Dear Editor,

please find below our detailed answer to the editorial comments you sent. All changes done to the manuscript have been marked.

1. Please take this opportunity to thoroughly proofread the manuscript to ensure that there are no spelling or grammar issues.

We have been through the manuscript several times, and we have again made minor changes to improve grammar as indicated in the manuscript (spelling and grammar errors have also been corrected in the Supplementary Table, although those changes have not been marked). We are not aware of any further spelling or grammar issue. If there are specific things you think should be changed, please let us know.

2. JoVE cannot publish manuscripts containing commercial language. This includes company names before an instrument or reagent. Please remove all commercial language from your manuscript and use generic terms instead. All commercial products should be sufficiently referenced in the Table of Materials and Reagents. Examples of commercial language in your manuscript include BD Bacto, etc.

To the best of our knowledge, all commercial language has now be removed from the manuscript, and the commercial products are instead only referenced in the Table of Materials and Reagents. In particular, we have removed references to ATCC and BD.

3. Please remove trademark (™) and registered (®) symbols from the Table of Equipment and Materials.

Done.

4. Please do not highlight notes for filming.

The note between steps 2.1.1 and 2.1.2 is no longer highlighted (we believe it was the only one that was).

5. Please highlight complete sentences for filming.

Sections 2.1.2 and 2.3.8 have now been highlighted in their entirety, to avoid incomplete sentences. We suggest, however, that, for each of these two steps (which consist in adding different chemicals to a solution), only a fraction of the step is filmed.

6 & 7. Line 147-156 and line 272-280: Please do not use a list. Please write this step in complete sentences.

Done. Steps 2.1.2 and 2.3.8 have been turned into complete sentences.

Note that in addition to the lists found in steps 2.1.2 and 2.3.8, we have also modified the lists previously found in steps 2.2.2 and 2.3.5, to turn them into complete sentences.

Finally, we note that the last highlighted sentence in the manuscript, which refers to the hanging drop method, is further clarified in the section "representative result". We thought it might help the script writer to know that this step can be further broken down into: Place a droplet of medium on a coverslip. Flip the coverslip and let it sit,

with the droplet facing down, on an O-ring spacer installed on a glass slide. Ensure that the drop is not in contact with the bottom glass slide. Place the hanging drop under a microscope, and focus on one edge of the droplet. Apply a magnetic field by placing the south pole of a magnet close to the observed edge, and watch the bacteria swim towards the edge.

Sincerely, Cécile Fradin.