

William P. Dwyer

Biology Ph.D. Student | Knight-Hennessy Scholar

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RESEARCH PROJECTS

DINNENY LAB | PH.D. CANDIDATE

2023 - Present | Stanford University, Department of Biology

- Developing biosensors for correlative light and electron microscopy (CLEM), collab with the Dahlberg Lab at the Stanford Linear Accelerator Center (SLAC)
- Conducting genetic suppressor screens to identify candidate genes involved in moisture-sensing and organ patterning

RHEE LAB | POSTBAC RESEARCHER

2020 - 2023 | Carnegie Institution for Science, Department of Plant Biology

- Sorghum Metabolic Atlas: a high-throughput pipeline to identify subcellular localization for hundreds of S. bicolor enzymes. **Karia, Dwyer et al. in prep**
- Arabidopsis thaliana RHAMNOSE 1 condensate formation drives UDP-rhamnose synthesis. **Field, Dorone, Dwyer et al. in prep**
- Plant Metabolic Network 15: A resource of genome-wide metabolism databases for 126 plants and algae. **Hawkins et al. including Dwyer (2021) JIPB**

HOUTEN LAB | SUMMER RESEARCH FELLOW

2019 | Icahn School of Medicine at Mt. Sinai, Department of Genetics and Genomics

- Acyl-CoA dehydrogenase substrate promiscuity: Challenges and opportunities for development of substrate reduction therapy in disorders of valine and isoleucine metabolism. **Houten, Dodatko, Dwyer, et al. (2023) JIMD**

VASSAR COLLEGE | UNDERGRADUATE RESEARCHER

2017-2020 | Department of Chemistry, Biochemistry Program

- Spodek-Keimowitz Lab: Investigating heavy metal contamination in Catskill lake sediment using ICP-MS. **Presented at ACS local chapter conference**
- Kennell Lab: honors thesis characterizing a phosphoglycolate phosphatase (PGP) ortholog in Drosophila melanogaster.

OUTREACH AND ADVOCACY

UNDOING THE IVORY TOWER

2023 - | The Good Scientists

- Founder and lead editor of Undoing the Ivory Tower, a monthly newsletter with 350 members covering community-participatory research

INDIGENOUS CROPS RESEARCH

2022 | Rhee Lab

- Reviewed research on understudied crops and proposed a renaming of 'orphan crop' to 'indigenous crops' to address colonial bias in scientific terminology. **Dwyer et al. (2022) TIPS**
- Organized and co-chaired a virtual symposium titled 'The Missing Link: Broadening Participation in the Plant Sciences' with Dr. Rose Marks from MSU.

EDUCATION

STANFORD UNIVERSITY

PH.D. BIOLOGY

2023 - Present

VASSAR COLLEGE

B.A. BIOCHEMISTRY

2016 - 2020 | Poughkeepsie, NY

Cum. GPA: 3.80 / 4.0, Dept Honors

HONORS

CMB TRAINING GRANT

2024 COHORT

National Institute of General Medical Sciences (NIGMS), NIH

KNIGHT-HENNESSY SCHOLARSHIP

2023 COHORT

Stanford University

CHURCHILL FELLOWSHIP

2020 NOMINEE AND FINALIST

Accepted at Cambridge University, Dept of Plant Sciences

SIGMA XI HONOR SOCIETY

2020 INDUCTEE

Vassar College

LANGUAGES

French (native)

English (fluent)

Spanish (conversational)

REFERENCES

José Dinneny, Professor of Biology, HHMI Investigator, Stanford University

 dinneny@stanford.edu

Sue Rhee, Director, Plant Resilience Institute, Michigan State University

 rheeseu6@msu.edu

Alison Keimowitz, Chair of Chemistry, Vassar College

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