

STRATOS mini-symposium at ISCB 2023, August 31 2023

Ten years STRATOS initiative - brief summary of progress and plans for the future

Coordinators:

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Description:

The STRATOS (STREngthening Analytical Thinking for Observational Studies) initiative, is a large collaboration of experts in many different areas of biostatistical research. It was launched at a half-day Mini-Symposium at ISCB 2013. In Milan it will commemorate the 10th anniversary with a full-day mini-symposium.

The objective of STRATOS is to provide accessible and accurate guidance in the design and analysis of observational studies (www.stratos-initiative.org).

We will reflect on our experiences and progress and discuss about the future of the STRATOS initiative and its ability to improve research in data science, specifically in the health sciences.

Program:

Session 1 (9.00-10.40)

9.00-9.50

Experience and progress with developing guidance for the analysis of key topics in observational research

Sauerbrei W, Abrahamowicz M, Le Cessie S, Huebner M, Keogh R, Carpenter J for the STRATOS initiative

9:50-10.15

Level 1 guidance on conducting and reporting sensitivity analyses for missing data

Lee K, Mainzer R, Carpenter J for TG1

10.15-10.40

Aims of the new Open Science panel

Luijken K, Hoffmann S, Boulesteix A-L for the Open Science panel

Session 2 (11.00-12.40)

11.00-11.25

Ongoing research towards state-of-the-art in variable and functional form selection for statistical models

Heinze G, Perperoglou A, Sauerbrei W for TG2

11.25-11.50

How to include time-varying exposures prone to measurement error in survival analyses

Proust-Lima C, Philipps, Deffner V, Boshuizen H, Freedman L, Thiébaud A for TG4

11.50-12.15

Evaluating the impact of covariate measurement error on functional form estimation in regression modelling

Perperoglou A, Abrahamowicz M, Gustafson P, Kipnis V, Thiébaud A, Ferreira Guerra S, Freedman L for TG2 and TG4

12.15-12.40

Statistical analysis of high-dimensional biomedical data: A gentle introduction to analytical goals, common approaches and challenges

Ambrogio F, Rahnenfuehrer J, De Bin R, McShane L for TG9

Session 3 (13.30-15.10)

13.30-13.55

The slowly changing landscape of predictive modeling in biomedicine

Lusa L, Kappenberg F, Schmid M, Sauerbrei W, Rahnenführer J

13.55-14.20

Counterfactual prediction for personalized healthcare using observational data

Van Geloven N, Steyerberg EW, Wang J, Didelez V, Keogh RH for TG6 and TG7

14.20-14.45

Recommendations to handle patient reported outcome data in oncology cancer trials

Le Cessie S, Goetghebeur E, Thomassen D on behalf of work package 3 of the SISAQOL-IMI consortium

14.45-15.10

Comparing quality of life - while alive - between treatment and (external) controls: methods for real world analysis in clinical trials

Goetghebeur E, Reynders D, Thomassen D, le Cessie S on behalf of work package 3 of the SISAQOL-IMI consortium

Session 4 (15.30-16.30)

Panel discussion about the future of STRATOS

Chair: Carpenter J (London, UK)