BAYLOR
UNIVERSITY

March 21st, 2019

Principal Investigator: Leigh Greathouse, PhD, MPH, MS, RD
Co-PI: Ramon Lavado, PhD
RE: Illuminate Proposal

Dear Review Committee,

As Assistant Professor of Environmental Sciences, I fully endorse the proposed study "Development of precision medicine prebiotics using mini-bioreactor arrays (MBRAs)."

I am happy to be a part of this study and to assist Dr. Greathouse with metabolite analysis of short-chain fatty acids. I am the principal investigator of the Environmental Toxicology and Metabolomics Lab in the Department of Environmental Science at Baylor University. I am excited to have the opportunity to collaborate on this study by leading the lipidomic analysis of the project. This work fits perfectly with research I am currently conducting in my laboratory and with that of my other collaborators. I have extensive experience with LC/MS spectrometry, and I will be responsible for overseeing the data acquisition and analysis of the LC/MS lipidomics identification and quantification. Furthermore, I will interpret the results, and prepare manuscripts for publication. In addition to lab expertise, I am also thrilled to help mentor undergraduate student researchers. We have recently received funding to profile over 360 lipids in cell culture systems and in human muscle, and thus I have shown that I have the expertise and standards necessary to complete this type of analysis.

The results from this study will lay the groundwork for a larger multi-phase study that is well-positioned to address the need for prebiotic formulations and treatments to combat infections. Ultimately, this research will lead to a significant opportunity for other researchers at Baylor University to take advantage of this cutting-edge system, and potentially be used to recruit highly research-active investigators to Baylor.

This project has tremendous promise not only for Dr. Greathouse but also for Baylor University. Further, I believe it will develop into a highly impactful long-term collaboration with exceptional external funding opportunities from multiple agencies, and that will generate innovative research on the diet-microbiome relationship. Overall, I am well positioned to provide excellent support for this study and we look forward to collaboration to facilitate Baylor's mission of R1 Status.

THE DEPARTMENT OF ENVIRONMENTAL SCIENCE
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I will totally support her research endeavors, and I will be available at all times to discuss any aspect of the research as well as participate in manuscripts generation and future grant preparation. I am confident that this grant proposal will be submitted as an R01 NIH grant proposal before the end of the project.

Sincerely,

Ramon Lavado, Ph.D.
Assistant Professor
Department of Environmental Science
Baylor University