

GSI – BIOPHYSICS SEMINAR

Dr. Maria Mendez-Lago

Genomics Core Facility

Institute of Molecular Biology gGmbH (IMB), Mainz

Thursday, 14th June 2018 at 2 p.m.

Lecture hall, Theorie SB3. 3.170a

Planckstraße 1, 64291 Darmstadt

“Next generation sequencing technologies”

Next generation sequencing (NGS) is the term that encompasses all DNA sequencing technologies that have revolutionized genomic research in the past decade. Nowadays, using NGS an entire human genome can be sequenced within a single day. In contrast, the previous Sanger sequencing technology, used to decipher the human genome, required over a decade to deliver the final draft. Not only the speed in which sequencing can be done increased, but also the material required to prepare a sequencing library and the costs related to sequencing have been drastically reduced. For all these reasons, the genomics field has exploded with new methods and applications constantly covering a large proportion of scientific articles.

In this seminar, a broad overview of the NGS technologies will be presented, making special emphasis on the most relevant applications that are currently being used in research settings, as well as in clinical applications. Different techniques will be explained, covering their advantages and pitfalls.

Hosted by Dr. Insa Schröder

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