Kyle M. Linders

Phone: (402) 340-2679 • E-Mail: klinders0@gmail.com
LinkedIn: www.linkedin.com/in/kyle-linders

Education

Master of Science in Agronomy - Plant Breeding and Genetics — **University of Nebraska-Lincoln**
GPA: 3.6/4.0 — *August 2023*

Bachelor of Science in Plant Biology - Biotechnology — **University of Nebraska-Lincoln**
GPA: 3.6/4.0 — *May 2020*

Research Experience

University of Nebraska-Lincoln – *Lincoln, NE*

Research Technologist I – Schnable Lab — **September 2023-Present**

- Interviewed, hired, trained and managed a team of six undergraduate research assistants, delivering high-quality phenotypic data from over 12,500 maize ears harvested from 4 locations across Nebraska
- Coordinated sorghum seed increase and maize crossing efforts in both greenhouse and nursery settings, ensuring seed purity
- Supported the initiation, development and optimization of a maize genetic transformation pipeline, including pollination, embryo extraction, inoculation, and tissue culture for the validation of proposed gene function
- Collaborated with both internal and external research partners to form productive interdisciplinary research teams
- Implemented seed storage, tracking and allocation protocols to ensure timely seed delivery upon request

Graduate Research Assistant - Sigmon Lab and Schnable Lab — **May 2021-August 2023**

- Designed and implemented data collection protocols to precisely and accurately measure biomass and inflorescence development traits in a multi-year, replicated field study of sorghum biomass across a diverse population
- Applied quantitative genetic analysis techniques using R statistical software to identify genetic variants associated with key traits
- Generated, quality controlled, and analyzed large trait and genetic marker datasets to meaningfully interpret collected data

Research Technician – Schnable Lab — **August 2020-May 2021**

- Identified and corrected planting errors in a sorghum diversity trial, salvaging data vital to numerous projects and collaborations
- Advised computational biologists, providing agronomic insight in developing accurate and efficient field research methods

Undergraduate Research Assistant – Soybean Breeding and Genetics — **September 2017-March 2020**

- Developed skills vital to small-plot field research, including field design, seed packaging, planting, data collection and harvesting
- Worked alongside graduate students and technicians to collect phenotypic data for a diverse set of soybean breeding trials
- Acted as the lead of the undergraduate field crew, independently traveling to remote trial locations to ensure plot maintenance

Syngenta Seeds Production Research – *Waterloo, NE*

Field Technology and Innovation Intern — **May 2019-August 2019**

- Managed data collection of five separate seed production research trials at both an on-site farm and collaborator fields
- Designed and led a field technology experimental trial involving optimization of a novel piece of large agricultural equipment
- Applied pesticides and determined need for fertilizer and irrigation to maintain suitable agronomic conditions

Teaching Experience

University of Nebraska-Lincoln – *Lincoln, NE*

Learning Assistant – Science and Decision-Making — **August 2022-December 2022**

- Led a recitation section of 32 students in short lectures, learning activities, group discussions, and homework assignments

Undergraduate Teaching Assistant - Genetics — **August 2018-May 2019**

- Co-taught a lab/recitation of 35 students in genetics and assisted students with practice problems and learning activities

Skills and Abilities

- Group Communication
- Project Management
- Experimental Design
- Protocol Development
- Data Management and Quality Control
- Microsoft Office
- R Statistical Software
- Small Plot Research Equipment Operation
- Field Scouting
- Pesticide Application

Awards and Recognitions

- Graduate Student Speaker – UNL Plant Science Retreat – 2022
- David Distinguished Scholarship Recipient – 2016-2020
- Dean's List – Fall 2016, Spring 2017, Fall 2017, Fall 2019

Leadership

- Chair of the 2023 Nebraska Plant Science Symposium Planning Committee - 2023
- Founding member of the UNL Plant Biology Club – 2020

References and Relevant Coursework Available Upon Request

Publications

- Zaremehrjerdi, Hossein, et al. “MaizeEar-SAM: Zero-Shot Maize Ear Phenotyping.” arXiv preprint arXiv:2502.13399, Feb. 2025.
- Shrestha, N., et al. “Off-the-Shelf Image Analysis Models Outperform Human Visual Assessment in Identifying Genes Controlling Seed Color Variation in Sorghum.” The Plant Phenome Journal, vol. 8, 2025, e70013. https://doi.org/10.1002/ppj2.70013.
- Mangal, H., et al. “Genes and Pathways Determining Flowering Time Variation in Temperate-Adapted Sorghum.” The Plant Journal, vol. 122, 2025, e70250. https://doi.org/10.1111/tpj.70250.
- Davis, J. M., et al. “Assessing the Impact of Yield Plasticity on Hybrid Performance in Maize.” Physiologia Plantarum, vol. 177, 2025, e70278. https://doi.org/10.1111/ppl.70278.
- Shrestha, N., et al. “Off-the-Shelf Image Analysis Models Outperform Human Visual Assessment in Identifying Genes Controlling Seed Color Variation in Sorghum.” The Plant Phenome Journal, vol. 8, 2025, e70013. https://doi.org/10.1002/ppj2.70013.
- Linders, Kyle M., Santra, D., Schnable, J. C., and Sigmon, B. “Variation in Leaf Chlorophyll Concentration in Response to Nitrogen Application Across Maize Hybrids in Contrasting Environments.” microPublication Biology, vol. 2024, 1 Mar. 2024, https://doi.org/10.17912/micropub.biology.001115.
- Linders, K. M. Plasticity of Sorghum Biomass and Inflorescence Traits in Response to Nitrogen Application. MS Thesis, University of Nebraska–Lincoln, 2023.