



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

PI: Nitsan Maharshak MD

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

Research Center Manager: Dr. Chen Varol PhD

Research Objectives:

- To study the role of enteric bacteria in inflammatory and metabolic related disease conditions in humans and in-vitro.
- To characterize the enteric microbiota and to assess the efficacy and optimal conditions for effective fecal microbial transplantation in disease conditions.

Main Research topics:

- Association of bacterial proteases and inflammatory bowel diseases.
- Inflammatory bowel diseases risk stratification and response to therapy by studying enteric bacterial composition.
- The effect of dietary intervention and fecal microbial transplantation on type 2 diabetes mellitus and obesity.
- FMT (fecal microbial transplantation) for hepatic encephalopathy.
- FMT for *Clostridium difficile* infection.
- FMT and dietary intervention for ulcerative colitis.
- Characterization of enteric microbiota in colon cancer.

Staff: Sarit Hoffman- PhD student, Shir Jakobovitch- study co-ordinator, Dr. Nathaniel Cohen- intern, Dr. Merav Ben Yehoyada- research associate

Active Grants:

- Tel Aviv University- IBD and bacterial proteases
- The Israeli Gastroenterology Association- fecal microbial transplantation in obese diabetic patients

Collaborations:

- Prof. Iris Dotan- Gastroenterology Department, Tel Aviv Medical Center, Israel
- Dr. Revital Kariv, Gastroenterology Department, Tel Aviv Medical Center, Israel
- Prof. Oren Shibolet- Gastroenterology Department, Tel Aviv Medical Center, Israel
- Prof. Yehuda Carmelli- Division of Epidemiology, Tel Aviv Medical Center, Israel
- Dr. Omry Koren, Faculty of Medicine, Bar-Ilan University, Tzfat, Israel
- Prof. Arie Levine, Pediatrics Gastroenterology, Wolfson Medical Center, Holon, Israel
- Prof. Eran Segal, The Weizmann Institute of Science, Rehovot, Israel
- Prof. Ian Carrol, University of North Carolina, Chapel Hill, USA

Contact us: nitsanm@tlvmc.gov.il