Nano biotechnology methods and applications Iraj Alipourfard, MD, PhD

Email: ialipourfard@ichf.edu.pl

Course: Online (in case of interest possible by attendance) Date: Beginning in March- Registration deadline: 8th march 2024. Assessment: Optional to a topic presentation OR a multiple choice exam

- Nanoparticle Synthesis, Functionalization, Characterization methods
- Nanofabrication: methods and application
- Nano Drug Delivery systems: Liposomal, Polymeric, Dendrimers
- Nano imaging methods: Quantum dots
- Nano Protein Engineering
- o DNA Technology
- PCR (Polymerase Chain Reaction):
- o DNA Sequencing
- Gene Editing methods
- o Cloning and recombinant protein production
- o Immunoassay methods: ELISA, RIA, FIA
- o Blotting techniques
- Fluorescence in Situ Hybridization (FISH)
- o Gene Expression Analysis: qPCR, RNA-seq, microarrays