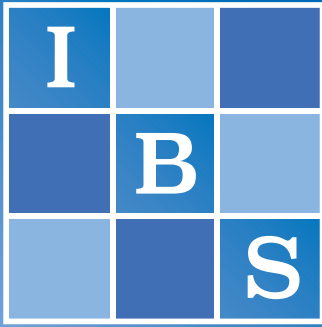




Biometric BULLETIN

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

International Biometric Society Internationale Biometrische Gesellschaft Société Internationale de Biométrie

President's CORNER



María Gabriela Cendoya
International Biometric
Society President

Dear Members of the
International Biometric Society,

It is a pleasure to welcome you
once again to the Society's
Biometric Bulletin.

Following the successful
completion of IBC Seoul 2026, I
would like to take a moment to
reflect on what was an inspiring
and enriching gathering for our
community. It was wonderful
to meet face-to-face with
colleagues, reconnect with
friends, exchange ideas, and
experience firsthand the energy
and innovation shaping the
biometrics field.

IBC Seoul in numbers: 955
attendees from 53 countries,
with nearly 700 speakers
participating. The IBC also
supported the attendance of
delegates from low and middle-
income countries, with 133
delegates attending in Seoul, as
well as our student community,
which reached 283 participants
this year.

Thanks to the efforts of
the International Program
Committee, several new
initiatives were introduced

7 • Editorial Updates

Get latest news from *Biometrics* and *JABES*.

14 • IBC2026

IBC2026 in Seoul welcomed nearly 1,000 registrants.

22 • Regional News

A snapshot of the vibrant activities taking place
across our global network.



Continued on Page 4

Biometric BULLETIN

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Region Key

Regions

RArg - Argentinean Region

AR - Australasian Region

ROeS - Austro-Swiss Region

RBe - Belgian Region

Benin - Benin Region

GBot - Botswanian Region

RBras - Brazilian Region

BIR - British and Irish Region

RCAC - Central American-
Caribbean Region

GComr - Cameroon Region

GCI - Chilean Region

CHINA - Chinese Region

CROA - Croatian Region

EMR - Eastern Mediterranean
Region

ENAR - Eastern North American
Region

ECU - Ecuadorian Region

GEth - Ethiopian Region

RF - French Region

DR - German Region

GGha - Ghanaian Region

IR - Indian Region

RItI - Italian Region

JR - Japanese Region

GKe - Kenyan Region

RKo - Korean Region

GMal - Malawi Region

NAM - Namibian Region

ANed - The Netherlands Region

GNI - Nigerian Region

NR - Nordic-Baltic Region

GPol - Polish Region

GRo - Romanian Region

RWAN - Rwanda Region

GSaf - South African Region

REsp - Spanish Region

GUgan - Ugandan Region

WNAR - Western North American
Region

GZim - Zimbabwean Region

Networks

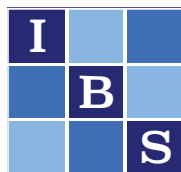
CEN - Central European Network

CN - Channel Network

EAN - East Asian Network

HISP - Hispanic International
Network

SUSAN - Sub-Saharan Network



Biometric BULLETIN



13

IBC2026

IBC2026 in Seoul welcomed nearly 1,000 registrants to one of the most well-attended conferences in the Society's history. Academics and others from more than 53 countries were in attendance, including professionals representing more than 31 specialties for this five-day educational event focused on the further development and application of statistical and mathematical theory and methods in biosciences. Read the highlights from speakers and attendees from IBC.



5

Update from the IBO

IBS Executive Director Peter Doherty acknowledges the many volunteers—IBS officers, committee members, speakers, local organizers and volunteers who helped make IBC2026 one of the most well-attended conferences in IBS history.

6

Letter from the Editor

Executive Editor Garth Tarr reflects on IBC2026 in Seoul, Society research and news, award recipients, regional activities, and our volunteers' contributions.

10

STrengthening Analytical Thinking for Observational Studies (STRATOS): Performance Measures of Estimators for Non-linear Associations between a Continuous Variable and an Outcome: A Categorization and Illustration of Various Criteria'

In this issue, STRATOS highlights methods for estimating non-linear associations, including fractional polynomials and spline-based approaches. The article examines how researchers can choose among these methods and the need for more simulation studies to guide those choices.

12

Donate to the IBS Travel Awards Fund

The IBS Travel Awards Fund helps support the allocation of travel grants to a selected group of members from low- and middle-income countries (LMICs), with the goal of allowing more members to exchange ideas at official IBS events.

Editorial Updates

Biometrics
JABES

7
8

22

Regional News

The Regional News section provides a snapshot of the vibrant activities taking place across our global network. In this issue we see examples ranging from the International Biometric Society Tanzania Region inaugural symposium, announcements of upcoming scientific meetings, such as the 28th International Symposium on Biometrics in Croatia (Meeting of the Croatian Biometric Society), and highlights from the Central European Network Conference - CEN 2026, held in Warsaw 18-21 May 2026.

Austro-Swiss (ROeS)	22
British and Irish (BIR)	23
Central American and Caribbean (RCAC)	23
Croatian (CROA)	25
French (FR)	25
German (DR)	25
Japan (JR)	27
The Netherlands (BMS-ANed)	27
Polish (GPol)	28
Spanish (REsp)	29
Tanzania (TZR)	29

37

Announcements & Upcoming Events

PRESIDENT'S CORNER

Continued from page 1

and, I am sure, greatly appreciated by our members. Among them were the Network Sessions, where each Network had its own space to showcase and discuss its most recent research activities.

Another highlight was the Special Luncheon Panel: *Bioethics Roundtable – Responding to Uncertainty in Times of Global Change*. This engaging discussion focused on how the scientific community can respond more proactively and visibly to urgent global challenges such as pandemics, climate change, and artificial intelligence, while participants enjoyed an exceptional Korean meal.

Looking ahead, IBC2028 will be held in Basel, Switzerland, from 16 to 21 July. Save the date! We are already working closely with the Local Organizing Committee, and Nora Bello has been approved to serve as Chair of the International Program Committee. More news will follow soon.

Another exciting announcement is that the host city for IBC2030 has been selected and approved by the Executive Board: Addis Ababa, Ethiopia. Congratulations to the Ethiopian Region and the SUSAN Network! We look forward to working with you to deliver another outstanding IBC in Africa.

As part of our efforts to promote the IBS and strengthen our connections with regional activities, I will be participating in the Annual Meeting of the Argentine Region, which will be held in Tandil, Buenos Aires Province, from 13-16 October and is being organized jointly with the Argentine Statistical Society. I will also attend the 70th Annual Meeting of the Brazilian Region of the IBS, which will take place from 23-25 November 2026 at IMECC-Unicamp in Campinas, São Paulo, Brazil. I am looking forward to participating in both events.

In addition, at the most recent Board meeting, the proposal to create an official IBS Instagram account was approved. This initiative will help us share IBS news, programs, and activities more effectively while reaching younger audiences. We look forward to connecting with you on Instagram, as well as through our other social media platforms, including Facebook, Bluesky, and LinkedIn. The more members who follow, share, and repost our content, the greater the visibility and impact of the IBS. We hope you will help us spread the word.

At the last Board meeting, we also had a productive discussion about giving more structure and visibility to the activities of both the Representative Council and the Executive Board. We believe this will help members better understand the important role these volunteer positions play in the Society's current and future well-being.

Having such a strong, diverse, and truly international scientific society is especially valuable at a time when science faces significant challenges around the world. However, our strength depends on the commitment of our members, whose dedication helps us navigate these uncertain times. For this reason, it is important that members are informed about the discussions taking place at the governance level and recognize that these positions are held by fellow members who share the same goal: advancing the development and application of statistical and mathematical theory and methods in the biosciences.

Lastly, as Iris Pigeot's term as Outgoing President comes to an end, I would like to express my sincere gratitude for her outstanding leadership and dedication to the Society. She has provided excellent service throughout her presidency and concluded her term by delivering a truly remarkable IBC in Seoul. Thank you, Iris. It has been an honor and a privilege to work alongside you.

This also brings us to the upcoming presidential elections, which will take place later this year. I encourage all members to stay informed and participate by casting their vote. Your engagement is vital to the continued success and future of our Society.

All the best,

María Gabriela Cendoya

International Biometric Society President



Update FROM THE IBO



Peter Doherty
Executive Director



As I write this article, it has been nearly a month since the 2026 International Biometric Conference came to an end. And though we are still analyzing all the results, I hope that those who had a chance to join us in Seoul valued their time with us. I know I will remember this conference for many years to come!

This conference was unique in many ways. I suspect that some of these unique aspects were already mentioned by Gabriela Cendoya in her President's Corner. For example, this conference was one of the most well attended IBC in our nearly 80 year history. This was not the expectation during the planning period. Far from it! With so much happening in the world, we had hoped for a return to a conference that was typical in size.

There were many challenges, and not just for our Planning Group, which by the way consisted of Organizing President Iris Pigeot, President Gabriela Cendoya, Treasurer Sarah Ratcliffe, Secretary Tarylee

Reddy, our Local Organizing Committee Co-Chairs Sohee Park and Ho Kim, our International Program Committee Chair Frank Bretz, Education Committee Chair Rafael de Andrade Morale, Meetings Director Alexander Lula, and Meetings Manager Becca Anderson. I also wish to thank our Membership Manager, Ryan Dee, our Director of Operations Heidi Lapka, and our Marketing Manager Shannon Barnet as well as others behind the scenes including Jenna Beak (MCI), Grace Doh (Dot Planner), and Sangwook Kang (LOC), whose efforts were vital to our success this year. This was the core group that made the conference happen. I hope you will thank them, [and all members of the Local Organizing Committee and the International Program Committee](#), if you have an occasion to speak with them!

Now, back to a few of the unique challenges, which I personally will remember because of how they were managed. And we did our best to turn some of these "lemons" into lemonade. We hope you appreciated our efforts. For example, did you know that our chosen venue only opened a little more than a year before we all arrived in Seoul? As a result, there wasn't time for the typical site visit. And I think it's safe to say we were all wondering whether the venue sketches and diagrams were going to match reality. For the most part, they did. And then there were the social events and tours. Some of us certainly saw a lot of the city this year... on foot, by bus, via the subway, and even by way of a sunset cruise. Contingencies were put in place for some of these events, due to the typical monsoon weather! And our shift to a Thursday tour pattern this year was a pilot of sorts. Whether our answer to every challenge was successful or not, we hope that the appeal of our host city could be felt and appreciated by all of our attendees.

The most memorable thing about my experience in Seoul was the people we had a chance to work and

interact with. Our local destination management firm and our local partner, the Korean Statistical Society, welcomed us with open arms and were a joy to work with on site.

Our heartfelt thanks also go to Soraeol, our Opening Ceremony entertainment from Chung-Ang University. And special thanks also go to Kee-Hoon Kang, President of Hankook University of Foreign Studies, for joining us on Monday morning. Of course, our Monday morning activities would not have been complete without an address from our Presidential Keynote speaker, Distinguished Professor Emeritus of Statistics Alan Agresti from the University of Florida, whose talk focused on the development of basic methods of categorical data analysis, starting with Karl Pearson's introduction of the chi-squared test in 1900 and early contributions by R. A. Fisher and G. Udny Yule.

Something else that was unique this year, though less of a "challenge," was the opportunity to add two

additional keynotes to the session lineup! Thanks to Professors Ho Kim from Seoul National University and Alison Kelly from the Qld Alliance for Agriculture and Food Innovation Institute, University of Queensland.

Though important, dwelling on the challenges too long can be counterproductive. So, I'll end it here. Moving forward, we will focus on the lessons learned, the new friends that we made, and the wonderful experience that we had in Seoul. [By the way, the photos have now been posted online!](#) And we still look forward to hearing about YOUR experiences and ideas, especially if you were one of the more than 624 first-time attendees at this year's event! Please reach out to us at ibs@biometricsociety.org. In this way, you will have an opportunity to directly impact our next event in Basel, Switzerland. We hope to see you there!

Best Wishes,

Peter Doherty, CAE
Executive Director

Letter from **THE EDITOR**

It was a pleasure to join so many members of the International Biometric Society at IBC2026 in Seoul. I am pleased to report that it lived up to expectations! I particularly enjoyed the breadth of interesting talks, catching up with colleagues, and making new connections with members from other regions. I also appreciated the opportunity to see more of the work that goes on behind the scenes. I joined the Committee on Communications meeting and attended the Representative Council Meeting, both of which provided interesting perspectives on how the Society operates and how we can better engage with members.

Of course, an IBC is not all meetings and scientific sessions. The *Celebrate Korea Awards Dinner* on the Han River was outstanding, bringing together local entertainment and the presentation of some of the Society's major awards. The Bastille Day fireworks across the river were a welcome surprise – many thanks to the French for arranging their national day so conveniently!

There is plenty beyond IBC in this issue as well. The STRATOS contribution considers an interesting and quite fundamental question: how should we assess methods for estimating non-linear associations when different performance measures can lead to quite different conclusions? The article provides a useful framework for thinking carefully about what

we actually want a performance measure to capture. Our journal updates include developments at both *Biometrics* and *JABES*, while the Regional News once again demonstrates the amount of activity taking place throughout the Society – from regional conferences and workshops to support for young statisticians and preparations already underway for IBC2028 in Basel.

This issue also gives us an opportunity to recognise many of the people who contribute to the IBS. Congratulations to our award recipients, including new Honorary Life Member Raúl E. Macchiavelli, Rob Kempton Award recipients Tobias Chirwa, Xiao Hua Zhou and Ziv Shkedy, Florence Nightingale Award recipient Fernanda Lang Schumacher, and the many travel grant, student presentation, poster and publication award recipients recognised in Seoul.

My thanks, as always, to our contributors, regional correspondents and the IBO team for putting this issue together. The success of the Seoul conference is a reminder of just how much of the Society depends on members volunteering their time, whether through our scientific activities, Regions and Networks, committees, publications or governance.

Garth Tarr
Biometric Bulletin, Editor

Editorial UPDATES

BIOMETRICS



Geert Molenberghs
Biometrics Executive Editor

Recent papers in *Biometrics*

Papers that are forthcoming in *Biometrics* can be accessed at:

<https://biometrics.biometricsociety.org/home/papers-to-appear>

Among the resources available here, you will find a list of papers to appear in future issues of the journal. You can also visit the journal via Oxford University Press:

<https://academic.oup.com/biometrics/issue>

Many people have institutional access. However, all members have full access in the following way. Navigate to the IBS web pages at: <https://www.biometricsociety.org/home>

Once logged on, go to “Publications” and select “Biometrics.” You will have full access to the current and preceding volumes, whether articles are Open Access or not.

Editorial Board News



Jessica Young (ENAR) to be 2027 – 2029 *Biometrics* Co-editor

A search committee, headed by Executive Editor Geert Molenberghs, has concluded its activities and successfully identified the successor of Co-editor Erica Moodie, whose term will end on 31 December 2026. In keeping with tradition, she

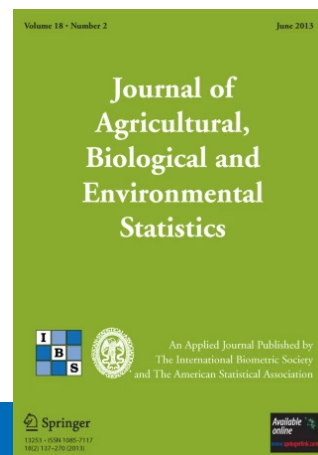
will be succeeded by a Co-editor from North America. The search committee had the following composition: Geert Molenberghs, *Biometrics* Executive Editor, Chair (Belgian Region); Erica Moodie, *Biometrics* CE (ENAR); Jessica Kasza, *Biometrics* CE (Australasian Region); Cécile Proust-Lima, *Biometrics* CE (French Region); Tarylee Reddy (South African Region); Ronald Gekus, EAC Chair (Netherlands Region & Vietnam); Paulo Canas Rodrigues (Brazilian Region), Debashish Ghosh (ENAR), and Rebecca Hubbard (ENAR). The search committee identified **Jessica Young** (ENAR, based at Harvard University) as Erica’s successor and is glad to report that Jessica has accepted to be the 2027-2029 Co-editor. The appointment has been endorsed by the Editorial Advisory Committee and approved by the Executive Board.

Associate Editor Panel turnover

As is customary, the *Biometrics* Associate Editor Panel, comprising over 100 colleagues, was recomposed on 1 July 2026. Fourteen colleagues concluded their terms on 30 June 2026, while 21 joined the panel on 1 July 2026. Ninety Associate Editors either started a new term or are serving terms until 30 June 2027. The names of outgoing and incoming Associate Editors were listed in the previous issue of the *Biometric Bulletin*.

***Biometrics* Editorial Board Meetings**

As is the case in every even-numbered year, two virtual (7 July and 19/20 August) and one face-to-face Editorial Board Meetings were held. The in-person meeting took place during the International Biometric Conference in Seoul, South Korea, on 14 July 2026. Taken together, a large number of



Associate Editors participated, with also the Co-editors and Editorial Managers in attendance during at least one of them. .

Looking Back on the International Biometric Conference 2026

In addition to the Editorial Board meeting, the Editorial Advisory Committee (EAC) met under the leadership of Ronald Geskus. The committee, as well as other constituencies within the IBS, are delighted that *Biometrics'* transition to Oxford University Press has been very satisfactory, from an editorial as well as financial standpoint.

The EAC suggests that guidelines as to proper (and improper) use of generative AI are made clear, not only to prospective authors, but also to reviewers. Formal guidelines will be complemented with alerts in standard letters sent to authors and reviewers. This is a rapidly evolving area on which the journal and Oxford University Press will work together.

Biometrics' content, both recent as well as older (archived in JSTOR), will be made available for training Large Language Models. The journal and the society have taken a prudent approach in this regard. In the meantime, about 95% of Oxford University Press's science journals have signed up for this. Our participation in this initiative will generate some revenue for the Society.

The *Biometrics* Showcase Session took place on Wednesday, 15 July 2026. In the previous issue of the *Biometric Bulletin*, we announced the winners of the "Best Paper Published in *Biometrics* by an IBS Member" Awards:

- Bu, F., Kagaayi, J., Grabowski, M. K., Ratmann, O., and Xu, J. (2024). Inferring HIV transmission patterns from viral deep-sequence data via latent typed point processes. *Biometrics*, **80**, ujad015.
- Wright, W. J., and Hooten, M. B. (2025). Continuous-space occupancy models. *Biometrics*, **81**, ujaf055.

Jason Xu and Wilson Wright gave excellent presentations on their respective teams' work.

Further, the new "Test of Time" Awards were publicly announced, i.e., the papers published in 2014 and 2015, respectively, that attracted the most citations over the intervening decade:

- Schmidli, H., Gsteiger, S., Roychoudhury, S., O'Hagan, A., Spiegelhalter, D., and Neuenschwander, B. (2014). Robust meta-analytic-predictive priors in clinical trials with historical control information. *Biometrics*, **70**, 1023-1032.
- Daniel, R. M., De Stavola, B. L., Cousens, S. N., and Vansteelandt, S. (2015). Causal mediation analysis with multiple mediators. *Biometrics*, **71**, 1-14.

Since 2022, the three Co-editors identify three colleagues that have done outstanding refereeing work for the journal over a given calendar year. During the Showcase Session, the six referees selected for the Excellent Referee Award for 2024 and 2025 were honored: Sarah Samorodnitsky, Hiroshi Mamiya, Florian Stijven, Chien-Wei Lin, Ashkan Ertefaie, and Lan Wen.

Geert Molenberghs
Biometrics Executive Editor

THE JOURNAL OF AGRICULTURAL, BIOLOGICAL, AND ENVIRONMENTAL STATISTICS (JABES)



Murali Haran
Editor-in-Chief

The Joint Statistical Meetings in Boston in August 2026 featured a JABES highlights session which brought together three of the best JABES papers of the past year. The papers were (speakers are in bold):

- Melded Integrated Population Models by Justin Van Ee (University of Hawai'i), Christian A. Hagen, David C. Pavlacky Jr., David A. Haukos, Andrew J. Lawrence, Ashley M. Tanner, Blake A. Grisham, Kent A. Fricke, Liza G. Rossi, Grant M. Beauprez, Kurt E. Kuklinski, Russell L. Martin, Matthew D. Koslovsky, Troy B. Rintz & Mevin B. Hooten.

- Semi-parametric Spatio-Temporal Hawkes Process for Modelling Road Accidents in Rome by Pierfrancesco Alaimo Di Loro (LUMSA University), Marco Mingione & Paolo Fantozzi
- Spatial Wildfire Risk Modeling Using a Tree-Based Multivariate Generalized Pareto Mixture Model by Daniela Cisneros, Arnab Hazra (IIT Kanpur), Raphaël Huser

- **Article Downloads: 108,851 downloads**
 - Trend: This is an increase from 83,298 in Q1-Q2 2025 and 82,370 in Q1-Q2 2024.
- **2025 Impact Factor: 1.1 (based on 144 citations from 129 articles)**
- **2024 Impact Factor: 1.1 (based on 104 citations from 95 articles)**

Recent Journal Statistics (Q1-Q2 2026)

- **Articles Published Online: 20 articles**
 - Note: The 2026 online article budget is 47 articles.
- **Submissions: 218 submissions**
 - Trend: This is a decrease from 233 submissions in Q1-Q2 2025, but an increase from 160 submissions in Q1-Q2 2024.
- **Average Time to First Decision: 35 days from submission**
 - Trend: This is an increase from 24 days in Q1-Q2 2025 and 21 days in Q1-Q2 2024.

Editorial Board Meeting at JSM 2026

The JABES Editorial Board meeting at the Joint Statistical Meetings in Boston in August included an online option for editors who were unable to attend in person. There were over 20 associate editors in attendance. The editorial board discussed several pressing issues including streamlining rejection decisions, discussing the scope of papers to be published in JABES, particularly machine learning and AI-oriented submissions, and strategies for handling reviewer shortages. Key decisions include doubling Associate Editors by year-end and requiring all theory and application papers to feature new statistical insights for publication.

STATA

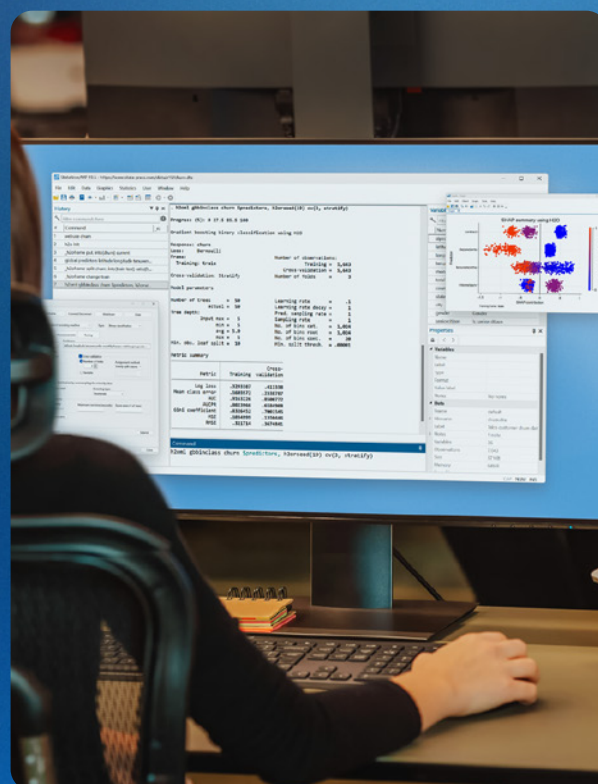
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STRengthening Analytical Thinking for Observational Studies (STRATOS):

PERFORMANCE MEASURES OF ESTIMATORS FOR NON-LINEAR ASSOCIATIONS BETWEEN A CONTINUOUS VARIABLE AND AN OUTCOME: A CATEGORIZATION AND ILLUSTRATION OF VARIOUS CRITERIA

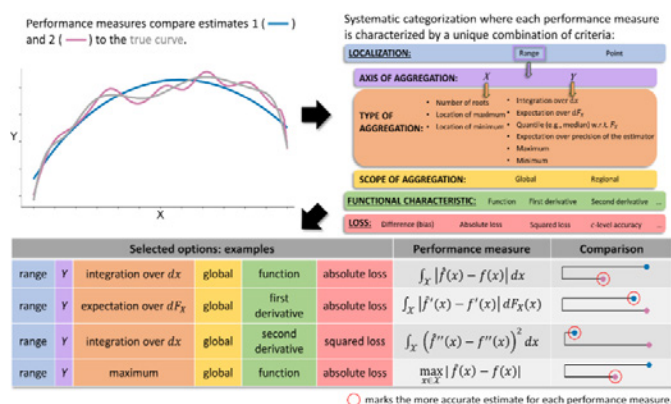
Theresa Ullmann 1 , Georg Heinze 1 , Michal Abrahamowicz 2 , Aris Perperoglou 3 , Willi Sauerbrei 4 , Matthias Schmid 5 , Daniela Dunkler 1 , for TG2 of the STRATOS initiative

1 Institute of Clinical Biometrics, Center for Medical Data Science, Medical University of Vienna, Vienna, Austria | 2 Department of Epidemiology & Biostatistics, McGill University, Montreal, Canada | 3 Statistics and Data Science Innovation Hub, GSK, Stevenage, UK | 4 Institute of Medical Biometry and Statistics, Medical Center, University of Freiburg, Freiburg, Germany | 5 Department of Medical Biometry, Informatics, and Epidemiology, University Hospital Bonn, Bonn, Germany.

In regression modeling, continuous predictors are often assumed to have a linear association with the outcome. In practice, however, associations may be more complex than that. Several methods were proposed for estimating non-linear associations, like (fractional) polynomials and various spline-based approaches. How should researchers choose among the many available methods? Simulation studies that systematically compare methods under different conditions can help answer this question. However, such studies remain relatively scarce, limiting the evidence available to guide methodological choices [1].

Suppose we decided to perform such a simulation study. The top left panel of Figure 1 shows some hypothetical results: two estimates for the association

between a variable and an outcome, obtained using two different methods, to be compared with the true curve . Several performance measures have been proposed for such comparisons [2, 3], but until recently, no systematic overview of such measures existed. In line with the aim of STRATOS Topic Group 2 (TG2) to develop guidance for variable and functional form selection in multivariable analyses, this gap was recently closed by a TG2 article [4, <https://doi.org/10.1002/wics.70042>].



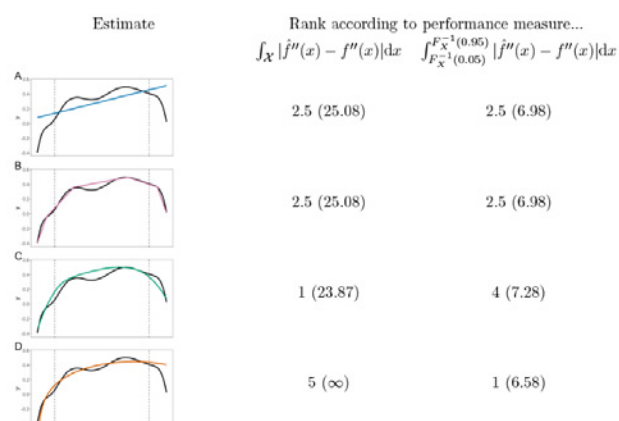
Title: Figure 1. Reprinted from [4] under a CC BY 4.0 license.

The article introduced a categorization of measures which is shown in the top right panel of Figure 1. First, performance measures differ in whether they compare the estimated and true curves over a range of predictor values or only at a single point. If the comparison is

made over a range, measures also differ in how the information is aggregated (for example, by integrating a loss function), and whether it is considered on the whole range of the variable or a subrange. Second, the curves themselves, their first derivatives or their second derivatives can be compared. Third, different types of losses can be chosen to measure the deviation of the estimated curve from the true curve.

Selecting a specific option for each of these aspects gives rise to a specific performance measure. Some examples of resulting measures are shown in the bottom panel of Figure 1. Notably, the ranking of the blue estimate (1) and the pink estimate (2) depends on the chosen performance measure. For example, the first measure prefers the estimate 2 because it is overall rather close to the true curve, while the third measure, which uses the second derivative to penalize “wiggleness,” clearly prefers estimate 1.

Another example is shown in Figure 2 where five different estimates are compared. The first performance measure aggregates over the full range of x , while the second measure considers only the range between the 5% and 95% percentile of the distribution of which here was Beta(2,2). Next to each estimate, its rank according to the respective performance measure is shown. The values of the measures are shown in brackets. According to the first measure, estimate C is the best one. Estimate D is ranked last because its performance value diverges when evaluated over the full range, as the second derivative diverges to $-\infty$ at a fast rate for $x \rightarrow 0$. On the other hand, the second measure ranks D on top and C in 4th place, because now the area around zero, where the second derivative of estimate D diverges to $-\infty$, is excluded. More examples can be found in a Shiny app at <https://thullmann.shinyapps.io/presplinesshinyapp/>.



Title: Figure 2. Reprinted from [4] under a CC BY 4.0 license.

To sum up, different performance measures capture different aspects of an estimated curve. Thus, well-balanced simulation studies that assess estimators should use more than just one measure. However, our categorization includes a very large number of measures, which raises the question which subset should be used in practice. The integrated squared difference can always be included. If excessive wiggleness should be penalized, measures which evaluate the second derivative should be included. Further measures may be considered depending on the context of an evaluation. For example, if the maximum of the curve is of special interest, then measures should evaluate the deviation of the estimated from the true maximum. If the distribution of X is unbounded, restricting the performance evaluation to a subrange is recommended. Our current work focuses on developing practical guidance on selecting suitable performance measures for different settings.

Our article focused on performance measures in the context of descriptive modeling, where the focal interest lies in evaluating the shape of an unadjusted or adjusted association. For explanatory modeling (causal inference), the performance measures considered in our article could be used for various purposes, e.g., to evaluate estimated dose-response curves or the association of a treatment effect with a continuous predictive biomarker. A STRATOS project from TG6 considered performance measures for prediction modeling [5].

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DONATE TO THE IBS TRAVEL AWARDS FUND

The International Biometric Society Travel Awards Fund helps support the allocation of travel grants to a selected group of members from low- and middle-income countries (LMICs), with the goal of allowing them to travel to IBS events during their grant year. Donations are now being accepted online at our [Donations page](#).

You may be interested to know that the Society has instituted a matching funds policy. For every dollar (USD) an individual, company, IBS Region or IBS Network donates, IBS will match it up to \$20,000. This gives us the opportunity to fund more travel, bringing professionals from eligible countries together to collaborate, share knowledge, learn new perspectives and build lifelong friendships! Donations are vital to the continued success of this program, as the IBS is typically able to fund less than half of the applicants who apply. Donations also foster our membership growth in LMICs and serve our global audience. Please donate today. Note that each donation received from an individual or region will be acknowledged with a note of appreciation and a receipt. Please contact us directly at ibs@biometricsociety.org with any questions related to tax deductions or related matters.

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 or in the Biometric Bulletin. Click below for additional information and ad rates. Please email the International Business Office (ibs@biometricsociety.org) with any questions. Note that members can also place employment ads online through our new “Employment Opportunities” online community. You must first login to submit your posting!

Advertising Specs & Rates - 2026

The collage shows three documents related to advertising in the IBS community. The top document is the '2022 IBS Website Advertising Specs & Rates', which includes sections for 'Reach thousands of Statisticians and Mathematicians', 'Industry Opportunity Ad', and 'Run of Site Banner Ad'. The middle document is the '2022 Biometric Bulletin Advertising Specs & Rates', which includes 'Biometric Bulletin Issue Dates', 'Ad Rates' (with a table for different ad sizes and placements), and 'Ad Specs' (with a table for different ad sizes and placements). The bottom document is the 'Biometric Bulletin Issue Dates' table, which lists the dates for the 2022 and 2023 issues.

Ad Type	1x	2x	3x
Full Page Horizontal	\$1500	\$3000	\$4500
Half Page Vertical	\$750	\$1500	\$2250
Quarter Page	\$375	\$750	\$1125
1/8th Page	\$187.50	\$375	\$562.50
20 Lines	\$1125	\$2250	\$3375
40 Lines	\$2250	\$4500	\$6750
60 Lines	\$3375	\$6750	\$10125
80 Lines	\$4500	\$9000	\$13500
100 Lines	\$5625	\$11250	\$16875
120 Lines	\$6750	\$13500	\$20250
140 Lines	\$7875	\$15750	\$23625
160 Lines	\$9000	\$18000	\$27000
180 Lines	\$10125	\$20250	\$30375
200 Lines	\$11250	\$22500	\$33750
220 Lines	\$12375	\$24750	\$37125
240 Lines	\$13500	\$27000	\$40500
260 Lines	\$14625	\$29250	\$43875
280 Lines	\$15750	\$31500	\$47250
300 Lines	\$16875	\$33750	\$50625
320 Lines	\$18000	\$36000	\$54000
340 Lines	\$19125	\$38250	\$57375
360 Lines	\$20250	\$40500	\$60750
380 Lines	\$21375	\$42750	\$64125
400 Lines	\$22500	\$45000	\$67500
420 Lines	\$23625	\$47250	\$70875
440 Lines	\$24750	\$49500	\$74250
460 Lines	\$25875	\$51750	\$77625
480 Lines	\$27000	\$54000	\$81000
500 Lines	\$28125	\$56250	\$84375
520 Lines	\$29250	\$58500	\$87750
540 Lines	\$30375	\$60750	\$91125
560 Lines	\$31500	\$63000	\$94500
580 Lines	\$32625	\$65250	\$97875
600 Lines	\$33750	\$67500	\$101250
620 Lines	\$34875	\$69750	\$104625
640 Lines	\$36000	\$72000	\$108000
660 Lines	\$37125	\$74250	\$111375
680 Lines	\$38250	\$76500	\$114750
700 Lines	\$39375	\$78750	\$118125
720 Lines	\$40500	\$81000	\$121500
740 Lines	\$41625	\$83250	\$124875
760 Lines	\$42750	\$85500	\$128250
780 Lines	\$43875	\$87750	\$131625
800 Lines	\$45000	\$90000	\$135000
820 Lines	\$46125	\$92250	\$138375
840 Lines	\$47250	\$94500	\$141750
860 Lines	\$48375	\$96750	\$145125
880 Lines	\$49500	\$99000	\$148500
900 Lines	\$50625	\$101250	\$151875
920 Lines	\$51750	\$103500	\$155250
940 Lines	\$52875	\$105750	\$158625
960 Lines	\$54000	\$108000	\$162000
980 Lines	\$55125	\$110250	\$165375
1000 Lines	\$56250	\$112500	\$168750



International
Biometric
Conference

IBC.

12-16 July 2026

Seoul, South Korea

THANK YOU FOR MAKING IBC2026 POSSIBLE

Our community came together to exchange ideas, advance statistical and mathematical methods in the biosciences, build lasting connections, and strengthen the global collaboration at the heart of IBS.

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The reach and impact of IBC2026 would not have been possible without the generous support of our sponsors.



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IBC2026 BY THE NUMBERS

955
estimated
attendees

53+ countries
represented

31+ professional
specialties
represented

Nearly **700**
scientific
program
speakers

280+ students
in attendance

130+ delegates
from lower- and
middle-income
countries

**Thank you for investing in scientific exchange,
global collaboration, and the future of the biometrics community.**



Award Winners ANNOUNCED AT IBC2026



Peter Doherty
Executive Director

As many of you already know, this year's International Biometric Conference was a success in many respects. And in keeping with our tradition, we honored many of our members and recognized them for the awards they earned this year during the IBC! Congratulations to all!

Outgoing Committee Chairs

Thanks to outgoing Awards Fund Committee Chair Vilda Puruteuoglu and outgoing Representative Council Chair Tim Friede for their service to the Society, as well as all 2025 outgoing committee members!

Publications

- We first honored our *Biometrics* Peer Referees 2024 and 2025. Thanks to Ashkan Ertefaie, Chien-Wei Lin, Florian Stijven, Hiroshi Mamiya, Lan Wen, and Sarah Samorodnitsky for outstanding refereeing work during the 2024 and 2025 editions of the *Biometrics* journal!
- We recognized our *Biometrics* outgoing Book Review Editor, Andrew Spieker. Thanks to Andrew for excellent work during his term and for participating in a smooth transition!
- Thanks to outgoing *Biometrics* Co-Editors Matthew Schofield (2023-2025) and Erica Moodie (2024-2026)!

- Thanks also to outgoing Executive Editor for *JABES*, Jorge Mateau!
- We also recognized the *Biometrics* "Best Papers" from 2024 and 2025 during this year's IBC. Congratulations to Professors F. Bu, J. Kagaayi, M.K. Grabowski, O. Ratmann, and J. Xu for their 2024 award-winning paper, "Inferring HIV transmission patterns from viral deep-sequence data via latent typed point processes" [*Biometrics*, 80, ujad015]. And Professors W.J. Wright and M.B. Hooten's paper "Continuous-space occupancy models" [*Biometrics*, 81(2), ujad055] took the prize for 2025. Well done!
- Best *JABES* paper for 2024 went to Daniela Cisneros, Arnab Hazra, and Raphaël Huser for "Spatial Wildfire Risk Modeling Using a Tree-Based Multivariate Generalized Pareto Mixture Model" [*JABES*, 29, 2 (2024) pages 320-345], and the Best Paper for 2025 was "Non-stationary Extensions of the Diffusion-Based Gaussian Matérn Field for Ecological Applications", [*JABES*, 30, 4 (2025) pages 966-982]. Congratulations to Juan Francisco Mandujano Reyes, Ian P. McGahan, Ting Fung Ma, Anne E. Ballmann, Daniel P. Walsh, & Jun Zhu on this honor!
- Finally, congratulations to the recipients of the *Biometrics* "Test of Time Awards". R.M. Daniel, B.L. De Stavola, S.N. Cousens, and S. Vansteelandt won with their 2015 paper, "Causal mediation analysis with multiple mediators" [*Biometrics* 71(1), 1-14], and H. Schmidli, S. Gsteiger, S. Roychoudhury, A. O'Hagan, D. Spiegelhalter, and B. Neuenschwander won with their 2014 paper, "Robust meta-analytic-predictive priors in clinical trials with historical control information" [*Biometrics*, 70(4), 1023-1032].

Travel Grants

- Congratulations to our 2026 Travel Award Recipients: Anteneh Bezabih Ali (Ethiopia), Peter Njuho (South Africa), Bhrihu Rajbongshi (India), Chengfeng Zhang (China), Diogo Rossoni (Brazil), Idemauro Rodrigues de Lara (Brazil), Jessie Khaki (Malawi), Marcelo Bourguignon (Brazil), Ola Jahanpour (Tanzania), Oscar Espinosa (Colombia), Shibiru Dugasa (Ethiopia), and Viviane Costa Silva (Brazil).
- Congratulations to Agatha Sacramento Rodrigues (Brazil) for “Competing Risks and Spatial Frailty in Time-to-Delivery Analysis: An Application to Health Regions in Brazil”, and Pedro Miranda-Afonso (The Netherlands) for “A Joint Model for (Un)Bounded Longitudinal Markers, Competing Risks, and Recurrent Events Using Patient Registry Data”. They are the recipients of the 2026 ISI Young Ambassadors to IBC travel grants! Thanks to both for presenting their papers in Seoul.



Best Posters And Best Papers

- Best IBC Student Oral Presentation - First Place goes to Sara Rutten (“Distributed Lag Non-linear Models with Effect Modification Using Laplacian P-splines”), and Best IBC Student Oral Presentation - Second Place goes to Georgi Baklcharov (“Weakening Assumptions for Treatment Effect Testing in RCTs with Truncation by Death or Other Intercurrent Events”) and Karen Kanaster (“A Mixed Self-Exciting Process to Model Epileptic Seizures”).
- The following were honored for their IBC Best Posters: Hiroya Morita (“Bias Arising from Incorrect Application of the Prevalent New User Design”), Seoyeon Jin (“Subgroup Identification for Precision Medicine via Fusion-Penalized Modeling”), and Michael Falk (“DNN Survival Analysis Using Risk Set Sampling Methods with Right Censored”). Congratulations!

Major Award Winners

Major award winners announced during the IBC included:

- The Rob Kempton Award for Outstanding Contributions to the Development of Biometry in the Developing World was awarded to **Tobias Chirwa, Xiao Hua Zhou and Ziv Shkedy**, for their exceptional leadership in multiple regions, inspiring future generations.
- One of our members was recognized as a new Honorary Life Member. Congratulations to **Raúl E. Macchiavelli** for his leadership in the biostatistics profession and the International Biometric Society!
- The recipient of the joint IBS/CWS Florence Nightingale Award for 2026 is **Fernanda Lang Schumacher**. Well done!

Honoring our members and honorees during every IBC is always a high point for those involved in planning the conference. We look forward to honoring our colleagues again in Basel!

Fun And Friends Came Together At IBC2026!

International
Biometric
Conference



When prioritizing International Biometric Conference events

and activities, most attendees will of course consider the scientific program sessions to be the most important part of their schedule. But a close second for many of us might have been our special social events! This year, there was something for every age and interest!

We began Sunday evening with our opening Welcome Reception. Hundreds of attendees joined us for a drink, a bite, and smiles from many friends and colleagues! But this was only one of the receptions and special coffee breaks during IBC week. Our young statisticians, women statisticians, Region leadership and poster presenters all had events of their own. We hope you will enjoy some of the photos shared here. You can find even more at <https://www.flickr.com/gp/127513655@N07/E4aQ6q226U>.

Speaking of the Poster Reception, all IBC registrants were invited to join us for a drink and “live” scientific poster presentations from the authors. This poster presentation format is still relatively new, and so we look forward to your feedback on how we can

make this event even more useful and enjoyable for all involved. We again awarded prizes for the Best Poster Presentations this year, which you can read more about in our awards recap.

Our signature Young Statisticians' Reception on Monday evening seems to get better every IBC. And this year, we took our younger attendees through the streets of Seoul, dodging raindrops along the way, for a visit to Sinsapub Balsam. With capacity for up to 250 and an engaging outdoor balcony overlooking the city, this was the perfect location for our young professionals to meet, catch up and relax after their first full day of sessions!

Sinsapub Balsam was just our first journey away from our COEX Magok IBC campus. The following evening, 300 of our colleagues visited Marina Park on the scenic Han River for a special awards dinner, complete with local entertainment and fireworks! Sorry that we did not come away with many photos of the fireworks display. We were too preoccupied

with celebrating our major IBS award winners (read more about them in our awards recap). Thanks to our leadership for assisting with the awards ceremony. Once the ceremony was complete, it was time for group photos (a wonderful moment for those who were there). Then it was time to head back to our hotel... and more rain! Some of us came close to swimming back to our buses!

A small group of attendees returned to the Han River later in the week for a leisurely journey on a small cruise ship, all the way to the famous Rainbow Bridge. And a few of us also stayed late on Thursday for tours of greater Seoul. IBC attendees could be found exploring the countryside, taking a stroll through an ancient palace, visiting the famous Demilitarized Zone, cooking a meal fit for our Seoul neighbors, or shopping to their heart's content! Bottom line: In Seoul, we experienced so much more than you will ever experience through a virtual conference. We're glad that we were able to fulfill the promise of a Seoul conference in 2026.

Sunday and Welcome Reception



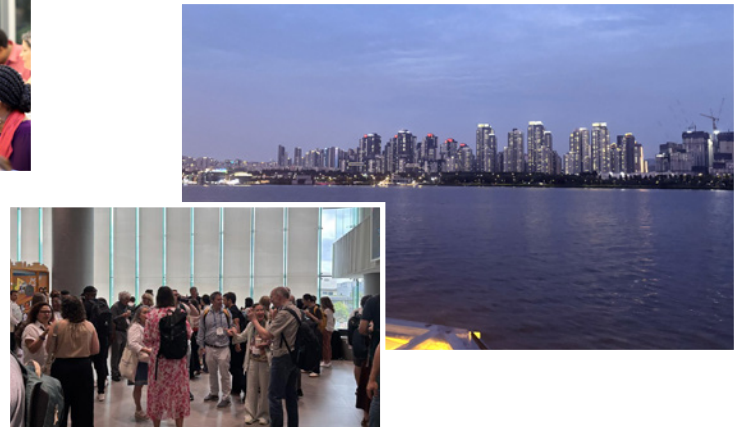
Monday and Young Statisticians Reception



Tuesday and Awards Dinner



Wednesday and Dinner Cruise



IBC SESSION RECAPS

We are highlighting a sample of IBC2026 sessions through session summaries provided by our presenters. By reading more about these sessions, you can gain a sense of the cutting edge methodological advances, innovative applications, and emerging perspectives presented at this year's conference. Collectively, the sessions showcased new approaches to study design, data analysis, clinical and public health research, and reproducible science.

Invited Session: “Innovative Statistical Methods for Complex Environmental Exposure Analysis”

This invited session presented novel statistical approaches for complex environmental exposure analysis. Talks covered nonlinear cumulative exposure models for over-dispersed count outcomes, a sensitivity analysis framework for multiple exposures under unmeasured confounding, a Measurement Error Infusion approach for selecting mediators in linear and nonlinear settings, and a trans-NIH effort advancing mixtures analysis through detection-limit methods, biological additivity modeling, and statistical learning for longitudinal exposures. The discussant highlighted shared themes, such as nonlinearity, timing, confounding, and mediation, and posed open questions for future methodological development.

–Paul Albert (Discussant) , National Institutes of Health, U.S.A.

Invited Session: “Recent Advances in Statistical Analysis of Complex Network Data”

Combining multiple sources of information creates new opportunities and statistical challenges for studying data with complex dependence structures. Across applications, auxiliary covariates, partially observed modalities, and AI-generated embeddings can enrich analysis and reveal structure difficult to detect from any single source. Covariance regression, for example, shows how genetic covariates can explain variation in gene coexpression rather than only marginal expression. At the same time, the talks highlighted challenges including structured missingness, signal heterogeneity, target-population mismatch, and robustness to imperfect auxiliary information. The session also emphasized that higher-order interactions, such as drug side effects from combination therapies, may not follow pairwise transitivity assumptions.

–Weijing Tang, Carnegie Mellon University, U.S.A.

Invited Session: Statistical Innovations for Trustworthy AI Driven Decisions in Healthcare

Contextual bandits are vital for personalized mobile health, but current Thompson Sampling (TS) approaches—using linear models, neural networks, or heuristic tree ensembles—struggle with bias, brittleness, or poor uncertainty quantification. To resolve this, we propose Bayesian Forest Thompson Sampling (BFTS). BFTS integrates Bayesian Additive Regression Trees (BART) into the TS loop, creating a theoretically sound, fully probabilistic sum-of-trees model. It features proven Bayesian regret bounds and frequentist minimax optimality. Empirically, BFTS achieves state-of-the-art performance on tabular benchmarks. Furthermore, it improved user engagement by over 30% in the Drink Less mobile health trial, proving its practical behavioral intervention effectiveness.

–Yan Shuo, National University of Singapore

Invited Session: “Borrowing Strength across Studies and Populations: Modern Strategies for Integrative Inference in Biomedical Research”

Three complementary strategies for borrowing information were presented, using dynamic discounting of conflicting external evidence, reweighting of biased external summary data with diagnostics, and classification of baskets into efficacy classes before pooling. The discussion drew out a shared structure across the talks, namely that borrowing must be governed rather than maximised, and that credibility depends on stating in advance how much is borrowed and how the analysis behaves when sources disagree. The audience engaged actively, raising questions on modelling details as well as on how these methods can be interpreted and applied in practice. Aligning the estimand before borrowing emerged as a shared recommendation.

–Koko Asakura, National Cerebral and Cardiovascular Center, Japan

Invited Session: “Bayesian Clinical Trials: Innovative Methods for Real-World Challenges”

Thin melanoma is generally considered an early-stage disease, yet it still contributes substantially to melanoma-related mortality. This work used model-based clustering of spatial transcriptomics data to identify interpretable tissue-level patterns in thin melanoma. Using data from 53 patients, we identified 10 cellular communities with distinct cell type compositions, including tumour-dominated, immune-enriched and epidermal communities. When mapped back to their spatial coordinates, these communities closely reflected known histological structures. Importantly, survival-related signals emerged at the

level of community-specific cell type frequencies, rather than overall cell type or overall community frequencies, suggesting that clinically relevant information may lie in higher-order tissue organisation.

–**Min Zhang, The University of Queensland, Australia**

IBC Travel Award Recipients

Travel award recipients were supported to attend IBC2026 and, as a result, were offered valuable opportunities for professional development, scientific exchange and networking. Thanks to all members who supported this program with their donation. In the reflections that follow, recipients share highlights from their conference experiences, key knowledge gained from presentations and discussions, and insights on how participation has influenced their research, career goals, and engagement with the broader scientific community.

My Personal Reflections and Observations:

IBC 2026 in South Korea

Name: Ola Farid Jahanpour

Country: Tanzania

Introduction: In July 2026, I had the privilege of traveling to South Korea to attend the International Biometric Conference (IBC). As the Secretary for the IBS Tanzania Region, with a background in medicine, public health, and evaluation, my participation focused on the intersection of spatial analysis and reproductive health, specifically regarding breastfeeding behaviors. My work often relies on mixed-effects models and spatial/spatio-temporal analysis, so I arrived with a clear set of goals: to sharpen my technical skills, build a global network of peers, and observe how other regions organize their scientific inquiry.

My Observations on the Future of Data One of the most striking aspects of the conference for me was seeing how researchers are moving beyond traditional datasets. I was fascinated by several innovative applications:

- **Wastewater and Commercial Data:** Seeing how sewage monitoring was used to map COVID-19 and how drug store sales could track diarrhea incidence was eye-opening.
- **Environmental Integration:** I watched presentations where high-resolution imagery was used to model environmental shifts and others where natural language processing (NLP) was adapted to treat environmental exposures as “tokens” in predictive algorithms.

- **Practical Challenges:** I followed discussions on the technical hurdles I often face, such as how to combine monthly and daily metrics to model malaria predictors or how to account for the delayed effects of weather on disease outcomes.

What Inspired Me: The keynote speakers at IBC 2026 left a lasting impression on me, demonstrating the power of dedicating years to a specific field. For instance, Dr. Alan Agresti’s presentation on the journey of categorical data analysis was refreshing; while I have frequently used Chi-square and Fisher’s exact tests in my medical research, I never knew the history or the human relationships behind these methods. Dr. Ho Kim’s talk on climate change and human health was equally impressive, especially as I have recently begun working on projects exploring climate impacts. It was eye-opening to learn that health facilities are major contributors to greenhouse gases and that we must push for “greener” facilities through recycling. Finally, Dr. Alison Kelly’s presentation highlighted the incredible breadth of our field—even as someone with a medical background, I was excited to see how vital statistics is to Agriculture!

Overall, these experts inspired me to consolidate my own understanding of the spatio-temporal field and focus on building deep expertise within a specific niche. I now personally aspire to be invited as a keynote speaker at a major event like the IBC in the future—a goal I am fully committed to achieving. I want to encourage my fellow members in Tanzania to do the same: find your niche and own it.

My Strategic Vision for the IBS Tanzania Region

Attending the conference and IBS Annual General Meeting gave me a broader perspective on how we can strengthen our own region. Based on my observations, I am proposing several key directions:

- **Seeking Accreditation:** I am eager for us to explore formal accreditation for our biostatistics programs, potentially following the partnership model between the University of the Witwatersrand and the Royal Statistical Society.
- **Supporting the Next Generation:** We must create dedicated support mechanisms to help our MSc and PhD students present high-impact work on the international stage.
- **Sustainability and Exchange:** I propose we continue to host IBS Tanzania symposia, hosted virtually or in hybrid formats, to ensure continuous scientific exchange.

- **Financial Investment:** Following insights from the global society, we must explore local revenue-generation and long-term investment strategies for our membership funds to ensure our region's financial sustainability.

To everyone who supported this journey, I offer the Swahili blessing, “**Ulipotoa, urudishiwe**”—may your generosity be replenished as abundantly as you have shared with me. Your investment has not only supported my personal career aspirations but has also planted seeds for the growth of biostatistics and academic excellence across our entire regional community. Thank you for making this transformative experience a reality.



Word of Appreciation

Name: Prof Peter M Njuho, PhD.

Country: South Africa

The Travel Award enabled me to attend both the pre-conference activities and the main International Biometric Conference (IBC2026) in Seoul, South Korea. I would like to express my sincere gratitude to the Award Committee for its generous financial support, which made my participation possible. Having previously served the International Biometric Society (IBS) in various capacities, I was particularly honoured to be selected as a recipient of this award.

The conference provided an invaluable opportunity to reconnect with colleagues, particularly former members of the IBS Executive Board with whom I had the privilege of serving. It also enabled me to establish new professional relationships with early-career members from different regions of the world. Several expressed an interest in receiving my guidance and mentorship as they progress in their professional careers, creating opportunities for continued collaboration, knowledge exchange, and future research partnerships.

I would also like to commend the South Korea Organising Committee and the IBS Office for the excellent organisation of the conference. Hosting all activities at a centralised venue greatly

enhanced accessibility, networking, and participant engagement. Furthermore, the adoption of paperless conference materials reflected the Society's commitment to environmental sustainability and responsible conference management. As custodians of our shared planet, we all have a responsibility to minimise our environmental footprint, and this initiative provides an excellent model for future IBS conferences.

Attendance and Participation

My participation commenced with attendance at a one-day pre-conference workshop comprising two sessions:

- Data Analysis with Competing Risks
- Multistate Models (Intermediate States)

These sessions strengthened my understanding of contemporary statistical methodologies for analysing complex time-to-event data and provided valuable practical insights that will inform my future research and teaching.

During the main conference, I had the privilege of serving as Chair of Session OP.6.1: Advancements in High-Dimensional Statistics. I also delivered an oral presentation entitled “Unveiling Hidden Structure in Credit Risk: A PCA-Based Solution to Multicollinearity in NPL Forecasting.” The presentation generated constructive discussion and valuable feedback from participants, which will be incorporated to further strengthen the quality and impact of my ongoing research.

In addition, I attended a broad range of invited lectures and scientific sessions, including:

- A Round Table Discussion on Responding to Uncertainty in Times of Global Challenges;
- Evaluation of Dynamic Surrogate Markers for Longitudinal Studies;
- Statistical Innovation for Trustworthy AI-Driven Decisions in Healthcare; and
- The Opportunities and Challenges for Statisticians in Research Using Long-Term Agricultural Experiments.

These presentations exposed me to emerging methodological developments, innovative applications of statistics, and contemporary challenges across diverse areas of statistical science. The knowledge gained will contribute significantly to my future research, teaching, and professional practice.

As a founding member of the Sub-Saharan African Network (SUSAN), I also attended the SUSAN Network Session. It was encouraging to witness the continued growth and sustainability of the network, particularly its strong participation by early-career statisticians, balanced gender representation, and broad membership across the sub-Saharan African region. The continued organisation of SUSAN conferences during alternate (odd-numbered) years between International Biometric Conferences is a noteworthy achievement that continues to strengthen statistical collaboration and capacity development across the region.

Discussions during the session identified opportunities to further strengthen the network. In particular, members considered reviewing the membership fee structure and mechanisms for fee collection to improve sustainability. There was also support for publishing conference proceedings, potentially through the IBS website, to enhance the visibility, accessibility, and long-term impact of the network's scholarly contributions.

Benefits of the Award

The Travel Award provided benefits that extended well beyond conference attendance. It enabled me to reconnect with long-standing professional colleagues while establishing new collaborations with researchers from around the world. These interactions created opportunities for future research partnerships, collaborative publications, mentorship, and the exchange of ideas and professional opportunities.

Beyond the scientific programme, the conference provided a rich cultural experience. Interacting with participants from diverse backgrounds broadened my appreciation of different cultures, perspectives, and ways of life. Such experiences strengthen international understanding and reinforce the value of global scientific collaboration.

Overall, participation in IBC2026 has enhanced my professional development, expanded my international research network, and strengthened my commitment to advancing statistical science through research, collaboration, mentorship, and service to the International Biometric Society.

I once again express my sincere appreciation to the IBS Award Committee for this generous Travel Award, which made this rewarding and professionally enriching experience possible.

Long live the International Biometric Society.

International Biometric Conference 2026

Name: Marcelo Bourguignon Pereira

Country: Brazil

Attending the International Biometric Conference 2026 (IBC2026) in Seoul, South Korea, was one of the most rewarding experiences of my academic career. The conference brought together researchers, students, and professionals from all over the world, providing an outstanding environment for learning, scientific discussions, networking, and the development of new collaborations. Beyond presenting my own research, I had the opportunity to attend keynote lectures, invited sessions, methodological presentations, networking activities, and social events that highlighted not only the latest advances in statistics and biostatistics but also the importance of building a truly global scientific community.

Sunday, July 12

The conference began with the Welcome Reception, an excellent opportunity to reconnect with colleagues from previous conferences and meet many new researchers from different countries. The informal atmosphere encouraged conversations about ongoing research projects, future collaborations, and the current challenges facing the statistical community.

Monday, July 13

The first official day started with the Opening Ceremony and Presidential Welcome, followed by the keynote lecture delivered by Professor Alan Agresti. Professor Agresti's presentation was particularly inspiring, offering valuable perspectives on statistical methodology and its applications.

As someone who has long admired his contributions to categorical data analysis, attending his keynote lecture was one of the highlights of the conference. Throughout the day, I attended several scientific sessions covering modern developments in statistical modeling, computational methods, machine learning, and applied statistics.

Tuesday, July 14

I participated in the Young Ambassadors Session. As an IBS Young Ambassador, appointed in 2022, this session reinforced the importance of promoting statistical science internationally and encouraging young researchers. I also attended the IBS General Members' Meeting, where I was recognized as a recipient of an IBS Travel Award.

The day concluded with the “Celebrate Korea” Awards Dinner, an outstanding social event that combined Korean culture with recognition of excellence within the statistical community. I would also like to express my sincere gratitude to the International Biometric Society for selecting me as a recipient of an IBS Travel Award, which provided financial support for my participation in IBC2026. This recognition represents not only valuable assistance for attending the conference but also meaningful encouragement for my ongoing research activities and international collaborations.

Wednesday, July 15 – Presenting My Research

One of the most important moments of the conference was presenting my research entitled “A General and Unified Parameterization of the Beta Distribution: A Flexible and Robust Beta Regression Model” during the contributed session: Session ID: OP.66.04, Room: 403 B

Presenting my work to an international audience of researchers was both an honor and an invaluable experience.

The presentation generated interesting questions and stimulating discussions regarding the proposed methodology, possible applications, and future research directions. The feedback received from participants was extremely valuable and will certainly contribute to the continued development of this research. Beyond the presentation itself, the conference offered numerous opportunities to exchange ideas with researchers working on regression models, distribution theory, computational statistics, and statistical methodology. These conversations opened possibilities for future collaborations and strengthened existing international academic relationships.

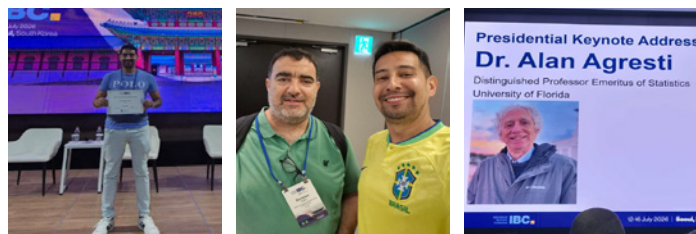
Thursday, July 16

The final day featured the keynote lecture by Professor Alison Kelly, followed by the Closing Ceremony, conference awards, and announcements regarding future International Biometric Conferences.

Throughout the IBC26, I learned about new statistical methodologies, exchanged ideas with leading researchers, discussed potential collaborative projects, and strengthened relationships with colleagues from many different countries.

As a faculty member at the Federal University of Rio Grande do Norte (UFRN), I return to Brazil inspired by the outstanding scientific discussions and motivated to share the knowledge acquired with my students, colleagues, and research group.

I sincerely thank the International Biometric Society, the conference organizers, volunteers, sponsors, speakers, and participants for organizing such an exceptional event. I am already looking forward to participating in future IBS conferences.



Rousseeuw Prize for Statistics

The King Baudouin Foundation has announced the winners of the third Rousseeuw Prize for Statistics. This biennial prize, worth \$1 million USD, aims to reward excellence in statistical research that has a significant impact. The selected topic is The R Project. The distinction goes to the five members of the R Core Team who, according to the jury, have made the longest and most sustained contributions: Professor Brian Ripley (University of Oxford), Professor Martin Maechler (ETH Zürich), Professor Kurt Hornik (Wirtschaftsuniversität Wien), Professor Peter Dalggaard (Copenhagen Business School), and Professor Luke Tierney (University of Iowa). Half of the prize money goes to these five individuals, while the other half is allocated to the remaining members of the R Core Team.

The international jury appointed by the King Baudouin Foundation selected the winners from the nominations received after a widely advertised call earlier this year. The jury consisted of its chair, Maria-Pia Victoria-Feser (University of Bologna), Daniel Apley (Northwestern University), Michael Friendly (York University), Torsten Hothorn (University of Zurich), Karen Kafadar (University of Virginia), Sugnet Lubbe (Stellenbosch University), Steve Marron (University of North Carolina), Jean-Michel Poggi (Université Paris-Saclay), Cynthia Rudin (Duke University), and Huixia Judy Wang (Rice University).



Regional NEWS

Austro-Swiss (ROeS)

This year's 10th Biostatistics Summer School in Strobl (Austria) took place from 23-26 June. Once again, it was co-sponsored by the ÖSG, the IBS-DR, and the IBS-ROeS, as well as by the Intelligent Data Analytics Lab Salzburg and the Center for Trustworthy Data Science and Security at UA Ruhr.

The nearly 30 international participants received an overview of "Surrogate Endpoint Evaluation in Clinical Trials" from Geert Molenberghs (Hasselt University and KU Leuven), Ariel Alonso (KU Leuven), and Wim Van der Elst (Janssen Pharmaceutical, Johnson & Johnson).

The lectures began with a brief introduction and historical overview of Surrogate Endpoints by Geert Molenberghs, who—just like last year—captivated the audience with his relaxed and humorous presentation style (in addition to his impressive expertise). Ariel Alonso provided a theoretical derivation of the methods, many of which were actually developed by the working group from Hasselt and Leuven. He drew on both information theory and the causal inference framework. Ariel Alonso managed to present the material in a way that was both understandable and engaging, even for participants with no prior experience in these fields. Throughout the session, the theory was made more tangible with the help of practical applications. Wim Van der Elst focused primarily on presenting the R package "Surrogate," which he co-authored. The package is very comprehensive and includes functions for evaluating surrogates in a wide range of situations. The Summer

School concluded on Friday with presentations by Geert Molenberghs on more specific topics such as nonparametric evaluation and the analysis of longitudinal data. All three speakers did a great job of conveying the topics clearly and keeping the presentations engaging.

In addition to the excellent presentations by the three speakers, the beautiful venue on Lake Wolfgangsee and the comfortable accommodations at bifeb Strobl (including excellent meals) are also worth mentioning. The refreshingly cool nighttime temperatures and the nearby lake were very welcome and made the heat wave at the end of June a bit more bearable. The Summer School lectures were complemented by a nice social program that included an excursion to the museum in Bad Ischl followed by dinner on the Siriuskugel hill (with live music), as well as a hike starting from St. Wolfgang. These offered everyone the opportunity to exchange ideas in a relaxed atmosphere.

We thank everyone involved for the successful event. See you next time.

Anna Gabler and Hermann Stigler (Participants)

The Swiss-Austria Region (ROeS) welcomes Dominik Heinzmann as its new president for 2026 and 2027 and also wants to thank Sereina Herzog for her outstanding service as president in 2024 and 2025 including organizing the exciting and successful ROeS conference 2025 in beautiful Graz, Austria.



Dominik Heinzmann is currently the Head of Biostatistics for Neurology at Roche/Genentech in Basel, Switzerland. He has more than 16 years of experience in applying innovative statistical designs and analysis of clinical trial and real-world data to support better decisions

throughout the drug development cycle, resulting in several approvals of breakthrough medicine for patients.

Dominik holds a PhD in Applied Mathematics from the University of Zurich, and an MSc in Mathematics from the Swiss Institute of Technology Lausanne (EPFL). He published more than 30 papers in the field of applied mathematics, statistics, epidemiology and medicine.

Dominik's vision: Together with the ROeS executive board (newly elected secretary Michael Vock, University of Bern, newly elected Treasurer Georg Zimmermann, Paris Lodron University Salzburg, and previous president Sereina Herzog, Medical University of Graz) and the entire ROeS community we will focus on the following three areas:

- Continuing to promote statistical excellence by supporting our different sections (Basel Biometric Section, Vienna Biometric Section, Styria-Carinthia Section) as well as the working group Adaptive Designs and Multiple Testing Procedures (ADMTP).
- Leading the organization of the upcoming ROeS conference in 2027 in Switzerland (date and location TBD), support the CEN 2026 (<https://cen2026.org/>), and last but not least prepare the organization of the IBC 2028 in Basel.
- Building on 1) and 2), contributing to the definition of the new role of statisticians in Academia and Industry in the era of AI, quantum computing, and robotics, to further amplify our impact in a fast-changing world.

Sonja Zehetmayer

Biometric Bulletin Correspondent

British and Irish (BIR)

As part of the annual Irish Statistical Association's forum, CASI (11-13 May), which this year took place in Trinity College Dublin, a BIR contributed session was held. The session was organized so that at least one author/co-author is a member of the BIR or a member of the Biometric Society in general. The speakers and their titles are detailed below:

Chair: Silvia D'Angelo

11.00 - 11.20

Rishabh Vishwakarma - Can we confirm the null hypothesis? Quantifying functional redundancy between species in an ecosystem

11.20 - 11.40

Litty Mathew - A method for testing the variability of predictions across multiple responses in multivariate regression models

11.40 - 12.00

Clarice Garcia Borges Demétrio - Discrete survival models for biological pest control

12.00 - 12.20

Hollie Hughes - Accuracy and efficiency in Bayesian spatial modelling: real-world and simulated evaluation of BYM2 computation

12.20 - 12.40

Marta Cipriani - Model-based dynamic prediction in mixture cure models

The special session was well attended and attendees were given information about the BIR and a QR code to access the membership page at the beginning. Students were especially encouraged to become members. The session had five speakers that were either members of the ISA or BIR, or associated with the wider IBS. Talk topics ranged from modelling ecosystem function relationships with biodiversity to spatial Bayesian methods, survival analysis and multivariate methods.

Kirsty Hassall

Biometric Bulletin Correspondent

Central American and Caribbean (RCAC)

We are very proud to announce that our IBS RCAC member Professor Raúl E. Macchiavelli, who is at the College of Agricultural Sciences, University of Puerto Rico, received the Honorary Lifetime Award at the 33rd International Biometric Conference held in Seoul, South Korea from 12-16 July 2026. He represented us at the Hispanic Network session.



The Annual Meeting of the IBS RCAC was held on 15 July 2026. It was decided to continue with the present panel of Office bearers for the years 2027 and 2028. Liliانا Lopez Kleina as President, Raul Machiavelli as Vice-President, John Puerto as Secretary/Treasurer, Rorron Clarke as Backup Secretary/Treasurer, Vrijesh Tripathi as Correspondent Biometric Bulletin, and Julieth Lopez as Backup Correspondent Biometric Bulletin. Dr. Adriana Pérez will continue serving as the RCAC member at the IBS representative council (<https://www.biometricsociety.org/about/governance>).



The IBS RCAC organised the 35th International Symposium on Statistics in Bogotá, Colombia from 14-17 July 2026.



Two RCAC members presented at the Symposium, namely, Julieth Lopez (left picture) presented a poster and Daniela Laguna (right picture) made an oral presentation.

Our members have continued to publish research articles in peer-reviewed journals. Professor Oscar Espinoza published five articles on the untapped potential of artificial intelligence in healthcare supply chains, a systematic review of quintuple aim for health systems, application of chaos theory in medical sciences, a technical-actuarial proposal of an occupational risk model, and another systematic review on occupational health risks in rural areas. Professor Adriana Perez published two articles, one on smoking and another on the effects of screentime on sleep duration among adolescents. IBS member Dr. Vrijesh Tripathi co-authored a portfolio of 34 statistical R packages published on

the Comprehensive R Archive Network (CRAN) in collaboration with Dr. Shikhar Tyagi (author and curator), Prof. Arvind Pandey, Prof. Bhupendra Singh, Dr. Sumit Kumar, and Dr. Mohd Mudassir. The package collection spans a wide range of advanced statistical methodologies, including survival analysis, censoring schemes, reliability analysis, Bayesian inference, process capability assessment, time-series modeling, accelerated degradation analysis, MCMC diagnostics, and spatial statistics. The CRAN packages include:

MleCensor, MAARTS, UniCensorEM, AlphaPowerHazard, StochFracPoisson, coxmnar, gofalm, Gofpt2, ProcessCapabilityR, gofPHCS, AdaptHyCensor, predHCS, CompRiskRel, StressCensor, LugsailGR, MYIS, BayesQRCount, UniIS, BDPTobitQR, BayesURTrend, MultiStepSSAD, gpciProgTyllImpSam, DepDoubleTruncKS, TKApprox, MultiFrailty, gpciProgTyll, ImpAdaptType2Censor, SemiParamBernsteinDepCS, BayesPanelUR, BayesSplineUR, UniLindleyApprox, GammaFrailtySPC, gpciIntCensor, and SingRegKrig. This extensive body of software contributes valuable open-source tools to the global statistical community, enabling researchers, practitioners, and students to apply advanced statistical methods through the R programming environment. The packages collectively support research in reliability engineering, survival studies, Bayesian statistics, quality control, econometrics, and data science.

1. Jensen JK, Ozga J, Stanton C, Pérez A, Moran M, Chen-Sankey J. (2026) New versus continued e-cigarette use and cigarette uptake among US adults who formerly smoked cigarettes. Forthcoming Addictive Behaviors. Accepted March 20/2026.
2. Pfledderer, C.D., Ranjit, N., Saxton, D., Pérez, A., Hoelscher, D.M., Archer, N.P. (2026) The differential associations between passive and interactive screentime with sleep duration among 8th and 11th grade adolescents. Children. 13(1):127. Accepted date: 01/12/2026. Doi: <https://doi.org/10.3390/children13010127>
3. Espinosa, O., Basto, S., Ordóñez, A., Arias, L., Sepúlveda, D., & Bhutta, M. (2026). A review of artificial intelligence in healthcare supply chains: untapped potential?. BMC Health Services Research, 26, 742. <https://doi.org/10.1186/s12913-026-14559-2>
4. Espinosa, O., Taborda, A., Chavarriaga-Ríos, M., Arias, L., Bermont, G., & Pérez-Bedoya, J. (2026). The quintuple aim as a framework for

health system performance: a systematic review of empirical applications. BMC Health Services Research, 26, 801. <https://doi.org/10.1186/s12913-026-14591-2>

5. Espinosa, O., Ordóñez, A., & Puentes, G. (2026). Recent applications of chaos theory in medical sciences: progress and challenges. BMC Biomedical Engineering, 8, 6. <https://doi.org/10.1186/s42490-026-00111-0>
6. Espinosa, O., Bejarano, V., Ramos, A., Rodríguez, J., Ordóñez, A., Torres-Tovar, M., & Luna, J. (2026). Technical-actuarial proposal of an occupational risk model for the vulnerable informal working population in rural areas. Discover Public Health, 23, 604. <https://doi.org/10.1186/s12982-026-01916-z>
7. Espinosa, O., Rodríguez, J., Ramos, A., Bejarano, V., Ordóñez, A., Huaman, K., Torres-Tovar, M., & Luna, J. (2026). Global perspectives on occupational health risks in rural areas: a systematic review. Discover Social Science and Health, 6, 86. <https://doi.org/10.1007/s44155-026-00411-9>

Vrijesh Tripathi, PhD

Biometric Bulletin Correspondent

Croatian (CROA)

BIOSTAT 2027

28th International Symposium on Biometrics
Meeting of the Croatian Biometric Society - Croatian Region of the International Biometric Society
Split, Croatia
1-4 September 2027
<https://www.hbmd.hr/biostat-2027>

Azra Tafro

Biometric Bulletin Correspondent

French (FR)

The French Region of the IBS ("Société Française de Biométrie," (SFB) participated in a dedicated Channel Network session during the 33rd International Biometric Conference in Seoul in partnership with the IBS regions of Belgium, Great Britain/Ireland, and the Netherlands.

Members of the SFB, along with members from the Austrian-Swiss and German regions of the IBS, ran an information and exhibition stand during the 33rd IBC in preparation for organizing the 34th IBC. The conference "From Biostatistics to AI for Healthcare", organised by the Conservatoire National des Arts et

Métiers (CNAM) and supported by the SFB, was held in Paris on 1 September 2026.

Upcoming events include:

- The Biostatistical Days, organized jointly by the SFB and the French Statistical Society, to be held on 5-6 November 2026, at the CNAM in Paris.
- The Young Researchers' Day of the French IBS Region will be held in early 2027. The Daniel Schwartz Prize for the best PhD thesis in Biometrics defended between July 2024 and June 2026 will be awarded during this event.
- The 11th Channel Network Conference (CNC), in partnership with the IBS regions of Belgium, Great Britain/Ireland, and the Netherlands, to be held in Rennes (western France) on 17-19 May 2027;
- The French Region will participate in organising the 34th International Biometric Conference in Basel (Switzerland), from 16-21 July 2028, in partnership with the Austrian-Swiss and German regions of the IBS.

More information can be found on the website of the French Region:

<https://sfb.pages.math.cnrs.fr/asso/>

Émeline Courtois

Biometric Bulletin Correspondent

German (DR)

The yearly meeting of the GR took place within the fantastic conference of the Central European Network (CEN), held in Warsaw from 18-21 May 2026 and organized by the Polish Region, with participation of GR and ROeS. During the conference, Lothar Kreienbrock was approved as honorary member of the GR by the general assembly. This recognition honored his decades of engagement for the region, particularly his service as a board member and former long-standing supervisor of the GR office in Hannover.



From the left: Lothar Kreienbrock, Jan Beyersmann. Foto: J. Gerss.

The Susanne-Dahms-Medal was awarded to Christoph Gerlinger, especially for his long-standing commitment to the working group “Pharmaceutical Research.”



From the left: Christoph Gerlinger, Jan Beyersmann. Foto: J. Gerss.] Armin Schüler was elected vice-president and future president of the GR, replacing Anne-Laure Boulesteix. Joachim Gerß was re-elected as treasurer and will thus continue in this position.

Young talent awards and young statisticians session

During the general assembly in Warsaw, the GR also awarded its young talent awards to excellent young researchers. The Gustav-Adolf-Lienert Prize went to Erin Sprünken, Maren Hackenberg and Kaya Miah. The Bernd-Streitberg Prize went to Jan-Bernd Igelmann and Alexandra Nagel for their master’s theses. As every year, the Early Career working group led by Maren Hackenberg and Lukas Klein organized a joint Young Statisticians Session (YSS), this time together with the Polish Region and ROeS. The GR selected three winners out of the submitted applications from the region and invited them to present their work: Paula Lorenz presented her bachelor’s thesis, and Mathilde Dicaire-Cartier and Henrik Stahl presented their master’s thesis projects.



From the left: awardees Erin Sprünken, Maren Hackenberg, Jan-Bernd Igelmann, Kaya Miah, Alexandra Nagel (with Anne-Laure Boulesteix and Jan Beyersmann). Foto: J. Gerss.

56th “Statistical Computing” workshop

The workshop of the working groups Statistical Computing (IBS-GR and GMDs) and Classification and Data Analysis in Life Sciences (GfKI) was held in cooperation with the German Data Science Society

(GDS) from 26-29 July as every year in Reisenburg Castle near Günzburg. It gathered 33 participants and there were ca. 20 talks, including the three keynote talks by Berthold Lausen (Erlangen), Björn Schuller (Munich) and Paolo Frasconi (Firenze).



The participants of the Statistical Computing workshop at Reisenburg Castle.

Upcoming Meetings

26-27 November 2026, in Ingelheim

Workshop of the working group Bayesian Methods on “Bayesian statistics in medical research” with a tutorial by Marco Scutari on “Bayesian and Causal Networks in Medicine: Concepts, Implementation and Interpretation in R”. Abstracts can be submitted until 02.11.26. Info: <https://www.biometrische-gesellschaft.de/pdf/AnkuendigungBayesWorkshop2026.pdf>

26-27 November 2026, in Berlin/hybrid

Workshop of the working group Non-Clinical Statistics, together with the working group Ethics and Responsibility and the PSI Pre-Clinical Special Interest Group. One special focus will be on reproducibility of preclinical experiments, but contributions on any other non-clinical topic are welcome. Abstracts can be submitted until 15.10.26 to frank.konietschke@charite.de and bernd-wolfgang.igl@boehringer-ingelheim.com.

27 November 2026, in Fulda

Workshop of the working group Pharmaceutical Research, with focus on use cases for AI in statistics and baseline covariate adjustment. For abstract submission, please contact Jens-Otto Andreas, Thomas Bregenzer, Hannes Buchner, Frank Fleischer, Rene Kubiak, Cornelia Ursula Kunz, Frank Langer, or

Susanne Schaefer. Info: <https://www.linkedin.com/feed/update/urn:li:activity:7488235097335324672/>

28 February- 3 March 2027, in Düsseldorf

73rd Biometric Colloquium of the German Region:
<https://biometrisches-kolloquium-2027.de/>

20-24 March 2028, in Bremen

74th Biometric Colloquium as part of the DAGStat Conference

Anne-Laure Boulesteix
Biometric Bulletin Correspondent

Japan (JR)

The 2026 Annual Membership Meeting of the Biometric Society of Japan

The Annual Meeting of the Biometric Society of Japan (BSJ) was held on 15-16 May 2026 in a hybrid format combining onsite and online participation. A total of 393 people registered for the meeting, including 184 onsite and 209 online participants. A tutorial seminar entitled “Statistical Modeling Using Extreme Value Statistics: Challenges in Small-Sample Analysis” was also held on the morning of 15 May, with 276 participants. A special session entitled “Frontiers of Privacy-Enhancing Technologies for Healthcare Data” was organized, covering recent developments in synthetic data, secure computation, differential privacy, and federated learning. In addition, 33 oral presentations were given in the general sessions. For the first time at the BSJ Annual Meeting, a poster session was organized, featuring nine presentations and lively discussions among onsite participants. The BSJ Young Biostatisticians Award was conferred on Dr. Tomohiro Ohigashi (Tokyo University of Science) and Dr. Yi Zhou (Kobe University). Dr. Ohigashi was recognized for his research on nonparametric Bayesian methods for dynamic borrowing of existing data in randomized controlled trials, while Dr. Zhou was recognized for her research on sensitivity analysis for publication bias in SROC curves in diagnostic meta-analysis.

The 2026 Japanese Joint Statistical Meetings

The 2026 Japanese Joint Statistical Meetings was held on 6-10 September 2026 at the Kanazawa-Hakkei Campus of Yokohama City University, Yokohama, Japan. The meeting was held in a hybrid format, primarily onsite with some sessions available online. Tutorial sessions, pre-events, and

public lectures were held on 6 September, followed by general and organized sessions from 7-10 September. The BSJ organized an invited session entitled “Why Data Assimilation in the Age of AI?” The BSJ also organized an invited session in which the recipients of the Young Biostatisticians Award conferred by the society presented their research.

Meetings:

6-10 September

The 2026 Japanese Joint Statistical Meetings
Yokohama City University, Yokohama, Japan

Masataka Taguri
Biometric Bulletin Correspondent

The Netherlands (BMS-ANed)

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

In this issue, we look back on the events organized by BMS-ANed this spring. On 28 May, we hosted the 14th session of our online Biostatistics Seminar Series. This edition featured Edouard Bonneville (LMU Munich), who presented several methods on handling missing covariates in survival models. 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. Our next online Biostatistics seminar will be announced soon.

On Friday, 19 June the General Assembly took place in Leiden. Topics discussed were the events organized by the board, approval of the annual finances and board transitions. Secretary Mar Rodriguez (LUMC) stepped down from the board. Mar has been a valued and dedicated member of the board for years and we thank her for all her efforts and contributions. Floor van Oudenhoven (Danone Nutricia Research) has taken over the role of secretary, and Liesbeth de Wreede (LUMC) has joined the board. Following the General Assembly, the symposium Connecting Survival Analysis and Infectious Disease Modelling took place. The symposium was organized by researchers from around the world and was supported, among others, by BMS-ANed.

In memoriam

On 14 May 2026, Prof. Dr. Hans van Houwelingen passed away. Prof. van Houwelingen made major contributions to the development of biostatistics in the Netherlands and beyond. His background in

mathematical statistics, combined with his interest in medical applications, enabled him to make fundamental mathematical contributions to medical science that were subsequently applied widely. His influence lives on through his publications and the many researchers whom he inspired and mentored throughout his career.

Sara Baart

Biometric Bulletin Correspondent

Polish (GPol)

The sixth edition of the Central European Network Conference - CEN 2026 - was held in Warsaw from 18-21 May 2026 under the theme Power of Data – Shaping the Future of Life Sciences. The event was jointly organised by the Austro-Swiss (ROeS), German (DR), and Polish Regions of the International Biometric Society, together with the Polish Biometric Society. The conference took place at the ADN Conference Centre. The first day was devoted to pre-conference courses, while the main scientific programme ran from 19-21 May.

The scientific programme comprised three plenary lectures, 46 parallel oral sessions, and a poster session held on each day of the conference. The plenary lectures were delivered by Tim Morris (Novartis, UK), Kirsten Schorning (TU Dortmund University, Germany), and Susanne Strohmaier (Medical University of Vienna, Austria). Their presentations focused, respectively, on the methodology of simulation studies, optimal design of cytotoxicity experiments, and practical aspects of causal inference.

The oral sessions covered biometric and statistical methods and their applications in the life sciences. Topics included censored data, high-dimensional data, statistical hypothesis testing, machine learning and data science, Bayesian methods, clinical trials, methods in epidemiology, statistical modelling, ecological and agricultural statistics, evidence synthesis, methods for diagnostic studies, missing data, and open and reproducible research. Two sessions—one organised by ROeS and the other jointly organised by the Polish and German Regions—were dedicated to young statisticians.

The day preceding the main conference programme was devoted to short courses. Participants could choose between two full-day courses: “An introduction to Bayesian non-parametrics for causal inference” and “A practical introduction to simulating complex trial designs,” or a half-day course “Bayesian borrowing in clinical trials: design choices, assessment of operating characteristics and reporting”.

The conference programme was complemented by a range of social events, including a welcome reception, a gala dinner, and guided tours introducing participants to the history and major landmarks of Warsaw. CEN 2026 provided a forum for presenting the latest scientific advances, exchanging knowledge and experience, and establishing international contacts, while also offering participants an opportunity to discover the Polish capital.



Opening ceremony (photos by Mazurkas Congress Management)



Local Organising Committee (photo by Mazurkas Congress Management)



Warsaw (photo by Emptywords, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=156568732>)

Elżbieta Kubera

Biometric Bulletin Correspondent

Spanish (REsp)

Spanish Biometric Society (SEB) Contributions and the Hispanic Network: Strengthening Collaboration at IBC Seoul 2026 The Spanish Biometric Society (SEB) had a strong presence at the 33rd International Biometric Conference (IBC), held in Seoul in July 2026. Numerous SEB members, including the President and other Society representatives, contributed to the scientific programme through oral presentations and posters, illustrating the range and quality of research being undertaken within our community.

A particular highlight was the Hispanic Network Session, which brought together colleagues from across the Hispanic biostatistical community and beyond. The Hispanic International Network connects the Argentinean, Central American and Caribbean, Chilean, Ecuadorian and Spanish (SEB) Regions of the International Biometric Society, promoting scientific exchange and collaboration in biometrics and biostatistics across Spanish-speaking regions. The conference provided an excellent setting to strengthen professional links, exchange ideas and enhance the international visibility of our community. We warmly congratulate all participants on their excellent contributions and thank everyone who helped make the meeting such a successful occasion.



Members of the Hispanic International Network at the 33rd International Biometric Conference, Seoul, July 2026.

Tanzania (TZR)

“Demystifying statistical methods for routine health data in low- and middle-income settings: Insights from the International Biometric Society Tanzania Region inaugural symposium”

Authors: Ola Farid Jahanpour^{1*}, Sophia Kagoye², Wende Clarence Safari³, Jim Todd^{4,5}, Jacqueline Materu^{5,6}, Sanun Ally Kessy^{7,8}, Rehema Salum⁷, Jacqueline Minja⁷, Leah Anku Sanga⁹, Neema Mosha¹⁰, Innocent B. Mboya^{8,11}

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Abstract

The International Biometrics Society (IBS) Tanzania Region successfully hosted a scientific symposium titled “*Demystifying Statistical Methods for Routine Health Data*” in November 2025. This hybrid event, held in Mwanza, Tanzania, engaged 71 participants and aimed to showcase statistical methods and build capacity for analyzing and interpreting routine health data in Tanzania to support evidence-based decision-making. The keynote sessions focused on strengthening the understanding of complex population-based and clinical data sources and key considerations on sampling methodologies. Facilitated by the Tanzania Countdown to 2030 team, the symposium also included a practical session on the use of routine health facility data from the District Health Information System Software version 2 (DHIS2) to derive and interpret population-level health indicators. An expert plenary addressed key methodological challenges, including data quality, missing data, mixed methods design, and machine learning applications. A career panel featuring local and international experts provided insights into professional development. Finally, the symposium concluded with a session highlighting opportunities for early-career statisticians and researchers. The session emphasized how membership in professional networks, such as the IBS, can support career

development through mentorship, networking, and access to training and funding opportunities.

Keywords: Capacity building, Routine health data, Symposium, Tanzania

Introduction

The [International Biometric Society](#) (IBS) is a global community of statisticians, mathematicians, biological scientists, and quantitative researchers in the fields of public health, agriculture, biomedical sciences, environmental sciences, and related fields with a shared goal of advancing the application of statistical methods in biosciences. IBS is organized into geographically defined regions, each requiring a minimum of ten members [International Biometric Society, n.d.].

The IBS Tanzania region was established in 2017 and has averaged 50 members over the past five (5) years [International Biometric Society, n.d.]. The region serves as a professional platform for fostering collaboration, strengthening statistical capacity, and promoting the use of rigorous and appropriate analytical methods in research and practice. Through monthly scientific meetings, training activities, and mentorship initiatives, IBS Tanzania aims to bridge the gap between statistical theory and real-world applications, particularly within the context of routine health and development data.

With the increasing availability of routine healthcare data in Tanzania and other low- and middle-income (LMICs) settings, their effective use requires careful attention to methodological challenges, including data quality, appropriate sampling, integration of multiple data sources, and analytical capacity across disciplines [Rice et al., 2018]. Addressing these challenges is essential to ensure that routine data are translated into reliable evidence for public health decision-making. In response to this, the IBS Tanzania Region successfully convened a one-day symposium titled “*Demystifying Statistical Methods for Routine Health Data*” on 12 November 2025. This event was held in a hybrid format in Mwanza, Tanzania, and brought together 71 participants, including biostatisticians, epidemiologists, public health professionals, data scientists, and students. The event’s core objective was to serve as a crucial platform for capacity building, networking, and knowledge sharing, with a focus on practical approaches needed to handle, analyze, and interpret routine health data to inform public health decision-making. This paper presents key insights

and lessons learned from the symposium to inform future capacity-building efforts in Tanzania and to strengthen the use of routine health data in LMICs settings.

Methods

Symposium organization

The inaugural symposium of the IBS Tanzania region was organized by local network members, a group of scientists (health professionals, data scientists, epidemiologists, and biostatisticians), in collaboration with local academic institutions and non-governmental organizations. These included the National Institute for Medical Research (NIMR); Mwanza Center, the Catholic University of Health and Allied Sciences (CUHAS); Bugando Medical Center (BMC); the Nelson Mandela African Institution of Science and Technology (NM-AIST); Ifakara Health Institute (IHI) through the Countdown to 2030 (CD2030) project; Management and Development for Health (MDH); and the Africa Academy for Public Health (AAPH). The international partners and collaborators included the London School of Hygiene and Tropical Medicine (LSHTM, UK); Warwick Medical School – University of Warwick (UK), University of Calgary (Canada); and Witwatersrand University (South Africa). The symposium was organized in five thematic areas; demystifying data management and linkage processes, integrating mixed methods approaches in data synthesis, best practices for handling missing data, application of machine learning and artificial intelligence (AI) in health analytics, and leveraging routine health facility data (such as HIV, Cancer, district health information systems [DHIS2]) to derive key health indicators in Tanzania. A panel discussion was specially designed to highlight career pathways for early career researchers, learning from health professionals, statisticians, and accomplished scientists.

Keynote presentations: foundations of healthcare data

The morning sessions established the foundational concepts for working with routine population-based and healthcare data, beginning with the complexity of data sources.

Keynote presentation 1: “Demystify Population-Based Data”

The keynote presentation elucidated the concept of population-based data, defining health data broadly as any information related to health conditions, causes of death, reproductive outcomes, quality of

life, and factors contributing to those conditions. The speaker emphasised that population health data is not limited to patients in health facilities but is essential for measuring the well-being of communities and the people living within those communities. Crucially, many health impacts can only be reliably measured in populations, including demographic measures such as fertility, mortality, and migration (including age-specific measures) as well as measures of good health and quality of life in the absence of disease. Population data also provide correct denominators for estimating the prevalence and incidence of non-communicable conditions, mental health, and cancers, often calculated using person-time lived in the community. Measurement designs utilised for population health include national censuses, surveys, Health and Demographic Surveillance Systems (HDSS), and community-based trials. The presentation highlighted analytical approaches such as weighting, data linkage between HDSS and health facilities, generalized linear models, and spatial analysis. Longitudinal HDSS data, which monitor vital events such as births, deaths, and migration over many years, provide results important for health programmers and policymakers.

Keynote presentation 2: “Demystify Clinical Data”

The second session provided clarity on clinical data, which is information collected during patient care or clinical research, including medical histories, demographic details, diagnosis, treatment, and laboratory tests. Clinical data serve as the foundation for clinical decisions and research findings. However, working with this data presents substantial challenges, including high data volume and complexity, as well as significant heterogeneity and fragmentation across multiple, often incompatible systems. Other core challenges include data quality issues, e.g., incomplete information and errors, sources of bias (selection and measurement bias), and the critical need to maintain patient privacy and compliance with ethical data laws. To mitigate these challenges and improve fairness, the speaker recommended ensuring diverse datasets, applying bias detection tools, and encouraging multidisciplinary data review. He emphasized that data governance is essential to ensure clinical data remains accurate, secure, compliant, and accessible to the appropriate people for the correct purpose. These challenges are commonly encountered in routine hospital records and electronic medical record systems, where missing data, inconsistent coding, and fragmented databases can limit the analytical usefulness of these data.

Keynote presentation 3: “Demystifying Sampling”

Another keynote speaker focused on “*Demystifying Sampling*”, positioning it as a cornerstone of credible statistics and noting that errors made at the design stage propagate through all analysis phases. She clarified that demystifying sampling makes the process transparent and practical in research.

Several common misconceptions about sampling were presented. First, the belief that a large sample size guarantees accuracy was dispelled. Representativeness is more important than sample size. Second, the notion that random selection removes all bias was challenged. Bias can still arise from outdated sampling frames or implementation errors. Third, the assumption that weighting resolves all issues was clarified. Weighting only corrects for known selection probabilities or nonresponse. It cannot address errors in the sampling frame or account for missing population groups.

The keynote presentation also focused on Tanzania’s regional experience and illustrated a progressive shift toward innovative, technology-driven data ecosystems. Recent large-scale initiatives, including the Demographic and Health Survey/ Malaria Indicator Survey (DHS/MIS) 2022 and Integrated Household Budget Survey (IHBS) 2025, have successfully employed multi-stage stratified sampling designs integrated with Computer-Assisted Personal Interviewing (CAPI), real-time monitoring, and GPS-enabled collection. These efforts align with the Tanzania Development Vision 2050, which positions data as a vital national asset. Future pathways for transformation include integrating survey, administrative, and geospatial data, alongside building AI and data science capacity within the National Statistical System (NSS) to enhance disease surveillance and strategic health planning.

The current statistical system faces several critical challenges, including significant data silos, limited interoperability, and limited institutional collaboration. These hurdles were compounded by a scarcity of advanced AI skills and infrastructure, inconsistent frameworks for sharing administrative data, and ongoing ethical concerns regarding privacy, consent, and bias in data collection and use. To address these issues, a strategic call to action emphasized the need to nurture a new generation of sampling experts and strengthen partnerships between academia, research institutions, and the NSS. Key pathways for transformation include building AI and data science capacity within the National Statistical

System, investing in robust digital and analytical infrastructure, and integrating survey, administrative, and geospatial data to enhance disease surveillance and strategic health planning. Ultimately, recognizing sampling as the cornerstone of credible statistics and attaching rigorous methodological notes to every dataset will foster a deeper understanding of uncertainty and build essential public trust in statistical outputs.

Advanced statistical methods showcase and applications

CD2030: “A Practical Guide: From DHIS2 to Health Indicators”

The mid-day session titled “*A Practical Guide: From DHIS2 to Health Indicators*” was led by the Tanzania CD2030 team, which focused on generating and interpreting population-level health indicators from monthly district-level routine health facility data from the DHIS2. The session focused on the CD2030 approach in the analysis of monthly routine health facility data, mainly on the denominator assessment and selection to estimate population-level coverage estimates for Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) indicators. The session highlighted that the denominators within the routine facility data can be calculated using both the facility-based sources, e.g., numbers of the first antenatal care visit (ANC1) and first pentavalent vaccination (Penta1) visits, and population-based projections (such as projected live births). Facility-based denominator estimation is based on demographic assumptions that allow for internal consistency between related RMNCAH indicators across the continuum of care. For example, the number of pregnancies (typically identified at the ANC1, around 4–5 months of gestation) can be converted to live births by considering pregnancy loss between 4–7 months, stillbirths or losses after 28 weeks, and the twinning rate. To further estimate surviving infants as a denominator for vaccination indicators, neonatal mortality and post-neonatal mortality are considered.

Once denominators are obtained, service coverage is calculated using the adjusted numerators and compared with the most recent available nationally representative survey estimate as a benchmark. This is done for a year as close as possible to the routine data, the denominator that results in the smallest absolute difference between survey and facility-based coverage estimates—at both national and subnational levels—is selected as the

best-performing option. At the national level, four different denominator estimation methods are used: projection-based methods (National population estimates provided through the health information system and internationally standardized projections from the United Nations [UN] Population Division) and facility data-derived methods (ANC1-derived denominators and Penta1-derived denominators). At the subnational level, UN projections are typically unavailable, so only three methods can be compared: the DHIS2 projection, ANC1-derived, and Penta1-derived denominators. Further information on the CD2030 methods in routine data analysis is documented elsewhere [Countdown to 2030, 2024].

Furthermore, the Tanzania CD2030 team demonstrated the use of an interactive tool that automates data extraction, analysis, and report generation. The tool standardizes the workflows in the analysis of routine health facility data, ensuring that routine health facility data is analyzed and reported with greater accuracy. Detailed information regarding this interactive tool is reported elsewhere [Kananura et al., 2026].

The key aim of this session was to provide a practical and hands-on demonstration of the potential of routine health facility data in estimating population-level health indicators, particularly in the current era when the national surveys are scarce due to funding limitations. While this demonstration did not incorporate HIV or cancer-related data, the inclusion of such data in future analyses would offer important opportunities to strengthen the integration of health services and enable a more comprehensive assessment of women's health outcomes. Linking RMNCAH data with HIV and cancer datasets could provide valuable insights into comorbidities, service delivery integration, and overall health system performance in low- and middle-income countries.

Plenary discussion: methodological journeys and practical applications

The plenary session fostered a comprehensive dialogue among the panelists, exploring their methodological trajectories from data selection to real-world public health applications. The panel comprised biostatisticians from diverse backgrounds, the majority of whom were early-career researchers who completed their PhDs within the past five years. Core questions regarding data utilization, statistical modelling, research findings, and advice for emerging researchers guided the discussion.

Diversity of data sources for clinical and public health research

The panelists showcased a wide spectrum of data sources, underscoring the diverse landscapes of clinical and public health research. The data utilized ranged from highly structured population-based longitudinal databases—such as the HDSS and the Magu open cohort—to national-level DHS spanning up to 17 years. In contrast, one panelist highlighted the value of secondary data gathered directly from community medicine stores and pharmacies. This diversity illustrated the ongoing trade-offs researchers face: balancing the rigorous, nested data from large-scale demographic surveys against the exploratory, real-world (though often incomplete) data from informal healthcare settings.

Spectrum of statistical methods, rationale, and applications

A central theme of the session was that statistical methods must be chosen based on the specific nature of the data and the fundamental assumptions of the models. The panel discussed a variety of approaches:

- Addressing time and correlation: For correlated time-to-event outcomes (e.g., age at first sex and marriage), panelists advocated for joint modeling using Accelerated Failure Time (AFT) and copula models.
- Handling hierarchical data: When utilizing DHS data, standard regression assumptions regarding the independence of observations are frequently violated. To address this, panelists emphasized the necessity of multilevel modelling to account for clustered data, such as mother-infant pairs nested within larger regional structures. The application of classical statistical and Bayesian methods for handling longitudinal data was also emphasized.
- Navigating missing data and exploration: Methodological robustness was also a key focus, with one showcase utilizing Monte-Carlo simulations to test various missing data methodologies (Complete Case Analysis, Multiple Imputation, Inverse Probability Weighting, and Double Robust estimation). Conversely, for exploratory studies investigating ground-level behavioral phenomena—such as self-medication—descriptive statistics proved most effective for identifying immediate systemic gaps.

- Data quality, a foundation for modeling clinical and public health outcomes: The integrated findings from the panelists highlighted both methodological imperatives and direct public health insights. A recurring methodological issue was the critical challenge of data quality, i.e., collecting high-quality data and dedicating sufficient resources to data preparation as a foundation for any modelling work. Panelists noted substantial inconsistencies in self-reported behavioral data and incomplete records in community pharmacies. Correcting these inconsistencies and understanding the mechanisms of missing data were deemed essential for producing unbiased estimates. Substantively, the panel discussion revealed critical shifts in public health trends, including gradual delays in the median age of youth behavioral milestones, shifting regional determinants for exclusive breastfeeding over time, and alarming rates of unprescribed antibiotic use driven by healthcare access barriers.

A guide for students and emerging researchers

Concluding the session, the panelists synthesized their collective experiences into actionable advice for the next generation of researchers:

1. **Prioritize data integrity:** Always rigorously evaluate the quality, reliability, and missingness of your data before diving into quantitative analysis; working with real-world data requires immense flexibility.
1. **Understand the assumptions:** Do not blindly apply statistical tools. Understand the mathematical assumptions underlying the models (such as testing variance components for clustering) to ensure they are appropriate for your specific dataset.
1. **Look beyond the numbers:** Remember that data represents human behavior. Combine multiple data sources where possible to gain a holistic view of the communities you are studying.
1. **Find your purpose:** Ultimately, public health research is a tool for societal betterment. Students were encouraged to identify their unique contributions, remain consistent through research challenges, and apply their training to drive meaningful change.

Professional development and networking

A dedicated career pathways panel discussion provided insights into professional growth. Panelists reflected on their personal journeys transitioning from clinical medicine to biostatistics and offered international perspectives on the field. The session was followed by a presentation on available networks for biostatisticians, including the IBS and the Sub-Saharan Network (SUSAN) [International Biometric Society, n.d.], and grant application opportunities, such as the HIV Research Trust [HIV Glasgow, n.d.] and Wellcome Trust Early Career and Career Development Awards [Wellcome Trust, n.d.].

Conclusion and call for action

The symposium highlighted the importance of strengthening methodological capacity and collaboration to improve the effective use of routine health data in LMICs settings. Based on the critical discussions, the following pathways for transformation and action were highlighted:

1. **Championing methodological integrity:** It is crucial to recognise sampling and data quality as the cornerstone of credible statistics and to champion methodological integrity and innovation.
2. **Data integration and infrastructure:** Efforts must be made to strengthen integrated data ecosystems to enhance strategic health planning and disease surveillance through modelling, which involves combining population-level, survey, administrative, healthcare, and geospatial data [Mboya et al., 2024]. Furthermore, there is a clear need to invest in digital and analytical infrastructure, including developing AI and data science capacity within the National Statistical System (NSS) in Tanzania and other settings in LMICs.
3. **Capacity building and partnerships:** The need to nurture the next generation of sampling experts, biostatisticians, mathematicians, demographers, and data scientists through mentorship and investment in training. This requires strengthening partnerships among academia, research institutions, NSS, and the industry.
4. **Transparency and trust:** To build user trust in statistical or modelling outputs, the practice of attaching methodological notes to every dataset must be promoted, alongside

promoting open science publication of research results, statistical codes, and, where applicable, deidentified datasets, fostering an understanding of uncertainty and error.

5. Recognize and mitigate challenges to open access publishing for LMIC researchers:

Systematic barriers still limit open access publishing and accessing scientific publications, especially from LMIC researchers, such as the high article processing charges [Saloojee & Pettifor, 2024], as highlighted by a recent scoping review [Kaliuzhna et al., 2025]. Addressing these barriers is crucial to support the science produced from these settings and for capacity building, especially for the upcoming generation of scientists.

Abbreviations

ANC	Antenatal clinic
AI	Artificial Intelligence
AFT	Accelerated Failure Time
CAPI	Computer-Assisted Personal Interviewing
DHIS2	District Health Information System Software version 2
DHS	Demographic and Health Survey
HDSS	Health and Demographic Surveillance System
IBS	International Biometric Society
IHBS	Integrated Household Budget Survey
LMICs	Low- and Middle-Income Countries
MIS	Malaria Indicator Survey
NSS	National Statistical System
RMNCAH	Reproductive, Maternal, Newborn, Child, and Adolescent Health
SUSAN	Sub-Saharan Network (of the IBS)

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Announcements & UPCOMING EVENTS

IBS, IBS Regional and Non-IBS Events and Meetings

BIOSTAT 2027

28th International Symposium on Biometrics
Meeting of the Croatian Biometric Society - Croatian
Region of the International Biometric Society
Split, Croatia

1-4 September 2027

<https://www.hbmd.hr/biostat-2027>

74th Biometric Colloquium as part of the DAGStat Conference

IBS Region Event

20-24 March 2028

74th Biometric Colloquium as part of the DAGStat
Conference
Bremen, Germany

34th International Biometric Conference

16-21 July 2028

Conference Centre Basel
Basel, Switzerland

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IBS, IBS Regional and Non-IBS Events and Meetings

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