## Young Talents Awards

During the tri-annual meeting of the Central European Network, the German Region awarded its young talent awards. These went to Lasse Fischer, Bremen, for the master thesis “Online Multiple Testing with FWER control,” Tim Mori, Göttingen, for the master thesis “Blinded sample size reestimation in clinical trials with time-to-event outcomes based on flexible parametric models,” Annika Swenne, Bremen, for the master thesis “Confounder Adjustment with Random Forests based on Local Residuals in Genetic Association Studies,” and Thilo Welz, Dortmund, for the article “Cluster-Robust Estimators for Multivariate Mixed-Effects-Meta-Regression” that appeared in “Computational Statistics & Data Analysis”.

## Online seminar series

The ‘sibinar’ is looking forward to new installments. Ludwig Hothorn (Hannover) will talk in German on Wednesday, 13 December 2023 at 1 p.m. on “Multiple marginal models – A flexible method of multiple testing across different sources of multiplicity: an R-oriented, example based introduction.” Cornelia Kunz (Boehringer Ingelheim) will talk on Thursday, 25 January 2024, at 1 p.m. on “Building bridges: Cooperation and careers in industry and academia.”

**Reinhard Vonthein**

## Ethics and Responsibility

The working group “Ethics and Responsibility” held their presence workshop on the topic “Open Replicable Research” 5-6 October in Munich organized by Sabine Hoffmann and Michael Lauseker. Invited speakers were Ioana Cristea (Padua) with a talk on “Implementation of data sharing in clinical research: tractable and intractable problems” and Ulrich Dirnagl (Berlin) who spoke about “Can statistics save preclinical research?” Speakers held eleven contributed talks on different aspects of data sharing and replicable and reproducible research, one satellite talk by Kim Luijken (Utrecht) rounded out the program.



About thirty participants attended the workshop  
Michael Lauseker (first from the left)

The workshop program and some of the talks can be found on the [German Region Website](#).

## Nonparametrics

Lubna Amro (TU Dortmund) and Markus Pauly organized a hybrid workshop on “Using Resampling and Simulation to Tackle Heterogeneity” as part of the FAIR scientific profiling ([fair.tu-dortmund.de](http://fair.tu-dortmund.de)) and in cooperation with the Research Center for Trustworthy Data Science and Security ([rc-trust.ai](http://rc-trust.ai)). Invited speakers were Moritz Berger, Dennis Dobler, Florian Dumpert, Sarah Friedrich, Frank Konietzschke, and Łukasz Smaga. Close to 40 participants attended.

In cooperation with Arne Bathke and Georg Zimmermann (both Salzburg), the working group will organize a summer school on time to event analysis for late June 2024. Here, we were lucky to ‘win’ Paul Blanche (Copenhagen), Sarah Friedrich (Augsburg), Kaspar Rufibach (Basel) and Helga Wagner (Linz) as lecturers.

**Markus Pauly**

## Population Genetics and Genome Analysis

The joint workshop “Introduction to Genome-Wide Association Studies” together with the AK Humangenetik (GMDS) took place on 21 September 2023 in the context of the annual meeting of the GMDS. In addition to presentations by Alexander Teumer (University Medical Center Greifswald) and Pascal Schlosser (University Medical Center Freiburg) on the different aspects of a GWAS, there was an online presentation by Claudia Schurmann (Bayer AG) on the UK Biobank Analysis Platform ‘UKB-RAP’.

The slides can be downloaded [here](#).

First preparations were made for the workshop in autumn 2024 focusing on polygene scores. Details will follow.

**Pascal Schlosser**

**Reinhard Vonthein**  
Biometric Bulletin Correspondent

## Italian Region (RitI)

The 14th biannual Meeting of the Italian Region of the International Society was held in Milano (27-31 August 2023), hosted by the University of Milano-Bicocca, and was jointly organized with the International Society of Clinical Biostatistics (ISCB) (<https://www.iscb2023.info>). The Scientific Programme Committee (chair S. Galimberti) and the Local Organising Committee (chair M.G. Valsecchi) have been working together to create a stimulating scientific and social programme and we extend our gratitude to both. Indeed, the meeting has been a resounding success gathering around 850 participants from 39 countries, more than 100 from the Italian Region. The conference spanned five days and featured outstanding speakers, leading scientists and young people at the beginning of their career presenting their papers and joining discussions. Five pre-conference courses given by recognized experts started the conference activities. In the plenary sessions, two highly distinguished speakers addressed topics hotly debated in modern biostatistics and epidemiology: Vanessa Didelez focused on causal inference, estimands and trials in epidemiology and biostatistics, while Lisa McShane shared the experience related to her statistical adventures in pursuit of precision medicine. Overall, we had 8 invited and 35 Oral Contributed Sessions on a wide range of statistical topics and more than 300 posters. The conference included additional activities for young researchers, for their networking and career development, in particular a session with the most brilliant students presenting their awarded work and a student evening gathering. Moreover, the Early Career Researchers' Day provided a unique opportunity for graduate students, post-doctoral fellows and biostatisticians at the beginning of their career to share experiences and advice, discuss opportunities and challenges, and practice their presentation skills in a less formal environment. Two mini-symposia, defined by the Mini-Symposia Committee (chair M. Bonetti) completed the programme. One was devoted to celebrate the 10th anniversary of the STRATOS Initiative and the other one addressed novel approaches to complex data and predictive modeling in healthcare research.

The board of the society was renewed on the occasion of the members' assembly that took place during the conference. Two members volunteered and were approved to remain on board (i.e. Paola Rebora and Marialuisa Restaino), one was elected President (Stefano Calza), while two were the newly elected members (i.e., Marco Bonetti and Monica Ferraroni). Congratulations to the new board willing to commit time and energy to serve the society.

**Francesco Stingo**

Biometric Bulletin Correspondent

## Japanese Region (JR)

### The 2023 Japanese Joint Statistical Meeting

The Japanese Joint Statistical Meeting was on 3-7 September 2023, in hybrid combining online and onsite at Kyoto University, Kyoto, Japan. This meeting was hosted by the Japanese Federation of Statistical Science Association, which consists of six sponsoring organizations, including the BSJ. The BSJ organized an invited session and the Young Biostatisticians Award session. In the former symposium entitled "New Developments in Biometrics and Ecology", the BSJ invited outstanding researchers to discuss this topic. In the latter session, Yumi Takagi (Kyoto University), the winner of the award conferred by the society, made a presentation on a statistical graph for evaluation of the primary endpoint in a clinical trial using the alternative hypothesis, Bayes factor, and confidence interval.

**Takashi Daimon**

Biometric Bulletin Correspondent

## Netherlands (BMS-ANed)

<https://www.vvsor.nl/biometrics/>

In this issue we are thrilled to look back on the dynamic Channel Network Conference 2023[TS(1)] hosted in the picturesque Wageningen, Netherlands. This biennial gathering, organized by the International Biometric Society's channel network (part of International Biometric Society), brought together (bio)statisticians, mathematicians, and data scientists from diverse regions. Three days of intense discussions, enriched by short courses, invited sessions, and contributed talks, showcased the latest biostatistics methodologies and applications. With 100+ participants spanning academia and industry, the conference buzzed with collaboration and knowledge exchange. Heartfelt appreciation to our esteemed keynote speakers: **Aad van der Vaart** and **Marc Chadeau-Hyam**, who ignited insightful conversations. Engaging Invited Sessions and specialized Short Courses further enriched the experience, shaping the future of biostatistics. Additionally, during the closing ceremony the winners of the two conference awards were announced: Yuchen Guo for Best Student Oral Presentation and Kai Ruan for Best Poster Presentation. Well done both!

The event description has been generously provided by Jos Hageman from Biometris at Wageningen University & Research (co-chair of the Local Organising Committee). Thank you Jos and the other members of the Local Organising Committee: Carel Peeters (co-chair), Dennis te Beest, Jonathan Kunst and Dinie Verbeek for your outstanding effort to deliver a productive and memorable event for us all!

Further, as part of our ongoing series of online seminars in Biostatistics we are honoured that Ronald Geskus from the Oxford University, Ho Chi Minh City, Vietnam presented the sixth seminar on Thursday October, 12th 2023. Ronald's talk was about: "Competing risks, when and how to incorporate them in the analysis". Presentation slides are available online[TS(2)]. The seminars aim at a broad biostatistical audience, in particular PhD

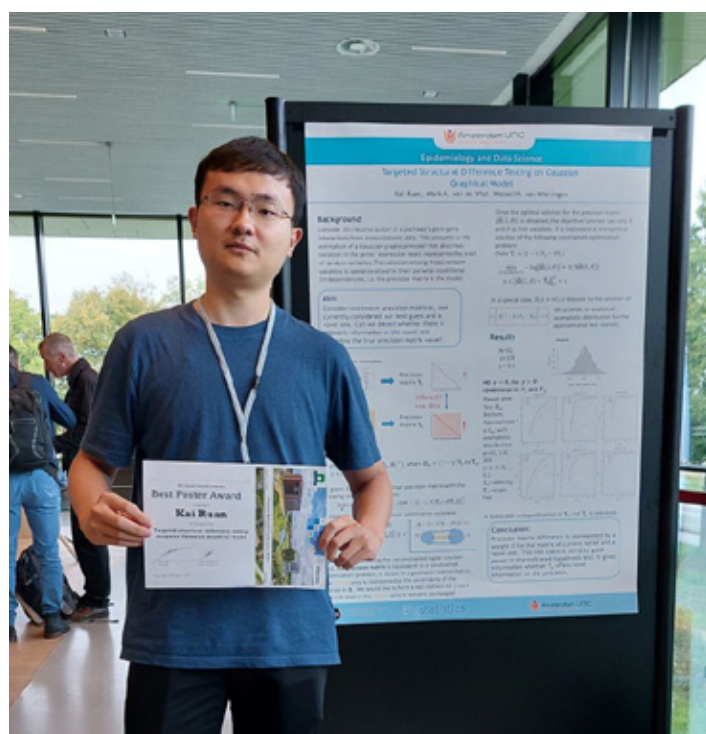




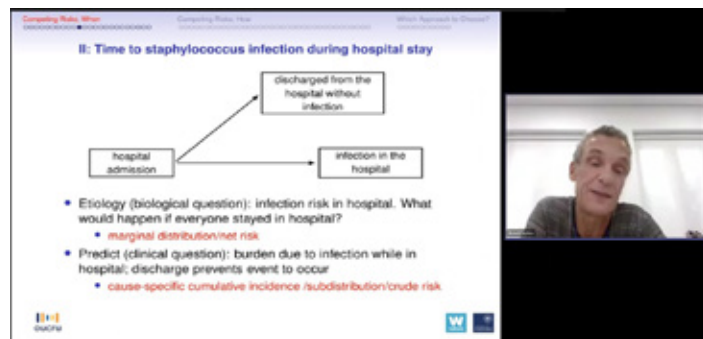
students. Similar to the previous online sessions this seminar was attended by many PhD Students, but also more senior statisticians. The next online seminar will be announced soon. Finally, our next BMS-ANed activity is the PhD Day on Wednesday, 29 November, which will be hosted at the Danone office in Utrecht. During this day, several biostatisticians from different fields outside of academia (from both the public and private sector) will tell us about their jobs and reflect on their career paths. An update will follow in the next issue!



Yuchen Guo recipient of the Best Student Oral Presentation



Kai Ruan recipient of the Best Poster Presentation



Screenshot from Ronald Geskus' online seminar

[TS(1)]<https://www.vvsor.nl/biometrics/news/2023-channel-network-conference-at-wageningen-university/>

[TS(2)]<https://www.vvsor.nl/biometrics/events/bms-aned-seminar-on-data-analysis-with-competing-risks/>

### In Memoriam - René Eijkemans

On 17 April 2023 prof. René Eijkemans (59) died as a consequence of the devastating disease amyotrophic lateral sclerosis (ALS). René was a prominent figure in the Dutch Biostatistics scene, who has also contributed substantially to IBS activities.

René studied mathematics in Delft, and pursued a PhD in applied statistics on 'Fertility in Populations and in Patients.' His interest in methodology for fertility and reproduction research persisted throughout his career, and he is well-known for his exceptional contributions to this field. In addition, he contributed to many biomedical papers on a wide variety of applications, always prioritizing the clinical question when tailoring the methodology. He had a keen interest in high-dimensional ('omics') data as well, realizing very early on that machine learning algorithms could be useful in those settings, but only when used very carefully. In that sense, he was an early adapter of the nowadays commonly shared vision that machine learning needs to be used with care in clinical practice.

In 2014 he became a full professor in Biostatistics at the faculty of medicine in Utrecht, and he was a department head at the Julius Center for several years. He was also very involved with teaching, and had an important share in the Medical Statistics track in the Epidemiology master. He was a positive, constructive, nice and humble leader. The well-being of the junior researchers was always a primary concern for him. Even during the last stages of his disease he prioritized his meetings with the juniors, and made sure that succession of their supervision was taken care of when this was needed.

### Contributions to IBS

René has also served as a very active member of the Budget and Finance Committee within the International Biometric Society. His contributions, comments, concerns and recommendations were always very positively valued by everyone in the committee and he will be greatly missed by all of us.

### Contributions to the DELTAS Africa SSACAB Training Program

Internationally, René Eijkemans was actively involved in the training activities of the Sub-Saharan Africa Consortium for Advanced Biostatistics (SSACAB I) Training Program Phase I, under the Developing Excellence in Leadership, Training, and Science in

Africa (DELTAS Africa) initiative. It is with heavy hearts that the DELTAS Africa SSACAB I programme learnt of the passing of Prof. Rene Eijkemans. As a Northern Partner based at the Julius Center, University Medical Center Utrecht (UMCU), the Netherlands, Rene played a pivotal role in the development of DELTAS Africa SSACAB I. As a distinguished scholar in the field of Biostatistics and with a special interest in Machine Learning, Rene's contributions were nothing short of extraordinary. During his tenure as the Lead from UMCU, Rene made significant contributions to the DELTAS Africa SSACAB I Training Program. He was involved in Executive Committee Meetings, Scientific research conferences, biostatistics workshops and module development for MSc and PhD teaching in our Partner and Collaborating institutions. He conducted pre-AGM workshops and online short courses in Machine Learning to the SSACAB community. Because of his commitment, we successfully have a theme to advance Machine Learning in SSACAB II and have Utrecht as a partner to continue his legacy. Rene also strengthened SSACAB's ties with the SUSAN IBS network which showcased his profound commitment to the program's success. His legacy continues to inspire the consortium members in their SSACAB Phase II endeavours.

*René will be deeply missed by the Dutch and International Biometrics Society.*

**Marta Zanelli**

Biometric Bulletin Correspondent

## Polish Region (GPol)

This year we celebrate the 75th birthday of Professor Stanisław Mejza.

Professor Stanisław Franciszek Mejza was born on May 23, 1948 in Leszno. In 1966, he graduated from high school in Leszno and began studying mathematics at the Faculty of Mathematics, Physics, and Chemistry of the Adam Mickiewicz University in Poznań. In 1971, he majored in mathematics and defended his thesis entitled "Analysis of canonical correlations." The master's degree thesis supervisor was Professor Tadeusz Caliński.

His professional career began on October 1, 1971, when he joined the Department of Mathematical and Statistical Methods at the University of Agriculture in Poznań. In 1976, he defended his doctoral thesis entitled "Uniformly better estimators of contrasts based on intra- and inter-block analysis" under the supervision of Professor Tadeusz Caliński at the Adam Mickiewicz University, obtaining a PhD degree in mathematical sciences, specialization in mathematical statistics. Professor Mejza achieved the Habilitation in natural sciences (specialization – applied statistics, biometry, and agricultural experimentation) on November 13, 1986, at the Agricultural University of Poznań based on the work entitled "Experiments in incomplete split-plot designs." On July 30, 1993, the President of the Republic of Poland, awarded him the title of professor in natural sciences. On September 1, 1997, he became a full professor. Since September 1, 1988, he has been the Head of the Division of Mathematical Statistics (now the Division of Biostatistics at the University of Life Sciences in Poznań).

Stanisław Mejza expanded his skills and knowledge by participating in many scientific internships in Poland (Poznań and Wrocław)

and abroad (including Germany, Italy, Norway, Israel, Great Britain, Spain, Greece, Ireland, South Africa, USA). At the same time, he collaborated scientifically with universities in Japan, such as Hiroshima University, Tsukuba University, Keio University, Osaka Prefecture University, Meisei University, Gifu University, and Nagoya University. From 1995 to 2005, Stanisław Mejza organized scientific cooperation under the intergovernmental agreement that joined the Poznań University of Life Sciences and Hiroshima University. Since 1994, he has visited the Universities of Dortmund and Lisbon many times, where he gave many lectures, participated in staff training, numerous scientific research and doctoral promotions related to mathematical statistics. As part of this cooperation, the Professor made six doctoral reviews and was a supervisor in the so-called European Doctorate. In the years 1978-2009, he visited Wageningen University many times, and in the period from 1992 to 1996, he carried out 12 individual TEMPUS projects of the European Union, visiting universities in Portugal, Germany, Spain, Great Britain, Ireland, France, and Denmark.

He has accomplished many projects under the ERASMUS program with universities: Humboldt Universitaet zu Berlin, Evora University, and Open University (Lisbon). The main scientific interests of Professor Mejza include the theory of estimation and testing of hypotheses in fixed and mixed models, experimental designs, especially block designs, factorial designs, and series of experiments. He has published over 170 original scientific papers in foreign and domestic journals. He promoted six PhDs, including one in Japan and one in Portugal. He taught mathematics, statistics, information technics, and experimentation at all faculties of the University of Life Sciences in Poznań. He also conducted classes for foreigners in mathematical statistics and experimentation.

Professor Stanisław Mejza is a member of several scientific societies, including the Polish Biometric Society (PTB), the Polish Statistical Association, and the International Biometric Society. From 1994-1997 he was a council member and from 2010-2013 a member of the Budget and Finance Committee of The International Biometric Society. From 1998, he was the President of the Polish Biometric Society (PTB), and from 2001 - the National Representative of the Polish Group of IBS. From 2011 he was a Vice-Chairman of the Mathematical Statistics Section of the Polish Statistical Association. For many years he has been a member of the editorial committees of scientific journals, particularly since 2005, the editor-in-chief of the journal "Biometrical Letters." He has participated (and still participates) in several research projects and managed six of them. He attended over 200 international conferences and often contributed as an "invited speaker," and a member of the scientific, program, organizational, or honorary committee. Several times he has received the Rector's Award for research and teaching. He has been awarded the Gold Cross of Merit.

On behalf of the Polish Biometric Society members, we would like to thank Professor for many years of cooperation, for being the president of PTB and the Polish section of IBS with deep commitment, and for his help and kindness towards us. We are full of admiration for the perseverance and determination with which the Professor approached the entrusted functions. We would like to appreciate for showing us how to overcome difficulties. We wish Professor good health and fulfillment of all his dreams and plans.

**Elżbieta Kubera and Anna Budka**

Biometric Bulletin Correspondents



## Western North American Region (WNAR)

### 2024 WNAR/IMS Meeting

The 2024 WNAR/IMS meeting will be in Fort Collins, Colorado from 9-12 June 2024. The conference will be joint with the 2024 Graybill Conference, to be held at Colorado State University. Fort Collins is 65 miles (105 km) north of Denver, approximately 2 hours from major ski resorts and 45 minutes from the Rocky Mountain National Park. The city has a thriving arts scene and an extensive mix of outdoor recreation activities. Wen Zhou (Colorado State) is the Local Organizer and Graybill Co-organizer; Prince Allotey (UW) and Catherine Lee (Kaiser Permanente) are the WNAR Program Chairs, Jie Peng (UC Davis) is the IMS Chair, and Kayleigh Keller (Colorado State) is the Student Competition Chair. Registration information and other details about the meeting will be posted to the WNAR site as they become available.

### 2024 WNAR/IMS Invited Session Proposals

Invited session proposals are due 15 December 15. Please see the WNAR Website for details and submission form.

### 2024 WNAR Student Paper Competition

WNAR sponsors students who enter the student paper competition. All WNAR-region entrants receive their registration fees and banquet dinner ticket for free. Monetary prizes will be awarded to the best papers in written and oral competitions. Information on the 2024 WNAR Student Paper Competition, registration information, and program details for the meeting will be posted as they become available: <http://www.wnar.org>. We look forward to seeing you there.

### WNAR Indigenous Student Travel Award

In 2024 WNAR will begin offering a travel supplement for an Indigenous student from within the WNAR region to attend our annual conference. Eligible students include Indigenous peoples of North America and the Pacific Islands. To apply, please send a letter outlining your connection to Indigenous peoples and why you are looking forward to attending the WNAR annual conference, to: [wnar@wnar.org](mailto:wnar@wnar.org). Please encourage your students to apply.

**Jessica Minnier**

Biometric Bulletin Correspondents

## Announcements & Upcoming Events

### IBS, IBS Regional and Non-IBS Events and Meetings

#### The ENAR 2024 Joint Statistical Meeting 3-8 August 2024

Portland, Oregon  
Canada

#### The 68th Brazilian Region of IBS 29-31 May 2024

Department of Exact Sciences of the Luiz de Queiroz College of Agriculture (ESALQ), University of São Paulo (USP)  
Piracicaba, Brazil

#### The 2024 WNAR/IMS Meeting 9-12 June 2024

Fort Collins, Colorado  
USA

[www.wnar.org/wnar2024](http://www.wnar.org/wnar2024)

View the full meetings [calendar here!](#)

### IBS, IBS Regional and Non-IBS Events and Meetings

[View the full meetings calendar here!](#)

Is something missing? Would you like to add your meeting or event to our calendar?

If so, please send an email to [IBS@biometricsociety.org](mailto:IBS@biometricsociety.org)

1. Event Title
2. Event Description & Location
3. Event Category (IBS Regional Event, IBS Event, Non-IBS Event)
4. Event Link
5. Start/End Date

Follow IBS on Social Media!

[Twitter @IBSstats](#)

[Facebook @BiometricSociety](#)

[LinkedIn @International Biometric Society](#)

## Get Connected!



Follow IBS on Social Media!  
**Twitter • Facebook • LinkedIn**