

## LINH N. TRAN

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### Education

- 2018–present University of Arizona, Tucson, AZ  
Ph.D. Genetics, *expected*, GPA: 4.00  
Minors: Molecular Medicine, Ecology & Evolutionary Biology
- 2016–2018 University of Pennsylvania, Philadelphia, PA  
Post-baccalaureate courses: Intro Programming, Intro Statistics, Field Botany
- 2012–2016 Bryn Mawr College, Bryn Mawr, PA  
B.A. Chemistry, Biochemistry Concentration, *Cum Laude*, GPA: 3.59
- 2013 Nanyang Technological University, Singapore  
International Summer School Diploma: Sociology & Political Science

### Research & Professional Experience

- 2020–present Graduate Research Assistant, University of Arizona  
PI: Ryan Gutenkunst, PhD, Associate Professor, Molecular & Cellular Biology  
Applying neural networks to population genetics inference methods for more accurate and computationally efficient analysis of big genomic data sets.  
Supervising two undergraduate students working on the project.
- 2019–2020 Graduate Research Assistant, University of Arizona  
PI: Felicia Goodrum, PhD, Professor, Immunobiology, BIO5  
Investigating the viral and cellular determinants of human-cytomegalovirus-induced myelosuppression in hematopoietic progenitor cells.
- 2018–2019 First-year Rotation Graduate Research Assistant, University of Arizona
- Rotations:
- with Prof. Rebecca Page, Chemistry & Biochemistry: investigating the structure and function of protein phosphatase 6 with X-ray crystallography
  - with Prof. Felicia Goodrum, Immunobiology: investigating the role of human cytomegalovirus protein UL135 isoforms in viral replication and latency
  - with Prof. Jared Churko, Cellular & Molecular Medicine: conducting differential gene expression analysis of arrhythmogenic cardiomyopathy
- 2016–2018 Organic Chemistry Teaching Lab Technician, University of Pennsylvania  
Supervisor: Sally Mallory, PhD, Chemistry Senior Lecturer  
Managed the organic chemistry teaching lab facility; assisted professors, graduate teaching assistants, and students taking organic chemistry lab; recruited, trained, and supervised several work-study undergraduate students
- 2015–2016 Undergraduate Research Assistant, Bryn Mawr College  
PI: Yan Kung, PhD, Associate Professor, Chemistry  
Research Project: Molecular cloning, overexpression, and purification of various Mevalonate Kinase homologs.
- 2014–2016 Teaching Assistant, Bryn Mawr College, Chemistry Department  
CHEM B103 & B104: General Chemistry I & II  
CHEM B211 & B212: Organic Chemistry I & II  
Led bi-weekly tutoring sessions, assisted students in lab activities, graded student lab reports, and held weekly office hours.

05–08/2014      Chemistry Summer Science Research Assistant, Bryn Mawr College  
PI: William Malachowski, PhD, Associate Provost & Professor, Chemistry  
Research Project: Medicinal synthetic organic chemistry of the Birch-Cope sequence

## Conference presentations

- 2022      Talk: “Computationally efficient demographic inference with supervised machine learning.”  
*Society for Molecular Biology & Evolution (SMBE) Everywhere* (Virtual)
- Poster: “Inferring demographic history from allele frequency spectra with multi-layer perceptron regressors.” *Population, Evolutionary, and Quantitative Genetics Conference*, Pacific Grove, CA
- 2021      Poster: “Inferring Demographic History from Allele Frequency Spectra with Supervised Machine Learning.” *Probabilistic Modeling in Genomics*, Cold Spring Harbor Laboratory (virtual).

## Publication

- 2020      Mlera, Luwanika, Melissa Moy, Kristen Maness, **Linh N. Tran**, and Felicia D. Goodrum. "The Role of the Human Cytomegalovirus UL133-UL138 Gene Locus in Latency and Reactivation." *Viruses* 12, no. 7 (2020): 714.

## Awards

- 2015      Bryn Mawr College Summer Undergraduate Internship Grant: conduct research on clinical diagnostic technologies in the contemporary Vietnamese healthcare industry
- 2014      Bryn Mawr College Summer Undergraduate Research Grant: Chemistry Department
- 2013      Bryn Mawr College & Nanyang Technological University Summer School Scholarship

## Service and Outreach

### University of Arizona

- 2021–current      Data Science Ambassador, University of Arizona Data Science Institute
- 2019–2020      Biology Head Mentor, Math and Science Summer Program in Vietnam
- 2019      Volunteer–Immunobiology, Science City at the Tucson Festival of Books

### Bryn Mawr College

- 2015–2016      Treasurer, Chair of Student Finance Committee, Self-Government Association Executive Board Member (elected)
- 2014–2015      Dorm president, Rhoads South Dormitory (elected)
- 2013–2015      Assistant, International Student Services
- 2013–2014      Tutor, Outreach English Project
- 2013      Mentor & Leadership Committee, Southeast Asian Leadership Network (SEALNet): Project Vietnam

## Relevant Coursework

INFO 557 Neural Networks, MCB 547 Big Data in Molecular Biology, BE 534 Biosystems Analytics, MCB 580 Intro to Systems Biology, MCB 553 Functional & Evolutionary Genomics, ECOL 526 Population Genetics, ECOL 519 Intro to Modeling in Biology

## Computational skills

Python, bash, high performance computing, git/Github (@Intran26), R/R studio, LaTeX  
Certified Software Carpentries Instructor