

Stanford



Kumar Thurimella

Resident in Medicine

Bio

BIO

I am an Internal Medicine resident at Stanford in the Translational Investigator Program (TIP), with a planned fellowship in Rheumatology.

I worked as a software engineer at Uber before completing my PhD at the University of Cambridge as a Gates Scholar and my MD at the University of Colorado. My research sits at the intersection of computational biology and B cell immunology, using protein language models and structural AI to identify novel therapeutic targets in autoantibody-mediated diseases.

Outside the clinic and lab, I enjoy skiing, hiking, biking, and reading science fiction.

PROFESSIONAL EDUCATION

- MD, University of Colorado-Anschutz School of Medicine , Medicine
- PhD, University of Cambridge , Biotechnology
- MPhil, University of Cambridge , Computational Biology
- BS, University of Colorado-Boulder , Applied Mathematics

Publications

PUBLICATIONS

- **Identifying microbial protease allergens through protein language model-guided homology.** *Cell systems*
Thurimella, K., Wu, E., Li, C., Graham, D. B., Owens, R. M., Plichta, D. R., Sokol, C. L., Xavier, R. J., Bacallado, S.
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- **Protein language models uncover carbohydrate-active enzyme function in metagenomics.** *BMC bioinformatics*
Thurimella, K., Mohamed, A. M., Li, C., Vatanen, T., Graham, D. B., Owens, R. M., La Rosa, S. L., Plichta, D. R., Bacallado, S., Xavier, R. J.
2025; 26 (1): 285
- **Bioelectronic Technology for Nutritional Research-a Novel In Vitro Platform for a Better Understanding of Human Gut Barrier Absorption.** *Advanced biology*
Stoeger, V., Strauss, M., Thurimella, K., Elias-Kirma, S., Niewczas, I., Parlar, E., Schaudy, E., Moysidou, C. M., Voong, S., Lietard, J., Clark, J., Gerner, C., Owens, et al
2026; 10 (2): e00409
- **Human immunodeficiency virus and antiretroviral therapies exert distinct influences across diverse gut microbiomes.** *Nature microbiology*
Jabbar, K. S., Priya, S., Xu, J., Das Adhikari, U., Pishchany, G., Mohamed, A. T., Johansen, J., Thurimella, K., McCabe, C., Vlamakis, H., Okello, S., Delorey, T. M., Lankowski, et al
2025; 10 (11): 2720-2735

- **Gut microbiome and metabolome profiling in Framingham heart study reveals cholesterol-metabolizing bacteria.** *Cell*
Li, C., Stražar, M., Mohamed, A. M., Pacheco, J. A., Walker, R. L., Lebar, T., Zhao, S., Lockart, J., Dame, A., Thurimella, K., Jeanfavre, S., Brown, E. M., Ang, et al
2024; 187 (8): 1834-1852.e19
- **SCNIC: Sparse correlation network investigation for compositional data.** *Molecular ecology resources*
Shaffer, M., Thurimella, K., Sterrett, J. D., Lozupone, C. A.
2023; 23 (1): 312-325
- **AMON: annotation of metabolite origins via networks to integrate microbiome and metabolome data.** *BMC bioinformatics*
Shaffer, M., Thurimella, K., Quinn, K., Doenges, K., Zhang, X., Bokatzian, S., Reisdorph, N., Lozupone, C. A.
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