April 18, 2020

Dear Prof. Dr. Rudolf Meier, Editor, *Cladistics*

In March of this year, we resubmitted this article “Genetic Capitalism and Stabilizing Selection of Antimicrobial Resistance Genotypes in *Escherichia coli*” for your consideration. We appreciate your reviewers’ thorough assessment of our work and have addressed the concerns and questions from the reviewers in a table on the last few pages of the manuscript. Please see our responses and let us know if there are any additional concerns for publication.

Note that for each of the responses from the reviewers, we denote each item with an "Edit:" and/or a "Comment:" to indicate our action. One major concern from reviewers that has been brought up in both reviews of this work is in the tree generation method used here, though the tree in our analysis was created by NCBI. While our work in this article is downstream from the tree generation, we reached out to NCBI about the tree methodology and we have added their response to the reviewers’ concerns at the end of the article. In addition, we have now archived the additional files that NCBI has sent us related to PDG000000004.1024 (such as the SNP matrix). Note that the supplementary materials are publicly available at <https://github.com/supramap/ecoli_amr_persistence>.

On behalf of all authors, we thank you for considering our manuscript for publication.

Sincerely,

Colby T. Ford, Ph.D.

Department of Bioinformatics and Genomics

and School of Data Science

The University of North Carolina at Charlotte