JENNIFER HILL

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EDUCATION

Arizona State University — Tempe, AZ
MS, Computational Life Sciences — Expected December 2026

University of Arizona — Phoenix, AZ
MPH, Public Health Practice — Spring 2015

University of Arizona — Phoenix, AZ
MS, Nursing — Summer 2014

Arizona State University — Tempe, AZ
MPA, Public Administration — Spring 2005

University of Arizona — Tucson, AZ
BS, Biochemistry — Summer 1997

University of Arizona — Tucson, AZ
BS, Mathematics — Spring 1994
Minor: Computer Science

RESEARCH INTERESTS

My research interests center on using computational methods to understand key ecological processes and to build models that predict how ecosystems—and particularly species distributions—respond to human-driven environmental change.

RESEARCH EXPERIENCE

University of Arizona — Tucson, AZ
Research Technician, Department of Entomology — 1997-1999

- Collect and analyze data on retrotransposons of the *Aedes aegypti* mosquito using molecular biology techniques, such as PCR and gel electrophoresis.

University of Arizona — Tucson, AZ
Undergraduate Research Assistant, Division of Neurobiology — 1995-1997

- Developed a method of analyzing tomato plant headspace volatiles by gas chromatography/mass spectrometry.

PUBLICATIONS

Tu, Z. & Hill, J. J. (1999). *Mosqul*, a novel family of mosquito retrotransposon distantly related to the *Drosophila* I factors, may consist of elements of more than one origin. *Molecular Biology and Evolution*, *16*(12), 1675-1686. https://doi.org/10.1093/oxfordjournals.molbev.a026081

PRESENTATIONS

Hill, JJ. (1997). *Tomato Plant Volatile Release: Environmental Effects on Release Rate* [Conference presentation abstract], Undergraduate Biology Research Conference
Mentors: Wendy Mechaber, PhD, John G. Hildebrand, PhD

GRANTS & FELLOWSHIPS

- Undergraduate Biology Research Program 2016-2017
- UA/NASA Space Grant 2015-2016

ACADEMIC SERVICE

Academic Associate, *School of Life Sciences, Arizona State University*, Spring 2025
- Facilitated two General Biology II Labs on the topics of genetics, evolution, population biology, and community ecology

Reviewer, *Journal of Emerging Investigators*, 2024-present
- Reviews completed: 2

Manuscripts reviewed
- Stoica, M. & Dulu, A. (2025). Portable, Accessible, Affordable: Redefining Tree Disease Diagnosis Through VOC Emission Measurements. *Journal of Emerging Investigators*. https://doi.org/10.59720/24-200
- Zhang, E. & Hao, Y. (2025). The Impact of Genetic, Drug, and Procedural Factors on Cardiac Xenograft Survival Days in Non-Human Primates. *Journal of Emerging Investigators*. https://doi.org/10.59720/24-299

LEADERSHIP & OUTREACH

- **Volunteer**, Sonoran Prevention Works 2022-present
- **Primary Education Supervisor**, US Peace Corps/Thailand 2000-2001

TECHNICAL SKILLS

Bioinformatics: R Studio, Genomic analysis with high-performance computing, Linux operating system, Bash command line

Wet Lab: Tomato plant volatile collection, Gas chromatography/mass spectrometry, Mosquito DNA extraction, Gel electrophoresis, PCR, Enzyme-linked immunosorbent assay (ELISA)