

Topaz Kreiser – Curriculum Vitae

Personal

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Date of birth: 13.6.1989
Place of birth: Israel

Military Service

2007-2010 **Flight simulator instructor** in the Israeli Air Force.
Award of Excellence for Outstanding Performance.

Academic career

2017-Present **Ph.D. Student, Biotechnology**, The Shmunis School of Biomedicine and Cancer Research, George S. Wise Faculty of Life Sciences, Tel-Aviv University. Under the supervision of Prof. Ehud Gazit.
Research title: Metabolite amyloids in pathological conditions.
2015-2017 **M.Sc. (*magna cum laude*), Genetics**, Department of Molecular Microbiology and Biotechnology, George S. Wise Faculty of Life Sciences, Tel-Aviv University. Under the supervision of Prof. Daniel Segal and Prof. Ehud Gazit.
2012-2015 **B.Sc., Life Sciences**, Faculty of Natural Sciences, Ben-Gurion University.

Academic and Professional Experience

2018-present **Supervisor of Teaching Assistants** in the George S. Wise Faculty of Life Sciences, The Shmunis School of Biomedicine and Cancer Research, Tel-Aviv University, Microbiology laboratory (Graduate School Course). Training and supervising 9 teaching assistants, overseeing 90 undergraduate students.
2015-2017 **Teaching Assistant** in the George S. Wise Faculty of Life Sciences, Department of Molecular Microbiology and Biotechnology, Tel-Aviv University, Genetics laboratory (Graduate School Course). Instructed several groups of 10 students each.

Academic Awards

2020 The Prajs-Drimmer Institute scholarship for Excellent Ph.D. Students.

Publications:

1. **Kreiser, T**[§]; Zaguri, D[§]; Sachdeva, S.; Zamosatsiano, R.; Mograbi, Y.; Segal, D.; Bacharach, E. and Gazit, E. "Fighting viral infection using innovative mineral-phytochemical combinations". In preparation.
2. Arnon, Z. A.; Grabarics, M.; Raveh, A.; **Kreiser, T**; Pagel, K. and Gazit, E. "Inulin nanostructures: The sweet-spot of carbohydrate self-assembly". In preparation.
3. Lerner, S.; Adler, L.; Eilam, R.; Baruteau, J.; **Kreiser, T**; Tsoory, M.; Brandis, A.; Mehlman, T.; Ryten, M.; Botia, J. A.; Garcia Ruiz, S.; Cisterna Garcia, A.; Dionisi-Vici, C.; Ranucci, G.; Spada, M.; Mazkereth, R.; McCarter, R.; Izem, R.; Balmat, T. J.; Gazit, E.; Nagamani, S. and Erez, A. "Tyrosine accumulation following ASL loss promotes neurodegenerative phenotypes". In preparation.
4. Arnon, Z. A[§]; **Kreiser, T**[§]; Yakimov, B.; Brown, N.; Aizen, R.; Shaham-Niv, S.; Makam, P.; Qaisrani, M. N.; Poli, E.; Ruggiero, A.; Slutsky, I.; Hassanali, A.; Shirshin, E.; Levy, D. and Gazit, E. "On-off transition and ultrafast decay of amino acid luminescence driven by modulation of supramolecular packing" 2021. Under review.
5. Adsi, H.; Levkovich, S. A.; Haimov, E.; **Kreiser, T**; Meli, M.; Engel, H.; Simhaev, L.; Karidi-Heller, S.; Colombo, G.; Gazit, E. and Laor Bar-Yosef, D. "Chemical Chaperones Modulate the Formation of Adenine Amyloid-like Structures". Submitted.
6. Sade Yazdi, D.; Laor Bar-Yosef, D.; Adsi, H.; **Kreiser, T**; Zaguri, D.; Bera, S.; Shaham-Niv, S.; Sigal, S.; Oluwatoba, D.S.; Levy D.; Do, D.T.; Frenkel, D. and Gazit E. "Homocysteine fibrillar assemblies display cross-talk with Alzheimer Disease β -amyloid polypeptide". *PNAS*. 2021.
7. Schnaider, L.; Shimonov, L.; **Kreiser, T**; Zaguri, D.; Bychenko, D.; Brickner, I.; Kolusheva, S.; Lichtenstein, A.; Kost, J. and Gazit, E. "Ultrashort Cell-Penetrating Peptides for Enhanced Sonophoresis-Mediated Transdermal Transport". *ACS Appl. Bio Mater.*, 2020.
8. Schnaider, L.; Rosenberg, A.; **Kreiser, T**; Kolusheva, S.; Gazit, E. and Berman, J., "Peptide Self- Assembly Is Linked to Antibacterial, but Not Antifungal, Activity of Histatin 5 Derivatives". *mSphere*, 2020.
9. Zaguri, D.[§]; Shaham-Niv, S.[§]; Naaman, E.[§]; Mimouni, M.; Magen, D.; Pollack, S.; **Kreiser, T**; Leib, R.; Rencus-Lazar, S.; Adler-Abramovich, L.; Perlman, I.; Gazit, E. and Zayit-Soudry, S. "Induction of retinopathy by fibrillar oxalate assemblies". *Commun. Chem.*, 2020.
10. Zaguri, D.; Shaham-Niv, S.; Adler-Abramovich, L.; **Kreiser, T** and Gazit, E. "The metabolite amyloids hypothesis". Società Chimica Italiana, 2018. In press.
11. Zaguri, D.; **Kreiser, T**; Shaham-Niv, S.; Gazit, E. "Antibodies towards tyrosine amyloid-like fibrils allow toxicity modulation and cellular imaging of the assemblies". *Molecules*, 2018, 23, doi:10.3390/molecules23061273.
12. Peled, S.; Sade, D.; Bram, Y.; Porat, Z.; **Kreiser, T**; Mimouni, M.; Lichtenstein, A.; Segal, D. and Gazit, E. "Single cell imaging and quantification of TDP-43 and α -synuclein intercellular propagation". *Sci. Rep.*, 2017, 7:554.

Patents:

1. "Dietary supplement combination to prevent and treat coronavirus and other viral infections" **United States Provisional Patent Application No. 63/080,797.**, filed [21.09.2020]. Zaguri, D[§]; **Kreiser, T**[§]; Gazit, E.; Segal, D.; Mograbi, Y.; and Bacharach, E.