

BCH 252 Seminar Series



**Paul Weers, Professor of Biochemistry,
Department of Chemistry and Biochemistry,
CSU Long Beach**

**Seminar Title: "Critical role of the C-terminal
helices of apolipoprotein A-I in self-association
and high-density lipoprotein formation."**

Abstract: ApoA-I is the main protein of high-density lipoproteins (HDL) and is critical for transport of cholesterol from peripheral tissues to the liver, also known as reverse cholesterol transport. The protein is composed of two putative domains, a helix bundle NT domain (residues 1-189) and a small and less structured CT domain (residues 190-243). ApoA-I self-associates, mediated by the CT domain, which also provides the amphipathic α -helices for initiation of lipid binding when forming HDL. To study this critical domain of apoA-I, pyrene fluorescence and site-directed mutagenesis were employed which provided new insight into the structural details of CT-apoA-I.

Biography: Paul Weers received his undergraduate degree in Chemical Biology (1990), and his PhD in Biochemical Physiology (1994), both at the University of Utrecht, Netherlands. He received a post-doctoral fellowship to study apolipoproteins at the Lipid and Lipoprotein Research Group & the department of Biochemistry, University of Alberta, Edmonton, Canada (1996-2000). In 2003 he moved to the Children's Hospital Oakland Research Institute (CHORI) in California in 2000, and joined the faculty of the Chemistry and Biochemistry Department at CSU Long Beach in 2003.

Tuesday, October 15, 2024 12:00 p.m. - 12:50 p.m. PST

In-Person: Genomics Auditorium 1102A

Host: Dr. Gregor Blaha