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Lightning Talk
Gabriella Rustici
1. **What are the training needs?**

- High-throughput technologies are extremely popular and generate vast amount of data that require increasingly sophisticated statistical and computational analyses.
- Bench scientists, who generate the data, often do not have the computational and statistical knowledge required to properly analyze it and have to rely on the support of a bioinformatician/statistician.
- Bench scientists and bioinformaticians have different backgrounds and the interaction between these two groups can be difficult.
- Bench scientists seek support from the statistician after the data have already been generated resulting in poor experimental design and statistically weak results.
1. What are you doing to address these needs?

- Our HT data analysis courses are aimed at researchers already involved in analysis projects and that have basic familiarity with the programming languages used during the course.
- Courses consists of a well balance mixture of:
  - lectures, which illustrate the fundamental concepts in the analysis of HT data, and
  - hands-on sessions (~50%), which allow the students to practice how to run analysis of HT data on real datasets.
- Focus on the use of open source, stable, actively developed and well-maintained software tools (i.e. Bioconductor, ...)
- Trainees should learn: (i) how to interpret HTS data, (ii) what the data analysis entails, and (iii) to critically evaluate the data analysis tools available.
2. What can you offer at a Pan-European level that is sustainable?

• Successful methodology for the design and the implementation of hands-on courses focusing on the analysis of high-throughput data

• Develop materials, based on face-to-face training, that can be converted into interactive tutorials and eLearning courses to reach a wider audience

• Train educators and academics involved in the teaching of these subjects to allow for the decentralization of our courses, in a scenario where courses participants are trained to train their respective local communities
3. What is your vision for a Pan-European, over-arching training strategy?

We need to build a cohesive community in order to:

1. Provide a forum where ideas can be exchanged
2. Raise awareness of on-going training efforts in specific subject areas so that experts can leverage on each other to develop training materials
3. Identify scientific areas which are not covered by existing training solutions and for which new solutions need to be developed
4. Create a repository of training materials which is available to the scientific community at large to help with the idea of courses’ decentralization