



EMGM BREST 2025 PROGRAM

TUESDAY 8th April

8.00 - 8.45	Registration
8.45 - 9.00	Welcome Introduction
9.00 - 10.30	Session 1 – Haplotype-based inference Chairs: Anthony Herzig and Heike Bickeböller <u>Invited speaker:</u> Garrett Hellenthal, <i>Leveraging haplotype sharing patterns to infer overlapping admixture events among populations</i> Robin Hofmeister, <i>Parent-of-Origin inference and its role in the genetic architecture of complex traits: evidence from ~265,000 individuals</i> Yoann Seeleuthner, <i>Detection of mosaic uniparental disomy from whole-exome and whole-genome sequencing data of single patient</i> Sidonie Foulon, <i>Detecting rare recessive variants involved in multifactorial diseases: validation and power of the Fantasio method</i>
10.30 - 11.00	Coffee Break
11.00 - 12.00	Session 2 – Complex Traits Chairs: Florian Privé and Mohamad Saad Ana Luiza Arruda, <i>The effect of stratified type 2 diabetes genetic liability on non-cardiometabolic comorbidities</i> Merli Koitmäe, <i>Using Genomic Structural Equation-Based Polygenic Scores to Improve Type II Diabetes Management</i> Martin Tournaire, <i>PRISM: a pleiotropy-driven framework to disentangle the effects of genetic variants in complex traits</i> Margot Derouin, <i>Using multiomic integration to improve blood biomarkers of major depressive disorder: a case-control study</i>
12.00 - 12.30	Poster Highlights Chair: Gaëlle Marenne Matthieu Pluntz, Hanna Julienne, Sohane Aissa, Sebastian Sendel, Kelly Larissa Vomo-Donfack, Vidhi Vidhi
12.30 - 14.00	Lunch
14.00 - 15.15	Session 3 – Ancient DNA Chairs: Aude Saint Pierre and Michael Nothnagel <u>Invited speaker:</u> Céline Bon, <i>Using Ancient DNA to Unveil the Genetic Diversity of Neolithic Populations in the Paris Basin: Interactions Between Farmers and Hunter-Gatherers</i> Guillaume Laval, <i>Deep Bayesian estimation of the intensity and timing of selection from a thousand ancient genomes of East Eurasians</i> Christian Dina, <i>Integrating Temporal and Spatial Dimensions in Genetic Selection Analysis: A Comprehensive Approach to Detecting Positive Selection in Human Genomes</i>
15.15 - 16.30	Posters & Coffee
16.30 - 17.15	Session 4 – Evolution and Selection Chairs: Amke Caliebe and Arthur Frouin Ferdinando Insalata, <i>Mutational signatures of deterministic and noise-induced evolutionary mechanisms</i> Elise Lucotte, <i>Characterizing the evolution and phenotypic impact of ampliconic Y chromosome regions</i> Mihaela Diana Zanoaga, <i>Triangulating evidence to detect signatures of stabilizing selection acting on molecular traits in humans</i>
17.15 – 17.30	Plans for the EMGM2026
19.30 - 22.00	Gala Dinner, Ateliers des Capucins, Brest



WEDNESDAY 9th April

9.00 - 10.30	<p>Session 5 – Statistical Modelling and non-Human studies Chairs: Hervé Perdry and Emmanuelle Génin <u>Invited speaker:</u> Beatriz C. D. Cuyabano, <i>The challenges of variance components estimation in the multi-omic era</i> Arthur Frouin, <i>ChoruMM: a versatile multi-components mixed model for bacterial-GWAS</i> Emil Pedersen, <i>A robust liability-scale R-squared</i> Louis Le Nezet, <i>Search of the genetic predisposition for Hip Dysplasia, using the dog model through leveraging One Health and Open Science</i></p>
10.30 - 11.00	Coffee Break
11.00 - 12.15	<p>Session 6 – Multi-Omics Chairs: Ozvan Bocher and Ana Luiza Arruda Li Yiran, <i>Joint plasma pQTL analysis in the UK Biobank with efficient Bayesian inference</i> Adriaan Van Der Graaf, <i>Summary Statistic-Derived Metabolite Ratio QTL Analysis Identifies 427 Otherwise Missed Loci and Reveals Catalyzing Enzymes</i> Amandine Santini, <i>Epigenetic signatures in developmental disorders: can signature patterns disclose enriched information on phenotypes?</i> Raphaël Malak, <i>K-mer-based-genome-wide association studies of the gut microbiome</i> Mohamad Saad, <i>Integrating Multi-Omics and Machine Learning through Polygenic Risk Scores in Middle Eastern Populations for Cardiometabolic Traits</i></p>
12.15 - 13.30	Lunch
13.30 - 14.30	<p>Session 7 – Modelling ancestry Chairs: Christian Dina and Gaëlle Marenne Fiona Pantring, <i>Characterisation of diverse global ancestries within participants of the UK Biobank</i> Florian Privé, <i>Improved ancestry and admixture detection using principal component analysis of genetic data</i> Maël Guivarch, <i>Comparing the performance of clustering methods to understand fine-scale genetic structure using simulated data</i> Siru Wang, <i>Multi-ancestry fine-mapping accounting for ancestral and environmental heterogeneity improves resolution</i></p>
14.30 - 15.15	Posters & Coffee
15.15 - 16.15	<p>Round-table panel discussion Chairs: Anthony Herzig and Hervé Perdry 10 years on from the EMGM2015 in Brest: Headway, shift changes, atavism? Françoise Clerget-Darpoux Paul McKeigue Yves Moreau Amke Caliebe</p>
16.15 - 16.45	Closing remarks, Awards