



Swiss Institute of  
Bioinformatics

# Long-read sequence analysis

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# Teachers

- **Gregoire Rossier:** Training manager at SIB
- **Geert van Geest:** Trainer at SIB/bioinformatician at IBU Bern
- **Guest lectures:**
  - Alban Ramette: applications with ONT sequencing
  - David Stucki: representing PacBio

# General learning outcomes

- Describe the **basics** behind **PacBio** SMRT sequencing and **Oxford Nanopore** Technology sequencing
- Use the command line to perform **quality control** and **read alignment** of long-read sequencing data
- **Develop** and execute a bioinformatics **pipeline** to perform an alignment-based analysis
- Answer **biological questions** based on the **analysis** resulting from the pipeline

# Learning experiences

- Lectures
- Quiz questions
- Exercises
- Group project

# Question 1-3

# Communication

- Course website:

<https://sib-swiss.github.io/NGS-longreads-training/>

- Google docs

# Introduction round

- Introduce yourself:
  - Where do you work
  - Why are you joining this course