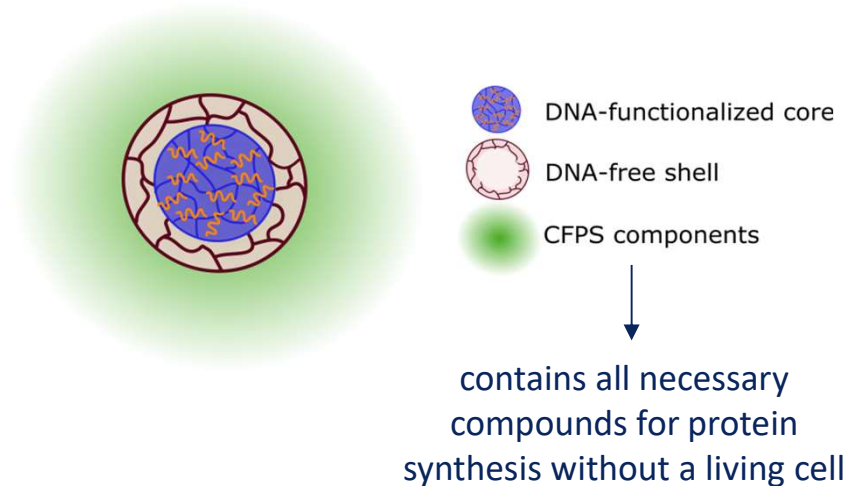


Cell-free protein synthesis in compartmented hydrogels

Background

The process of transcription and translation in protein synthesis are normally coupled in bacterial cells. We will use polysaccharide-based hydrogels with various thickness and porosity to investigate an artificial decoupling of the process. The hydrogel structure will be realized by 3D-bioplotting and the permeability will be investigated with fluorescent dextran.



Tasks and methods

- Modification of polysaccharide hyaluronic acid
- Production of hydrogels
 - 3D-bioplotting
- Coupling of DNA to hydrogels
- Detection of fluorescently labeled proteins after cell-free protein synthesis
 - (Confocal) fluorescence microscopy

**Wir freuen uns
auf eure Rückmeldung!**

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