Seth D. Temple

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EDUCATION

PhD, Statistics, University of Washington 09/19 - Present

- Dissertation Committee: Sharon Browning (head), Elizabeth Thompson, Amy Willis, Kelley Harris
- MS degree in Statistics (concurrent; Autumn 2022)
- NDSEG Fellow, NIH Predoctoral Trainee in Statistical Genetics
- Alzheimer's Disease Sequencing Project Follow-Up Study

BS, Mathematics, University of Oregon 09/14 – 06/18

- *Summa cum laude*, Phi Beta Kappa, Departmental Honors, Presidential Scholar
- Thesis Committee: Chris Sinclair, Peter Ralph, Samantha Hopkins
- Exchange semester at Universität Tübingen

RESEARCH & WORK

Graduate Research Assistant, University of Washington 09/20 – Present

- Developing methods to study recent evolution in human populations
- Studying patterns of identity-by-descent in families affected by Alzheimer's

Graduate Research Assistant, Los Alamos National Laboratory 06/20 – 09/20

- Advised by Dr. Kimberly A. Kaufeld
- Constructed spatiotemporal occupancy models for vector epidemiology
- Applied maximum entropy modeling for mosquito species distribution mapping

Actuarial Assistant, Liberty Mutual Insurance 07/18 – 08/19

- Performed reserving analyses for the leading global surety
- Developed SQL/SAS code to query claims database
- Passed actuarial exams (MAS I, P, and FM)

Research Assistant, University of Oregon 02/18 – 06/18

- Built neural nets in Python to predict punctuation for audio recordings
- Trained *keras* models with graphical processing units

Actuarial Intern, Liberty Mutual Insurance 06/17 – 09/17

- Created choropleth maps with R to visualize effects of a spatial smoothing algorithm

TEACHING

Instructor of Record, University of Washington

- BIOST 550 (Sp22): Statistical Genetics I: Mendelian Traits
- BIOST 581 (W23): Statistical Genetics Journal Club

Directed Reading Program, University of Washington 09/20 – Present

- Mentor to 4 students, member of organizing and admissions committees

Teaching Assistant, University of Washington

- Module 15 of SISG (Su22): Association Mapping: GWAS and Sequencing Data
- CSE/STAT 416 (Sp20): Introduction to Machine Learning
- STAT 423/504 (W20): Applied Regression and Analysis of Variance
- STAT 421 (F19): Applied Statistics and Experimental Design

Teaching Assistant, University of Oregon

- MATH 467 (W18): Stochastic Processes
- MATH 315 (Sp17): Fundamentals of Analysis
- MATH 105 (F16, W18): University Mathematics I

Math Tutor, University of Oregon 09/14 – 06/17

PAPERS

Temple, S.D., Manore, C.A. & Kaufeld, K.A. Bayesian time-varying occupancy model for West Nile virus in Ontario, Canada. *Stoch Environ Res Risk Assess* (2022). https://doi.org/10.1007/s00477-022-02257-4

Gorris, M.E., Bartlow, A.W., Temple, S.D. et al. Updated distribution maps of predominant Culex mosquitoes across the Americas. *Parasites & Vectors* 14, 547 (2021). https://doi.org/10.1186/s13071-021-05051-3

Temple, S.D. PhD Preliminary Exam Report on "Pair-based likelihood approximations for stochastic epidemic models". (2021). https://github.com/sdtemple/pblas

Temple, S.D. The Tweedie Index Parameter and Its Estimator. (2018). https://math.uoregon.edu/wp-content/uploads/2018/07/TempleStempleTweedieThesis.pdf

Temple, S.D. Bean as Our Future: How *Ender's Shadow* Disputes the 1997 Backlash against Human Cloning. (2017). https://scholarsbank.uoregon.edu/xmlui/handle/1794/23493

CONFERENCES

Probabilistic Modeling in Genomics (presenter)	03/23
20th Anniversary of UW Genome Sciences Department	11/22
International Genetic Epidemiology Society Annual Meeting (presenter)	09/22
American Association of Anthropological Genetics Workshop on Computational Genetics	07/22
International Society of Bayesian Analysis (abstract accepted)	06/22
2021 Joint Statistical Meetings	08/21
25th, 26th, 27th Summer Institute in Statistical Genetics	07/20,21,22
AAAS 2020 Annual Meeting	02/20
SAMSI Undergraduate Modeling Workshop	05/18
University of Oregon Undergraduate Research Symposium (presenter)	05/18
University of Oregon Undergraduate Research Symposium (presenter)	05/17
SAMSI Astrophysics Undergraduate Outreach	10/16

SERVICE

Queer Union for (Bio)statistician Inclusion and Community 03/22 – Present

UW STAT Social Committee Co-chair 06/20 – 06/22

UW STAT Book Club Organizer Summer '20, '21

Homework Helper at Seattle Public Library 09/18 – 06/19

Pride@Liberty West Zone 02/19 – 08/19

Club Soccer President and Treasurer 06/16 – 06/18

- Managed administration, finances, and social media for traveling team
- Leadership award for most outstanding club sports officer

Tutor at Looking Glass Community Services 04/17 – 06/17

d.a.i. Tübingen Rent an American Volunteer 04/15 – 08/15

SKILLS

Software: Python, R, Excel, Unix, SQL, qsub (experienced); C++, Java, SAS, slurm (intermediate)

Languages: English (first), German (proficient)

COURSEWORK

University of Washington

- Advanced Regression Methods I-II
- Advanced Theory of Statistical Inference I-III
- Statistical Consulting (1 term); Applied Consulting Project (1 term)
- Statistical Inference I-II
- Stochastic Modelling of Scientific Data I-II
- Theory of Linear Models
- Measure Theory
- Statistical Genetics I-II: Mendelian Inheritance and Quantitative Traits
- Introduction to Computational Biology
- Molecular Population Genetics and Evolution
- Mathematics of Evolution
- Statistical Genetics Seminar (10 quarter terms)
- Statistics Student Seminar
- Reading Groups: Phylogenetics, Theoretical Evolutionary Biology, Survival Analysis
    - Organizer for lab journal club on phasing, IBD segment detection, population genetics

University of Oregon

- Mathematical Statistics I-II
- Regression Analysis
- Stochastic Processes
- Point Set Topology
- Mathematical Cryptography
- Real Analysis
- Linear Algebra I-II
- Multivariable Calculus
- Differential Equations
- Introduction to Computer Science I-III
- Algorithms and Data Structures
- Data Science

REFERENCES

Sharon R. Browning, PhD
UW Research Professor (Biostatistics)
Dissertation Advisor
Contact: sguy@uw.edu

Kimberly A. Kaufeld, PhD
Los Alamos Statistical Scientist
Intern Mentor, Co-author
Contact: kkaufeld@lanl.gov

Elizabeth Blue, PhD
UW Associate Professor (Medical Genetics)
Applied Consulting Project Client
Contact: em27@uw.edu

Christopher Sinclair, PhD
UO Associate Professor (Mathematics)
Undergraduate Thesis Advisor
Contact: csinclai@uoregon.edu