

We wish to thank all three reviewers for their insightful comments regarding our manuscript. Each reviewer's comments will be addressed below.

Reviewer #1

Thank you for your comments. We will address each concern below.

1. We have added information from the de Souza *et al.* and Zhao *et al.* papers to the introduction.
2. To address your question regarding *fliC* expression in UPEC strain NU149, we moved the *fliC-lacZ* fusion plasmid into a $\Delta lacZ$ variant of NU149 and ran β -galactosidase assays. The results we obtained with the UPEC strain were similar to the results we observed for the K-12 strain. We noted in the discussion that both the K-12 and UPEC strains behave in similar manners in both the *fliC* transcription and motility analyses.
3. Line 79 has had a bracket added.
4. Lines 161 and 171 were corrected.
5. Line 518 was corrected.

Reviewer #2

Thank you for your comments. We will address each concern below.

1. We have since tested the *E. coli* K-12 strain, the *gadE* mutant, and the complemented *gadE* mutant and found results that were similar to what we observed for the UPEC strain NU149. This data is presented Table 5.
2. Originally, we tested the MC4100 strain, and then obtained the MG1655 strain and its derivatives from Dr. Foster. Since we already had the data for the other K-12 strain, we presented it in the paper. Even K-12 strains can have subtle differences in expression.

3. No reports have been published that examined overexpression of GadE and this effect on UPEC pathogenesis.
4. Page 3, line 67 has been changed.
5. We have changed to one style: United States.
6. Kit names have been included.
7. Page 10, line 196 has been changed.
8. Page 11, line 209 has been changed.
9. Page 11, line 224 has been changed.
10. Page 14, line 287 has been changed.

Reviewer #3

Thank you for your comments. We have added three additional references from 2019 or 2020.

The excellent points that were raised by all of the reviewers are addressed below. Reply to Reviewer's comments manuscript 4009-54579 First, I want to apologize to the reviewers for the copy that was inadvertently sent out that was incomplete and with track changes. The day it was submitted was hectic because my university implemented a "stay-at-home" beginning at the end of the day because of SARS-CoV-2. I tried to rectify the problem through the editor, but only one of you saw the copy that I intended to send out for re-review. So again, I apologize for the submission. We have rewritten the manuscript to take into consideration all of your comments that are addressed below.

Reviewer #1

Thank you for your comments. All of the references now have one number. We have added references #12 and 25 that are more recent papers as you suggested.

Reviewer #2

Thank you for your comments. We have addressed all of the issues that you raised and they are numbered below. 1. In the discussion (lines 302-303 and line 325) we have added language regarding both strains of E. coli that were tested. 2. Table 5 now has the motility results for the K-12 strain (lines 614-616). 3. A description was added in the results section for the motility assay for the K-12 strain (lines 271-277). 4. We have added a description in the results section of the fliC transcriptional results for the UPEC strain (lines 233-244) as well as in Table 3 (lines 582-585). 5. Kit names have been included (lines 142 and 154) and the word commercial eliminated. 6. The word has been changed to affect in line 221. 7. The Miller units number has

been changed to 295 in line 258. Reviewer #3 Thank you for your comments. We have rearranged the reference order for references 12 and 13 as per your suggestion.