

Eucharist Kun

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EDUCATION

- The University of Texas at Austin**, Austin, TX Graduated Dec 2025
Biochemistry PhD Graduate
- GPA: 4.00/4.00
- The University of Texas at Austin**, Austin, TX Graduated May 2018
Bachelor of Science with Honors in Biochemistry
- GPA: 3.81/4.00
 - Business Foundations Certificate from UT McCombs School of Business
 - Elements of Computing Certificate from UT School of Natural Sciences

FELLOWSHIPS AND AWARDS

- Professional Development Award, The University of Texas at Austin 2025
Graduate School Summer Fellowship, The University of Texas at Austin 2025
Burke Judd Award, The University of Texas at Austin 2024
- ***One time award given in recognition of excellence in genomics research***
- Professional Development Award, The University of Texas at Austin 2023
Reviewer's Choice Award, American Society of Human Genetics 2023
- ***Top 5% of ~3500 abstracts***
- Graduate School Summer Fellowship, The University of Texas at Austin 2023
Trainee Research Excellence Award, American Society of Human Genetics 2022
- ***Top 9 of ~3500 abstracts***
- Longhorn Guaranty Scholarship, The University of Texas at Austin 2014 - 2018
- ***Merit and need based full ride scholarship***
- Pell Grant, The University of Texas at Austin 2014 - 2018
TEXAS Grant, The University of Texas at Austin 2014 - 2018
Hogg Grant, The University of Texas at Austin 2014 - 2015

PUBLICATIONS

Zeosky, M^{*}, **Kun, E^{*}**, Reddy, S., Pandey, D., Xu, L., Wang, J. Y., Li, C., Gray, R. S., Wise, C. A., Otomo, N., Narasimhan, V. M. (2026). [Deep learning-based precision phenotyping of spine curvature identifies novel genetic risk loci for scoliosis in the UK Biobank](#). *medRxiv* (Accepted to *npj digital medicine*).

**indicates equal contribution*

Pandey, D., Xu, L., **Kun, E.**, Li, C., Wang, J. Y., Melek, A., DiCarlo, J. C., Castillo, E., Narula, J., Taylor, C. A., Narasimhan, V. M. (2025). [Multimodal AI for Precision Preventive Cardiology](#). *medRxiv*.

Xu, L., **Kun, E.**, Pandey, D., Wang, J. Y., Brasil, M., Singh, T., Narasimhan, V. M. (2025). [The genetic architecture and the evolutionary consequences of the human pelvic form](#). *Science*, 388, eadq1521.

Kun, E., Sohail, M., Narasimhan, V. M. (2025). [The trait specific timing of accelerated genomic change in the human lineage](#). *Cell Genomics*, 5, 1, 100740.

Smith, O., **Kun, E.**, Narasimhan, V. M. (2024). [HARE: A Python workflow for analyzing genomic feature enrichment in GWAS datasets](#). *Journal of Open Source Software*, 9(97), 6359.

Flynn, B. I., Javan, E. M., Lin, E., Trutner, Z., Koenig, K., Anighoro, K. O., **Kun, E.**, Gupta, A., Singh, T., Jayakumar, P., Narasimhan, V. M. (2023). [Deep learning based phenotyping of medical images improves power for gene discovery of complex disease](#). *npj Digital Medicine*, 6, 155.

Kun, E., Javan, E. M., Smith, O., Gulamali, F., Fuente, J., Flynn, B. I., Vajrala, K., Trutner, Z., Jayakumar, P., Tucker-Drob, E. M., Sohail, M., Singh, T., Narasimhan, V. M. (2023). [The genetic architecture and evolution of the human skeletal form](#). *Science*, 381, eadf8009.

- [Cover](#) article of Vol 381, Issue 6655
- University Research Paper Excellence UT Austin (for the best paper published by UT faculty across all disciplines in a single year)

Kun, E., Narasimhan, V. M. (2023). [Fast-evolving genomic regions underlie human brain development](#). *Nature*, 614, 7946.

Kun, E., Tsang, Y., Ng, C. W., Gershenson, D. M., Wong, K. K. (2020). [MEK inhibitor resistance mechanisms and recent developments in combination trials](#). *Cancer Treatment Reviews*, 92, 102137.

Kun, E., Tsang, Y., Lin, S., Pan, S., Medapalli, T., Malpica, A., Richards, J. S., Gershenson, D. M., Wong, K. K. (2020). [Differences in gynecologic tumor development in Amhr2-Cre mice with *KRAS*^{G12D} or *KRAS*^{G12V} mutations](#). *Scientific Reports*, 10, 20678.

Izaguirre, D. I., Ng, C. W., Kwan, S., **Kun, E.**, Tsang, Y., Gershenson, D. M., Wong, K. K. (2020). [The Role of GDF15 in Regulating the Canonical Pathways of the Tumor Microenvironment in Wild-Type p53 Ovarian Tumor and Its Response to Chemotherapy](#). *Cancers*, 12(10), 3043.

Liu, X., Lu, X., Su, Y., **Kun, E.**, Zhang, F. (2020). [Clay-Polymer Nanocomposites Prepared by Reactive Melt Extrusion for Sustained Drug Release](#). *Pharmaceutics*, 12(1), 51.

Liu, X., Ma, X., **Kun, E.**, Guo, X., Yu, Z., Zhang, F. (2018). [Influence of lidocaine forms \(salt vs. freebase\) on properties of drug–eudragit® L100-55 extrudates prepared by reactive melt extrusion](#). *International Journal of Pharmaceutics*, 547(1-2), 291-302.

TALKS AND CONFERENCE PRESENTATIONS

Poster, Deep learning to understand the genetic basis of organ specific age acceleration by combining imaging and genetic data at biobank scale.

American Society of Human Genetics (ASHG) Annual Meeting 2025. October 14-18, 2025. Boston, Massachusetts, USA.

Talk, The trait specific timing of accelerated genomic change in the human lineage.

Annual Meeting of the Society for Molecular Biology and Evolution (SMBE) 2024. July 7-11, 2024. Puerto Vallarta, Jalisco, Mexico.

Poster, A timeline of human evolution: Leveraging GWAS and comparative genomic data to examine time periods with accelerated change for particular traits in humans.

American Society of Human Genetics (ASHG) Annual Meeting 2023. November 1-5, 2023. Washington D.C., USA.

Poster, The genetic architecture of the human skeletal form.

2022 Southwest Society for Developmental Biology Regional Meeting (SWSDB). November 4-6, 2022. Austin, Texas, USA.

Plenary Talk, The genetic architecture of the human skeletal form.

American Society of Human Genetics (ASHG) Annual Meeting 2022. October 25-29, 2022. Los Angeles, California, USA.

RESEARCH EXPERIENCE

University of Texas, Austin, TX

Mar 2020 – Present

Graduate Research Assistant / Postdoctoral Fellow in the Narasimhan Lab

- Applying machine learning algorithms to medical imaging in combination with genetic and electronic health record patient data in order to expand our understanding of human genomics and improve personalized medicine
- Carry out genome-wide association studies (GWAS), polygenic risk score analysis (PRS), and other genomic/statistical analyses on large datasets comprised of hundreds of thousands of individuals

The University of Texas MD Anderson Cancer Center, Houston TX

Sept 2018 - Aug 2020

Research Assistant I in the Wong Lab, Department of Gyn Onc and Reproductive Med

- Researched LGSOC (Low Grade Serous Ovarian Cancer) and other reproductive organ tumors including leiomyomas and leiomyosarcomas through mouse models and molecular biology techniques such as PCR, Western Blotting, and IHC

University of Texas, Austin, TX

Aug 2016 – May 2018

Undergraduate Research Assistant in the Zhang Lab, Pharmaceuticals Division

- Researched interactions between various drugs and polymers in order to improve solubility and dissolution rates, with a primary focus on pharmacokinetics

TEACHING EXPERIENCE

Teaching Assistant - BIO 321G: Introduction to computing for the biological sciences

Fall 2023

- Helped students develop skills in Python, R, and Bash for tackling problems in bioinformatics and genetics; taught students how to utilize the supercomputing resources at the University of Texas and navigate the Unix terminal; held weekly office hours to teach students coding practices and how to debug code