

List of Publications - Eran Bosis

* Equal contribution

Corresponding author

Highlighted - Publications since promotion

In Preparation / Submitted

1. Mahata, T., Kanarek, K., Goren, M. G., Bosis, E.[#], Qimron, U.[#], and Salomon, D.[#] (2023). A widespread bacterial mobile genetic element encodes weapons against phages, bacteria, and eukaryotes. *bioRxiv*, 2023.03.28.534373.
2. Carobbi, A., di Nepi, S., Bosis, E., Salomon, D. and Sessa, G., 2023. An N-terminal delivery domain defines a new class of polymorphic T6SS effectors in Enterobacterales. *bioRxiv*, pp.2023-07.

Braude College of Engineering

3. Costa, J., Pothier, J. F., Bosis, E., Boch, J., Kölliker, R., and Koebnik, R. (2023). A Community-Curated DokuWiki Resource on Diagnostics, Diversity, Pathogenicity and Genetic Control of Xanthomonads. *MPMI*, *in press*.
4. Kanarek, K., Fridman, C. M., Bosis, E.[#], and Salomon, D.[#] (2023). A new class of polymorphic T6SS effectors and secreted adaptors. *Nature Communications*, 2023; 14, 4983.
5. Tchelet, D., Keppel, K., Bosis, E., and Salomon, D. (2023). *Vibrio parahaemolyticus* T6SS2 effector repertoires. *Gut Microbes*, 2023; 15(1): p. 2178795.
6. Jana, B., Keppel, K., Fridman, C.M, Bosis, E.[#], and Salomon, D.[#]. (2022). Multiple T6SSs, mobile auxiliary modules, and effectors revealed in a systematic analysis of the *Vibrio parahaemolyticus* pan-genome. *mSystems*, e00723-22.
7. Fridman, C.M., Jana, B., Ben-Yaakov, R., Bosis, E., and Salomon, D. (2022). A DNase T6SS effector requires its MIX domain for secretion. *bioRxiv* 2022.05.04.489851. *Microbiology Spectrum*, e02465-22.
8. Dar, Y., Jana, B., Bosis, E.[#] and Salomon, D.[#] (2021). A binary effector module secreted by a type VI secretion system. *EMBO Reports*, 2021; e53981.
9. Lopez, J., Nguyen-Hung, L., Moon, K. H., Salomon, D., Bosis, E.[#], and Feldman, M.F.[#] (2021). Formylglycine-generating enzyme-like proteins constitute a novel family of

widespread type VI secretion system immunity proteins. *J Bacteriology*, 2021; 203(21): e00281-21.

10. Catara V., Cubero J., Pothier JF., Bosis E., Bragard C., Dermić E., Holeva M.C., Jacques M-A., Petter F., Pruvost O., Robène I., Studholme D.J., Tavares F., Vicente J.G., Koebnik R., and Costa J. (2021). Trends in Molecular Diagnosis and Diversity Studies for Phytosanitary Regulated *Xanthomonas*. *Microorganisms*, 2021; 9(4):862.

11. Jana, B., Salomon, D. #, and Bosis, E. # (2020). Novel family of polymorphic toxins in Bacteroidetes. *Life Science Alliance*, 2020, 3 (4) e201900631.

12. Fridman, C.M., Keppel, K., Gerlic, M., Bosis, E. #, and Salomon, D. # (2020). A comparative genomics methodology reveals a widespread family of membrane-disrupting T6SS effectors. *Nature Communications*, 2020; 11:1085.

13. Jana, B., Fridman, C.M., Bosis, E. #, and Salomon, D. # (2019). Modular effector with a DNase toxin domain and a new marker for type VI secretion system substrates. *Nature Communications*, 2019; 10(1):3595.

14. Dar, Y, Salomon, D. #, and Bosis, E. # (2018). The Antibacterial and Anti-Eukaryotic Type VI Secretion System MIX-Effector Repertoire in *Vibrionaceae*. *Mar. Drugs* 2018, 16(11), 433.

15. Merda, D., Briand, M., Bosis, E., Rousseau, C., Portier, P., Barret, M., Jacques, M.A, Fischer-Le Saux, M. (2017). Ancestral acquisitions, gene flow and multiple evolutionary trajectories of the type three secretion system and effectors in *Xanthomonas* plant pathogens. *Molecular Ecology* 26(21): 5939-5952.

Tel Aviv University (Postdoctoral)

16. Teper, D., Madhusoodana Girija, A., Bosis, E., Popov, G., Savidor, A., and Sessa, G. (2018). The *Xanthomonas euvesicatoria* Type III Effector XopAU is an Active Protein Kinase that Manipulates Plant MAP Kinase Signaling. *PLoS Pathogens* 14(1): e1006880.

17. Salomon, D. *, Bosis, E. *, Dar, D., Nachman, I., and Sessa, G. (2012). Expression of *Pseudomonas syringae* type III effectors in yeast under stress conditions reveals that HopX1 attenuates activation of the high osmolarity glycerol MAP kinase pathway. *Microbiology* 158(Pt 11).

18. Bosis, E. *, Salomon, D. *, and Sessa, G. (2011). A simple yeast-based strategy to identify host cellular processes targeted by bacterial effector proteins. *PLoS One* 6(11): e27698.

Tel Aviv University (PhD)

19. Bosis, E.^{*}, Salomon, D.^{*}, Ohayon, O.^{*}, Sivan, G., Bar-Nun, S., and Rabinovich, E. (2010). Ssz1 restores ERAD in cells expressing defective Cdc48-Ufd1-Npl4 complex by upregulating Cdc48. *Genetics* 184 (3): 695-706.
20. Sengupta, P.^{*}, Bosis, E.^{*}, Nachliel, E., Gutman, M., Smith, S. O., Mihályiné, G., Zaitseva, I., and McLaughlin, S. (2009). EGFR Juxtamembrane Domain, Membranes and Calmodulin: Kinetics of Their Interaction. *Biophysical Journal* 96 (12): 4887-95.
21. Bosis, E., Nachliel, E., Cohen, T., Takeda, Y., Ito, Y., Bar-Nun, S., and Gutman, M. (2008). Endoplasmic reticulum glucosidase II is inhibited by its end products. *Biochemistry* 47 (41): 10970-10980.
22. Mezer A., Bosis E., Ashery U., Nachliel E., and Gutman M. (2007). A Comprehensive Kinetic Model of the Exocytotic Process: Evaluation of the Reaction Mechanism. In: Eskin E., Ideker T., Raphael B., Workman C. (eds) Systems Biology and Regulatory Genomics. RSB 2005, RRG 2005. *Lecture Notes in Computer Science*, vol 4023. Springer, Berlin, Heidelberg.
23. Istrin, G., Bosis, E., and Solomon, B. (2006). Intravenous immunoglobulin enhances clearance of amyloid-beta peptide. *Journal of Neuroscience Research* 84:434-43.
24. Mezer, A., Ashery, U., Gutman, M., Project, E., Bosis, E., Fibich, G., and Nachliel, E.. (2006). Systematic search for the rate constants that control the exocytotic process by a Genetic Algorithm. *Biochimica et Biophysica Acta* 1763:345-55.
25. Mezer, A., Bosis, E., Ashery, U., Nachliel, E., and Gutman, M. (2005). Kinetic model of the exocytotic process and evaluation of the reaction mechanism. *Annals of the European Academy of Sciences* 2005;5-21.