

## Curriculum Vitae

Sivan Pearl Mizrahi

August 2023

### Personal details

Date of birth: 11.6.1981

Country of birth: Israel

I.D: 040964637

Nationality: Israeli

Family status: married +3

Phone: +972-508689777

Address: 6 Yaakov Berman st. Apt 29, Rehovot, 7621312 Israel

Work address: Herzl 229, Rehovot 7610001, Israel

E-Mail: sivan.pearl@mail.huji.ac.il

### Higher Education

- 2009-2015 PhD student at the Hebrew University, under the supervision of Prof. Nathalie Q. Balaban (Physics department) and Prof. Itamar Simon (Molecular Genetics and Microbiology department). Research subject: *Quantitative analysis of cell-cycle variability and its relation to the response to anti-cancer drugs, at the single cell level.*
- 2005-2007 MSc of Microbiology, Genomics and Bioinformatics at the Hebrew University, under the supervision of the late Prof. Amos Oppenheim (Molecular Genetics and Microbiology department) and Prof. Nathalie Q. Balaban (Physics department). Research subject: *Non-Genetic Individuality in the Host-Phage Interaction.*
- 2001-2004 BSc. of Computer Science and Computational Biology; at the Hebrew University,

### Professional Experience

- 2023-current Assistant Professor at the Institute of Biochemistry, Food Science and Nutrition, Robert H. Smith Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem.
- 2018-2023 Post-doctoral fellow at the lab of Prof. Jeff Gore, (Physics of Living Systems department, MIT). Research subject: *Studying the impact of extinction and invasion on microbial community structure and stability.*
- 2016-2018 Post-doctoral fellow at the lab of Prof. Hanah Margalit, in collaboration with Prof. Ilan Rosenshine (Molecular Genetics and Microbiology department, Hebrew university). Research subject: *Identification of small RNA-Target interactions involved in pathogenic Escherichia coli virulence.*
- 2009-2015 Teaching Assistant at the Faculty of Medicine. Hebrew University.
- 2009 Guide at The Hebrew University Youth Division for the Advancement of Science Education
- 2008 Software engineer in the Algorithms team of Amadesa, Inc.
- 2004 Student at the lab of Dr. Yehuda Tzfati from the Genetics Department. Project subject: *Prediction of the Secondary Structure of Telomerase RNA.*

## Honors and Awards

2023	Ilanit (FISEB) travel award
2019-2022	HFSP Long-Term fellowship
2018-2020	EMBO Long-Term Fellowship (non-stipendiary)
2017-2019	Post-Doctoral scholarship from Israel's Council for higher education
2017-2018	Post-Doctoral scholarship from the Hebrew university in Jerusalem
2017-2018	Fulbright Postdoctoral Scholar Fellowship
2017	Fulbright Schneider-Danon Postdoctoral Research Fellowship
2016	Hans Wiener Prize
2016	Faculty of Medicine prize for outstanding PhD thesis
2016	Golda Meir Postdoctoral Fellowship
2012-2015	Clore Scholars Program for promoting outstanding young Israeli scientists
2010	Nano-center Prize for excellent students
2007	Rector Prize for Interdisciplinary and Microbiology Institute fellowships
2005-2006	Excellency scholarship from the Microbiology Institute
2001	<i>Excellency scholarship from the Hebrew University</i>

## Publications

1. **Pearl Mizrahi S**, Goyal A, Gore J. **Community interactions drive the evolution of antibiotic tolerance in bacteria**. PNAS, 2023 Jan 12.
2. **Pearl Mizrahi S**, Elbaz N, Argaman L, Altuvia Y, Katsowich N, Socol Y, Bar A, Rosenshine I, Margalit H. **The impact of Hfq-mediated sRNA-mRNA interactome on the virulence of enteropathogenic Escherichia coli**. Science Advances, 2021 Oct 29, 7(44).
3. Noga Mosheiff, Bruno MC Martins, **Sivan Pearl-Mizrahi**, Alexander Grünberger, Stefan Helfrich, Irina Mihalcescu, Dietrich Kohlheyer, James CW Locke, Leon Glass, Nathalie Q Balaban. **Inheritance of Cell-Cycle Duration in the Presence of Periodic Forcing**. Physical Review X, 2018 May 9; 8:2.
4. **Pearl Mizrahi S**, Gefen O, Simon I, Balaban NQ. **Persistence to Anti-Cancer Treatments in the Stationary to Proliferating Transition**. Cell Cycle, 2016 Dec 16; 15(24):3442-3453.
5. **Pearl Mizrahi S**, Sandler O, Lande-Diner L, Balaban NQ, Simon I. **Distinguishing between stochasticity and determinism: Example from cell cycle duration variability**. Bioessays, 2016 January 38(1), 8-13 . (invited).
6. Sandler O\*, **Pearl Mizrahi S\***, Weiss N, Agam O, Simon I, Balaban NQ. **Lineage correlations of single cell division time as a probe of cell-cycle dynamics**. Nature, 2015 March 519, 468–471. (\*equal contribution).
7. **Pearl S**, Oppenheim A, Balaban NQ. **Epigenetic variability in Predator-Prey System**. Transformations of Lamarckism, from subtle fluids to molecular biology. Edited by Gissis SB and Jablonka Eva. MIT Press. 2011.
8. **Pearl S**, Gabay C, Kishony R, Oppenheim A, Balaban NQ. **Nongenetic individuality in the host-phage interaction**. PLoS Biology, 2008 May 20;6(5).
9. Brown Y, Abraham M, **Pearl S**, Kabaha MM, Elboher E, Tzfati Y. **A critical three-way junction is conserved in budding yeast and vertebrate telomerase RNAs**. Nucleic Acids Res. 2007;35(18):6280-9. Epub 2007 Sep.
10. Lin J, Ly H, Hussain A, Abraham M, **Pearl S**, Tzfati Y, Parslow TG, Blackburn EH. **A universal telomerase RNA core structure includes structured motifs required for binding the telomerase reverse transcriptase protein**. PNAS 101(41): 14713-14718. 2004.

## Presentations at conferences

- 2023 10th Fiesb Ilanit conference, Israel. Oral presentation.
- 2022 microbiome CSHL, USA. Poster presentation
- 2022 q-bio Annual Meeting, USA. Oral presentation
- 2020 Simons Marine Collaborations Joint Meeting, Zoom. Poster presentation
- 2020 PriME annual Meeting. Poster presentation, Zoom; Part of the organizing committee
- 2019 PriME Annual Meeting, Italy. Oral presentation
- 2017 4th Scientific Conference of (IMRIC), Israel. poster teaser
- 2016 Stochastic Processes in the Cell Cycle, Israel. Chair & Poster presentation.
- 2014 7th Fiesb Ilanit conference, Israel. Oral presentation.
- 2011 6th Fiesb Ilanit conference (ILANIT). Israel. Poster presentation.
- 2010 48th annual meeting of biophysical society of Japan, Japan. Invited talk.
- 2010 Huji Nano center annual conference, Israel. Invited Talk.
- 2008 The Sudarsky center for computational biology. Annual meeting, Israel. Invited talk.
- 2007 International Society of Molecular Biology / 6th European Conference on Computational Biology, Austria. Poster presentation.
- 2007 5th European Conference on Computational Biology, Israel. Poster presentation.