

## NIDDK P30 Center for Molecular Studies in Digestive and Liver Diseases Research Seminar



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## " New Perspectives on Disease Pathogenesis: Condensate and Proteo-Lethargy"

Thursday, March 28th, 2024 12:00 – 1:00 PM EST Lunch is provided, all are invited.

901 Biomedical Research Building or <a href="https://pennmedicine.zoom.us/j/92047751580">https://pennmedicine.zoom.us/j/92047751580</a>

Dr. Platt will discuss cellular compartmentalization and the mobility of proteins transiting through the cell. One layer of cellular compartmentalization includes biomolecular condensates, which are concentrations of biomolecules that are highly dynamic, frequently forming and dissolving within seconds. In this lecture, Dr. Platt will discuss data demonstrating that, in disease, including insulin resistance, condensate dynamics are decreased (condensate lethargy), which reduces the activity of proteins within condensates and promotes disease pathogenesis. In addition, he will discuss data showing that protein mobility decreases between health and disease – in a process called proteolethargy – and that this occurs as a result of changes in cellular redox. These findings provide a new perspective on disease pathogenesis and may lead to novel therapeutic approaches to improve patient care.