

Nina Khera

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Education

HARVARD UNIVERSITY

Cambridge, MA

AB in Neuroscience (Computational), GPA: 3.96/4.0

May 2027

Relevant Coursework: Immunology, Neuroscience Laboratory Research, Principles of Organic Chemistry, Introductory Mechanics and Relativity, Linear Algebra, Multivariable Calculus, Integrated Introduction to the Life Sciences

Honors: Masason Foundation Member (2023-2027, full tuition/board scholarship), Interact Fellow (2026), PRISE Fellow (2024, Harvard-funded summer research program), Bessemer Venture Partners Fellow Finalist (2024), Time Fellow (2023)

Organizations: Director of Science for the Aging Initiative (2023-present), Member of Harvard Innovation Labs (2023-present), Director of Harvard Alzheimer's Buddies (2023-present), Peer Reviewer for the Harvard Undergraduate Research Journal (2024-present)

BUCKINGHAM BROWNE AND NICHOLS SCHOOL

Cambridge, MA

High School Diploma, GPA: 3.94/4.0

Honors: National Merit Finalist (2023), Cum Laude Society Member (2023), Meriwether Otis Kimball Prize Awardee (2023), SPARC Participant (2023), Atlas Fellow (2022, \$50K scholarship), Emergent Ventures Fellow (2021, granted \$60K for multiple initiatives), Cabot Grantee (2021, \$900 grant for computer science education)

Organizations: Volunteer for GirlsXMath Program (2021-2023), Class Instructor for Easterseals Karate (2020-2023), President of Computer Science, French and Scrabble Clubs (2022-2023), Author for the Spectator (literary magazine)

Experience

COGNITO THERAPEUTICS

Cambridge, MA

Research Associate

2025-present

Perform quantitative analysis of product and experimental data from a 40 Hz stimulation platform aimed at neuroprotection in Alzheimer's disease, with a focus on identifying biomarkers of cognitive resilience to dementia. Contribute to literature reviews to contextualize findings and guide experimental hypotheses.

CONTRARY

Cambridge, MA

Venture Partner, Harvard Pod Lead

2024-present

Selected as Venture Partner for Contrary, a talent and research-driven investment firm. Scout and interview eligible founders on campus. Organized a campus-wide building event to foster innovation and connect with founders, attracting 40+ attendees. Planned and selected teams for a five team Harvard-MIT joint pitch event for Contrary HQ.

BOYDEN LAB, MIT

Cambridge, MA

Research Intern

2022, 2024-present

Co-authoring a book and blog with Dr. Boyden and colleagues on first-principles problem-solving in biology. Conducted research on design of cost-effective machine learning tools to model aging-related disease risks.

TSAI LAB, MIT

Cambridge, MA

Research Intern

2022-present

Conducting research to analyze factors causing cognitive decline in Alzheimer's disease using bioinformatics pipelines in Python and R. Processed single cell RNA-sequencing and whole genome sequencing data for differentially-expressed gene and transcription factor analysis of two datasets. First author on a peer-reviewed publication on cognitive resilience. Awarded the PRISE Fellowship over the summer of 2024 by Harvard to facilitate conducting this research.

BIOTEIN

Cambridge, MA

CEO / Co-founder

2019-present

Lead a four-person team pursuing multiple initiatives in the longevity space. Raised \$79K in funding (\$50K from 1517 fund, \$28K from Emergent Ventures, and \$1K from the Fowler Global Social Innovation Challenge). Oversaw three research studies. Partnered with Harvard Pagliuca Life Lab as part of their Student Bench program.

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Experience (cont.)

ALIO MEDICAL

Intern

Remote
2023 (summer)

Selected to work on an initiative focused on optimizing dialysis therapy. Created and presented a bioinformatics pipeline in Python to extract heart rate variability metrics from smartwatch PPG data, as well as a website for patient interaction.

LYGENESIS

Intern

Remote
2022 (summer), 2021 (summer)

Developed and executed several bioinformatics pipelines in Python to identify differentially expressed genes with age in thymic data. Wrote and presented two final reports focused on results and follow-on initiatives.

RUBEDO LIFE SCIENCES

Intern

Remote
2021 (summer)

Created a Python-based package to visualize gene expression data, and wrote a final README and Github repository describing the package usage and applications; this facilitated subsequent analysis of Rubedo datasets.

GLADYSHEV LAB, HARVARD MEDICAL SCHOOL

Research Intern

Cambridge, MA
2020-2021

First author on a peer-reviewed academic paper in the Aging journal on COVID-19 and its relation to age. Performed background research on the disease and current case-fatality rates, analyzed publicly available datasets using R and Python, wrote the paper and implemented feedback.

Publications and Presentations

Neuroscience of Vitality and Aging Conference (Co-organizer, 600 attendees, 2026)

Kording, K. P., Arkhipov, A., Deng, D., Escola, S., Grant, S. G. N., Haspel, G., Januszewski, M., Kasthuri, N., Khera, N., Kohman, R. E., Lindsay, G., Lunshof, J., Marblestone, A., Markowitz, D. A., Matelsky, J., Mensh, B., Mineault, P., Payne, A., Peng, J., ... Boyden, E. S. (2026). Compiling molecular ultrastructure into neural dynamics. arXiv. <https://doi.org/10.48550/ARXIV.2603.25713>

Longevity World Forum (Speaker, 2026)

Fedorovskyy, M., Dasariraju, S., Simonini, S., Mehra, E., Law, C., Khera, N., Rajagopal, K., & Orkaby, A. (2025). Aging initiative : A student-led model for advancing aging research with a translational focus. Innovation in Aging, 9, igaf122.3536. <https://doi.org/10.1093/geroni/igaf122.3536>

Khera, N., Raju, R., & Lipton, S. A. (2025). The transcriptional and cellular landscape of cognitive resilience to Alzheimer's disease. In Frontiers in Molecular Neuroscience (Vol. 18, p. 1665802). Elsevier. <https://doi.org/10.3389/fnmol.2025.1665802> (2 citations, featured in Frontiers in Molecular Neuroscience 2025 Highlights)

EngineeringX Substack (<https://engineeringx.substack.com/>, 870 subscribers, with Dr. Ed Boyden and Claire Wang)

Nucleate Inside: Aging Speaker Series (Organizer and Moderator, 2024-2025)

Biomarkers of Aging Conference (Presented Poster, 2024)

Fossel, M., et al (2024). Aging: How aging works, how we reverse aging, and prospects for curing aging. Academic Press, an imprint of Elsevier. (co-authored chapter, 1 citation)

Fossel, M., Bean, J., Khera, N., & Kolonin, M. G. (2022). A Unified Model of Age-Related Cardiovascular Disease. In Biology (Vol. 11, Issue 12, p. 1768). MDPI AG. <https://doi.org/10.3390/biology11121768> (20 citations)

Deutsche Welle More Life - Decoding the secret of aging Documentary (Speaker, 2022)

Aging Research and Drug Discovery Conference (Student Ambassador, 2022)

Fifteen Seconds Conference (Speaker, 2021)

RAADFest Conference (Speaker, 2021)

Khera, N., Santesmasses, D., Kerepesi, C., & Gladyshev, V. N. (2021). COVID-19 mortality rate in children is U-shaped. In Aging (Vol. 13, Issue 16, pp. 19954–19962). Impact Journals, LLC. <https://doi.org/10.18632/aging.203442> (42 citations; also cited by the World Health Organization and the Public Health Agency of Sweden in policy reports)

Collision Conference (Speaker, 2019)

Skills

Technical: Python, R, Java, Swift, Full-Stack Web Development, Bioinformatics (cell quality control, PCA, clustering, enrichment analysis, differentially expressed gene analysis), Version Control (Git/GitHub), Machine Learning (TensorFlow/Keras), Data Visualization in Python (Matplotlib, Seaborn)

Languages: English, French (fluent)