

Hunter College of the City University of New York
Department of Biological Sciences
Spring 2023 Inga Richter Seminar Series

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NIH



**Triglyceride-Rich Lipoproteins: Advances from Diagnostics
to New Therapeutics**

Dr. Remaley's laboratory seeks to better understand lipoprotein metabolism and to translate new insights gained from basic biochemistry, cell biology, and transgenic animal models into much needed clinical advances in the treatment and prevention of cardiovascular disease. Dr. Remaley's research has focused on the beneficial role of high-density lipoprotein (HDL), the so-called "good cholesterol." HDL, which is a complex of the protein apoA-I with phospholipids, removes excess cholesterol from peripheral tissues, such as the arterial wall, and transports it to the liver and intestine for excretion from the body. It has been shown that this process—the reverse cholesterol transport pathway—can be markedly stimulated by infusing HDL made with either purified or recombinant apoA-I and phospholipids. HDL infusion has been proposed as an acute therapy for patients with acute coronary syndrome who are at imminent risk for developing myocardial infarction. His laboratory has developed small synthetic peptide mimetics of apoA-I, and like the full-length protein, these peptides mobilize excess cholesterol from cells and have been shown to reduce atherosclerosis and inflammation in animal models. One of the peptides developed by his laboratory has been licensed to an outside company and is now undergoing pre-clinical toxicology studies for evaluation as a possible new therapy.

<https://www.nhlbi.nih.gov/science/lipoprotein-metabolism>

Monday, May 15, 2023 @12:30pm
Host: Jayne Raper
Zoom: TBA