



**DEPARTMENT OF GENETICS
&
HUMAN GENETICS INSTITUTE OF NEW JERSEY**

VIRTUAL RESEARCH SEMINAR
**“Dietary Control of Stem Cells in
Physiology and Disease”**



Omer Yilmaz, M.D., Ph.D.
Associate Professor
Department of Biology
Massachusetts Institute of Technology
Cambridge, MA

Organismal diet has a profound impact on tissue homeostasis and health in mammals. Adult stem cells mediate many aspects of tissue adaptation by balancing self-renewal and differentiation divisions to alter tissue composition in response to the environment. Because somatic stem cells may respond to organismal physiology to orchestrate tissue remodeling and some cancers are understood to arise from transformed stem cells, these findings raise the possibility that organismal diet, stem cell function, and cancer initiation are interconnected. Here I will present work from my group that describes our emerging view of how diet, metabolites and nutrient-sensing pathways instruct mammalian intestinal stem cell fate in homeostasis, adaptation to diet and diseases such as cancer.

Noon, Monday, September 14, 2020

Zoom Meeting Link: <https://rutgers.zoom.us/j/92975996581>

Host: Mike Verzi, Phone:848-445-9578, Email: verzi@dls.rutgers.edu