

Tal Danino, Ph.D.

Associate Professor of Biomedical Engineering, Columbia University
550 W 120th St. New York NY 10027 | tal.danino@columbia.edu

Education

- Ph.D., Bioengineering, University of California, San Diego (2011)
- B.S., Physics, University of California, Los Angeles (2005)
- B.S., Mathematics, University of California, Los Angeles (2005)
- B.S., Chemistry, University of California, Los Angeles (2005)

Professional Appointments

- Associate Professor (tenured), Department of Biomedical Engineering, Columbia University, 2023-present
- Associate Professor (tenure-track), Department of Biomedical Engineering, Columbia University, 2020-2023
- Assistant Professor, Department of Biomedical Engineering, Columbia University, 2016-2020
- Member, Herbert Irving Comprehensive Cancer Center, Columbia University, 2016-present
- Member, Data Science Institute, Columbia University, 2016-present
- Postdoctoral Fellow, Koch Institute for Integrative Cancer Research, MIT, Dr. Sangeeta N. Bhatia, 2011-2015
- Ph.D. student, Department of Bioengineering, University of California, San Diego, Dr. Jeff Hasty, 2005-2011

Selected Honors and Awards

- 2026 Pershing Lotus Award
- 2025 CZI Biohub Investigator
- 2025 AIMBE Fellow
- 2024 Research Rebel, Charlie Teo Foundation
- 2020 Cancer Research Institute (CRI) Lloyd J. Old Scientist's Taking Risks (STAR) Award
- 2020 Pershing Square Sohn Prize for Young Investigators in Cancer Research
- 2019 NSF CAREER Award
- 2018 ALCF Young Innovators Team Awards (YITA)
- 2017 Breast Cancer Research Foundation-AACR Career Development Award
- 2017 Department of Defense Era of Hope Breast Cancer Scholar Award
- 2015 NIH Pathway to Independence Award (K99/R00)
- 2015 TED Fellow
- 2014 New England Biolabs Passion in Science Award
- 2012 NIH Ruth L. Kirschstein National Research Service Award (NRSA)
- 2011 Misrock Postdoctoral Fellowship
- 2006 Department of Energy Computational Science Graduate Fellowship (DoE CSGF)

Selected Recent Publications

*indicates corresponding and senior author(s). ‡ equal author contribution.

- Singer, Z.‡, Pabon, J.‡, Huang, H., Rice, C., **Danino, T.*** [Engineered bacteria launch and control an oncolytic virus](https://doi.org/10.1038/s41551-025-01476-8). *Nature Biomedical Engineering* (2025). doi.org/10.1038/s41551-025-01476-8
- Redenti, A.‡, Im, J.‡, Redenti, B., Li, F., Rouanne, M., Sheng, Z., Sun, W., Gurbatri, C. R., Huang, S., Jang, Y., Hahn, J., Komaranchath, M., Ballister, E., Vincent, R. L., Vardoshivilli, A., **Danino, T.***, Arpaia, N.* [Probiotic neoantigen delivery vectors for precision cancer immunotherapy](#). *Nature* (2024)
- Vincent, R.‡, Gurbatri, C.‡, Redenti, A., Coker, C., Arpaia, N., **Danino, T.*** [Probiotic-guided CAR-T cells for universal solid tumor targeting](#). *Science* 382, 211–218 (2023)
- Harimoto, T.‡, Hahn, J.‡, Chen, Y., Im, J., Zhang, J., Hou, N., Coker, C., Gray, K., Harr, N., Chowdhury, S., Pu, K., Nimura, C., Arpaia, N., Leong, K.* **Danino, T.*** [A programmable encapsulation system improves delivery of therapeutic bacteria in mice](#). *Nature Biotechnology* 40, 1259–1269 (2022)
- Gurbatri, C., Arpaia, N., **Danino, T.*** [Engineering bacteria as interactive cancer therapies](#). *Science* 378(6622), 858–864 (2022)

- Chien, T.‡, Harimoto, T.‡, Kepecs, B., Gray, K., Coker, C., Pu, K., Azad, T., Nolasco, A., Pavlicova, M., **Danino, T.*** [Enhancing the tropism of bacteria via genetically programmed biosensors](#). *Nature Biomedical Engineering* 6, 94–104 (2021)
- Chowdhury, S., Castro, S., Coker, C., Hinchliffe, T. E., Arpaia, N.*, **Danino, T.*** [Programmable bacteria induce durable tumor regression and systemic antitumor immunity](#). *Nature Medicine* 25(7), 1057–1063 (2019)

Peer-Reviewed Publications (Full List)

54. Yang, Z., Im, J., Chen, N., Mariuzza, D. L., de los Santos-Alexis, K., Li, F., Ballister, E. R., Ringham, O. R., **Danino, T.**, Arpaia, N. [Engineered probiotics for tumor-targeted combination chemimmunotherapy](#). *Science Translational Medicine* 18(867), eady2289 (2026)
53. Shaw, M., Garg, S., Kirby, J., Schmidgall, S., Liguori, F., Doshi, A., Tu, T., **Danino, T.*** [Engineered *E. coli* swarming for binary and analog input recording](#). *Molecular Systems Biology* (2026)
52. Rouanne, M., Chen, N., Mariuzza, D. L., Yang, Z., Li, F., de Los Santos-Alexis, K., Savage, T. M., Vincent, R. L., Mendelsohn, C. L., **Danino, T.**, Arpaia, N. [Tumor-specific antibodies elicited by engineered bacteria promote bladder cancer immunotherapy in preclinical mouse models](#). *Science Translational Medicine* (2026)
51. Schmidgall, S., Zhu, X., Shaw, M., Yang, L., Liévin, V., Yang, J., Zhuang, Y., Strother, T., Bijamov, A., Sun, M. W., Palepu, A., Chen, J., Steiner, D., Shreibati, J., Weng, W.-H., Zhao, Y., Hu, X., Zahn, N., Garg, S., Kirby, J., Gan, Y., Li, J., Thakkar, D., Azizi, S., Racz, D., Gottweis, J., Natarajan, V., Wu, C., **Danino, T.**, Rong, K., Wang, H., Schillings, B., Cheng, Y., Le, Q. V., Tu, T. [Accelerating Scientific Research with Gemini in the Real-World](#). *arXiv* 2608.26701 (2026)
50. Deb, D., Liguori, F., Shuster, B. M., Huang, R., Shoreibah, S., Wang, S., Rojas Ocampo, N. E., Murray, K. P., **Danino, T.*** [Toward development of soil-derived *Bacillus* isolates as lung cancer cytotoxic agents](#). *BioDesign Research* 100074 (2026)
49. Hahn, J.‡, Harimoto, T.‡, Chen, Y.-Y., Liguori, F., Leong, K. W.*, **Danino, T.*** [Design and modeling of biosensor-driven encapsulation systems for systemic delivery of bacterial cancer therapy](#). *ACS Synthetic Biology* (2025)
48. Pabon, J., **Danino, T.**, Gudis, D. A., Overdevest, J. [Engineered Microbial-Based Therapeutics Nose No Bounds: Extending Innovation to Rhinologic Disease Management](#). *International Forum of Allergy & Rhinology* (2025)
47. Singer, Z.‡, Pabon, J.‡, Huang, H., Rice, C., **Danino, T.*** [Engineered bacteria launch and control an oncolytic virus](#). *Nature Biomedical Engineering* (2025)
46. Ballister, E. R.‡, Michels, A.‡, Vincent, R. L.‡, Kreindler, L., Chowdhury, S., Upadhaya, S., Saez-Ibañez, A. R., Tu, T., Gottweis, J., **Danino, T.*** [The emerging landscape of engineered bacteria cancer therapies](#). *Nature Biotechnology* (2025)
45. Li, F., Yang, Z., Savage, T. M., Vincent, R. L., de Los Santos-Alexis, K., Ahn, A., Rouanne, M., Mariuzza, D. L., **Danino, T.**, Arpaia, N. [Programmable bacteria synergize with PD-1 blockade to overcome cancer cell-intrinsic immune resistance mechanisms](#). *Science Immunology* 9, eadn9879 (2024)
44. Redenti, A.‡, Im, J.‡, Redenti, B., Li, F., Rouanne, M., Sheng, Z., Sun, W., Gurbatri, C. R., Huang, S., Jang, Y., Hahn, J., Komaranchath, M., Ballister, E., Vincent, R. L., Vardoshivilli, A., **Danino, T.***, Arpaia, N.* [Probiotic neoantigen delivery vectors for precision cancer immunotherapy](#). *Nature* 635, 453–461 (2024)
43. Windemuth, S., Hahn, J., You, J., Wang, Z., Ding, S., Tarrab, S., Coker, C., Leong, K., **Danino, T.*** [Iron-tannin coating reduces clearance and increases tumor colonization of systemically delivered bacteria](#). *ACS Synthetic Biology* (2024)
42. Liguori, F., Pellicciotta, N., Milanetti, E., Windemuth, S., Ruocco, G., Di Leonardo, R., **Danino, T.*** [Dynamic control of gene expression to mitigate mutational escape in lysis-driven bacteria cancer therapy](#). *BioDesign Research* (2024)
41. Gurbatri, C.‡, Radford, G. A.‡, Vrbanac, L., Im, J., Thomas, E. M., Coker, C., Taylor, S. R., YoungUk, J., Sivan, A., Rhee, K., Saleh, A. A., Chien, T., Zandkarimi, F., Lia, I., Lannagan, T. R. M., Wang, T., Wright, J. A., Thomas, E., Kobayashi, H., Ng, J. Q., Lawrence, M., Sammour, T., Thomas, M., Lewis, M., Papanicolas, L., Perry, J., Fitzsimmons, T., Kaazan, P., Lim, A., Stravropoulos, A. M., Gouskos, D. A., Marker, J., Ostroff, C., Rogers, G., Arpaia, N., Worthley, D. L., Woods, S. L.*, **Danino, T.*** [Engineering](#)

- [tumor-colonizing *E. coli* Nissle 1917 for detection and treatment of colorectal neoplasia](#). *Nature Communications* 15, 646 (2024)
40. Hahn, J., Ding, S., Im, J., Harimoto, T., Leong, K. W., **Danino, T.*** [Bacterial therapies at the interface of synthetic biology and nanomedicine](#). *Nature Reviews Bioengineering* 2, 120–135 (2024)
 39. Vincent, R., Li, F., Ballister, E., Arpaia, N., **Danino, T.*** [Efficient Generation of Murine Chimeric Antigen Receptor \(CAR\)-T Cells](#). *Journal of Visualized Experiments* (2024)
 38. Vincent, R.‡, Gurbatri, C.‡, Redenti, A., Coker, C., Arpaia, N., **Danino, T.*** [Probiotic-guided CAR-T cells for solid tumor targeting](#). *Science* 382, 211–218 (2023)
 37. Doshi, A., Shaw, M., Tonea, R., Moon, S., Doshi, A., Laine, A., Guo, J., **Danino, T.*** [Engineered bacterial swarm patterns as spatial records of environmental inputs](#). *Nature Chemical Biology* 19, 878–886 (2023)
 36. Serebrinsky-Duek, K., Barra, M., **Danino, T.**, Garrido, D. [Engineered bacteria for short-chain-fatty-acid-repressed expression of biotherapeutic molecules](#). *Microbiology Spectrum* 11(2) (2023)
 35. Savage, T., Vincent, R., Hanrahan, S., Huang, L., Ahn, A., Pu, K., Li, F., Coker, C., **Danino, T.**, Arpaia, N. [Chemokines expressed by engineered bacteria recruit and orchestrate antitumor immunity](#). *Science Advances* 9(10) (2023)
 34. Deb, D., Wu, Y., Coker, C., Harimoto, T., Huang, R., **Danino, T.*** [Design of combination therapy for engineered bacterial therapeutics in non-small cell lung cancer](#). *Scientific Reports* 12, 21551 (2022)
 33. Gurbatri, C., Arpaia, N., **Danino, T.*** [Engineering bacteria as interactive cancer therapies](#). *Science* 378(6622), 858–864 (2022)
 32. Deb, D.‡, Zhu, S.‡, LeBlanc, M., **Danino, T.*** [Assessing chemotherapy dosing strategies in a spatial cell culture model](#). *Frontiers in Oncology* 24 (2022)
 31. Doshi, A.‡, Shaw, M.‡, Tonea, R., Minety, R., Moon, S., Laine, A., Guo, J.*, **Danino, T.*** [A deep learning pipeline for segmentation of *Proteus mirabilis* colony patterns](#). *IEEE 19th International Symposium on Biomedical Imaging (ISBI)*, 1–5 (2022)
 30. Harimoto, T.‡, Hahn, J.‡, Chen, Y., Im, J., Zhang, J., Hou, N., Coker, C., Gray, K., Harr, N., Chowdhury, S., Pu, K., Nimura, C., Arpaia, N., Leong, K.*, **Danino, T.*** [A programmable encapsulation system improves delivery of therapeutic bacteria in mice](#). *Nature Biotechnology* 40, 1259–1269 (2022)
 29. Zhu, N.‡, Liu, C.‡, Singer, Z., **Danino, T.**, Laine, A., Guo, J. [Segmentation with residual attention U-Net and an edge-enhancement approach preserves cell shape features](#). *IEEE Engineering in Medicine and Biology Society (EMBC)* (2022)
 28. Harimoto, T., Deb, D., **Danino, T.*** [A rapid screening platform to coculture bacteria within tumor spheroids](#). *Nature Protocols* (2022)
 27. Kobayashi, H., Gieniec, K. A., Lannagan, T. R. M., Wang, T., Asai, N., Mizutani, Y., Iida, T., Ando, R., Thomas, E. M., Sakai, A., Suzuki, N., Ichinose, M., Wright, J. A., Vrbanc, L., Ng, J. Q., Goynes, J., Radford, G., Lawrence, M. J., Sammour, T., Hayakawa, Y., Klebe, S., Shin, A. E., Asfaha, S., Bettington, M. L., Rieder, F. L., Arpaia, N., **Danino, T.**, Butler, L. M., Burt, A. D., Leedham, S. J., Rustgi, A. K., Mukherjee, S., Takahashi, M., Wang, T. C., Enomoto, A., Woods, S. L., Worthley, D. L. [The origin and contribution of cancer-associated fibroblasts in colorectal carcinogenesis](#). *Gastroenterology* 162(3), 890–906 (2021)
 26. Chien, T.‡, Harimoto, T.‡, Kepecs, B., Gray, K., Coker, C., Pu, K., Azad, T., Nolasco, A., Pavlicova, M., **Danino, T.*** [Enhancing the tropism of bacteria via genetically programmed biosensors](#). *Nature Biomedical Engineering* 6, 94–104 (2021)
 25. Singer, Z., Ambrose, P., **Danino, T.***, Rice, C. M.* [Quantitative measurements of early alphaviral replication dynamics in single cells reveals the basis for superinfection exclusion](#). *Cell Systems* 12(3), 210–219 (2021)
 24. Chien, T., Jones, D. R., **Danino, T.*** [Engineered bacterial production of volatile methyl salicylate](#). *ACS Synthetic Biology* 10(1), 204–208 (2020)
 23. Gurbatri, C., Lia, I., Vincent, R., Coker, C., Castro, S., Treuting, P. M., Hinchliffe, T. H., Arpaia, N., **Danino, T.*** [Engineered probiotics for local tumor delivery of checkpoint blockade nanobodies](#). *Science Translational Medicine* 12(530), eaax0876 (2020)
 22. Barra, M., **Danino, T.**, Garrido, D. [Engineered probiotics for detection and treatment of inflammatory intestinal diseases](#). *Frontiers in Bioengineering and Biotechnology* 8, 265 (2020)

21. Harimoto, T., Singer, Z., Velazquez, O., Zhang, J., Castro, S., Hinchliffe, T., Mather, W., **Danino, T.*** [Rapid screening of engineered microbial therapies in a 3-D multicellular model](#). *PNAS* 116(18), 9002–9007 (2019)
20. Chowdhury, S., Castro, S., Coker, C., Hinchliffe, T. E., Arpaia, N.*, **Danino, T.*** [Programmable bacteria induce durable tumor regression and systemic antitumor immunity](#). *Nature Medicine* 25(7), 1057–1063 (2019)
19. Fedorec, A. J. H., Ozdemir, T., Doshi, A., Rosa, L., Velazquez, O., **Danino, T.**, Barnes, C. P. [Two new plasmid post-segregational killing mechanisms for the implementation of synthetic gene networks in *E. coli*](#). *iScience* 14, 323–334 (2019)
18. Harimoto, T., **Danino, T.*** [Engineering bacteria for cancer therapy](#). *Emerging Topics in Life Sciences* 3(5), 623–629 (2019)
17. Ozdemir, T., Fedorec, A. J. H., **Danino, T.**, Barnes, C. P. [Synthetic Biology and Engineered Live Biotherapeutics: Toward Increasing System Complexity](#). *Cell Systems* 7(1), 5–16 (2018)
16. Chien, T.†, Doshi, A.†, **Danino, T.*** [Advances in bacterial cancer therapies using synthetic biology](#). *Current Opinion in Systems Biology* 5, 1–8 (2017)
15. Geller, L. T.†, Barzily-Rokni, M.†, **Danino, T.**, Jonas, O., Shental, N., Nejman, D., Gavert, N., Zwang, Y., Cooper, Z. A., Shee, K., Thaïss, C. A., Reuben, A., Livny, J., Avraham, R., Frederick, D. T., Ligorio, M., Chatman, K., Johnston, S. E., Mosher, C. M., Brandis, A., Fuks, G., Gurbatri, C., Gopalakrishnan, V., Kim, M., Hurd, M. W., Katz, M., Fleming, J., Maitra, A., Smith, D. A., Skalak, M., Bu, J., Michaud, M., Trauger, S. A., Barshack, I., Golan, T., Sandbank, J., Flaherty, K. T., Mandinova, A., Garrett, W. S., Thayer, S. P., Ferrone, C. R., Huttenhower, C., Bhatia, S. N., Gevers, D., Wargo, J. A., Golub, T. R., Straussman, R. [Potential role of intratumor bacteria in mediating tumor resistance to the chemotherapeutic drug gemcitabine](#). *Science* 357(6356), 1156–1160 (2017)
14. Moon, S.†, Fritz, I.†, Singer, Z.†, **Danino, T.*** [Spatial Control of Bacteria Using Screen Printing](#). *3D Printing and Additive Manufacturing* 3(4), 194–203 (2016)
13. Din, M.†, **Danino, T.†**, Prindle, A., Allen, K., Skalak, M., Bhatia, S., Hasty, J. [Synchronized cycles of bacterial lysis for in vivo delivery](#). *Nature* 536(7614), 81–85 (2016)
12. Luna, J., Scheel, T., **Danino, T.**, Shaw, K., Takacs, C., Mele, A., Fak, J., Nishiuchi, E., Cantanese, M., Rice, C., Darnell, R. [Hepatitis C virus RNA functionally sequesters miR-122](#). *Cell* 160(6), 1099–1110 (2015)
11. **Danino, T.†**, Prindle, A.†, Kwong, G., Skalak, M., Li, H., Allen, K., Hasty, J., Bhatia, S. [Programmable probiotics for cancer detection in urine](#). *Science Translational Medicine* 7, 289ra84 (2015)
10. **Danino, T.†**, Prindle, A.†, Hasty, J., Bhatia, S. [Measuring growth and gene expression dynamics of tumor-targeted *S. typhimurium* bacteria](#). *Journal of Visualized Experiments* 77, e50540 (2013)
9. **Danino, T.**, Lo, J., Prindle, A., Hasty, J., Bhatia, S. [In vivo gene expression dynamics from tumor-targeted bacteria](#). *ACS Synthetic Biology* 1(10), 465–470 (2012)
8. Prindle, A., **Danino, T.**, Selimkhanov, J. S., Samayoa, P., Goldberg, A., Bhatia, S., Hasty, J. [Genetic circuits in *Salmonella typhimurium*](#). *ACS Synthetic Biology* 1(10), 458–464 (2012)
7. Cookson, N. A., Mather, W. H., **Danino, T.**, Mondragón-Palomino, O., Williams, R. J., Tsimring, L. S., Hasty, J. [Queueing up for enzymatic processing: Correlated signaling through coupled degradation](#). *Molecular Systems Biology* 7, 561 (2011)
6. Prindle, A., Samayoa, P., Razinkov, I., **Danino, T.**, Tsimring, L. S., Hasty, J. [A sensing array of radically coupled genetic biopixels](#). *Nature* 481, 39–44 (2011)
5. Mondragon-Palomino, O., **Danino, T.**, Selimkhanov, J., Tsimring, L. S., Hasty, J. [Entrainment of a population of synthetic genetic oscillators](#). *Science* 333(6047), 1315–1319 (2011)
4. Boyer, D., Mather, W., Mondragon-Palomino, O., Orozco-Fuentes, S., **Danino, T.**, Hasty, J., Tsimring, L. S. [Buckling instability in ordered bacterial colonies](#). *Physical Biology* 8, 026008 (2011)
3. **Danino, T.**, Volfson, D., Bhatia, S., Tsimring, L., Hasty, J. [In-silico pattern formation of vascular mesenchymal stem-cells in three-dimensions](#). *PLoS ONE* 6(5), e20182 (2011)
2. Mather, W., Mondragon-Palomino, O., **Danino, T.**, Hasty, J., Tsimring, L. S. [Streaming instability in growing cell populations](#). *Physical Review Letters* 104(20), 208101 (2010)
1. **Danino, T.†**, Mondragon-Palomino, O.†, Tsimring, L., Hasty, J. [A synchronized quorum of genetic clocks](#). *Nature* 463, 326–330 (2010)

Current Research Support

Note: All funding amounts shown are direct costs allocated to the Danino Lab.

- **Pershing Square Lotus Award** (PI: Danino) *Bioengineered probiotics for ovarian cancer therapy*. The Pershing Square Foundation [08/2026–07/2029] – \$750,000
- **R01CA313939** (PI: Danino, Arpaia) *Advancing ProCAR therapy toward clinical application*. NIH R01 [07/01/2026–06/30/2031] – \$2,665,518
- **R01CA304090** (PI: Arpaia, Danino) *Modulating the localization and persistence of microbial neoantigen vaccine vectors to enhance therapeutic efficacy*. NIH/NCI [07/2025–06/2030] – \$1,928,105
- **LC240083** (PI: Senar; collaborators: Danino, Arpaia) *MyLC: Mycoplasma pneumoniae as minimal lung bacterial chassis to deliver locally therapeutic proteins for the treatment of non-small cell lung carcinoma*. DOD [07/01/2025–06/30/2028] – \$201,596
- **CHTF CU24-1208** (PI: Danino) *Bioengineering probiotics for glioblastoma therapy*. Charlie Teo Foundation Research Rebel Award [06/2025–05/2027] – \$132,984
- **UG3 CA301294** (PI: Arpaia, Danino) *Engineered probiotic bacteria for colorectal cancer immunoprevention and interception*. NIH/UH3 [04/01/2025–03/31/2030] – \$2,021,953
- **CZB NY CU25-0232** (PI: Danino) *Engineering synthetic prokaryotic-immune cell communication systems*. CZ Biohub New York [04/01/2025–03/31/2028] – \$652,173
- **INV-060390** (PI: Danino) *Engineering bacteria as in vivo bioreactors*. Bill & Melinda Gates Foundation [11/2023–12/2026, NCE] – \$900,000
- **R01EB034302** (PI: Danino, Arpaia, Leong) *Programmable encapsulation systems to improve delivery of therapeutic bacteria*. NIH/NIBIB [06/01/2023–05/30/2027] – \$1,310,935
- **CRI3446** (PI: Danino) *Engineering probiotics as cancer immunotherapies*. Cancer Research Institute, Lloyd J. Old STAR Award [08/01/2020–12/31/2026, NCE] – \$1,250,000

Selected Completed Research Support

- **ARPA-H P22502** (PI: Kwong, Qiu, Blazeck, Danino, Xue) *Mapping the cancer and organ degradome atlas to unlock synthetic biomarkers for multi-cancer early detection*. ARPA-H [10/2023–11/2025] – \$3,593,181
- **R01EB029750** (PI: Danino) *Engineering *S. typhimurium* for metastatic colorectal cancer*. NIH/NIBIB [06/15/2020–11/30/2025] – \$1,972,810
- **R01EB030352** (PI: Danino) *Probiotic guided CAR-T therapy (ProCARs) for breast cancer*. NIH/NIBIB [09/15/2020–05/31/2024] – \$1,741,503
- **W81XWH-17-1-0356** (PI: Danino) *Programmable probiotics for primary and metastatic breast cancer*. Era of Hope Scholar Award, Department of Defense [07/15/2017–01/31/2023] – \$3,751,197
- **NSF CAREER Award** (PI: Danino) *CAREER: Engineering bacteria swarming for biotechnology*. National Science Foundation [03/01/2019–02/29/2024] – \$356,214
- **PSSCRA CU20-0730** (PI: Danino) *Engineering probiotics for precise targeting of cancer therapeutics*. Pershing Square Sohn prize for young investigators in cancer, Pershing Square Foundation [08/01/2020–07/31/2023] – \$621,317
- **U01CA247573** (PI: Danino, Arpaia) *Engineering immunotherapeutic probiotics to mitigate irAEs*. NIH/NCI [01/01/2020–12/31/2024] – \$1,490,561

Selected Other Publications and News

- Danino, T. [Beautiful Bacteria](#). Rizzoli [NYT book review] (2024)
- Deb, D., Shoreibah, S., Danino, T. [Reimagining cancer research with art](#). *Nature Reviews Cancer* (2022)
- Ruskin, E., Danino, T. [Syndemic: Using game-based learning to engage students in the human microbiome](#). Connecting Sustainability Research and Teaching: Discourses on Justice, Inclusion, and Authenticity (2022)
- Nature | [Special delivery: bacterial couriers are smuggling drugs into cancers](#)
- Science | [Perspective on Engineered bacteria guide T cells to tumors](#)
- The New York Times | [New Weapons Against Cancer: Millions of Bacteria Programmed to Kill](#)
- Nature Medicine, News & Views | [Programmable bacteria as cancer therapy](#)