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Title	Biological nanofactories target and activate epithelial cell surfaces for modulating bacterial quorum sensing and interspecies signaling
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Abstract	In order to control the behavior of bacteria present at the surface of epithelial cells, we have designed a nanofactory that targets and activates the surface of these cells. The nanofactory is composed of a biodegradable polymer matrix that encapsulates a bacterial strain that is capable of producing a quorum sensing molecule. The nanofactory is designed to target the surface of epithelial cells and to release the bacterial strain upon contact with the cell surface. The released bacteria then activate the surface of the epithelial cells, leading to the production of a quorum sensing molecule. This molecule then modulates the behavior of the bacteria present at the surface of the epithelial cells, leading to the formation of a biofilm. The biofilm is composed of a matrix of extracellular polymeric substances (EPS) that is produced by the bacteria. The biofilm is then attached to the surface of the epithelial cells, leading to the formation of a stable, long-term association between the bacteria and the epithelial cells. This association is beneficial for the bacteria, as it provides them with a protected environment in which to grow and reproduce. It is also beneficial for the epithelial cells, as the biofilm acts as a barrier against the entry of other bacteria and viruses. This nanofactory-based approach has the potential to be used in a variety of applications, including the treatment of bacterial infections and the development of new vaccines.
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