

# Bioinformatics (MTAT.03.239)

# Introduction

Who are you ?

Why are you here ?

What is your background?

# Course format

Title	Bioinformatics
Code	MTAT.03.239
Lecturer	Priit, Leopold, Sven, ...
Lectures	Thursday 12:15 – 14:00
Practice session	Thursday 14:15 – 16:00
Location	J. Liivi 2 – 612

# Course format

- 6 ECTS – 156 h
- Lectures & practice sessions
- Home assignments
- Project
- Exam

# Course outline

- Course page : <http://courses.cs.ut.ee/2015/bi/>
- Exam 17 Dec 12:15
  - in Jan ?

# Aim of the course

- To introduce the concepts and principles of bioinformatics, starting from biological problem to algorithmic methods
- We learn
  - to understand the concept of Integrative analysis involving Biology,
  - statistics, mathematics and computer science data management and data analysis
  - to understand biological, statistical, computational problems and apply your algorithmic or analysis skills to solve a biological problems

# Bioinformatics

- vast amount of information being generated - especially **DNA/RNA** sequencing
- species, many humans (medical)
- critical part - computational analysis of the data
- computational analysis is the bottle neck
- great demand for individuals with bioinformatics knowledge

# Bioinformatics

- background in mathematics, cs, ... should understand biological problem in your own perspective
- Current scenario - BIG data, integrative analysis, different experimental data, complex studies
  - to improve human health, life quality, agriculture, etc.



# What does bioinformatics mean for you?

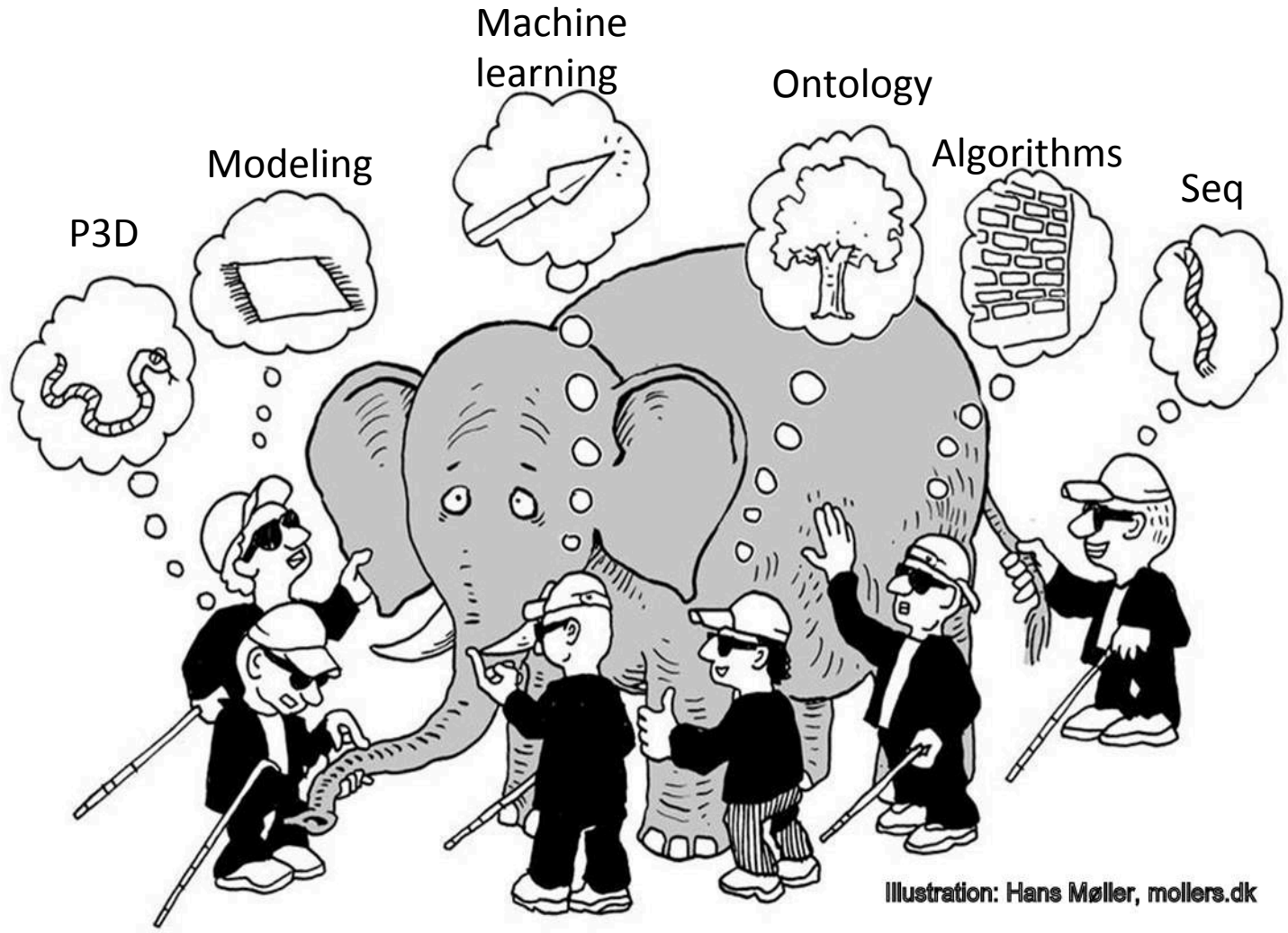


Illustration: Hans Møller, mollers.dk