Dr. Beth McCormick

Editor-in-Chief

*Gut Microbe*

June 28, 2022

Dear Dr. McCormick,

I am pleased to submit an original research article entitled “Microbiome-derived metabolites influence the communication between Enteropathogenic E. coli and Vibrio cholerae” for consideration for publication in *Gut Microbes.*

Here, we demonstrate that an enteropathogenic *Escherichia coli* (EPEC) strain is capable of detecting and responding to the presence of *Vibrio cholerae* by enhancing its virulence. Interestingly, we found that indole, a major metabolite produced by commensal bacteria, was able to impair this form of bacterial communication, thereby interfering with the ability of these pathogens to colonize the host. Furthermore, the co-culture of EPEC and *V. cholerae* in the presence of *B. thetaiotaomicron*, an indole-producing commensal bacteria, ablated the enhancement of EPEC virulence. Our results suggest that the disruption of pathogen communication through the production of microbiome-derived metabolites may represent a broader phenomenon, potentially highlighting an exciting new research space with the potential to enable future therapeutic breakthroughs.

We believe that this manuscript is appropriate for publication by *Gut Microbes* given the focus of your journal on publishing cutting-edge research aimed at elucidating the interplay between the gastrointestinal microbiota and human physiology, which precisely aligns with the finding of this manuscript. Together, our results highlight potential avenues for therapeutic development and/or dietary intervention that may protect against serious gastrointestinal disease.

All authors have read and approved of the final manuscript, which has not been published in part or in whole, and is not under consideration for publication elsewhere.

Thank you for your consideration, and please reach out with any questions.

Sincerely,

Dr. Neta Sal-Man

Department of Microbiology, Immunology, and Genetics

Ben Gurion University