## Research at Tel Aviv Sourasky Medical Center

# Clinical Immunology & Immunotherapy



## NAME OF LABORATORY: The HIV research laboratory

PI: Dr. David Hassin MD

**Director of Department:** Dr. David Hassin (Internal Department "H") Dr. Dan Turner MD (The Crusaid Kobler AIDS Center)

**Research Objectives:** Study the interaction between cytotoxic T lymphocytes and autologous CD4 T cells infected by human immunodeficiency virus (HIV) in the patient's PBMC throughout the course of HIV infection.

### Main Research topics:

- The cytotoxic T lymphocytes (CTL, CD8 T cells) activity against latently HIV-infected CD4 T cell (latent reservoir cells) procured from the patient's blood.
- Reveal the mechanisms that enable the escape of HIV infected CD4 T cells from CD8 T cells induced apoptosis.
- The HIV Nef protein protects HIV-infected CD4 T cells from CD8 T cells induced apoptosis. We aim to screen for small molecule inhibitors of HIV Nef protein.
- We study the role of CD8 T cells in the gradual annihilation of latently HIV infected CD4T cells leading to Acquired Immune Deficiency Syndrome (AIDS).

#### **Collaborations:**

- Professor Mark A. Brockman, SimonFraserUniversity (Burnaby, B.C.), Vancouver, Canada.
- Professor Gideon Berke, Department of Immunology, Weizmann Institute of Science.

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