

Evan Gorstein

Updated January 22, 2025

Email: egorstein@wisc.edu

Website: <https://sites.google.com/evangorstein>

Research interests Statistical phylogenetics, species network inference, ancestral sequence reconstruction, deep learning, Bayesian inference

Education

University of Wisconsin-Madison
PhD in Statistics 2020–Present
Advisor: Claudia Solís-Lemus Advanced to candidacy in 2024

University of Wisconsin-Madison
MS in Statistics 2020–2023
GPA: 3.86

University of Chicago
BS in Mathematics, BA in Statistics 2015–2019
GPA: 3.87

Honors and scholarships

Graduate Travel Award (UW–Madison Plant Pathology Department) 2024
Phi Beta Kappa (University of Chicago) 2019
University Scholar Award (University of Chicago) 2015-19
University Dean’s List (University of Chicago) 2015-19

Publications

Ancestral Sequence Reconstruction Assisted by Variational Autoencoders
Evan Gorstein, Mengze Tang, Hailey Bruzzone, Claudia Solís-Lemus
In preparation

Combined Effects of Methyl Bromide and Soil Ammendments on Soil Bacterial and Fungal Communities in Turfgrass
Salma Mikhtar, Tianyi Xu, Evan Gorstein, Claudia Solís-Lemus, Ming Yi Chou, Paul Koch
In preparation

HighDimMixedModels.jl: Robust high-dimensional mixed-effects models across omics data
Evan Gorstein, Rosa Aghdam, Claudia Solís-Lemus
PLOS Computational Biology, 2025.

Modeling based response guided therapy in subjects with recent hepatitis C infection

Evan Gorstein, Marianne Martinello, Alexander Churkin, Swikriti Dasgupta, Kevin Walsh, Tanya L. Applegate, David Yardeni, Ohad Etzion, Susan L. Up-
richard, Danny Barash, Scott J. Cotler, Gail V. Matthews, Harel Dahari
Antiviral Research, 2020.

**Modeling-Based Response-Guided Glecaprevir-Pibrentasvir Therapy
for Chronic Hepatitis C to Identify Patients for Ultrashort Treatment
Duration**

Swikriti Dasgupta, Michio Imamura, Evan Gorstein, Takashi Nakahara, Masa-
taka Tsuge, Alexander Churkin, David Yardeni, Ohad Etzion, Susan L. Up-
richard, Danny Barash, Scott J. Cotler, Harel Dahari, Kazuaki Chayama
Journal of Infectious Diseases, 2020.

Conference and Sem-
inar Presentations

**HighDimMixedModels.jl: Robust high-dimensional mixed-effects
models across omics data**

UW Madison Statistics Student Seminar
JuliaCon Poster

Madison, April 2024
Boston, July 2023

**Changes in a golf course phytobiome resulting from methyl bromide
fumigation**

UW-Madison Plant Pathology Friday @4 Seminar

Madison, March 2023

Research experience

Solís-Lemus Lab in Wisconsin Institute for Discovery

Mentor: Claudia Solís-Lemus

September 2022 – Present

Benchmarked statistical performance of high-dimensional mixed-effects mod-
els fit with coordinate descent to omics data, developing Julia [package](#) for fit-
ting these models and describing results in first authored paper.

Sports Analytics Research Project

Mentor: Sameer Deshpande

August 2021 – August 2022

[Developed](#) a hierarchical Bayesian model of contribution of individual NHL
hockey player to their teams' shots and fit to all hockey shifts during a season.

**Program for Experimental and Theoretical Modeling at Loyola Univer-
sity Medical Center**

Mentor: Harel Dahari

August 2019 – March 2020

Performed statistical analysis for cohort studies modeling decline of Hepatitis
C virus (HCV) upon treatment to identify patients for shorter treatment.

University of Chicago Summer Math REU

Mentor: Daniel Campos Salas

June 2016 - August 2016

Authored expository paper exploring connection between simple random
walks and the discrete Dirichlet problem.

Teaching experience	Teaching assistant, UW-Madison STAT 309: Introduction to Probability Spring 2021, Fall 2021, Spring 2022 STAT 371: Introductory Applied Statistics for the Life Sciences Fall 2020
	Teaching assistant, University of Chicago MATH 15100: Calculus I Fall 2016 MATH 15200: Calculus II Winter 2017
Industry and consulting experience	UW-Madison College of Agriculture & Life Sciences <i>Statistical Consultant</i> Fall 2022–Fall 2023 Provided one-on-one statistical consulting (data analysis, statistical programming, and experimental design) for staff and graduate students in the biological sciences at UW-Madison
	John Deere Factory Automation Team <i>Data Science & Analytics Intern</i> Summer 2022 Assisted with various data engineering projects related to tractor factory and sales data
Skills	Programming: R, Julia, Python, Stan Software: Git, LaTeX Languages: English (native), Hebrew (advanced), Spanish (beginner), Yiddish (beginner)
Service and outreach	Statistics Graduate Student Association November 2020 – May 2023 <i>Student Outreach Chair</i> Helped out with planning and manning a statistics station for kids at UW-Madison Science Expeditions weekend