

Stanford



Noa Katz

Postdoctoral Scholar, Chemical Engineering

Bio

BIO

Noa Katz is a Stanford Science Fellow and an EMBO and Fulbright postdoctoral scholar at Stanford University. She implements biomolecular gene circuits to study and manipulate the central nervous system to promote therapeutic applications for neuro-regeneration and autism.

INSTITUTE AFFILIATIONS

- Member, Wu Tsai Neurosciences Institute

HONORS AND AWARDS

- Rising Stars in Engineering in Health, Biomedical Eng. at Boston, Cornell, Columbia, and Johns Hopkins Universities (2024)
- Future Leaders in Bioengineering seminar series, Rice University (2024)
- Exceptional Scholars Workshop, Rockefeller University (2024)
- Stanford Science Fellow, Stanford University (2022-present)
- Postdoctoral Fellowship, European Molecular Biology Organization (2022-2023)
- Postdoctoral Award, Israel National Postdoctoral Award for Advancing Women in Science (2021-2023)
- Postdoctoral Fellowship, Fulbright Program (2021-2022)
- Conference Scholarship, Keystone Symposia- Noncoding RNAs in Health and Disease (2016)
- Best Presentation, 2nd Synthetic Systems Biology Summer School (2015)
- Special Doctorate Program for outstanding BSc graduates, Technion, Israel Institute of Technology (2013-2019)
- Bachelor of Science, highest honors, Technion, Israel Institute of Technology (2013)
- Excellence Scholarship, PEF Israel Endowment Funds (2009-2012)

STANFORD ADVISORS

- Xiaojing Gao, Postdoctoral Faculty Sponsor
- Xiaojing Gao, Postdoctoral Research Mentor

PATENTS

- Gao, X., Kaseniit, E., Katz, N., Kolber, N., Wolfsberg, E.. "United States Patent 164630 RNA Sensors in Living Cells Utilizing ADAR Editing for Sense-Response Application", Leland Stanford Junior University, Aug 31, 2023
- Roe Amit, Noa Katz. "United States Patent 20210095296 Synthetic non-coding RNAs", TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD., Apr 1, 2021

- Roei Amit, Alexey Tomsov, Orna Atar, Liron Abrahami, Yael Annis, Roni Cohen, Alexandra Ereskovsky, Noa Katz, Lior Levy, Maayan Lufton, Tal Ofek, Sagi Sheinkman, Nitzan Shmuel, Inbal Vaknin, Ruth Veksler, Adi Yannai. "United States Patent 10240132 Composition and method for treating androgen-dependent disorders", TECHNION RESEARCH & DEVELOPMENT FOUNDATION LTD., Mar 26, 2019

Publications

PUBLICATIONS

- **Formation of synthetic RNA protein granules using engineered phage-coat-protein -RNA complexes.** *Nature communications*
Granik, N., Katz, N., Willinger, O., Goldberg, S., Amit, R.
2022; 13 (1): 6811
- **Modular, programmable RNA sensing using ADAR editing in living cells.** *Nature biotechnology*
Kaseniit, K. E., Katz, N., Kolber, N. S., Call, C. C., Wengier, D. L., Cody, W. B., Sattely, E. S., Gao, X. J.
2022
- **A Cell-Free Assay for Rapid Screening of Inhibitors of hACE2-Receptor-SARS-CoV-2-Spike Binding** *ACS SYNTHETIC BIOLOGY*
Kikuchi, N., Willinger, O., Granik, N., Gal, R., Navon, N., Ackerman, S., Samuel, E., Antman, T., Katz, N., Goldberg, S., Amit, R.
2022; 11 (4): 1389-1396
- **Overcoming the design, build, test bottleneck for synthesis of nonrepetitive protein-RNA cassettes** *NATURE COMMUNICATIONS*
Katz, N., Tripto, E., Granik, N., Goldberg, S., Atar, O., Yakhini, Z., Orenstein, Y., Amit, R.
2021; 12 (1): 1576
- **Synthetic 5' UTRs Can Either Up- or Downregulate Expression upon RNA-Binding Protein Binding** *CELL SYSTEMS*
Katz, N., Cohen, R., Solomon, O., Kaufmann, B., Atar, O., Yakhini, Z., Goldberg, S., Amit, R.
2019; 9 (1): 93-+
- **An Assay for Quantifying Protein-RNA Binding in Bacteria** *JOVE-JOURNAL OF VISUALIZED EXPERIMENTS*
Katz, N., Cohen, R., Atar, O., Goldberg, S., Amit, R.
2019
- **Designing Bacterial Chemotactic Receptors Guided by Photonic Femtoliter Well Arrays for Quantifiable, Label-Free Measurement of Bacterial Chemotaxis** *ACS BIOMATERIALS SCIENCE & ENGINEERING*
Davidov, T., Granik, N., Zahran, S., Leonard, H., Adir, I., Elul, O., Fried, T., Gil, A., Mayo, B., Ohayon, S., Sarig, S., Shasha, N., Tsedef, et al
2019; 5 (2): 603-612
- **An in Vivo Binding Assay for RNA-Binding Proteins Based on Repression of a Reporter Gene** *ACS SYNTHETIC BIOLOGY*
Katz, N., Cohen, R., Solomon, O., Kaufmann, B., Atar, O., Yakhini, Z., Goldberg, S., Amit, R.
2018; 7 (12): 2765-2774