


# gokul gowri

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 github.com/ggdna

## education

Ph. D. Systems, Synthetic, and Quantitative Biology, Harvard, 2020 - *present*.

B.S. Bioengineering, Caltech, 2020.

## papers

Approximating mutual information of high-dimensional variables using learned representations

Submitted.

**Gowri, G.\***, Lun, XK., Klein, A.\*<sup>^</sup>, & Yin, P.<sup>^</sup>. [\* co-corresponding, <sup>^</sup> senior authors]

Signal amplification by cyclic primer extension enables high-sensitivity single-cell mass cytometry analysis

Accepted, Nature Biotechnology.

Lun, XK., Sheng, K., Yu, X., Lam, CY., **Gowri, G.**, Zhai, Y., Kim, Y., Jackson, HW., Ingber, D., Yaffe, M., & Yin, P.

Scalable design of orthogonal DNA barcode libraries

Nature Computational Science, 2024.

**Gowri, G.\***, Sheng, K., & Yin, P.\* [\* co-corresponding]

Multi-micron crisscross structures from combinatorially assembled DNA origami slats

Nature Nanotechnology, 2023.

Wintersinger, C. M., Mineev, D., Ershova, A., Sasaki, H., **Gowri, G.**, Berengut, J., Corea-Dilbert, F. E., Yin, P., & Shih, W.

Interpretable visualization of single cell data using Janus autoencoders

Learning Meaningful Representations of Life Workshop at NeurIPS, 2022.

**Gowri, G.**, Richter, P., Lun, X., & Yin, P.

Reversible computation using swap reactions on a surface

Lecture Notes in Computer Science, 2019.

Brailovskaya, T.\*, **Gowri, G.\***, Yu, S.\*, & Winfree, E. [\* contributed equally]

Combined amplification and molecular classification for gene expression diagnostics

Lecture Notes in Computer Science, 2019.

**Gowri, G.**, Lopez, R., & Seelig, G.

## teaching

Teaching Fellow, Integrated Science (statistical mechanics and animal development), Harvard, 2022.

Facilitator, Equity Workshops for SSQBio PhD program, Harvard, 2021-2023.

Teaching Assistant, Biomolecular Computation, Caltech, 2019.

Teaching Assistant, Principles of Biology, Caltech, 2019.

## software

**latentmi**: mutual information estimation in high dimensions. `pip install latentmi`

**seqwalk**: tool for designing orthogonal DNA sequence libraries. `pip install seqwalk`

## honors

Goldwater Scholar, 2019.