



NAME OF LABORATORY: Research Center for Digestive Disorders and Liver Diseases

PI: Sigal Fishman MD

Research Director at the Division of Digestive Diseases: Prof. Zamir Halpern MD

Research Center Manager: Dr. Chen Varol PhD

Research Objectives: Research of obesity and the metabolic syndrome *in vivo*, under high fat diet feeding. Chimeric and genetically engendered mice are used according to specific research goals. In addition human adipose tissue, harvested during bariatric surgery is utilized for *ex vivo* experiments

Main Research Topics:

- The role of the incretin hormone, glucose-dependent insulinotropic peptide (GIP), as a linker between the metabolic and the immunologic systems. Chimeric mice are used in order to delete GIP receptor from whole immune cells. In addition, floxed mice are used to delete GIP receptor from specific immune cell populations
- The role of sortilin molecule in obesity, metabolic syndrome and non-alcoholic fatty liver diseases. Chimeric mice are used in order to delete sortilin from whole immune cells. In addition, floxed mice are used to delete sortilin from adipocytes, hepatocytes and macrophages.

Staff: Dr. Izabel Zvibel - senior researcher, Dana Fernanda Mantelmacher- PhD student

Active Grants:

- Israeli Science Foundation (ISF)

Collaborations:

- Chen Varol, Research Center Manager, Division of Digestive Diseases, Tel Aviv Sourasky Medical Center
- Daniel J Drucker Lunenfeld-Tanenbaum Research Institute Mount Sinai Hospital Toronto Ontario

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