## Introduction to RNA-seq and ChIP-seq data analysis

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# Introduction to RNA-seq and ChIP-seq data analysis

- Introduction
  - Illumina sequencing technology
  - Galaxy
- RNA-seq
  - Library preparation and experimental design
  - Quality control
  - Read mapping
  - Data analysis
  - Ensembl Biomart
  - Functional analysis
- ChIP-seq
  - Library preparation and experimental design
  - Data analysis
- Galaxy workflows
- Correlation of RNA-seq and ChIP-seq data

#### Data files and software

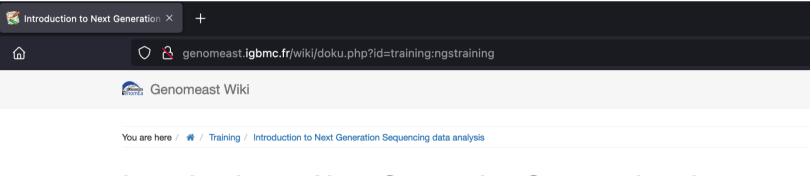
- You should have on your computer
  - Files needed for practical sessions
    - Files you have downloaded from our FTP server
      - Host : ngs.igbmc.fr/analyzeddata
      - Login : NGS\_data\_analysis\_training
      - Password : NGSdat\_23
  - Software
    - Latest version of zoom
    - Excel
    - Firefox
    - Latest version of JAVA
    - Integrative Genomics Viewer version 2.11.0

You should have an account on Galaxy France server

#### **Training material**

- Lectures and answers to questions addressed during practical sessions
  - http://genomeast.igbmc.fr/wiki/
  - → Training

Introduction to Next Generation Sequencing data analysis



### Introduction to Next Generation Sequencing data analysis

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- Do not hesitate to ask questions
  - Reactions → raise hand
  - Chat
- Mute your microphone when are not speaking
- Practical parts
  - 2 rooms
    - Ask questions
    - Share screen
    - Reactions :
      - you have completed the exercise and do not have any question
      - You get an error / you need help
      - You have a question
  - Go back to the main session to go through the exercise together