



Nasim Bararpour

Basic Life Research Scientist, Genetics

SUPERVISORS

- Michael Snyder

Bio

BIO

Nasim Bararpour is a postdoctoral fellow in the Department of Genetics and Personalized Medicine at Stanford School of Medicine, where she works at the intersection of data science, and multi-omics integration. She completed her Ph.D. in Life Science from the University of Lausanne, developing deep expertise in mass spectrometry-based metabolomics and lipidomics as well as integrative omics. She joined Stanford in 2020.

At Stanford, Dr. Bararpour has led and contributed to some of the most comprehensive multi-omics studies to date, including the human Personalized Omics Profiling (hPOP) project, the integrative Personal Omics Profiling (iPOP) study, and the Human Tumor Atlas Network (HTAN). Her first-authored paper in *Cell* (2026), which integrated thirteen molecular layers across individuals of diverse ancestries, identified ethnicity-specific drug target patterns and molecular pathways with direct implications for cardiometabolic disease, making a scientific case for population-aware precision medicine. She is the author of over 20 peer-reviewed publications, including papers in *Nature Metabolism*, and *Nature Biomedical Engineering*.

LINKS

- My linkedin: <https://www.linkedin.com/in/nasimbararpour>
- My github: <https://github.com/nbararpo>

Publications

PUBLICATIONS

- **A comparison of deep multiomics profiles across ethnicity, geography, and age.** *Cell*
Bararpour, N., Cao, J. Z., Wu, Y., Gupta, S., Hoopmann, M. R., Qin, R., Midha, M. K., Mireault, M., Juanes-Velasco, P., Hanson, C., Ahadi, S., Higgs, E., Baxter, et al
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- **Metabolomic Profiles During and After a Hypertensive Disorder of Pregnancy: The EPOCH Study.** *International journal of molecular sciences*
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- **Multiomic analysis of familial adenomatous polyposis reveals molecular pathways associated with early tumorigenesis.** *Nature cancer*
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- **Temporal dynamics of the multi-omic response to endurance exercise training.** *Nature*

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- **The mitochondrial multi-omic response to exercise training across rat tissues.** *Cell metabolism*
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2024
- **People living with HIV display increased anti-apolipoprotein A1 auto-antibodies, inflammation, and kynurenine metabolites: a case-control study.** *Frontiers in cardiovascular medicine*
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Sajic, T., Ferreira Gomes, C. K., Gasser, M., Caputo, T., Bararpour, N., Landaluze-Iturriria, E., Augsburger, M., Walter, N., Hainard, A., Lopez-Mejia, I. C., Fracasso, T., Thomas, A., Gilardi, et al
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- **Arsenic induces metabolome remodeling in mature human adipocytes.** *Toxicology*
Gasser, M., Lenglet, S., Bararpour, N., Sajic, T., Vaucher, J., Wiskott, K., Augsburger, M., Fracasso, T., Gilardi, F., Thomas, A.
2023: 153672
- **Dynamic lipidome alterations associated with human health, disease and ageing.** *Nature metabolism*
Hornburg, D., Wu, S., Moqri, M., Zhou, X., Contrepolis, K., Bararpour, N., Traber, G. M., Su, B., Metwally, A. A., Avina, M., Zhou, W., Ubellacker, J. M., Mishra, et al
2023
- **The polyclonal path to malignant transformation in familial adenomatous polyposis**
Schenck, R. O., Khan, A., Horning, A., Esplin, E. D., Monte, E., Wu, S., Hanson, C., Bararpour, N., Neves, S., Jiang, L., Contrepolis, K., Lee, H., Guha, et al
AMER ASSOC CANCER RESEARCH.2023
- **Multi-omics microsampling for the profiling of lifestyle-associated changes in health.** *Nature biomedical engineering*
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- **Cadmium acute exposure induces metabolic and transcriptomic perturbations in human mature adipocytes.** *Toxicology*
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2021; 178 (23): 4708-4725
- **Triangulating evidence from longitudinal and Mendelian randomization studies of metabolomic biomarkers for type 2 diabetes.** *Scientific reports*
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- **DBnorm as an R package for the comparison and selection of appropriate statistical methods for batch effect correction in metabolomic studies.** *Scientific reports*
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- **In situ metabolomic changes in rat hippocampus after acute cocaine administration** *INTERNATIONAL JOURNAL OF MASS SPECTROMETRY*
Joye, T., Bararpour, N., Augsburger, M., Boutrel, B., Thomas, A.
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- **Separation of blood microsamples by exploiting sedimentation at the microscale.** *Scientific reports*
Forchelet, D., Béguin, S., Sajic, T., Bararpour, N., Pataky, Z., Frias, M., Grabherr, S., Augsburger, M., Liu, Y., Charnley, M., Déglon, J., Aebersold, R., Thomas, et al
2018; 8 (1): 14101
- **Proteome and Metabolome of Subretinal Fluid in Central Serous Chorioretinopathy and Rhegmatogenous Retinal Detachment: A Pilot Case Study.** *Translational vision science & technology*
Kowalczyk, L., Matet, A., Dor, M., Bararpour, N., Daruich, A., Dirani, A., Behar-Cohen, F., Thomas, A., Turck, N.
2018; 7 (1): 3

PRESENTATIONS

- A Comparison of Deep Multi-Omics Profiles Across Ethnicity, Geography and Age - HUPO 2025 (November 9, 2025 - November 13, 2025)