

CURRICULUM VITAE

SOFIYA ARORA

Center for Plant Science Innovation
Department of Agronomy & Horticulture
University of Nebraska-Lincoln

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^aClickable hyperlinks are in blue throughout

Experience

University of Nebraska-Lincoln, USA Aug,2024-Present
Graduate Research Assistant - Schnable Lab

- Identification of candidate genes using gene expression and genetic variants for more than 800 Sorghum lines
- Validation of candidate genes using non-transgenic and transgenic methods in maize
- Assisting in generation of advance mapping populations in maize

University of Nebraska-Lincoln, USA Aug,2023- July,2024
Graduate Research Assistant - Arthropod Vectors of Plant Pathogens Lab

- Inoculation of plant-viruses and maintenance of virus-infected plants, viruliferous and aviruliferous wheat-curl mite and aphid colonies
- Molecular and serological techniques for screening of virus-infected plants and arthropods

Punjab Agricultural University, India Aug,2022-Dec,2022
Agro-Industrial Intern - Plant Protection

- Isolation of biocontrol agent *Trichoderma harzianum* from host plant rhizosphere, isolation and preparation of pure cultures of pathogens
- Rearing of Rice moth (*Corcyra cephalonica*) and *Trichogramma spp.* and production of Trichocards by parasitization of rice moth eggs

Education

M.S. (Agronomy and Horticulture) Aug,2024-Present
University of Nebraska-Lincoln, USA

B.Sc. (Hons.) Agriculture Aug,2019-June,2023
Punjab Agricultural University, India

Awards

Chancellor's Fellowship 2023-2025
University of Nebraska-Lincoln, USA

University Merit Scholarship 2021-2023
Punjab Agricultural University, India
(Awarded to top 5% students in the batch)

Presentations

5. **Sofiya Arora**, Karla M Perez Cuellar, Nikee Shrestha, James C. Schnable, J. Vladimir Torres-Rodriguez (2025) "Leveraging natural genetic variation for functional validation of genes with predicted functions in maize." ASPB Midwest, Lincoln, NE, USA **(Poster)**
4. **Sofiya Arora**, Karla M Perez Cuellar, Nikee Shrestha, James C. Schnable, J. Vladimir Torres-Rodriguez (2025) "Leveraging natural genetic variation for functional validation of genes with predicted functions in maize." 67th Maize Genetics Conference, St. Louis, MO, USA **(Poster)**
3. **Sofiya Arora**, James C. Schnable, J. Vladimir Torres-Rodriguez (2024) "A fast and simple way for functional validation of genes with predicted functions in maize." PSI Plant Science Retreat, Nebraska City, NE, USA **(Poster)**
2. **Sofiya Arora**, Gary Hein, Satyanarayana Tatineni, Shaonpius Mondal(2024) "Understanding the spatial and temporal distribution of High Plains wheat mosaic virus in various wheat varieties."(2024) North-Central Branch ESA, Fort Collins, CO, USA **(10-min Oral)**
1. **Sofiya Arora**, Gary Hein, Satyanarayana Tatineni, Shaonpius Mondal(2024) "High Plains Wheat Mosaic Virus and its interactions with the mite vector", Department of Entomology, University of Nebraska-Lincoln, NE, USA **(30-min Departmental Seminar)**

Service

Subcommittee Head, Nebraska Plant Science Symposium (NPSS) Organizing Committee	2025
<ul style="list-style-type: none"> • Led coordination with judges, student speakers, and poster presenters and ensured smooth execution of event-day activities 	
Member, Organizing Committee for the Nebraska Plant Science Symposium (NPSS)	2024
<ul style="list-style-type: none"> • Coordinated judge outreach via email and managed the registration table during the event 	
Poster Judge, National Junior Academy of Science, Regional Science Fair at UNL	2024
<ul style="list-style-type: none"> • Evaluated undergraduate posters in diverse scientific disciplines 	
Member, Outreach Committee, Bruner Club, Department of Entomology, UNL	2023-2024
<ul style="list-style-type: none"> • Assisted in organizing outreach and fundraising events 	
Member, Education Committee, Bruner Club, Department of Entomology, UNL	2023-2024
<ul style="list-style-type: none"> • Contributed to the planning and organization of educational workshops for graduate students 	

Mentoring

Savanah Veomette, Undergraduate Intern, UNL	March,2024-June,2024
<ul style="list-style-type: none"> • Maintaining and propagating wheat-virus-infected plants in the greenhouse, protocols to conduct research in the BSL-2 laboratory environment 	

Outreach

Represented the UNL Department of Entomology by volunteering at public engagement booths at:

- Bug Fest, Department of Entomology (80-100 participants) 2023, 2024
- Ag. Family Field Day at Concord, NE (400- 500 participants) 2023, 2024
- Pershing Nature Learning Center, Lincoln, NE (50-60 participants) 2024