

Abstract Submitted  
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**Bacteria in Confined Spaces** CONNIE WILKING, DAVID WEITZ,  
Harvard University — Bacterial cells can display differentiation between several developmental pathways, from planktonic to matrix-producing, depending upon the colony conditions. We study the confinement of bacteria in hydrogels as well as in liquid-liquid double emulsion droplets and observe the growth and morphology of these colonies as a function of time and environment. Our results can give insight into the behavior of bacterial colonies in confined spaces that can have applications in the areas of food science, cosmetics, and medicine.

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