



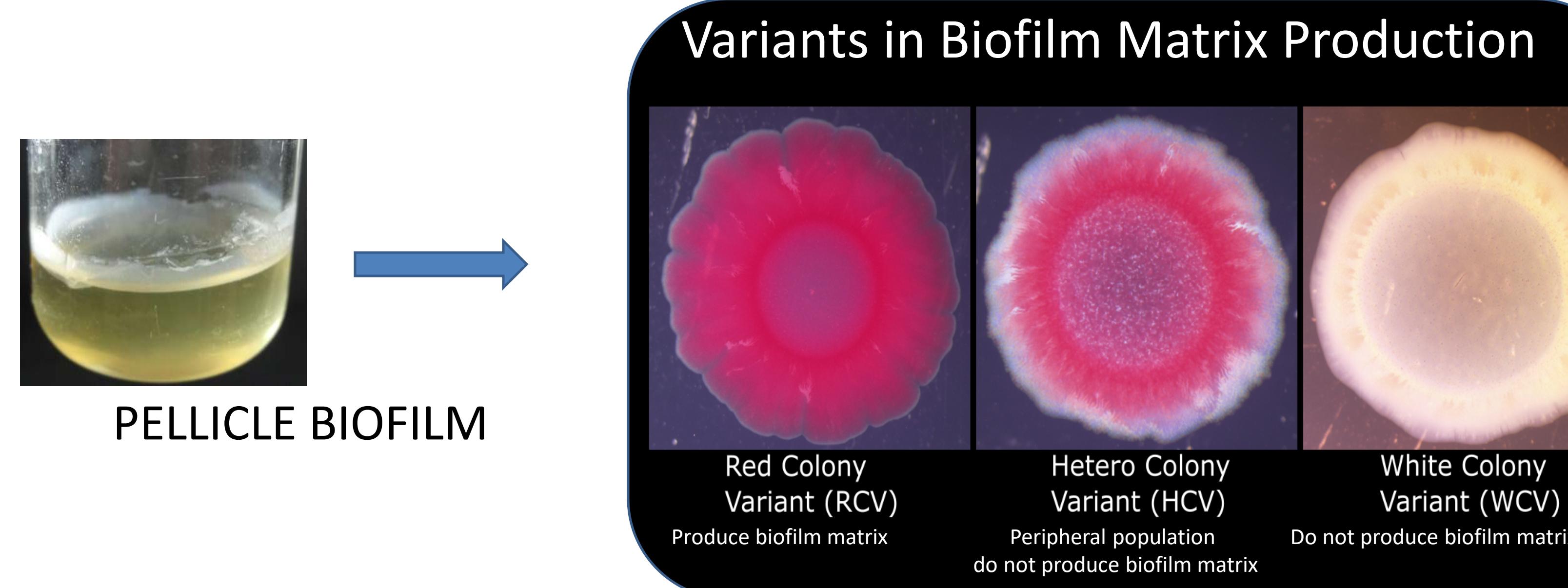
FIGHT/FLIGHT- THE INTERACTION BETWEEN POPULATION VARIANTS DURING MOTILITY IN *E. coli*

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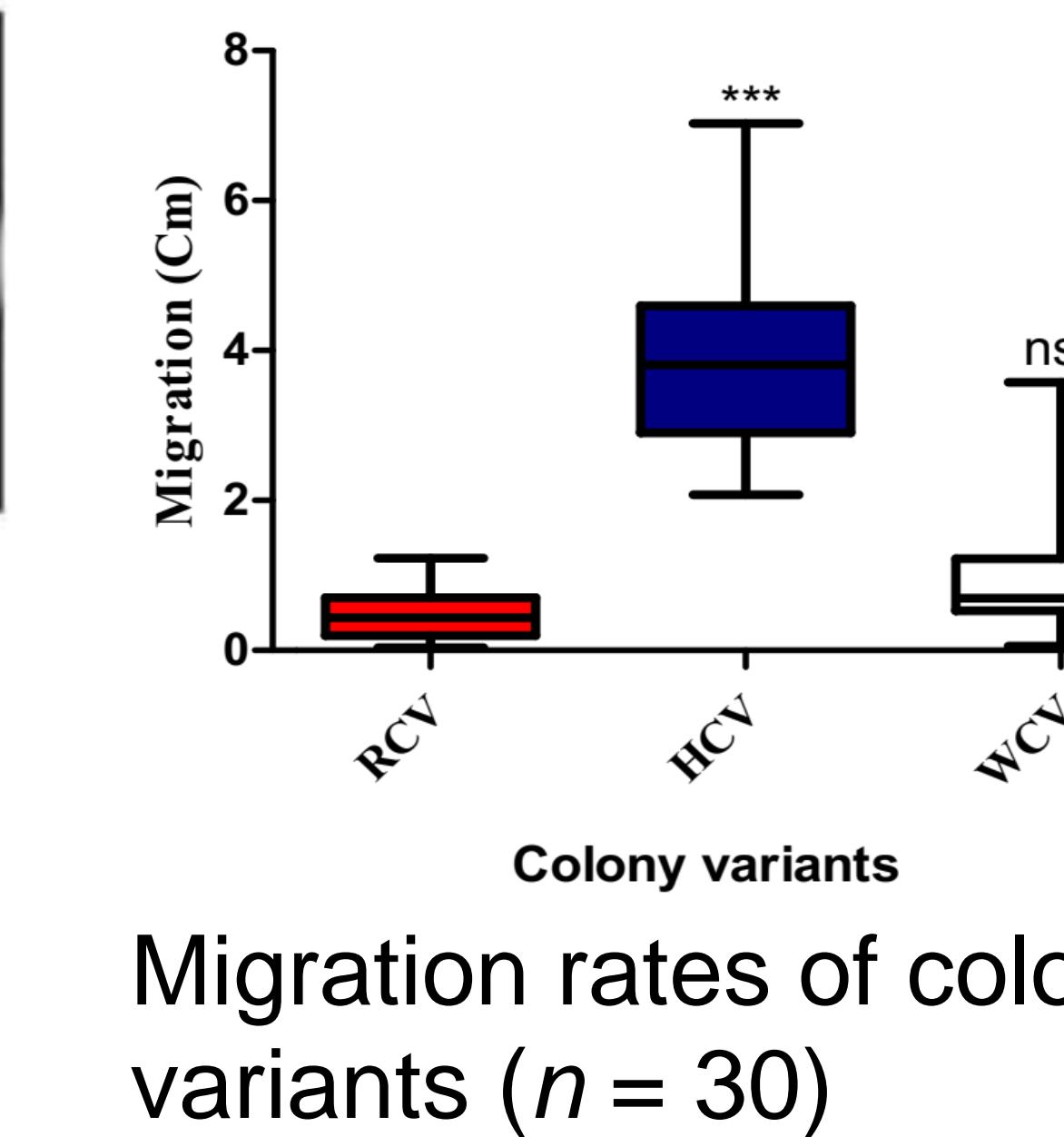
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ABSTRACT:

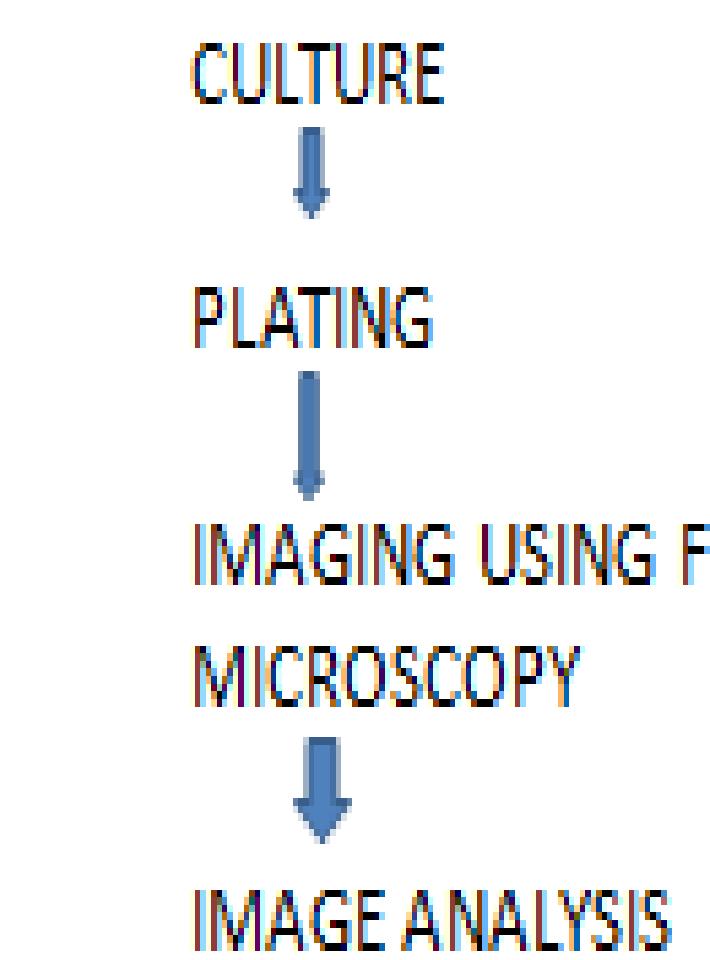
Urinary tract infection (UTI) is among the most common infectious diseases of humans and is the most common nosocomial infection in the developed world. UPEC is the major causative agent of the infection. Biofilm transform independent cells to specialised cell population. Biofilm is essential for establishment of the infection and increases the bacterial pathogenicity in the host. When Uropathogenic *Escherichia coli* were plated on the congo red media, we observed heterogeneity which shows red, white and hetero colony variants. Sugar source in the media is one of the vital factors which determine the existence and survival of the population. When subjected with glucose in the media the ability of the variants to quench the glucose is analysed. And swarming motility is studied.



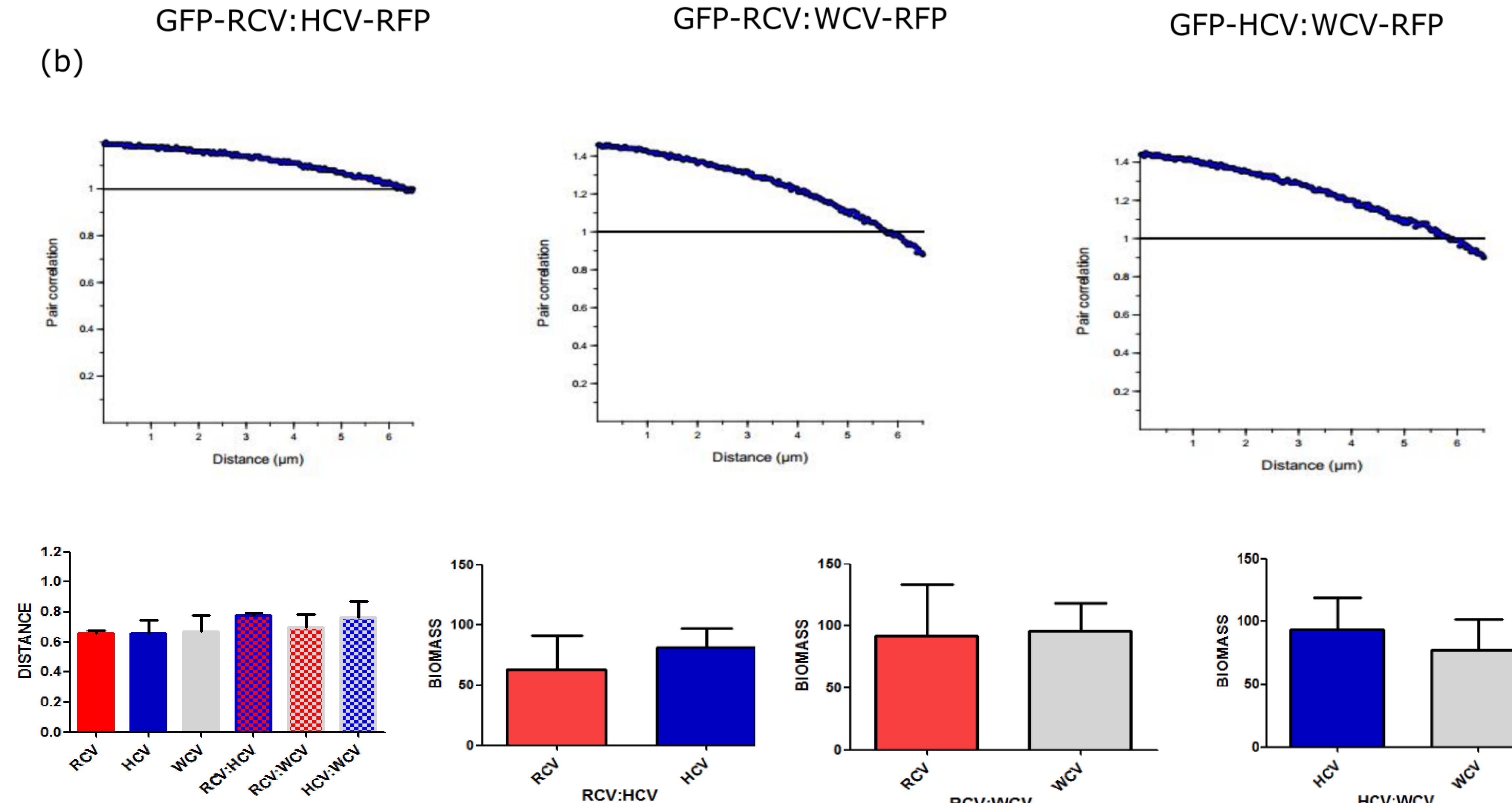
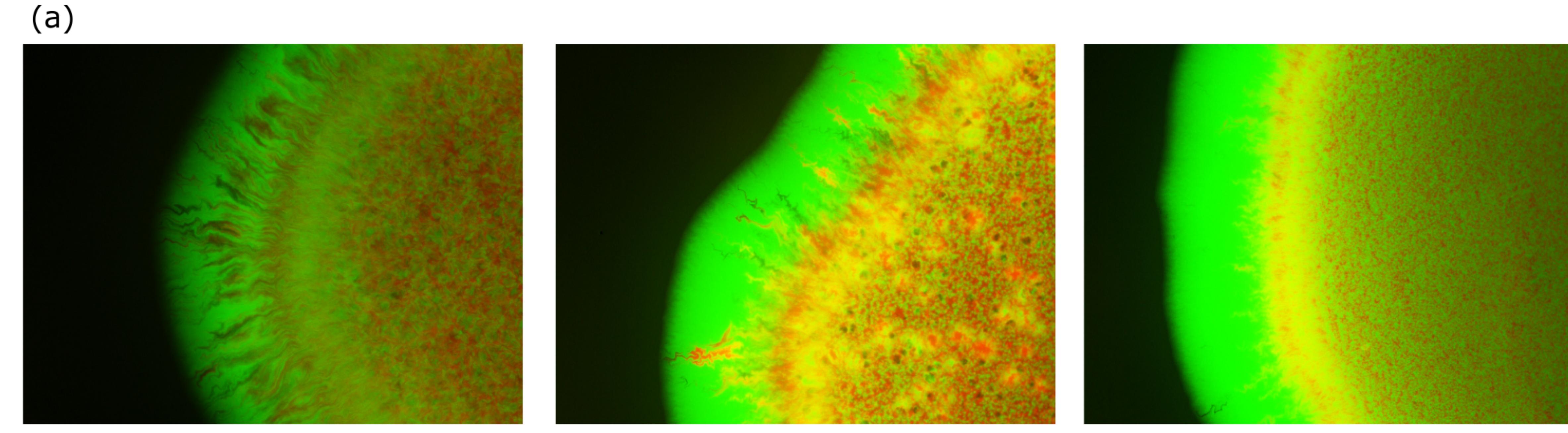
Bacterial strain used	UPEC UTI89
VARIANTS TRANSFORMED WITH	pFPV25.1 , pFPV-mCherry
MEDIA	YESCA (0.7% AGAR) , 40% glucose
IMAGING	Fluorescence microscopy
IMAGE ANALYSIS	IMAGE J



METHODOLOGY:



RESULTS

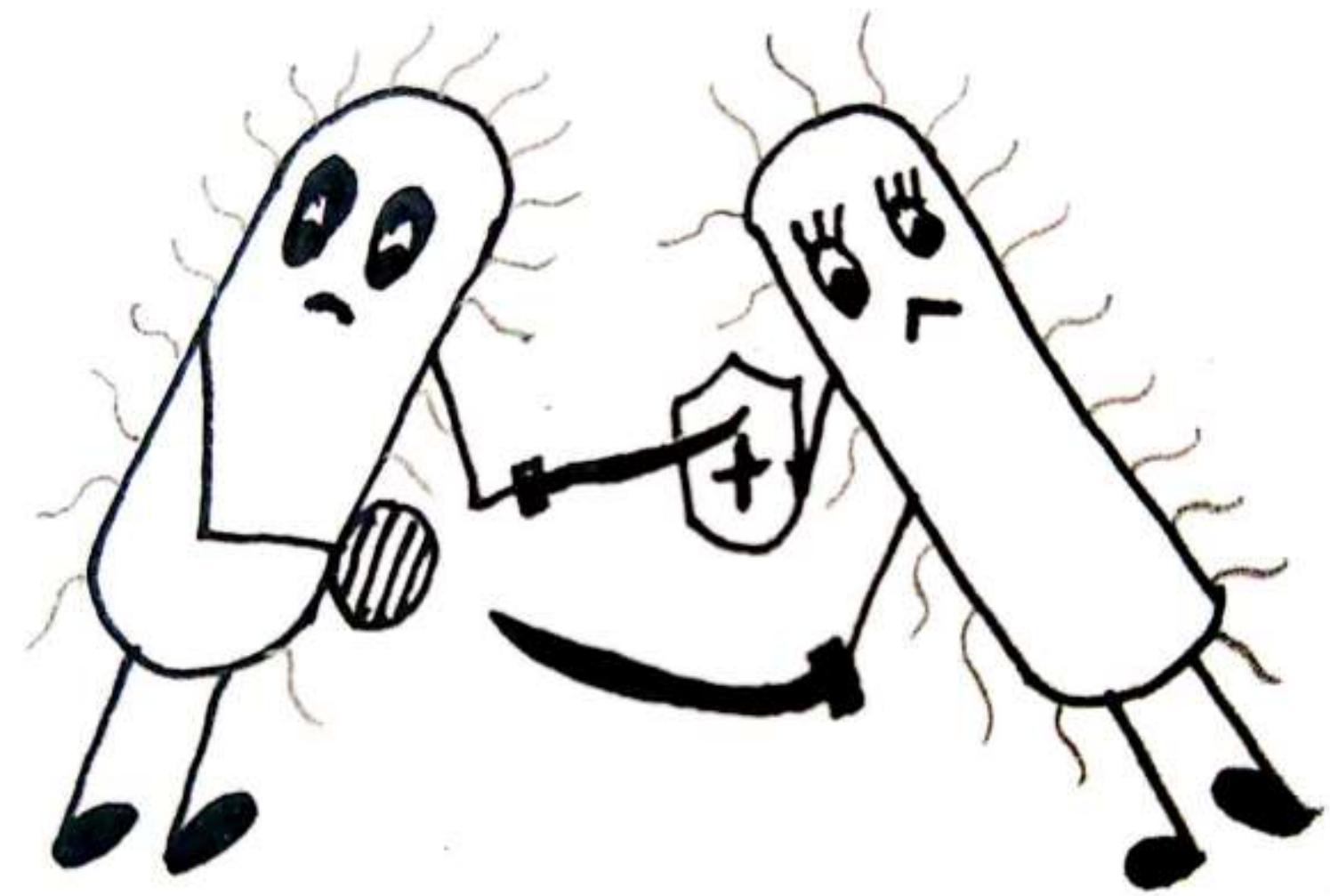


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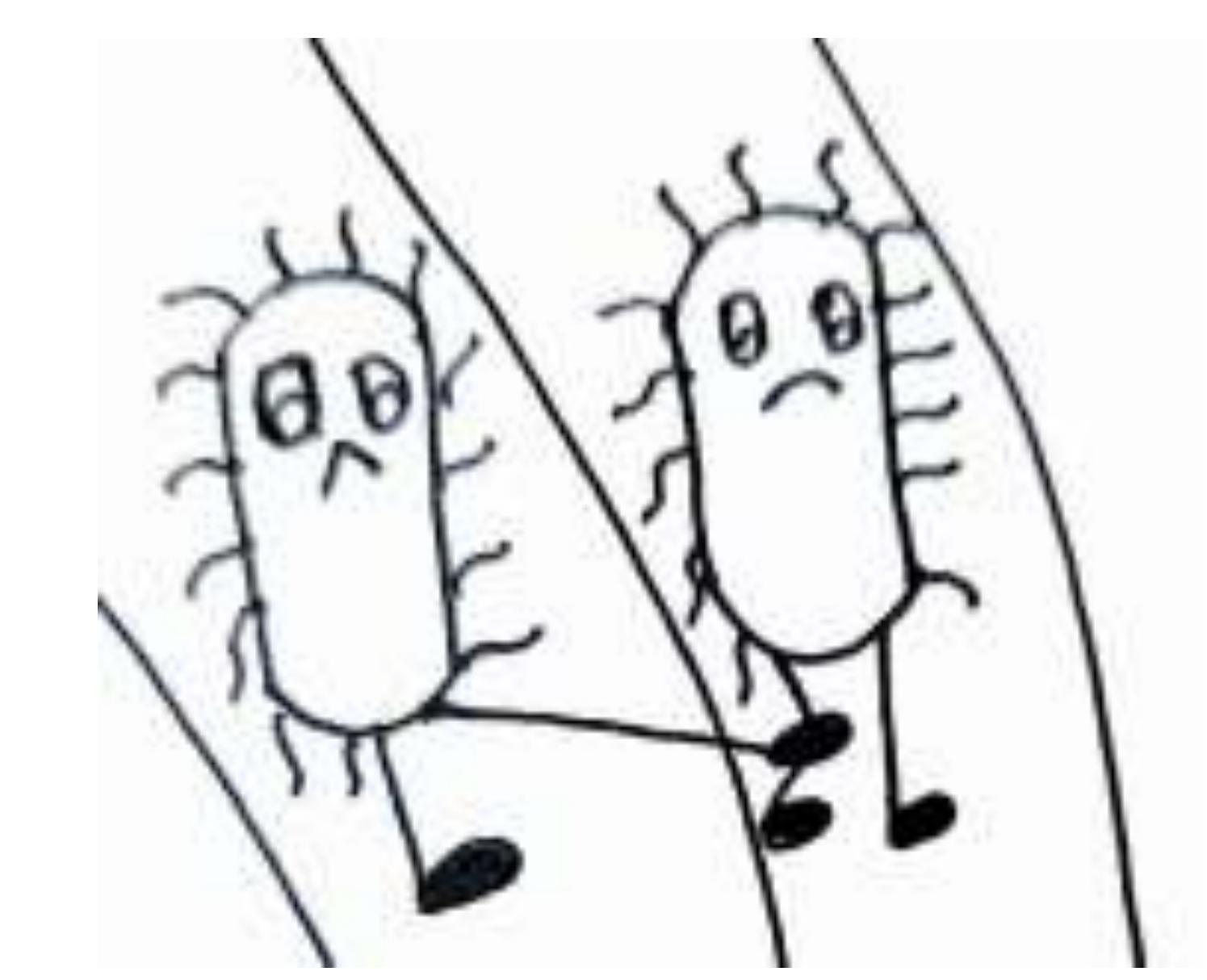
Bin Nia, et al, Growth-rate dependent resource investment in bacterial motile behaviour quantitatively follows potential benefit of chemotaxis, 2019, PNAS.

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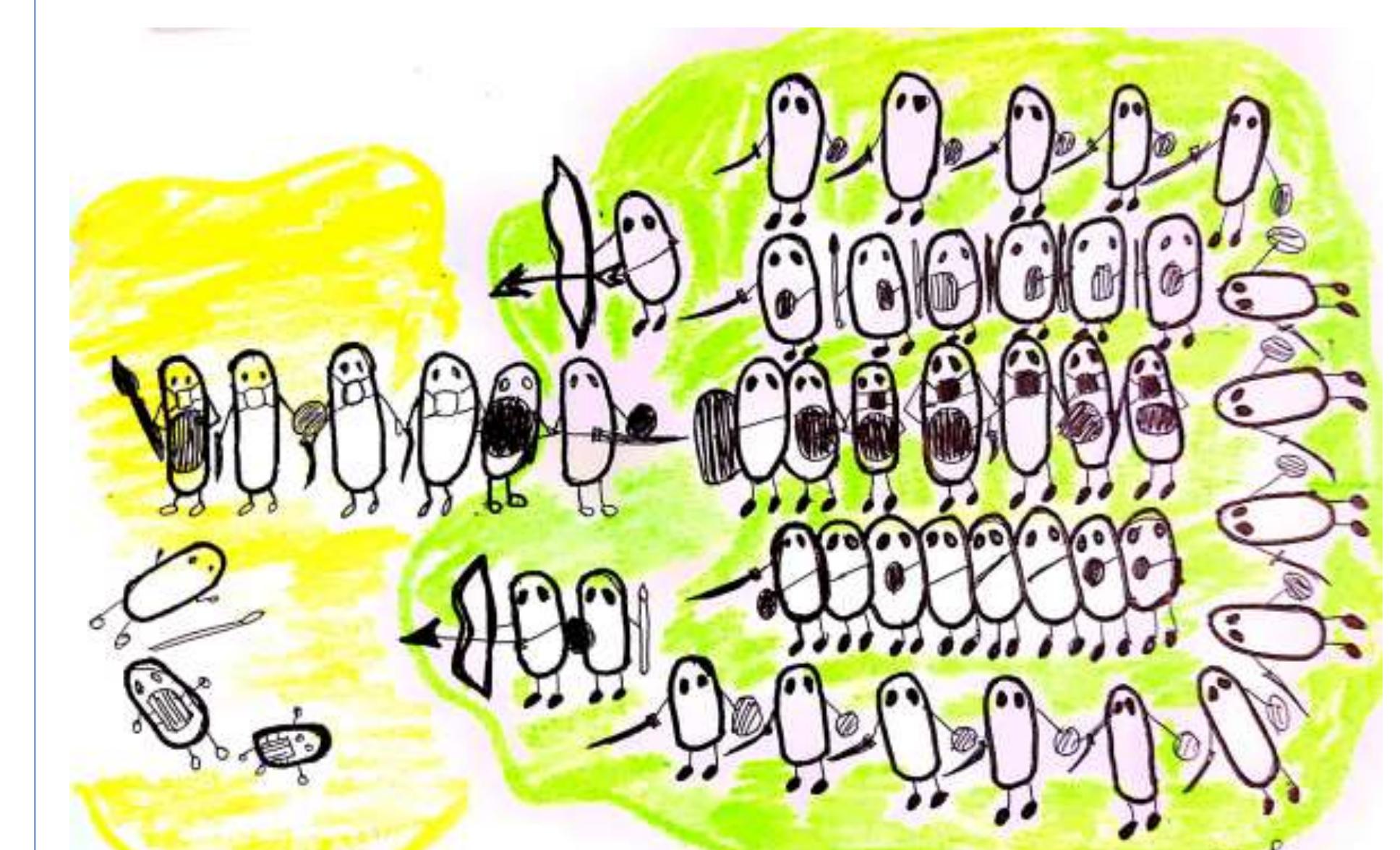
MICROBIAL INTERACTIONS



DIRECT COMPETITION



INTERFERENCE COMPETITION



EXPLOITATIVE COMPETITION