



The Department of Nutritional Sciences Spring 2023 Seminar Series

"Micronutrient zinc and zinc transporters modulate regulation between the gut microbiome and host metabolism"

Tolunay Aydemir, Ph.D.

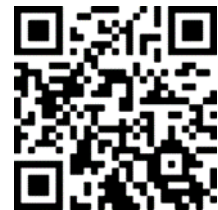
Professor, Department of Nutritional Sciences
Cornell University

Host: Harini Sampath, Ph.D.
Department of Nutritional Sciences, Rutgers



Wednesday, March 22, 2023 @ 2:15 PM
FSNS Building, 65 Dudley Road, Room 120, New Brunswick

Zoom Option: <https://go.rutgers.edu/Aydemir-Seminar>



Micronutrient zinc is essential for intestinal homeostasis, which is regulated by dynamic and reciprocal interactions among the intestinal microbiota, epithelium, and immune system. Despite its essentiality, there is no functional reserve or storage site for zinc in mammalian systems. The two families of zinc transporters (SLC30/ZNT and SLC39/ZIP) maintain zinc homeostasis in the body, from intestinal absorption/excretion to the distribution of zinc to the target tissues/cells/subcellular compartments. Studies linking the action of intestinal metal transporters to gut microbial regulation are lacking. In this seminar, the influence of deletion of metal transporter *Slc39a14/Zip14* in the gut microbiome composition and how ZIP14-linked changes in the gut microbiome and serum metabolome, in turn, modulate host metabolism will be presented.



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For information, please contact Christina Duffy, Department of Nutritional Sciences, cduffy@sebs.rutgers.edu, 848-932-5425