Learning outcomes:

- 1) Principles of 1., 2. and 3. Generation sequencing approaches (How do the individual technologies work?)
- 2) Advantages and disadvantages of 1., 2. and 3. Generation sequencing approaches
- 3) Problems of standard RNA-seq
- 4) Advantages of metabolic labeling combined with RNA-seq
- 5) Concept of metabolic labeling combined with chemical nucleotide conversion sequencing (SLAM-seq; How does it work?)
- 6) Conceptual approach of Ribosome profiling (How does it work?)
- 7) Advantages and problems of single cell RNA-seq