NGS - quality control, alignment, visualisation

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Trainers/organisers

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- **Geert van Geest:** trainer at SIB/bioinformatician at IBU Bern

Learning outcomes

- Understand the **basics** of the different NGS **technologies**
- Perform **quality control** for better downstream analysis
- **Align** reads to a **reference** genome
- **Visualize** the output

Learning experiences

- Lectures
- Polls + Quiz questions
- Exercises

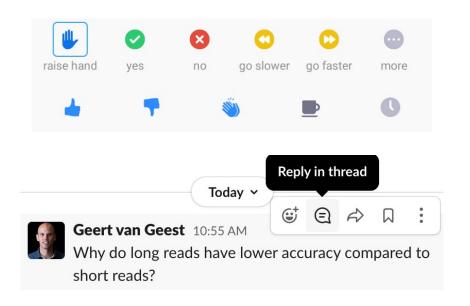# Poll

Communication

- Course website:

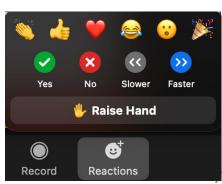https://sib-swiss.github.io/NGS-variants-training/

- Slack
- Google docs

Asking questions

- During lectures: zoom functionality
- Personal interest questions: #background
- During exercises: #q-and-a on slack

OR

Learning outcomes – per chapter

Introduction ✏️

Learning outcomes

After having completed this chapter you will be able to:

- Illustrate the difference between short-read and long-read sequencing

- Explain which type of invention led to development of long-read sequencing

- Describe the basic techniques behind Oxford Nanopore sequencing and PacBio sequencing

- Choose based on the characteristics of the discussed sequencing platforms which one is most suited for different situations

Get to know each other

- Introduction round
- Write three topics you want to learn about