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## Movement and Distribution of Bacteria near Surfaces

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### ABSTRACT

Bacteria are found everywhere in nature, including within human/animal bodies, biomedical devices, industrial equipment, oceans and lakes. They can be found in planktonic state within a bulk liquid phase or attached to surfaces with the potential to form biofilms. In this study we are interested in the movement and distribution of bacteria near surfaces. The concentrations and fluid interactions of bacteria were characterized at various distances from a surface. *Psuedomonas putida* F1 was observed in a suspension near a surface. Bacteria movements were visualized with an inverted microscope at 40x magnification. *P. putida* F1 exhibited greater density in close proximity to the surface when compared to the bulk. Additionally, the ability to move in a direction normal to the surface was significantly reduced.

### KEYWORDS

Microfluidics, Environment, Bacteria