Stanford

Ved Topkar

- MD Student, expected graduation Spring 2024
- Ph.D. Student in Biophysics, admitted Autumn 2018
- MSTP Student

Bio

BIO

I am a lover of all things RNA currently interested in studying sub-cellular localization of mRNA molecules. Using primary oligodendrocytes as a model system, I am studying the mechanisms of mRNA transport in myelin development.

LINKS

- Personal Site: http://vedtopkar.com

Publications

PUBLICATIONS

- **Combinatorial optimization of mRNA structure, stability, and translation for RNA-based therapeutics.** *Nature communications*
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- **Accelerated cryo-EM-guided determination of three-dimensional RNA-only structures.** *Nature methods*
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- **Open-source guideseq software for analysis of GUIDE-seq data** *NATURE BIOTECHNOLOGY*
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- **Broadening the targeting range of Staphylococcus aureus CRISPR-Cas9 by modifying PAM recognition** *NATURE BIOTECHNOLOGY*
  Kleinstiver, B. P., Prew, M. S., Tsai, S. Q., Nguyen, N. T., Topkar, V. V., Zheng, Z., Joung, J.
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- **Engineered CRISPR-Cas9 nucleases with altered PAM specificities** *NATURE*
  Kleinstiver, B. P., Prew, M. S., Tsai, S. Q., Topkar, V. V., Nguyen, N. T., Zheng, Z., Gonzales, A. W., Li, Z., Peterson, R. T., Yeh, J., Aryee, M. J., Joung, J.
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- **Dimeric CRISPR RNA-Guided FokI-dCas9 Nucleases Directed by Truncated gRNAs for Highly Specific Genome Editing** *HUMAN GENE THERAPY*
  Wyvekens, N., Topkar, V. V., Khayter, C., Joung, J., Tsai, S. Q.
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- **Defining Genome-Wide Off-Target Cleavage Profiles of CRISPR-Cas RNA-Guided Nucleases Using GUIDE-Seq**
  Tsai, S. Q., Zheng, Z., Nguyen, N. T., Liebers, M., Topkar, V. V., Thapar, V., Wyvekens, N., Khayter, C.
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- **Engineered Cas9 Variants with Novel PAM Specificities Expand the Targeting Range of CRISPR/Cas Nucleases**
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