**Supplementary File 1.** Summary of prior studies related to indole chemotaxis.

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| --- | --- | --- | --- | --- | --- |
| **Species, Strain(s)** | **Indole Treatment a** | **Reported Response b** | **Experimental Method(s)** | **Chemotaxis & Motility Proteins Involved in Response** | **Ref.** |
| *E. coli,* strainRP437 | ≤1 mM  >1 mM | chemorepulsion  chemoattraction | tethered cell assay c | Tsr, Tar | 8 |
| *E. coli,* strain MG1655 | 1 mM ± 0.5-0.1 mM L-Ser | “bet-hedging” d | diffusion-based assay into long channel with fluorescent imaging | Tar, Tsr | 9 |
| *E. coli,* strainRP437 | 500 µM | chemorepulsion, overridden in presence of 500 µM Autoinducer-2 | flow-based microfluidic chemotaxis device coupled to a gradient generator | Tar, Tsr | 14 |
| *E. coli,* strainRP437 | ≤1 mM  >1 mM | decreased motility  slower flagellar rotation | tethered cell assay c | Non-CheY dependent | 18 |
| *E. coli*, strain O157:H7 CDC EDL933 | 500 μM | chemorepulsion | agarose plug chemotaxis assay imaged every 5 minutes for 30 minutes | MotB and FliD | 25 |
| *S.* Typhimurium, strain ATCC14028s | 1 mM | decreased motility | swimming motility agar plates c | MotA | 23 |
| *S.* Typhimurium, strain ATCC14028s | 1 mM | decreased motility | swimming motility agar plates c | FlhC | 24 |

![A diagram of a growth of salmonella

Description automatically generated]()

a Source concentration, or ranges, used in experiment.

b The motility or chemotactic response as reported by the study authors; note that some methods employed may not be able to distinguish between responses as a consequence bacterial growth versus chemotaxis.

c The assay may have limitations in its ability to report on either rapid temporal responses, or localization to or from an effector source.

d In this work, we refer to behaviors of this type as “chemohalation” to be similar to the widely-used terms chemoattraction and chemorepulsion.