

Inserm Workshop 281

Données génomiques massives : avancées statistiques et bioinformatiques
Massive Genomic Data: Statistical and Bioinformatic Advances

16-18 Septembre 2024 / **September 16-18** ■ **Bordeaux, France**

Lundi 16 Septembre 2024 ■ **Monday September, 16 2024**

14:30 - 15:00	Reception of participants
15:00 - 15:30	Welcome and presentation by the organizers
SESSION I	FROM EXOME TO WHOLE-GENOME SEQUENCING
15:30 - 16:15	Successes in monogenic diseases Christel Depienne (University of Essen, Germany)
16:15 - 17:00	Success and challenges from NGS data in deciphering underlying mechanisms of multifactorial traits Inês Barroso (University of Exeter, UK)
17:00 - 17:30	Coffee break
17:30 - 18:15	The non-coding genome Benoit Ballester (Inserm U1090/Aix-Marseille Université, Marseille, France)
18:15 - 19:00	Pangenome as a reference genome & the implication for future method developments Jean Monlong (Inserm U1220, Toulouse, France)
19:30	Dinner

Mardi 17 Septembre 2024 ■ **Tuesday September, 17 2024**

06:30 - 08:30	Breakfast
SESSION II	METHODOLOGICAL DEVELOPMENTS...
08:30 - 09:15	Beyond SNVs & indels: structural variations, transposable elements Jean Muller (Université de Strasbourg, France)
09:15 - 10:00	Phasing & imputation, including rare variants, structural variants & issues with large biobanks Simone Rubinacci (Harvard medical school/Broad institute, Boston, USA)
10:00 - 10:30	Coffee break
10:30 - 11:15	Rare variants association tests, in coding and non-coding Ozvan Bocher (Helmholtz Center, Munich, Germany)
11:15 - 12:00	Fine mapping: functional annotations, trans-ancestry and multi-trait similarity Jenn Asimit (University of Cambridge, United Kingdom)
12:00 - 14:00	Lunch

SESSION III	... METHODOLOGICAL DEVELOPMENTS
14:00 - 14:45	Multi-omics data integration Anaïs Baudot (Inserm U1251/CNRS, Marseille, France)
14:45 - 15:30	Epistasis and GxE analysis Hugues Aschard (Institut Pasteur, Paris, France)
15:30 - 16:00	Coffee Break
16:00 - 16:45	Polygenic risk scores (PRS) in the clinic Fabienne Lesueur (Inserm U900/Institut Curie, Paris, France)
16:45 - 17:30	Pros and cons of PRS and the underlying assumptions of GWAS Anthony Herzig (Inserm U1078, Brest, France)
19:30 - 20:15	Cocktail
20:15	Dinner

Mercredi 18 Septembre 2024 ■ **Wednesday September, 18 2024**

06:30 - 08:30	Breakfast
SESSION IV	DATA SHARING & ETHICS
08:30 - 09:15	Large sequencing projects: POPGEN, Genomic Medicine France, Genome Europe Emmanuelle Génin (Inserm U1078, IT Génétique-Génomique-Bioinformatique, Paris, France)
09:15 - 10:00	Federated learning: sharing the methods and not the data Aurélien Bellet (Inria, Lille, France)
10:00 - 10:30	Coffee Break
10:30 - 11:15	Services deployed by the Institut Français de Bioinformatique (IFB) for massive genomic data projects Jacques Van Helden (Aix-Marseille Université/IFB/ELIXIR-FR, Marseille, France)
11:15 - 12:00	Ethic issues with collecting and analyzing massive health data, including genomics Catherine Bourgain (Inserm U988/CNRS/EHESS/Université Paris Cité, Paris, France)
12:00 - 14:00	Lunch
14:00	Departure