

# ELAD ELIAHOO

Cell: (054)-4772299

Email: [elad.eliahoo@gmail.com](mailto:elad.eliahoo@gmail.com)

LinkedIn: [LinkedIn profile](#)

PhD in Biochemistry with expertise in molecular biology, protein characterization, protein structure and RNA-protein interactions. Experience as a Post-Doctorate in virology and biochemistry of proteins and nucleic-acid. My greatest strength is in my ability to navigate between different disciplines and to collaborate with groups with different backgrounds. I have great organization skills and had proven to promote several projects simultaneously while mentoring and guiding other projects in the labs. Seeking a challenging position that utilizes state of the art technology and will allow me to build on my experience in biomedical research, as well project management and planning skills. I believe that with my background and experience I will be able to contribute to the work that is being done in your company.

## Experience

### 2014 –2017 Post-Doctorate Research

Fred Hutchinson Cancer Research Center - Seattle, Washington, Human Biology, Dr. Adam Geballe

- Study of the protein TRS1 from HCMV – an antagonist to the **innate immune sensor** PKR.
- Expressing and characterizing the protein in different expression system, such as bacterial, yeast, human cells and invertebrate cells infected with Baculoviruses.
- In vitro experiments: **Molecular biology, primary cell culture** methods and **Immunoblot**.
- Working with protein biochemistry characterizing methods such as **affinity purification, size exclusion** and solving **protein expression, stability and solubility issues**.
- Analyzing RNAseq data.
- **Project planning**, scheduling and management.
- **Leading the lab group**- mentoring student and technicians.
- Writing papers, grants application, progress reports and budget planning.

### 2012 –2014 Post-Doctorate Research

University of Washington- Seattle, Washington, Department of Laboratory Medicine, Division of Virology, Dr. David Gretch

- Research the effect of NS3/4A, HCV serine protease, between clinically isolated HCV sub-strains from mild and severe patients.
- The study included **in-vitro** experiments, **cancerous cell culture** and **fluorescent microscopy**.
- Working in **Biosafety Level 2/3**.
- Working with live **HCV** and with **HCV replicon** in hepatocyte derived cellular carcinoma cells.
- **Leading the lab group**- mentoring student and technicians.

### 2011-2012 Lecturer

Pre-academic unit, Technion, Haifa, Israel.

- Teaching Biology and Chemistry Basics at “The scientists of the future presidential program”.

### 2006 –2012- Teaching Assistant

Department of Biology, Technion

- Taught courses in Animal World lab (5 years), Genetics lab (3 years) and Biochemistry lab (1 year).

## **Education**

### 2006-2011 Ph.D. Technion IIT- Haifa, Department of Biology, Prof. Haim Manor

Thesis: “*Studies on the structure and function of the protein Translin in Schizosaccharomyces Pombe*”.

- Characterizing and mapping of the interaction sites of Translin with nucleic acids and proteins.
- I have used **bioinformatics**, **molecular genetics** and **biochemistry** methods.
- Studied the structure of the Translin octameric complex using **biochemical** and **biophysical** methods such as **GE AKTA** for size exclusion and ion exchange, **affinity purification**, **SAXS**, **Crystallography** and **ultracentrifugation sedimentation**.
- Using **quantitative proteomic** analysis in order to identify proteins that associated with the protein Translin. The analysis was obtained by **metabolic labeling** of proteins in the cells using **stable isotopes labeling**. Associated proteins were determined by **statistical analysis**.

### 2003-2006 M.Sc. Hebrew University of Jerusalem, Department of Microbiology Prof. Amos Panet and Prof. Zichria Zakay-Rones.

Thesis: “*Stages in the reproduction of the Newcastle Disease Virus (NDV) in normal and cancerous lung cells*”.

- The study included **FACS of avian and mammalian cells**.
- Working with **latent** and **mild** NDV viruses – **BSL 2**.
- Working with **lenti-virus** based expression system.
- Maintaining **GLP** environment in the lab.

### 1999-2002 B.Sc. cum laude, Life Science and Computer Science Bar-Ilan University, Ramat-Gan, Israel.

### Fellowships, Honours and Awards

2016 Pilot & Feasibility Grants Supported by the Cooperative Center of Excellence in Hematology (CCEH - U4 DK106829)

2011 DESY-humburg, SAXS beam-time, EMBL

2001 Faculty of Biology Scholarship Prize, Bar-Ilan University (tw

## Publication

- Gordon N, Rosenblum R, Nussbaum-Shochat A, **Eliahoo E** and Amster-Choder O. A search for ribonucleic antiterminator sites in bacterial genomes: Not only antitermination? *Journal of Molecular Microbiology and Biotechnology*. *J Mol Microbiol Biotechnol*. 2015;25(2-3):143-53
- **Eliahoo E**, Marx A, Manor H, Alian A. A novel open-barrel structure of octameric translin reveals a potential RNA entryway. *J Mol Biol*. 2015 Feb 27;427(4):756-62.
- **Eliahoo E**, Litovco P, Ben Yosef R, Bendalak K, Ziv T, Manor H. Identification of proteins that form specific complexes with the highly conserved protein Translin in *Schizosaccharomyces pombe*. *Biochim Biophys Acta*. 2014 Apr;1844(4):767-77.
- Pérez-Cano L\*, **Eliahoo E\***, Lasker K, Wolfson HJ, Glaser F, Manor H, Bernadó P, Fernández-Recio J. Conformational transitions in human translin enable nucleic acid binding. *Nucleic Acids Res*. 2013 Aug 26. (\*Contributed equally to this work).
- **Eliahoo E**, Ben Yosef R, Pérez-Cano L, Fernández-Recio J, Glaser F, Manor H. Mapping of interaction sites of the *Schizosaccharomyces pombe* protein Translin with nucleic acids and proteins: a combined molecular genetics and bioinformatics study. *Nucleic Acids Res*. 2010 May; 38(9):2975-89.
- Lazar I, Yaacov B, Shiloach T, **Eliahoo E**, Kadouri L, Lotem M, Perlman R, Zakay-Rones Z, Panet A, Ben-Yehuda D. The oncolytic activity of Newcastle disease virus NDV-HUJ on chemoresistant primary melanoma cells is dependent on the proapoptotic activity of the inhibitor of apoptosis protein Livin. *J Virol*. 2010 Jan;84(1):639-46.
- Yaacov B, **Eliahoo E**, Lazar I, Ben-Shlomo M, Greenbaum I, Panet A, Zakay-Rones Z. Selective oncolytic effect of an attenuated Newcastle disease virus (NDV-HUJ) in lung tumors. *Cancer Gene Ther*. 2008 Dec;15(12):795-807.

## Languages

- Hebrew: Native speaker
- English: Native speaker level