

# SEMINAR

Presented by the Fralin Biomedical Research Institute at VTC



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## *Virtual Presentation: Mammalian 12-hour Clock Regulation of Lipid Homeostasis in Liver Physiology and Diseases*

Dr. Meng's lab work centers on the mechanism of the early-life metabolic regulation and clock control in physiology and their dysregulation in metabolic diseases, cancer metabolism, and aging. One major area of his research is focused on studying the contributions of a newly uncovered 12-hour circatidal clock to the metabolic development and progression toward metabolic diseases (e.g., nonalcoholic fatty liver disease, NAFLD), obesity and cancer. Dr. Meng and his team recently discovered and published on the existence of an evolutionarily conserved circatidal 12-hour clock and its regulation of lipid metabolism that is: 1) independent of the 24-hour circadian clock, 2) cell autonomous and 3) regulated by molecular pacemakers that are distinct from those that control the 24-hour circadian clock. Dr. Meng's new research program also targets the mechanisms connecting biological clocks with metabolism at all levels in response to various nutritional and environmental changes, from cellular organelles to the whole organism, and will specifically address a question of how the temporal-spatial (4D) deregulation of this clock-metabolic crosstalk can lead to various pathologies.

MONDAY, JAN. 24 at 12:00 p.m.

Watch via Zoom: <https://viriniatech.zoom.us/j/83077339153>



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