RYLEIGH J. KIRBY

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EDUCATION

BS   University of Nebraska-Lincoln   *December 2025*
          Bachelor of Science in Plant Biology
          On-Going Coursework

HSD   Lincoln North Star High School   *May 2022*
          Graduated Summa Cum Laude
          3.9 Non-Weighted GPA, 4.2 Weighted GPA
          Advanced Placement and Differentiated Coursework

RESEARCH & TEACHING EXPERIENCE

University of Nebraska-Lincoln, Lincoln NE   *May 2022 to current*
Undergraduate Research Assistant, Dr. James Schnable
- Gain expertise in plant genetics, comparative genomics, quantitative genetics, and high throughput phenotyping; assist in existing research projects

University of Nebraska-Lincoln, Lincoln NE   *January 2024 to current*
Botany & Plant Science Teaching Assistant, Dr. Christian Elowsky
- Run a three-hour botany (PLAS 278) lab as well as curated all material for PLAS 131 recitations

University of Nebraska-Lincoln, Lincoln NE   *June 2024 to May 2025*
UCARE Researcher, Research Advisor: Dr. James Schnable
- Received funding to investigate the gene families' evolutionary pattern within the PACMAD grass clade

University of Nebraska-Lincoln, Lincoln NE   *August to Dec 2024*
Teaching Assistant, Dr. Georgina Bingham
- Grading for introductory life sciences course (LIFE 120)

Syngenta Agrichemical Company, Slater IA   *May 31 to Aug 2023*
NA Discovery Breeder Intern, Dr. Scott Stelpflug
- Summer project that runs in conjunction with senior leaders in Syngenta

University of Nebraska-Lincoln, Lincoln NE   *June 1 to Aug 2023*
UCARE Researcher, Research Advisors: Dr. James Schnable & Mr. Dennis Ferraro
- Received funding to design a program to identify native Nebraska snake species automatically

University of Nebraska-Lincoln, Lincoln NE   *June 1 to Aug 2021*
Young Nebraska Scientist, Dr. James Schnable
- Received funding from Nebraska EPSCoR to conduct research as a high school intern

VOLUNTEER EXPERIENCE

The Career Academy, Lincoln NE
Capstone Mentor, Mr. Josh Jones
- Provided detailed feedback for approximately 40 different capstone projects proposed by students

University of Nebraska-Lincoln, Lincoln NE
Undergraduate Research Consultant, Dr. Santosh Pilta
- Provided feedback for automated robotic design in the Farm-ng challenge

EXTRACURRICULARS

UNL CASNR Student Advisory Board, Lincoln NE   *Aug 2023 to current*

Plant Biology Club, Lincoln NE   *Aug 2022 to current*
Member, Club Advisor: Dr. Christian Elowsky
President, Club Advisor: Dr. Christian Elowsky (*current role*)

Herpetology Club, Lincoln NE   *Aug 2022 to current*
Member, Club Advisor: Mr. Dennis Ferraro
Treasurer, Club Advisor: Mr. Dennis Ferraro
Vice President, Club Advisor: Mr. Dennis Ferraro

PRESENTATIONS/TALKS

ASPB Midwest Annual Meeting, Lincoln, NE   *March 21-22 2025*

Maize Genetics Meeting, St. Louis, MO   *March 6-9 2025*

Kansas Herpetological Society Annual Meeting, Hays, KS   *November 1-3 2024*

Nebraska Plant Science Symposium, Lincoln, NE   *April 29th 2024*

UNL Student Research SLAM, Lincoln, NE   *March 28th 2024*

UNL Plant Science Symposium, Lincoln, NE   *Nov 2nd 2023*

National Corn Congress, Washington, D.C.   *July 17-21 2023*

UNL Student Research SLAM, Lincoln, NE   *March 31st 2023*

MLCAS Workshop/Conference, Ames, IA   *Oct 10-11th 2022*

NJAS State Conference, Lincoln, NE   *March 28th 2022*

UNL Research Symposium, Lincoln, NE   *Aug 2021, 2022, 2023, 2024, 2025*

ACADEMIC PUBLICATION(S)

Davis, J., Galliard, M., Tross, M., Shrestha, N., Ostermann, I., **Grove, R.**, Li, B., Benes, B., Schnable, J. (2025). [3D Reconstruction Enables High-Throughput Phenotyping and Quantitative Genetic Analysis of Phyllotaxy](#). University of Nebraska, Lincoln. The Plant Phenome Journal. DOI: 10.03.616344

Tross, M., Grzybowski, M., Jubery, T., **Grove, R.**, Nishimwe, A., Torres-Rodriguez, J.V., Sun, G., Ganapathysubramanian, B., Schnable, J. (2024). [Data driven discovery and quantification of hyperspectral leaf reflectance phenotypes across a maize diversity panel](#). University of Nebraska, Lincoln. The Plant Phenome Journal. DOI: 10.1002/ppj2.20106

Ostermann, I., Benes, D., Gaillard, M., Li, B., Davis, J., **Grove, R.**, Shrestha, N., Tross, M., Schnable, J. (2024). [Sorghum Segmentation and Leaf Counting Using in Silico Trained Deep Neural Model](#). Purdue University, West Lafayette, Indiana. The Plant Phenome Journal. DOI: 10.1002/ppj2.70002

Tross, M. C., Gaillard, M., Zweiner, M., Miao, C., **Grove, R. J.**, Li, B., Benes, B., Schnable J. C. (2021). [3D reconstruction identifies loci linked to variation in the angle of individual sorghum leaves](#). University of Nebraska, Lincoln. PeerJ. DOI: 10.1101/2021.06.15.448566.

REFERENCES

Dr. James Schnable   (402) 472-4540
Nebraska Corn Checkoff Presidential Chair   schnable@unl.edu
                                           1901 Vine St, Lincoln, NE

Dr. Scott Stelpflug   (515) 685-5000
Head of NA Corn Germplasm Development at Syngenta   scott.stelpflug@syngenta.com
                                       2369 330th St, Slater, IA 50156

Dr. Christian Elowsky   (402) 472-2848
Assistant Professor of Practice; Plant Biology Academic Advisor   celowsky@unl.edu
                                         1825 N 38th St, Lincoln, NE