

Open positions for students and postdocs in Immunology

Our laboratory focuses in lymphocyte development in health and diseases. We are attempting to understand mechanisms by which different pathologies in the B lineage initiate such as autoimmunity, cancer and allergies, and to suggest new approaches for treatment. The research in the lab utilizes various advanced cellular and molecular technologies such as RNA-Seq, single cell PCR, molecular cloning and advanced flow cytometry. We also use mouse models and apply gene targeting to stem cells for our studies.

Major projects in the lab are:

1. **How a normal B lymphocyte transform into a malignant lymphoma cells.** We study mechanisms by which microRNAs determine cell-fate decisions and how alterations in microRNA networks are critical for the transformation process.
2. **Can we rejuvenate the immune system in aging?** The lab investigates why the immune system declines with aging and develops approaches to rejuvenate it and to improve its function.
3. **Can we stop allergic responses?** The lab investigates and develops several approaches to modify networks of allergic responses. We aim to establish tools that will enable us to desensitize allergies, which can then be used as novel therapeutic drugs.

For more information, visit our website at:

<https://melamed-lab.net.technion.ac.il/>

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