



The Department of Nutritional Sciences Spring 2022 Seminar Series

"The Ying and the Yang of the mono-unsaturated fatty acids"

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Wednesday, March 9, 2022 @ 2:15 PM
Zoom meeting: <https://go.rutgers.edu/Mounier-Seminar>



Oleate and palmitoleate are mono-unsaturated fatty acids that play key roles in various diseases. These two fatty acids are synthesized by the Stearoyl CoA Desaturase 1 (SCD1) in the endoplasmic reticulum. We have studied the role of SCD1 and its products in hepatic steatosis and cancer. We demonstrated that SCD1 and its product oleate, are central for the formation of lipid droplets in the liver. In particular, we showed that oleate is important for the maturation of SREBP1c, a key transcription factor for de novo lipogenesis. SCD1 and its products are also involved in the development of metastatic breast cancers activating the beta-catenin pathway as well as the migration of triple negative breast cancer cells via a PLD-mTor pathway.



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