

# Amelia Tran

◇ [Github](#) ◇ Email: tran26h@mtholyoke.edu ◇ [Personal Website](#)

## EDUCATION

<b>University of Pennsylvania</b> <i>M.S. in Biostatistics</i>	May 2023
<b>Mount Holyoke College</b> <i>B.A. in Statistics, Data Science. Summa Cum Laude</i>	May 2021

## SKILLS

**Languages:** R, Python, SQL, SAS, Java, L<sup>A</sup>T<sub>E</sub>X  
**Tools:** Git/GitHub, Jupyter Notebook, VS Code, PyCharm

## INDUSTRY EXPERIENCE

<b>Genentech Inc.</b>   <i>Data Scientist, South San Francisco, CA</i>	Jun 2023 –
<ul style="list-style-type: none"> <li>Provide statistical analysis and R/SQL/SAS programming support to different therapeutic molecules</li> <li>Manage SDTM mapping, ADaM derivation, and TLG delivery to clinical scientists across Product Development</li> <li>Collaborate cross-departments to develop open-source R packages and support study design with real-world data</li> </ul>	
<b>Regeneron Pharmaceuticals Inc.</b>   <i>Biostatistics Intern, Tarrytown, NY</i>	Jun – Aug 2022
<ul style="list-style-type: none"> <li>Quantified physical activity with <a href="#">arctools</a> R package to generate analysis for minute-level accelerometry data</li> <li>Investigated physical activity variability through intraclass correlation: independent, auto-regressive, exchangeable</li> </ul>	

## ACADEMIC EXPERIENCE

<b>University of Pennsylvania</b>   <i>Graduate Research Assistant, Philadelphia, PA</i>	Sep 2021 – May 2023
<ul style="list-style-type: none"> <li>MS thesis: Evaluated a novel prognostic score-based weighting approach for facility profiling metrics</li> <li>Estimated causal effects of transplant centers, multiple wait-listing, HCV-infected kidney transplants on survival with Cox PH, time-dependent Cox, IPTW, propensity score matching on kidney disease related projects</li> </ul>	
<b>Institute for Pure and Applied Mathematics</b>   <i>Research Fellow, Los Angeles, CA</i>	Jun – Aug 2021
<ul style="list-style-type: none"> <li>Developed physics-informed neural networks with regularization to simulate wave propagation in Python</li> <li>Designed optimal network architecture with PDEs and boundary/velocity conditions of the wave equation</li> </ul>	
<b>Memorial Sloan Kettering Cancer Center</b>   <i>Research Fellow, New York City, NY</i>	Jun – Aug 2020
<ul style="list-style-type: none"> <li>Evaluated how bilirubin change affects survival in cirrhosis with Cox PH, time-dependent Cox, and Joint Model</li> <li>Extracted interval endpoints and event statuses from patients' enrollment time, and produced visualizations in R</li> </ul>	
<b>Mount Holyoke College</b>   <i>Undergraduate Research Assistant, South Hadley, MA</i>	Jun 2019 – May 2020
<ul style="list-style-type: none"> <li>Developed <i>ncopula</i> R package to construct nested Archimedean copula models for interdependent data</li> <li>Designed unit tests to examine the package functionality and provided reproducible documentation</li> </ul>	

## SELECTED PUBLICATIONS

- Evaluating a facility-profiling metric based on survival probability: Application to U.S. transplant centers. **AH Tran**, PP Reese, DE Schaubel. 2024+
- Multiple Listing In Kidney Transplantation Following Implementation Of The Concentric Circle Kidney Allocation Policy. VS Potluri, **AH Tran**, N Kye, N Al Haddad, S Tandukar, TB Dunn, P Reese, DE Schaubel. 2024+
- [Prognostic score-based methods for estimating center effects based on survival probability: Application to post-kidney transplant survival](#). Lee Y, Reese PP, **Tran AH**, Schaubel DE. *Statistics in Medicine*. 2024.
- [Five-Year Allograft Survival for Recipients of Kidney Transplants From Hepatitis C Virus Infected vs Uninfected Deceased Donors in the Direct-Acting Antiviral Therapy Era](#). Schaubel DE, **Tran AH**, Abt PL, Potluri VS, Goldberg DS, Reese PP. *JAMA*. 2022;328(11):1102–1104.
- [Using physics-informed regularization to improve extrapolation capabilities of neural networks](#). Davini D\*, Samineni B\*, Thomas B\*, **Tran AH\***, Zhu C\*, Ha K, Dasika G, White L. *Machine Learning and the Physical Sciences Workshop, Neural Information Processing Systems (NeurIPS)* 2021.