



Bridging the gaps in bioinformatics/Getting started in bioinformatics

Course intro: Goals, expectations and how to make the most of it

The formal objectives

ILOs: intended learning outcomes



- Process sequencing data (from raw data to genomes)
- Perform basic analysis supporting epidemiological investigations, including interaction with public databases
- Critically evaluate data quality at all steps of the process
- Write basic python/bash scripts, to extract relevant information from processed data
- Write a basic processing pipeline

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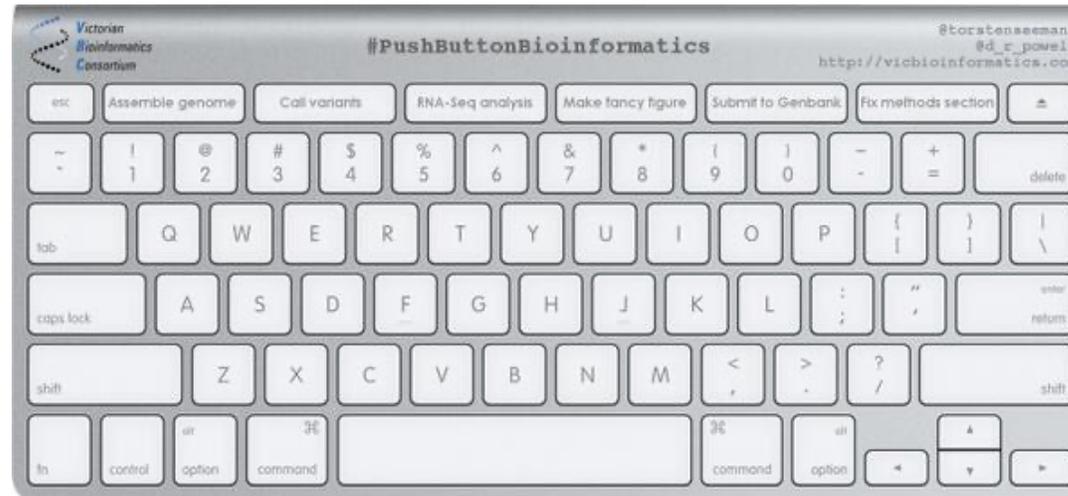
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Is it really necessary to learn programming?

This keyboard is fictional



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There is commercial bioinformatics software with more user-friendly interfaces. But:

- It can be expensive
- Commercial software is not “open source”
- Commercial software is for standard-type, widely used analysis
- Programming will enable you to solve many types of data problems efficiently
- A skilled programmer can do whatever she/he wants with data. Complete freedom!

Side-benefit: You will become part of a large world-wide community, with a strong tradition for helping each other out

Bioinformatics is hard. Especially in the beginning.



[Image: struggling with that one character that makes your script crash]

It takes time to learn bioinformatics



- This is a two-week course..
 - It takes years to become proficient
 - We aim to get you started on the journey
- Be patient. And be kind to yourself

This is a hands-on course



- We will spend most of the time doing computer practicals
- There will be some lectures. But don't expect detailed theory

How do you get the most out of this course?



- Active participation!
 - Ask a lot of questions
 - Give us feedback (not just at the end of the course)
- Continue learning after the course
 - Practice!
- This course is also a networking opportunity
 - Take advantage!

Acknowledgements

The creation of this training material was commissioned by ECDC to Statens Serum Institut (SSI) with the direct involvement of Kirsten Ellegaard