

Eli Collinsworth

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Education

Southern Illinois University
B.S. Plant Biology, GPA: 4.0/4.0 (*Chancellor's Scholar*)
Expected Graduation: May 2028

Carbondale, IL
Sep 2024 – Present

Research Experience

NSF/GLBRC Plant Genomics REU — Lebeis Lab
Advisor: Dr. Sarah Lebeis

Michigan State University
Jun 2026 – Aug 2026

- Characterized morphological variants of *Paenibacillus* isolates for potential development as agricultural bioinoculants.
- Designed and executed plating and phenotyping assays to document variant colony morphology and growth characteristics.
- Presented findings as a poster at the Mid-Michigan Symposium for Undergraduate Research Experiences (MidSURE).

Undergraduate Research Assistant — Prairie Ecotype & Climate Response Study
Advisor: Dr. Loretta Johnson

Kansas State University
Jun 2025 – Present

- Quantified phenology, growth, and photosynthetic rate across ~200 *Andropogon gerardii* individuals to evaluate ecotype-level climate adaptation.
- Processed and organized 1,000+ tissue samples for nutrient analysis, including subsampling, labeling, and shipment to collaborating laboratories.

Additional Experience

Southern Illinois University Sustainable Farm
Farm & Landscape Technician

Carbondale, IL
Jun 2025 – Present

- Maintained production and research plots through irrigation, transplanting, pruning, and experimental plot upkeep.
- Supported cultivation of diverse crop and native plantings under field conditions.

Southern Illinois University Botany Greenhouse
Horticultural Intern

Carbondale, IL
Sep 2025 – Dec 2025

- Maintained greenhouse plant collections through propagation, pruning, irrigation, and pest monitoring.
- Prepared living materials for instructional laboratories and public outreach displays.

Skills

Plant & Field Methods

Phenology monitoring, photosynthetic measurements, soil moisture assessment, environmental data collection, greenhouse propagation

Microbiology

Aseptic technique, bacterial culturing and plating, media preparation, serial dilutions, bacterial phenotyping

Laboratory

Compound microscopy, tissue handling, sample processing, experimental record keeping

Selected Coursework

Plant Systematics • Evolution • Diversity of Plants • Principles of Genetics • Biostatistics • General Chemistry I–II
Current: Organic Chemistry • Cell Biology • Plant Morphology & Anatomy

Leadership & Involvement

Horticulture Association
President

Southern Illinois University
Aug 2025 – May 2026

- Ran monthly meetings and coordinated with the faculty advisor to set club goals and activities.
- Organized plant sales and volunteer events, and managed the club's budget.