

The Genomics of Transposable Elements

Unmasking their Complex Contribution to Genome Function and Evolution

PSL-Qlife Winter School in Quantitative Biology – February 6th–10th , 2023

Monday, February 6th

Tuesday, February 7th

Wednesday, February 8th

Thursday, February 9th

Friday, February 10th

8:45 - 9:00 am **V. Colot, P. Charnay**
Introduction

9:00 - 10:30 am **Josefa Gonzalez**
Transposable elements in adaptive evolution: linking genotype to phenotype.

10:30 -11:00 am *Coffee break - Room 305*

11:00 - 12:30 am **Deborah Bourc'his**
DNA and RNA modifications of transposons

12:00 - 1:30 pm *Lunch*
Room 305

1:30 - 5:00 pm
Digital workshop
Part1

How TEs contribute to genome sequences?

Josefa Gonzalez

1:30 - 5:00 pm
Digital workshop
Part1

How TEs contribute to the epigenome?

Deborah Bourc'his

9:00 - 10:30 am **Helen Rowe**
Transposable elements as gatekeepers of chromatin remodeling and inflammation

10:30 -11:00 am *Coffee break - Room 305*

11:00 - 12:30 am **Leandro Quadrana**
Title

12:00 - 1:30 pm *Lunch*
Room 305

1:30 - 5:00 pm
Digital workshop
Part2

How TEs contribute to genome sequences?

Leandro Quadrana
Vincent Colot

1:30 - 5:00 pm
Digital workshop
Part2

How TEs contribute to the epigenome?

Helen Rowe
Rocio Enriquez-Gasca

9:00 - 10:30 am **Felipe Karam Teixeira**
Small RNAs and the control of genome functioning

10:30 -11:00 am *Coffee break - Room 305*

11:00 - 12:30 am **Richard Durbin**
Title

12:00 - 1:30 pm *Lunch*
Room 305

1:30 - 5:00 pm
Digital workshop

How TEs contribute to genome activity?

Felipe Karam Teixeira
Amir Hay
Daniel Gebert

1:30 - 5:00 pm
Digital workshop

How TE evolutionary dynamics impact on chromatin structure and function?

Helen Rowe
Rocio Enriquez-Gasca

9:00 - 10:30 am **Gaël Cristofari**
Genomic approaches to study transposable elements in the human genom

10:30 -11:00 am *Coffee break - Room 305*

11:00 - 12:30 am **Jose Tubio**
Title

12:00 - 1:30 pm *Lunch*
Room 305

1:30 - 5:00 pm
Digital workshop

How to measure TE expression?

Gaël Cristofari

1:30 - 5:00 pm
Digital workshop

How to use Nanopore sequencing to explore TEs associated with disease?

Jose Tubio

9:00 - 10:00 am Discussion/restitution with students

10:00 -10:30 am *Coffee break - Room 305*

10:30 - 12:30 am **Rebecca Berrens**
Title

12:00 - 1:30 pm *Lunch*
Room 305

1:30 - 5:00 pm
Digital workshop

How TE evolutionary dynamics impact on interindividual variation?

Vincent Colot
Chloé Agathe Azencott

1:30 - 5:00 pm
Digital workshop

Single cell transcriptomics using Nanopore sequencing

Rebecca Berrens

5:00 - 6:00 pm *Coffee break - Room 305*

6:00 - 8:00 pm
Poster session & Wine, beer and cheese

5:00 - 5:30 pm *Coffee break - Room 305*

5:30 - 6:30 pm **Jan Korbel**
Deciphering genomic structural variation in the human genome using long-read sequencing

7:30 pm
Speakers/TAs dinner

5:00 - 5:30 pm *Coffee break - Room 305*

5:30 - 6:30 pm **Michael Imbeault**
KRAB zinc finger proteins, transposable elements and the evolution of gene regulatory networks

5:00 - 5:30 pm *Coffee break - Room 305*

5:30 - 6:30 pm **Sandra Duhaucourt**
Control of transposable by Polycomb in Paramecium

6:30 - 8:00 pm
Cocktail

5:00 - 6:00 pm
Farewell Cocktail