

7-9 July 2025, Aegina, Danae Hotel

Conference Program

Day 1: Monday 7th July 2025

9.00-10.30 Registration

10.30-12.00 Short Course (Chair: Ioannis Ntzoufras): Longitudinal data analysis and joint modeling (Part A) by **Giota Touloumi** (NKUA)

12.00-12.15 Coffee Break

12.15-13.45 Short Course (Chair: Christos Thomadakis): Causal time-series (Part A) by **Pantelis Samartsidis** (University of Cambridge)

13.45-15.00 Lunch Break

15.00-16.00 Invited Talk (Chair: Christos Thomadakis): Mendelian randomization: From promise to pitfalls and the path forward by **Ioanna Tzoulaki** (Biomedical Research Foundation of the Academy of Athens & ICL)

16.00-17.40 Research Presentations (Session Chair: Dimitris Karlis)

Petros Barmpounakis (AUEB) Multiphasic epidemic models

Panagiotis Papastamoulis (AUEB) Bayesian cure rate modeling for time to event data

Efthymia Derezea (University of Bristol) *Meta-analysis of diagnostic test accuracy with multiple disease states: combining stage-specific accuracy data with descriptive statistics*

Nikos Demiris (AUEB) Some remarks on robust Bayesian causal inference

Day 2: Tuesday 8th July 2025

9.30-11.00 Short Course (Chair: Fotios Siannis): Evidence synthesis models (pairwise and network metaanalysis) (Part A) by **Dimitris Mavridis** (Evidence Synthesis Methods Statistics Team of UOI)

11.00-11.15 Coffee Break

11.15-12.45 Short Course (Chair: Fotios Siannis): Causal time-series (Part B) by **Pantelis Samartsidis** (University of Cambridge)

12.45-14.00 Lunch Break

14.00-15.00 Invited Talk (Chair: Christos Thomadakis): Using joint models for longitudinal and time-to-event data to investigate the causal effect of salvage therapy after prostatectomy by **Dimitris Rizopoulos** (Erasmus University of Medical Center)

15.00-15.15 Coffee Break

15.15-17.20 Research Presentations (Session Chair: Nikos Demiris)

Anastasios Apsemidis (University of Ioannina) *Stable survival extrapolation via mortality* projections

Aristidis K. Nikoloulopoulos (University of East Anglia) *Vine copula mixed models for meta-analysis of multiple diagnostic tests*

Venediktos Kapetanakis (Evidera) *Is population adjustment enough to reduce bias in unanchored comparisons of progression-free survival in oncology? the importance of dealing with progression assessment time differences*

Dimitris Karlis (AUEB) *Single arm clinical trial designs with hierarchical testing*

Melanie Wall (Columbia University) A prediction tool for individual outcome trajectories across the next year in first episode psychosis in coordinated specialty care

20.00-21.00 Poster Session

- 1. Modelling time series of different modalities by Anna Nalpantidi (AUEB)
- 2. Bayesian model screening: On the way to scalable approximations by Argyro Damoulaki (AUEB)
- 3. Considering individual variation of viral load in epidemic forecasting by Andre Ehrlich (AUEB)

- 4. Factor analysis for psychometric data: A study using the SPQ questionnaire by Zoe Sagri (AUEB)
- 5. Predicting cognitive ability in patients with frontotemporal dementia using brain measures volumetric data by **Athanasia Kalogirou** (AUEB)
- 6. Estimating treatment effects for two groups in the presence of informative censoring- A simulation approach by **Stylianos Tzortzakis** (NKUA)
- 7. Adapting standard surrogacy models to incorporate real-world evidence via user- or data-driven information sharing by Anastasios Tasoulas (IQVIA)
- 8. Bridging single arm studies with individual participant data in network meta-analysis of randomized controlled trials: A simulation study by Katerina Maria Kontouli (UOI)
- 9. Bayesian fMRI analysis in Fourier space by Konstantinos Bakas (King Abdullah University of Science and Technology)
- 10. Restricted mean survival time: regression analyses by Eirini Matsouka (AUEB & FSF-H)
- 11. Extrapolating overall survival data: A practical guide to methods and model selection for long-term predictions by Michalis Galanakis (Evidera)
- 12. Personalized causal effect estimation: A Bayesian approach using observational and experimental data by **Konstantina Lelova** (U Crete)
- 13. Variable selection for survival data with multiply imputed covariates: A comparative simulation study by Valia Baralou (NKUA)
- 14. Joint modeling of longitudinal data and potentially informative visiting process to dynamically predict future visiting times by Achilleas Stamoulopoulos (NKUA)
- 15. Real-world effectiveness of COVID-19 vaccines in the Netherlands: A test-negative case-control study within the pharm lines initiative by **Stefan Verweij** (U Groningen)
- 16. Extending network meta analysis to include non-randomized evidence: Results of a scoping review by Ourania Koutsiouroumpa (UOI)
- 17. Investigating single and combined environmental long-term exposure on cardiometabolic morbidity in a population sample in Athens, Greece by Dimitris Stamatiou (NKUA)
- 18. Nonlinear dynamics and machine learning for ECG diagnosis: Insights from the PTB-XL dataset by Spyridon Kontos (NKUA)

20.00- Wine and Finger Food Reception

Day 3: Wednesday 9th July 2025

9.30-11.00 Short Course (Chair: Dimitris Karlis): Longitudinal data analysis and joint modeling (Part B) by Christos Thomadakis (NKUA & AUEB)

11.00-11.15 Coffee Break

11.15-12.45 Short Course (Chair: Nikos Demiris): Evidence synthesis models (pairwise and network metaanalysis) (Part B) by **Dimitris Mavridis** (Evidence Synthesis Methods Statistics Team of UOI)

12.45-13.00 Coffee Break

13.00-15.00 Research Presentations (Session Chair: Ioannis Ntzoufras)

Petros Pechlivanoglou (The Hospital for Sick Children Research Institute) *Recovering parameters* of a multistate model from aggregate overall and progression-free survival data using Bayesian model calibration

Loukia Meligkotsidou (NKUA) A Bayesian approach to estimating the prevalence of opioid dependence

Fotios Siannis (NKUA) Meta-analysis of time-to-event data under model misspecification

Irini Moustaki (LSE) Unfolding the network of peer grades: A latent variable approach

TBC Summarizing the conference