

Dr. M. Andrea Azcarate-Peril is a microbiologist specializing in molecular and fungal microbiology and the gut microbiome. She holds a Ph.D. and has numerous postdoctoral fellowships, with a bibliography of over 120 peer-reviewed publications and an h-index of 56. Currently, she is a professor and director of the Microbiome Core at the University of North Carolina – Chapel Hill, where she contributes significantly to gut health research and dietary impacts on the gut microbiota.

She is also the Editor in Chief of Gut Microbiome, a scientific publication of the Nutrition Society and Cambridge University Press. Dr. Azcarate-Peril has received several awards, including the ELEVATE Faculty Development Award, underscoring her distinguished career. Her editorial contributions highlight her leadership in microbiome studies. As awareness of gut health's importance grows, her expertise makes her a key figure in this evolving field. Her research has led to multiple patents focused on

bacterial modulation and stress tolerance, demonstrating her ability to apply scientific findings practically. Actively involved in speaking engagements, she educates audiences on the microbiome's role in human health and promotes informed gut health choices. As the founding director of the UNC Microbiome Core since 2009, Dr. Azcarate-Peril leads a skilled team contributing to over 500 projects and maintaining high operational standards. The Core has a robust publication record with over 250 articles, significantly impacting the scientific community. As a principal investigator on multiple grants, Dr. Azcarate-Peril showcases her commitment to advancing healthcare through interdisciplinary research. Her ability to secure funding and lead innovative studies underlines her dedication to pressing health issues, ultimately benefiting public health.

## **Presentation Summary**

This presentation will explore the latest research on nutrition and the gut microbiome, examining how dietary choices affect gut health and the interaction between the gut microbiome and overall well-being. It will also provide insightful guidance on the most effective methods for presenting, analyzing, and discussing relevant data, emphasizing best data visualization, interpretation, rigor, and reproducibility practices. Additionally, the presentation will highlight essential 'dos and don'ts' for engaging with this subject matter, ensuring clarity and accuracy in communication.