



William R. Lagor, Ph.D

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"Cholesterol biosynthesis as a regulator of intestinal stem cell homeostasis "

About this seminar:

The intestine occupies a critical interface between cholesterol absorption and excretion from the body. Surprisingly little is known about how enterocytes and stem cells within the gut regulate synthesis of cholesterol. In this seminar we will share our recent findings about an unexpected link between cholesterol biosynthesis and intestinal stem cell homeostasis in mice.

Reference(s):

1. Intestinal Deletion of 3-Hydroxy-3-Methylglutaryl-Coenzyme A Reductase Promotes Expansion of the Resident Stem Cell Compartment. Doerfler AM, Han J, Jarrett KE, Tang L, Jain A, Saltzman A, De Giorgi M, Chuecos M, Hurley AE, Li A, Morand P, Ayala C, Goodlett DR, Malovannaya A, Martin JF, de Aguiar Vallim TQ, Shroyer N, Lagor WR. *Arterioscler Thromb Vasc Biol.* 2022 Apr;42(4):381-394. doi: 10.1161/ATVBAHA.122.317320. Epub 2022 Feb 17. PMID: 35172604

2. Depletion of essential isoprenoids and ER stress induction following acute liver-specific deletion of HMG-CoA reductase. De Giorgi M, Jarrett KE, Burton JC, Doerfler AM, Hurley A, Li A, Hsu RH, Furgurson M, Patel KR, Han J, Borchers CH, Lagor WR. *J Lipid Res.* 2020 Dec;61(12):1675-1686. doi: 10.1194/jlr.RA120001006. Epub 2020 Oct 27. PMID: 33109681



**Baylor Main Campus
DeBakey Building
Auditorium M112**



**<https://bcm.zoom.us/>
Meeting ID: 951 0349
9512
Password: 2020**



Refreshments provided.

**NOV 14
4PM CST**