

11th Next Generation Sequencing: RNA-Seq data analysis

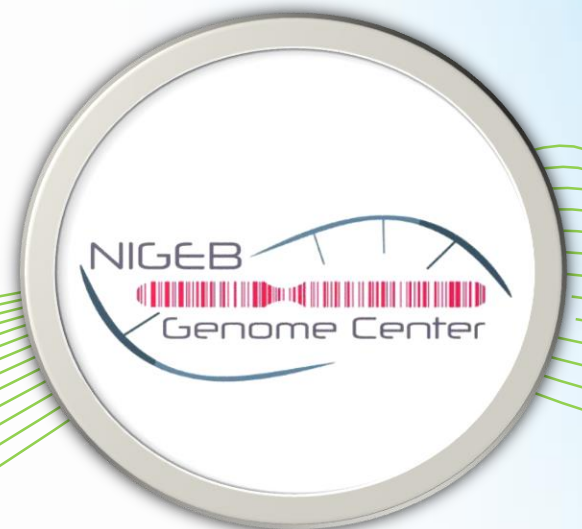
workshop



Map QR

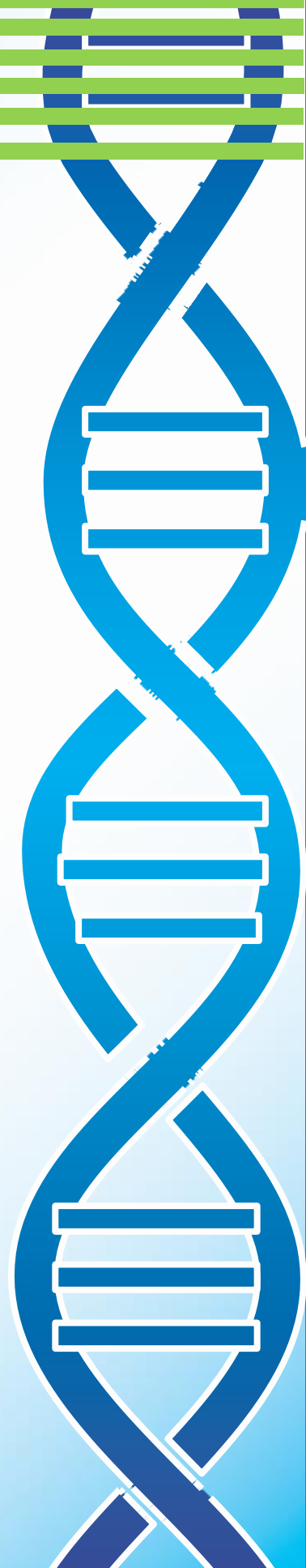
15- 16 February, 2017

Media Teb Gene
OMICSTM



Summary

The purpose of this workshop is to get a deeper understanding in Next-Generation Sequencing (NGS) with a special focus on RNA-seq data analysis. Advantages and disadvantages of current sequencing technologies and their implications on data analysis will be discovered. The participants will be trained to understand both, the data analysis aspects of NGS technologies and the functional implications of RNA-seq. Downstream analysis to infer the functional implication of the detected genes will be discussed including functional and GO analysis. All workshop attendees will be enabled to perform important first tasks of NGS data analysis themselves. The course layout has been adapted to the needs of beginners in the field of NGS bioinformatics and allows scientists with no or little background in computer science to get a first hands-on experience in this new and fast evolving research topic. After this workshop, the participants will be able to perform their own RNA-seq analysis using up-to-date methods and extract scientific valuable findings.



Training Outlines

- ✓ **NGS Technologies: Introduction and Applications**
- ✓ **Library Preparation and RNA QC**
- ✓ **Project Design and Experimental Considerations**
- ✓ **Quality Control and Data Pre-processing**
- ✓ **Introduction to The Command Line and Useful Commands in Linux**
- ✓ **Mapping to a Reference Genome and DGE Analysis**
- ✓ **Isoform Discovery and Expression**
- ✓ **Enrichment Analysis**
- ✓ **Visualization and Annotation**



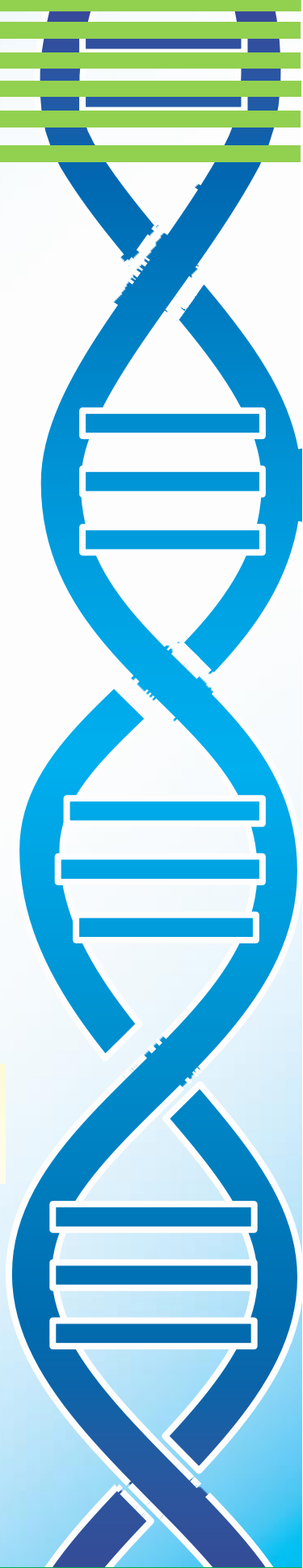
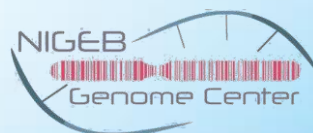
Collaborators



پژوهشگاه ملی مهندسی ژنتیک و زیست فناوری



ریاست جمهوری
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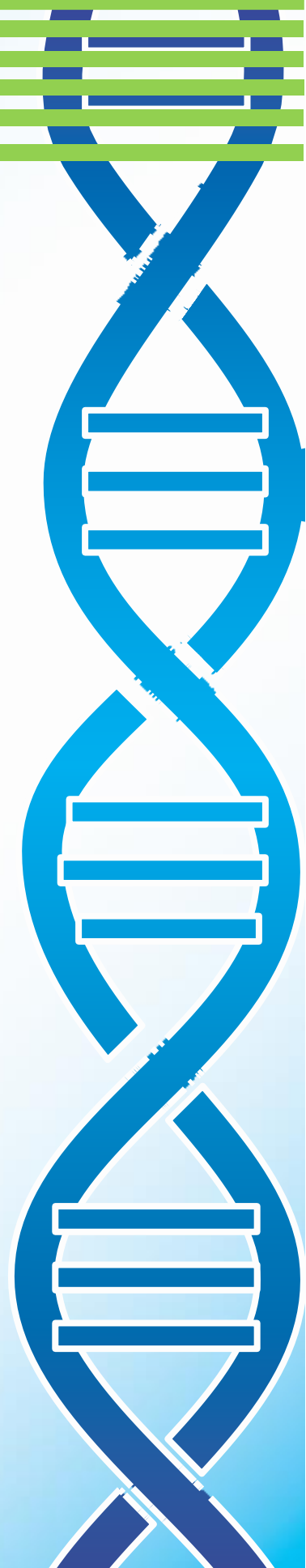
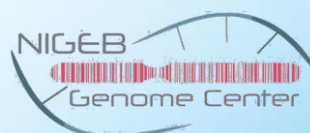
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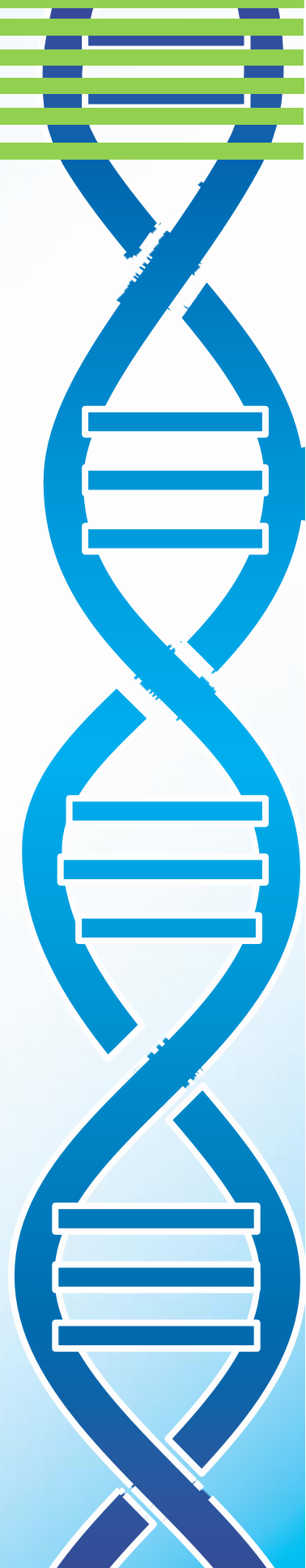
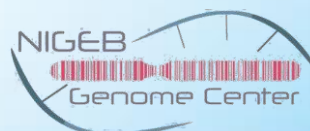
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Assessment and Evaluation

In this workshop, we prepare a quiz or challenge to assess how much information participants learned and we survey participants to see if they found the training beneficial.

Hope to meet you at this workshop

