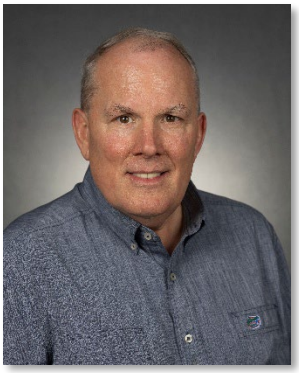
National Institutes of Health
Office of Dietary Supplements

2025–2026 Seminar Series

Mechanisms and Mechanistic Studies

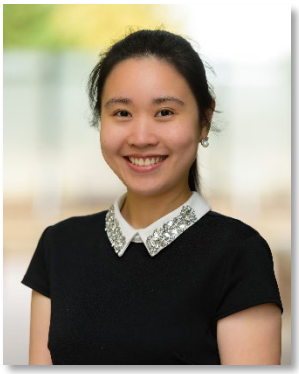
Wed., Feb. 18 | 11 a.m. – 12 p.m. ET

Please join our panelists, who will discuss "Mechanisms and Mechanistic Studies." Registration is required to attend.



James F. Collins, Ph.D., is a Professor of Human Nutrition in the Food Science and Human Nutrition Department at the University of Florida. He has broad training and expertise in physiology, molecular biology, genetics, and nutrition, and he has been involved in biomedical research for more than 25 years. His research interests include molecular mechanisms of intestinal iron transport, the influence of copper on iron homeostasis, nutrient-gene interactions (i.e., nutrigenomics), nutrient control of gene transcription, and iron absorption during inflammatory states (e.g., anemia of chronic disease). Ongoing studies in his lab relate to iron supplementation and how this negatively impacts copper homeostasis (e.g., in pregnancy) and the development of therapeutic approaches to modulate intestinal iron absorption in various disease states (e.g., hereditary hemochromatosis and β-thalassemia).

Dr. Collins is an Associate Editor of the *Journal of Nutrition*. Previous positions include Graduate Coordinator and Director of the Nutritional Sciences Doctoral Program in the Food Science and Human Nutrition Department at the University of Florida, Assistant Professor at the University of Buffalo, and Research Associate Professor at the University of Arizona. He received his M.S. in molecular biology from Middle Tennessee State University and his Ph.D. in molecular physiology from Vanderbilt University. He completed a postdoctoral fellowship in transport physiology at the University of Arizona.



Wiramon Rungratanawanich, Ph.D., is a Research Fellow in the Section on Molecular Pharmacology and Toxicology at the National Institute on Alcohol Abuse and Alcoholism (NIAAA) at the National Institutes of Health (NIH). She began there as a Postdoctoral Fellow. Previously she was a lecturer in the Faculty of Pharmaceutical Sciences at Burapha University. Her research centers on alcohol and toxicant-mediated oxidative/nitrative stress, post-translational protein modifications, inflammation, and crosstalk between the gut-liver-brain axis.

Dr. Rungratanawanich's career and productivity are reflected in her extensive research output, which includes 26 peer-reviewed papers, a book chapter, and 2 editorials. Dr. Rungratanawanich has delivered 15 oral and 10 poster presentations, showcasing her work at notable conferences. Her accomplishments have been recognized with 15 prestigious awards that include the NIAAA Daniel Hommer Fellow Award for Outstanding Fellow, the Research Society on Alcohol Junior Investigator Award, and the NIH Fellow Award for Research Excellence. She received her B.Sc. in pharmaceutical sciences from Chulalongkorn University in Bangkok, Thailand, and her Ph.D. in neuroscience from the University of Brescia, Italy.