Stanford

Varun Shanker

- MD Student, expected graduation Spring 2027
- Ph.D. Student in Biophysics, admitted Autumn 2023
- MSTP Student

Publications

PUBLICATIONS

- **Utilizing Machine Learning to Improve Neutralization Potency of an HIV-1 Antibody Targeting the gp41 N-Heptad Repeat.** *ACS chemical biology*
  Filsinger Interrante, M. V., Tang, S., Kim, S., Shanker, V. R., Hie, B. L., Bruun, T. U., Wu, W., Pak, J. E., Fernandez, D., Kim, P. S.
  2025
- **Identification of Covalent Cyclic Peptide Inhibitors Targeting Protein-Protein Interactions Using Phage Display.** *Journal of the American Chemical Society*
  Wang, S., Faucher, F. F., Bertolini, M., Kim, H., Yu, B., Cao, L., Roeltgen, K., Lovell, S., Shanker, V., Boyd, S. D., Wang, L., Bartenschlager, R., Bogyo, et al
  2025
- **Identification of Covalent Cyclic Peptide Inhibitors Targeting Protein-Protein Interactions Using Phage Display.** *bioRxiv : the preprint server for biology*
  Wang, S., Faucher, F. F., Bertolini, M., Kim, H., Yu, B., Cao, L., Roeltgen, K., Lovell, S., Shanker, V., Boyd, S. D., Wang, L., Bartenschlager, R., Bogyo, et al
  2024
- **Unsupervised evolution of protein and antibody complexes with a structure-informed language model.** *Science (New York, N.Y.)*
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- **Inverse folding of protein complexes with a structure-informed language model enables unsupervised antibody evolution.** *bioRxiv : the preprint server for biology*
  Shanker, V. R., Bruun, T. U., Hie, B. L., Kim, P. S.
  2023
- **Efficient evolution of human antibodies from general protein language models.** *Nature biotechnology*
  Hie, B. L., Shanker, V. R., Xu, D., Bruun, T. U., Weidenbacher, P. A., Tang, S., Wu, W., Pak, J. E., Kim, P. S.
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- **PROTEASOME REARRANGED PEPTIDES ARE A NOVEL SOURCE OF ANTIGENS FOR THE PEPTIDE VACCINE IMMUNOTHERAPY OF GLIOBLASTOMAS**
  Fidanza, M., Gupta, P., Shanker, V., Wong, N., Skirboll, S., Lim, M., Wong, A.
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- **Enhancing proteasomal processing improves survival for a peptide vaccine used to treat glioblastoma.** *Science translational medicine*
  Fidanza, M., Gupta, P., Sayana, A., Shanker, V., Pahlke, S., Vu, B., Krantz, F., Azameera, A., Wong, N., Anne, N., Xia, Y., Rong, J., Anne, et al
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