

Diane Ferragu

EDUCATION

Miss Porter's School, Farmington, CT, *Diploma 2026*

GPA: 4.08/4.00

Relevant Coursework (Junior Year): AP Calculus BC, AIS Biology, Physics, AIS Political Philosophy, UCONN Dual Enrollment in Chinese, Literature, and Classics

Pursuing Certificate of Global Studies

UC San Diego Extended Studies, Remote

GPA: 4.00/4.00

BioImaging & 3D Printing (Mar 2025); Intro to Bioengineering Research (May 2025)

Shoals Marine Laboratory / Cornell University, Portsmouth, NH

GPA: 4.33/4.00

Marine Environmental Science Program (Jun 2024)

EXPERIENCE

Mantis AI Intern, MIT @ Kellis Lab, Remote & In-Person (Paid)

Feb 2025–Present

Developed features for AI-driven cognitive cartography in biological research

Built tools to visualize latent structures and uncover transcriptomic–phenotypic relationships

TNPO2 Foundation Intern, Remote

Jan 2025–Present

Co-authored NIH-style grant for ASO therapy targeting TNPO2

Analyzed off-label drug use in MIMIC-IV to identify repurposing candidates

UCSD BioEngineering Research Scholar, Remote

Jan 2025–Present

Applied micro-/nano-CT to visualize osteochondral interfaces in human tissue

Investigated maturity gradients for regenerative design strategies

NASA GeneLab for High Schools, Remote

Jun 2025–Present

Conducted omics-based analysis of spaceflight biology using NASA pipelines

Pursuing Capstone on spaceflight gene expression for national symposium selection

Independent Researcher, Remote

Aug–Nov 2024

Built ML framework to analyze microplastic health risks using Random Forest/XGBoost

Mapped systemic patterns linking chemical classes to human outcomes

Tutor, WorldTutors, Haiti (Remote)

May 2024–Present

Teach math and French to 50+ underrepresented students aged 6–17

Ski Instructor, Stratton Mountain Resort

Nov 2023–Apr 2024

Taught skiing fundamentals to children (ages 3–7) in seasonal paid role

Barn Groom, Salko Farm & Stable

Jan–Mar 2023

Provided daily care and support for horses and barn maintenance

LEADERSHIP & ACTIVITIES

Co-Founder/Co-Head, Best Buddies Chapter, Miss Porter's

Sep 2024–Present

Member, Head of School Committee — Led STEM mentorship for 30+ girls

Staff Writer, *Hypatia* Science Newspaper

Sep 2024–Present

Co-Captain, Varsity Equestrian Team — Qualified IEA Intermediate U/S

Member, Science Olympiad; **Member**, 2 Worlds Cultural Club

SKILLS & INTERESTS

Skills: Grant Writing, Research, Python, R, TypeScript

Interests: Bioengineering, Computational Biology, Equestrian, Running