



## POCKET PROGRAM

<https://jobim2025.labri.fr/>



## HANDICAP INFORMATION

For handicap-related enquiries, please contact:

- Patricia Thébault: [thebault@labri.fr](mailto:thebault@labri.fr)

## GOOD CONDUCT

In the event of a disrespectful behaviour or harassment, please contact:

any organiser with a bandana or: [jobim2025-resp@diff.u-bordeaux.fr](mailto:jobim2025-resp@diff.u-bordeaux.fr)

## RED BANDANAS

For other enquiries: organisers are wearing red bandanas.

## EDUROAM

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# DAY 1 – Tuesday, July 8th

Main Hall 12:30 - 13:30	<b>Registration, ENSEIRB</b>
Main Amphi 13:30 - 14:00	<b>Welcome &amp; opening remarks</b>
Main Amphi 14:00 - 15:00	<b>Keynote: Anamaria Necsulea - Chair: Guy Perrière</b> Deciphering the genomic basis of convergent phenotypic evolution
Main Amphi 15:00 - 15:20	<b>Session: Statistics, Machine Learning, and AI for Biology and Health - Chair: Victoria Bourgeais</b> Explainable AI for Marine Ecological Quality Prediction: Integrating Microbiome Data, Metadata, and Diversity - Houria Braikia
15:20 - 15:40	Evaluating deep learning models for plant protein function prediction - Minh Ngoc Vu
15:40- 16:00	Variable selection in transcriptomics data using knockoffs in a classification framework - Julie Cartier
Amphi D	<b>Session: Algorithms and data structures for sequences - Chair: Raphaël Mourad</b>
15:00 - 15:20	Structural Space of Microproteins with Protein Language Models - Simon Herman
15:20 - 15:40	MetagenBERT: a Transformer Architecture using Foundational Read Embedding Models to enhance Disease Classification - Gaspar Roy
15:40- 16:00	SpecPeptidOMS Directly and Rapidly Aligns Mass Spectra on Whole Proteomes and Identifies Peptides That Are Not Necessarily Tryptic: Implications for Peptidomics - Géraldine Jean
Amphi E	<b>Session: Evolution, phylogeny and comparative genomics - Chair: Sophie Abby</b>
15:00 - 15:20	Evolutionary dynamics of centromeric DNA in guenon might end an old anthropocentric dogma - Julien Pichon
15:20 - 15:40	Natural selection acting on gene expression and regulation in mole-rats - Maëlle Daunesse
15:40- 16:00	A Comprehensive Study of Inverted Repeats in Prokaryotic Genomes: Enrichment, Depletion, and Taxonomic Variations - Victor Banon Garcia
Main Hall 16:00 - 16:30	<b>Break &amp; Coffee</b>
Main Amphi	<b>Session: Statistics, Machine Learning, and AI for Biology and Health - Chair: Romain Bourqui</b>
16:30 - 16:50	Joint Embedding-Classifier Learning for Interpretable Collaborative Filtering - Clémence Réda
16:50 - 17:10	Models for protein domain embedding - Louison Silly
17:10 - 17:30	Benchmarking Data Leakage on Link Prediction in Biomedical Knowledge Graph Embeddings - Galadriel Brière
Amphi D	<b>Session: Metagenomics, Metatranscriptomics, and Microbial Ecosystems Statistics - Chair: Rayan Chikhi</b>
16:30 - 16:50	Metatranscriptomic classification in the study of microbial translocation - Antonin Colajanni
16:50 - 17:10	Fast answers to simple bioinformatics needs and capacity building in an island context, a focus on microbial omics data analysis - David Couvin
17:10 - 17:30	OneNet—One network to rule them all: Consensus network inference from microbiome data - Magali Berland
Amphi E	<b>Session: Functional and Integrative Genomics - Chair: François Sabot</b>
16:30 - 16:50	AntiBody Sequence Database - Nicolas Maillet
16:50 - 17:10	The Pfam protein families database: embracing AI/ML - Typhaine Paysan-Lafosse
17:10 - 17:30	MethMotif 2024 Suite Reveals the Epigenetic Blueprint of Context-Specific Transcription Factor Binding Sites - Touati Benoukraf



Main Hall      **POSTERS – Session 1**  
17:30 - 18:30

- 3 REPET v4.0: A robust and accessible tool for TE annotation - Etienne Bardet  
4 Digital Concord: Cultivating links between Discord and the secrets of the genome - Franck Samson  
5 Refining eDNA taxonomic assignments with a phylogenetic approach - Enora Geslain  
6 EvoLaps 3: Next-Level Phylogeographic Visualization - Thomas Vitre  
9 Mechanistic Modeling of Cell Viability Assays with *in silico* Lineage Tracing - Aurore Amrit  
11 A meta-model for representing bioinformatics workflow to improve reproducibility - Mouna El Garb  
13 Single-cell profiling reveals distinct immune profile in anti-Yo paraneoplastic neurological syndrome - Anna Tran  
14 COSMIQ-4C: quantifying 3D genome interactions of retroviral proviruses at the single-clone level - Nicolas Fontrodona  
15 HoloOligoDB: Exploring Mammalian Milk Oligosaccharides - Hajar Bouamout  
16 InDeepNet a web plateform for predicting and validating protein-protein interaction binding sites - Fabien Mareuil  
17 Metage2Metabo-PostAViz: exploring and visualising the wealth of metabolic modelling predictions to compare microbial communities - Leonard Brindel  
19 Exploring the challenges of Dinoflagellate transcriptome assembly with long-read data - Lauryn Trouillot  
20 Computational investigation of chemosensory receptors in salmonid species - Emma Mathieu  
21 Generation of gene annotations including UTRs for Bulk and Single-Cell RNASeq analyses - Salomé Brunon  
22 GenomiqueENS, the IBENS Genomics core facility - Laurent Jourdren,  
23 Building an atlas of transcription factor DNA-binding properties in *Arabidopsis thaliana* - Alice Jegou  
25 Beyond species: towards the modeling and prediction of marine plankton ecological associations biogeography - Marinna Gaudin  
26 Seed2LP: seed inference in metabolic networks for reverse ecology applications - Chabname Ghassemi Nedjad  
27 The Genotoul-Bioinfo platform - Matthias Zytnicki  
28 MOAL: Improving the Reproducibility of OMICS Bioanalysis - Florent Dumont  
31 MLOps best practices for bioinformatics - Pauline Le Corre  
33 CroCoDeEL: accurate control-free detection of cross-sample contamination in metagenomics data - Lindsay Goulet  
35 A multi-modal and temporal antibiotic resistance knowledge graph - Brieuc Quemeneur  
36 ABRomics-analysis: Developing Metagenomic Workflows for National Antibiotic Resistance Surveillance Platform - Hugo Lefevre  
37 Annotating Bioconductor packages using the EDAM ontology - Claire Rioual  
38 StatOmique: sharing experience on statistical analysis of omics data - Julie Aubert  
39 Evolutionary Dynamics of G-Quadruplexes in Human and Other Great Ape Telomere-to-Telomere Genomes - Saswat Mohanty  
40 KGATE, an Autoencoder Training Environment for exploring and benchmarking Knowledge Graph Embedding models - Benjamin Loire  
47 Exploring the Richness of the French Galaxy Ecosystem - Bérénice Batut  
48 Galaxy Training: A powerful framework for teaching! - Bérénice Batut  
51 Genome Annotation tooling in Galaxy: contributions of the EuroScienceGateway project - Romane Libouban  
54 Investigating the habitat range of yeast species - Thomas Biscop  
55 Unraveling gut microbiome latent structures: enterosignatures and microbial guilds - Mathilde Sola  
57 fastCNV: Fast and Accurate CNV prediction from scRNA-Seq and Spatial Transcriptomics Data - Gadea Cabrejas  
61 Characterizing the landscape of genomic rearrangements associated to double-strand breaks associated to transcribed loci (TC-DSB) - Amel Benarbia  
63 Generation Mechanisms and Species-Specific Properties of Beta Oscillations in the Basal Ganglia - Elena Nicollin  
Plant-PLMview: a web-tool and *in silico* method for identifying cis-regulatory elements in gene-proximal regions of plants - Franck Samson and Cécile Guichard  
68 Normalization Strategies in Lipidomic Profiling: Implications for Ewe's Milk Lipolysis Biomarker Discovery - Alyssa Imbert  
69 Microbial transfers in dairy systems under changing climate and farming practices - Sébastien Theil  
71 A web platform for taxonomic exploration of metabarcoding databanks - Olivier Rué  
72 Lifting the veil on Challenging Medically Relevant Filaggrin Gene - Victor Grentzinger  
74 A Robust Computational Framework to Characterize the Genetic Diversity Across 3,570 Strains in *S. cerevisiae* - Louis Ollivier  
77 Pan1c: A Snakemake Workflow for Chromosome-Level Pangenome Construction and analysis - Martin Racoupeau  
78 Viral RNA meets RIG-I: insights from RNA-Seq - Rachel Legendre  
79 Long-read sequencing of the 16S-ITS-23S operon enables maternal microbiota transmission study at the strain-level resolution - Maëlle Pomès  
80 Microplastic effects on Mosquito Gene Expression and Microbiota - Ahamed Tchatakoura  
177 Comprehensive Identification of Pleiotropic Associations for Chronic Lymphocytic Leukemia - Anthony Haidamous  
178 The Good, the Bad and the Ugly: methodological and conceptual pitfalls in single-cell data science - Yanis Aslouadj  
191 OLGA: Local Accession Management Tool for Biological Resources Centres (BRC) - Jacques Lagnel  
202 Using OntoWeaver to Integrate Heterogeneous Information in the OncodashKB Semantic Knowledge Graph for Finding Personalized Actionable Drugs in Ovarian Cancer - Matthieu Najm



Amphi D	<b>Session Demo - Chair: Nicolas Tourasse</b>
17:30 - 18:00	ABRomics-analysis: a web service for the analysis of Antibiotic Resistance in bacterial genomes - Julie Lao
18:00 - 18:30	WHOOPER: Web application for Hands-On identification of protein co-Occurrence among Phyla, focused on user ERgonomics - Sylvain Marthey
Amphi E	<b>Session Demo - Chair: Elodie Darbo</b>
17:30 - 18:00	Bridging the Gap Between R and Python in Bulk Transcriptomic Data Analysis with InMoose - Maximilien Colange
18:00 - 18:30	Interactive toolbox for cell-type deconvolution of spatial transcriptomics data - Lucie Gaspard-Boulin

Main Hall	<b>Welcome Cocktail</b>
18:30 - 20:00	

## DAY 2 - Wednesday July, 9th

Main Amphi	<b>Keynote: Simona Cocco - Chair: Morgane Thomas-Chollier</b>
9:00 - 10:00	SARS-CoV-2 viral evolution and antibody resilience
Main Hall	<b>Break &amp; Coffee</b>
10:00 - 10:30	
Main Amphi	<b>Session: Structural Bioinformatics and Proteomics - Chair: Daniel Gautheret</b>
10:30 - 10:50	Comparative Analysis of Deep Learning-Based Algorithms for Peptide Structure Prediction - Clément Sauvestre
10:50 - 11:10	Searching for variable structural motifs in RNA graphs using simple descriptors - Camille De Amorim
11:10 - 11:30	RNA3DClust: unsupervised segmentation of RNA 3D structures using density-based clustering - Quoc Khang Le
Amphi D	<b>Session: Systems Biology - Chair: Sarah Djebali</b>
10:30 - 10:50	Regulatory response of maize to water deficit mediated by distal cis-regulatory elements - Thomas-Sylvestre Michau
10:50 - 11:10	Predictive modelling of Acute Promyelocytic Leukaemia resistance to Retinoic Acid therapy - Denis Thieffry
11:10 - 11:30	Building a modular and multi-cellular virtual twin of the synovial joint in Rheumatoid Arthritis - Anna Niarakis
Amphi E	<b>Session: Statistics, Machine Learning, and AI for Biology and Health - Chair: Nathalie Vialaneix</b>
10:30 - 10:50	Ten years of the Pasteur's Bioinformatics and Biostatistics Hub: achievements and perspectives - Hervé Ménager
10:50 - 11:10	Developing machine-learning-based amyloidogenicity predictors with Cross-Beta DB - Valentin Gonay
11:10 - 11:30	Leveraging multi-omics integration to uncover childhood trauma-related mechanisms in bipolar disorder. - Margot Derouin



Main Hall    **POSTERS - Session 2**  
11:30 - 12:30

- 53 Building a Standardized Database for Honey Bee Microbiome: Addressing Metadata and Data Comparability gaps - Bérénice Batut  
56 A database to predict safety risks of raw milk cheeses from farming practices in climate change context - Sébastien Theil  
82 Accounting for defective genomes in influenza consensus genome reconstruction - Kévin Da Silva  
83 Exploration of non-coding and structural variations in early-onset Alzheimer disease patients: contribution of PacBio HiFi long-read sequencing - Fatima-Zahra Abani  
84 BYTE-Sea: the digital infrastructure of ATLASea, the French marine genome sequencing programme - Annie Lebreton  
85 Identification of transcriptional regulatory networks underlying variable human immune responses - Anthony Bertrand  
86 Multi-omics data integration in constraint-based modeling of metabolic networks to study the metabolism of adipose-derived stem cells - Maximilian Stingl  
87 EuphausiidB: A Transcriptomic reference Database for Krill Species - Triskell Cumunel  
89 Generation of metabolomic-informed models of metabolism in complex microbial communities - Coralie Muller  
90 Assessing rhythmicity in the marine diatom *P. tricornutum* circadian transcriptome - Irelka Colina Moreno  
94 Detection of Somatic Copy Number Alterations from Single-Cell Multiomics Data with the R package muscadet - Marie Denoulet  
95 Exploring Rare Genetic Variants in French Centenarians: A Path to Understanding Longevity - Assia Benmehdia  
97 InterPro: Accelerating Protein Annotation with AI - Matthias Blum  
98 Uncovering the sweetpotato virome in Burkina Faso using Nanopore-based metagenomics and bioinformatics approaches - Pakyendou E. Name  
99 SeaGO: A Scalable and High-Performance Platform for Functional Annotation and Genomic Data Visualization - Said Ait Salah  
103 Gammaproteobacteria Operons for polysaccharide utilization: from Algae to a Larger Scope (GOALS project) - Matthieu Boulinguez  
105 GRIS: Gene Repertoires Indexes of Similarity - Julien Guglielmini  
106 A strategy for balanced haplotype-resolved de novo assembly of the autotetraploid genome of *Medicago sativa* - Christophe Klopp  
109 Integrases as Key Players in Shaping Pangenome Hotspots in Enterobacteriaceae - Romane Junker  
112 MEMHDX v2: Advanced Preprocessing and Enhanced Analysis of HDX-MS Datasets - Steven Volant  
113 Comprehensive Herpesviruses Antiviral drug Resistance Mutation Database (CHARMD) - Daniel Diaz Gonzalez  
114 Overall genetic characterization of a 3D iPSC-derived cell therapy for Parkinson Disease through a multi-omic approach - Elodie Babina  
115 SIDURI: from an integrative information system to a user-friendly portal for data analysis and visualisation dedicated to fermentation - Agnès Barnabé  
116 Optimizing in silico drug discovery: simulation of connected differential expression signatures and applications to benchmarking - Catalina Gonzalez Gomez  
117 GrAuFlow: A snakemake workflow for pangenome graph augmentation using assembled short-read data - Antoine Malet  
118 Data stewardship strategy of the Ferments du Futur grand challenge - Erwan Le Floch  
119 Gradiv: a tool to compute diversity statistics from a pangenome graph - Margaux Imbert  
120 Bridging gene-level and sequence-level pangenome graph to explore microbial diversity - Hanin Ali  
122 Large Language Models-driven Reconstruction of Sequence Read Archive Metadata for Cancer Research - Fiona Hak  
123 POMOdORO database: a Pan OMics cOllection of tOmato undeR biOtic stress - Alexina Damy,  
124 Towards new therapeutic strategies for protein x-deficient Triple-Negative Breast Cancers - Gwenn Guichaoua  
126 Genomic Approaches for Nematode Systematics: UCEs and Machine Learning - Lucy Jimenez  
128 Evolutionary process of breast cancer metastasis - Zakia Tariq  
129 LoRa-com: INRAE's Shared LoRaWAN Platform for Agro-environmental Research - Jacques Lagnel  
132 International Society for Computational Biology Student Council Regional Student Group France (RSG France): Association of Young Bioinformaticians of France (JeBiF) - Magis Papail  
133 cMFA for multi-omics data integration in microbial community models - Sthyve Tatho  
134 Towards reproducible single-cell transcriptomics analysis - Audrey Onfroy  
135 Assessing the contribution of ancient genomic data to the inference of historical demographic parameters - Arnaud Quelin  
136 iKISS: A Reference-Free Pipeline for Inferring Domestication Traces in Plants - Julie Orjuela  
141 The Environmental Cost of Bioinformatics: A Perspective from GenOuest, a Bioinformatics Platform - Rémy Siminel  
142 Large-scale proteomics and Deep learning for the generation of protein-protein interaction (PPI) maps at atomic resolution - Caroline Sancho  
144 Data modeling in agroecology, a first schema to characterize plant holobiont and environmental data - Marie Lahaye  
146 IFB/ELIXIR-FR contributions to the ELIXIR Training Platform Programme - Olivier Sand  
147 Protein fold diversity and evolution in Archaea: from adaptation to extreme environments to the origin of biodiversity - Ambre Baumann  
148 Bread wheat pangenome graph provides access to gene diversi-ty, structural variations and key agronomic loci architecture - Pauline Lasserre-Zuber  
149 Computational modeling of JAK inhibitors in patients with Rheumatoid Arthritis - Elisa Mages  
150 Transient RNA structures and recombination in H7N9 high pathogenicity Avian Influenza virus - Aldair Martin Martinez Pineda  
152 DigiDermA: Modeling Interactions between Mast Cells and Sensory Neurons in Atopic Dermatitis  
154 ABRAAM: Agent-Based RheumAtoid Arthritis Model for personalised therapy  
158 SynOmics: A Synthetic Data Pipeline for Transcriptomics and Clinical Data Accelerating Benchmarking Study - The-Chuong Trinh



Amphi D	<b>Session Demo - Chair: Fleur Mougin</b>
11:30 - 12:00	Network-centric identification and analysis of a model of post-traumatic stress disorder with NORDic - Fabien Romano
12:00 - 12:30	Demonstrating OntoWeaver to Integrate Heterogeneous Information in the OncodashKB Semantic Knowledge Graph for Finding Personalized Actionable Drugs in Ovarian Cancer - Matthieu Najm
Amphi E	<b>Session Demo - Chair: Simon Labarthe</b>
11:30 - 12:00	CroCoDeEL: accurate control-free detection of cross-sample contamination in metagenomics data - Lindsay Goulet
12:00 - 12:30	LAGOON-MCL: A Nextflow pipeline for comprehensive protein sequence annotation and comparison - Jérémie Rousseau
Main Hall 12:30 - 14:00	<b>Lunch</b>
Main Amphi 14:00 - 15:00	<b>Keynote speaker: Eric Rivals - Chair: Raluca Uricaru.</b> On n'a pas de terres rares, mais on a des idées. Partitionnement en classe d'équivalence pour le test d'algorithmes du texte.
Main Amphi 15:00 - 16:00	<b>Assemblée Générale SFBI</b>
Main Hall 16:00 - 16:30	<b>Break &amp; Coffee</b>
Main Amphi 16:30 - 17:30	<b>Network presentations - IFB, GDR BIMM, JEBIF, MERIT, PCI, Bioinfo-Dag</b>
17:30 - 20:00	<b>CULTURAL ACTIVITIES (details on last pages)</b>

## DAY 3 - Thursday July, 10th

Main Amphi 9:00 - 10:00	<b>Keynote speaker: Emma Schymanski - Chair Sylvain Prigent</b> Open Science Data Processing and Integration Workflows in Metabolomics and Exposomics
Main Hall 10:00 - 10:30	<b>Break &amp; Coffee</b>
Main Amphi 10:30 - 10:50	<b>Session Systems Biology - Chair: Damien Eveillard</b> Metagenome-scale metabolic modelling for the characterization of cross-feeding interactions in freshwater cyanobacteria-associated microbial communities - Juliette Audemard
10:50 - 11:10	Met4J: a library, a toolbox and a workflow suite for graph-based analysis of metabolic networks - Clément Trainay
11:10 - 11:30	Methods for a species-specific genome-scale metabolic model designed for eukaryotes and applied to the <i>Ascophyllum nodosum</i> macroalga - Pauline Hamon-Giraud
Amphi D 10:30 - 10:50	<b>Session: Algorithms and data structures for sequences - Chair: Matthias Zytnicki</b> Vizitig: context-rich exploration of sequencing datasets - Bastien Degardin
10:50 - 11:10	Reindeer2: practical abundance index at scale - Yohan Hernandez Courbevoie
11:10 - 11:30	OReO: Optimizing Read Order for practical compression - Mathilde Girard
Amphi E 10:30 - 10:50	<b>Session Workflows, Reproducibility, and Open Science - Chair: Erwan Corre</b> Madbot, a metadata and data brokering online tool to ensure the adoption of standards and FAIR principals in an open science context - Imane Messak
10:50 - 11:10	Assessing bioinformatics software annotations: bio.tools case-study - Ulysse Le Clanche
11:10 - 11:30	A decade of strengthening bioinformatics in West Africa: HPC infrastructure, training, and scientific collaboration - Ezechiel B. Tibiri



Main Hall

## POSTERS – Session 3

11:30 - 12:30

- 2 URGI – A scientific facility dedicated to plant bioinformatics - Mariène Wan  
50 Breaking Myths: The Reality of Galaxy's Capabilities and Impact - Bérénice Batut  
65 GBOT upgrade: a loci comparison tool dedicated to the exploration of duplications and synteny - Franck Samson  
67 A priori estimation of reproducibility odds informs the sizing of omic data cohorts - Maximilien Colange  
155 The HARMONI project: Evaluating advanced microbiota characterization methods for host and environmental samples using DNA metabarcoding and metagenomic sequencing - Lindsay Goulet  
159 A High-Throughput Approach and Pipeline for Single-Bacterium Transcriptomics - Ngoc Chau Pham  
162 Assessing phenomic prediction in the plant species Stevia rebaudiana B - Patricia Homobono Brito de Moura  
164 French Bioinformatics Institute's Initiatives for Biodiversity Genomic Data Management - Clara Emery  
165 Investigating taxonomy-based clustering of HiFi reads for de novo assembly of complex metagenomes - Nicolas Maurice  
168 gwas-pipe: a Nextflow pipeline for GWAS analyses incorporating quality control - Jacques Lagnel  
169 Identifying subtypes in neurological disease patients - Julie Segueni  
180 Virome@tlas, a digital platform for the virosphere surveillance - Elea Pauliat and Paul Tissot  
181 Interpretable Multi-Class Classification of the Microbiome Using Predomics - Fabien Kambu Mbuang  
182 Deciphering codon choice: how deep learning models select between synonymous codons - Helene Bret  
183 A refined strategy linking transcriptomics and metabolic models for deciphering chemical induced changes - Maxime Lecomte  
185 Evolutionary divergence of regulatory chromatin contacts following gene duplication - Victor Lefebvre  
187 Integrative Bulk and Single-Cell Multiomic Framework for Tracing (Sub)clonal Evolution in Multiple Myeloma - Nils Giordano  
189 Virus–host–ecosystem studies at large-scale: Please check your sequence metadata! - Paul Tissot and Elea Pauliat,  
192 Spatial transcriptomic analysis of neuroinflammation and brain dysfunction induced by bacterial meningitis in juvenile mice - Alicia Gouge  
193 Data-Driven Discovery of Novel Antigen Targets: A Scalable Bioinformatics Pipeline - Lea Meunier  
194 SnoBoard: surfing on ncRNA modifications and snoRNA guides - Philippe Bordron  
195 Size optimization of RNA sequences in the RNA World context.  
196 Gpredomics: rapid, interpretable and accurate prediction models for compositional data - Matteo Bettati  
199 GaaS: Galaxy as a Service - Rémi Planel  
200 Protein Function Prediction: Graph Neural Networks as Multi-modal Aggregators of Sequences, Networks, and Ontologies - Antoine Toffano
- 201 Characterization of swine influenza viruses infections in pig herds: A machine learning approach identifying key environmental, physiological, immunological and virological determinants - Elisabeth Hellec  
203 Integrating proteomics data into a genome-scale metabolic model to predict metabolic fluxes in maize leaf - Maëla Sémyer  
206 Co-building a Sustainable Bioinformatics Training Program: The International Certificate in Bioinformatics and Genomics in West Africa - Ezechiel B. Tibiri  
207 Identification and characterization of inversions' content in *Pseudogymnoascus destructans* - Hugo Bellavoir  
208 Models and Methods for de novo Identification of Transposable Elements in short-read RNAseq data - Sasha Darmon  
210 A pipeline for Trans-kingdom small RNAs analysis - Alexis Bourdais  
214 Methods for identifying associations between plant genomes and symbioses despite the presence of paralogues - Pierre Gérenton  
215 Recursivity improves spatial transcriptomics data clustering quality - Christophe Le Priol  
220 Using PhysiCell modelling to simulate the PDAC tumor microenvironment response to therapies based on patients' spatial omics data - Owen Griere  
223 SCANS: Assessing lncRNA conservation across species - Aurore Besson  
224 Predictive metabolomic to decipher plant eco-evolutionary tendencies - Cathleen Mirande-Ney  
225 Single-cell classification of breast cancer and identification of cell surface protein targets - Quentin Rott  
227 Exploring the relationship between GBA1 host genotype and gut mi-crobiome in the GBA1L444P/WT mouse model: Implications for Par-kinson disease pathogenesis - Mallia Geiger  
229 Probabilistic motif search and differentials in pangenome graphs - Benjamin Linard  
233 vvv2\_align\_SE, vvv2\_align\_PE / vvv2\_display: Galaxy workflows and software to compute, summarize and visualize variant calling and annotations of a viral assembly - Fabrice Touzain  
235 DLScuff: Deep Learning for Hi-C Assembly Correction and Scaffolding - Alexis Mergez  
236 MSangepop: Simulating complex structural variants under advanced demographic scenarios using the coalescent - Lucien Piat  
237 Predicting Non-Response to Cystic Fibrosis Modulators from Microbiota Using Standard and Custom Machine Learning - Céline Hosteins  
239 Multi cohort investigation of the AML tumour microenvironment in relation to mutational profiles - Emilie Montaut  
240 Comparative Evaluation of Short-Read, Long-Read, and Hybrid Assemblies for MAG Recovery in Human Fecal Metagenomes - Baptiste Hennecart  
241 Evolutionary genomics of the *Aedes aegypti* Mosquitoes in the West Indies: Impact of Transposable Elements in their Adaptation - Meron Tsetargachew  
242 CellTFusion: A novel approach to unravel cell states via cell type deconvolution and TF activity estimated from bulk RNAseq data identifies cell niches potentially predictive of cancer progression- Marcelo Hurtado  
247 Mapping the Human Small Intestinal Microbiome: A Statistical Learning Approach - Zakaria Tougui  
253 A computational workflow to map and evaluate the impact of human genetic variation on the interactome - Thomas Stosskopf  
255 GraDex, a set of indexes for sequence graphs in GFA format - Mourdas Mohamed  
256 A workflow for the analysis of QuantSeq FWD data - Pascal G P Martin



Amphi D	<b>Session Demo - Chair: Sylvain Prigent</b> HUMESS: A tool to integrate quantitative transcriptomic and metabolic network modelling to unveil context specific gene signatures - Louis Paré
11:30 - 12:00	
12:00 - 12:30	SynFlow: a Syri based interactive viewer - Marilyne Summo
Amphi E	<b>Session Demo - Chair: Pascal Martin</b>
11:30 - 12:00	Gratools a tool for easy manipulation of GFA - Camille Carette
12:00 - 12:30	REPET v4.0: A Comprehensive Tool for Transposable Element Analysis - Etienne Bardet
Main Hall	
12:30 - 14:00	<b>Lunch</b>
Main Amphi	
14:00 - 15:00	<b>Keynote speaker: Björn Grüning - Chair: Jacques Van Helden</b>
Main Amphi	<b>Mini-symposium: Comment concilier nos activités en bioinformatique avec les limites planétaires ?</b>
Amphi D	<b>Mini-symposium: AI in Healthcare: From Fundamentals to the Clinic</b>
15:00 - 18:00	
Amphi E	<b>Mini-symposium: The Genomics of Biodiversity</b>
15:00 - 18:00	
Amphi B	<b>Mini-symposium: Methods for Interfacing with Graphs of Genomic Sequences: novel pangenome paradigms</b>
15:00 - 18:00	
19:00 - 00:00	<b>Gala dinner (details on last pages)</b>

## DAY 4 - Friday July, 11th

Main Amphi	<b>Session Algorithms and data structures for sequences - Chair: Sèverine Bérard</b> SVJedi-Tag: a novel method for genotyping large inversions with linked-read data - Mélody Temperville GrAnnoT, a tool for efficient and reliable annotation transfer through pangenome graph - Nina Marthe Facilitating genome annotation using ANNEXA and long-read RNA sequencing - Nicolaï Hoffmann
Amphi D	<b>Session Statistics, Machine Learning, and AI for Biology and Health - Chair: Sophie Schbath</b> Exhaustive Identification of Pleiotropic Loci for Serum Leptin Levels in the NHGRI-EBI Genome-Wide Association Catalog - Anthony Haidamous jsPCA enables fast, interpretable and parameter-free domain identification in 3D spatial transcriptomics data - Ines Assali RITHMS: An advanced stochastic framework for the simulation of transgenerational hologenomic data - Solène Pety
Amphi E	<b>Session Functional and Integrative Genomics - Chair: Sylvain Foissac</b> rnaends: an R package targeted to study the exact RNA ends at the nucleotide resolution - Tomas Caetano Strain-dependency of metabolic pathways within 1,494 genomes of lactic bacteria evidenced with Prolipipe, an in silico screening pipeline - Noé Robert Benchmarking circRNA Detection Tools from Long-Read Sequencing Using Data-Driven and Flexible Simulation Framework - Anastasia Rusakovich
Main Hall	<b>Break &amp; Coffee</b>
Main Amphi	<b>Keynote: Jean Monlong - Chair: Claire Lemaître</b> Integrating structural variants in genomic studies of rare and complex diseases with long-read sequencing and pangnomes
Main Amphi	<b>Conference closing words</b>
Main Hall	<b>Lunch Box</b>



## Information about social events

### Tuesday, July 8th



#### Welcome cocktail

ENSEIRB building, main hall.  
18:30-20:00

### Wednesday, July 9th



#### Social events:

Meeting for bus departure at 17:40, ENSEIRB building

##### **Wine tasting by ISVV**

Institut des Sciences de la Vigne et du Vin, 210 Chemin de Leysotte,  
Villenave d'Ornon

##### **Initiation Salsa - Jardin Public**

Jardin Public Cours de Verdun, Bordeaux  
Tramway B: STOP Quinconces (+ 7 mn walk)

##### **Escalade, Arkose**

170 Cr du Médoc Galerie Tatry, 33300 Bordeaux  
Tramway B: STOP Cours du Médoc (+ 16 mn walk)  
Remember to bring sportwear

#### On-site activity at 17:45, ENSEIRB

##### **Online Game – GeoGuessr:**

On-site: Amphitheatre D - Bring your laptop

<https://inrae-fr.zoom.us/j/91754534311?pwd=fAnMskBpcVA6P9KnHQo2ki2kDPuB6c.1>

#### Downtown on-site meeting at 18:00

##### **Karaoké**

BAM Karaoké Box Chartrons, 38 rue Cornac, Bordeaux  
Tramway B: STOP CAPC Musée d'Art Contemporain (+ 6 mn walk)

##### **Escape Game John Doe**

7 rue d'Alembert Bordeaux  
Tramway B: STOP Victoire (+ 3 mn walk)

#### Downtown on-site meeting at 18:30

##### **Bordeaux City Tour (~1.5 hours)**

Rendez-Vous monument des Girondins, 2792 Pl. des Quinconces, Bordeaux  
Tramway B: STOP Quinconces (+ 2 mn walk)

### Thursday, July 10th, from 19:00



#### Gala dinner

##### **Bordeaux Palais de la Bourse - BPB**

17 Pl. de la Bourse, Bordeaux  
Tramway B: STOP Grand Théâtre (+ 6 mn walk)





**GDR** Groupement  
de recherche  
**BIMMM** Bio-Informatique Moléculaire :  
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