Asst/Assoc Professor - Genetics Teaching and Discipline-Based Education Research (DBER)

Position Information

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Working Title	Asst/Assoc Professor - Genetics Teaching and Discipline-Based Education Research (DBER)
Department	Agronomy & Horticulture-0827
Requisition Number	F_250033
Posting Open Date	04/08/2025
Application Review Date: (To ensure consideration, please submit all application materials before review date)	05/12/2025
Posting Close Date	
Open Until Filled	Yes
Description of Work	The Department of Agronomy and Horticulture at the University of Nebraska-Lincoln (UNL) Institute of Agriculture and Natural Resources (IANR) is seeking applications for an assistant/associate professor in Genetics Teaching and Discipline-Based Education Research (DBER). This 12-month (calendar year), tenure-track appointment will lead the teaching of core undergraduate plant and animal genetics courses and upper-level plant genetics courses and conduct plant sciences education research. The apportionment is 60% teaching and 40% research. This position will be located in Lincoln, Nebraska. The incumbent's primary teaching responsibility will be in the College of Agriculture and Natural Resources' (CASNR) introductory genetics 4 credit course (PLAS 215), which is required for all life science majors in the college. The incumbent will lead PLAS 215 delivery in both on-campus and online formats. The learning priorities for this course are to engage students in how the theories of foundational genetics have led to current tools in gene and genome analysis and develop strong science literacy around genetics and implications in real world settings. The incumbent will innovate ways to introduce data analysis in the department's genetics instruction pipeline in population and quantitative genetics, bioinformatics, genomics, and statistics. The incumbent will complete their 60% teaching appointment with the delivery of additional courses which serve the genetics instructional needs of the undergraduate and graduate life science programs in the department and college while best leveraging their expertise. The incumbent will conduct discipline-based education research (DBER) at the intersection of genetics, plant sciences, and education; integrate expertise in plant genetics with evidence-based educational practices to improve teaching methodologies, curriculum design, and student learning outcomes. The incumbent will develop a nationally and internationally recognized research program focused on student learning in genetics and plant sciences, with potential areas of emphasis including how students learn science, understanding discipline-based learning challenges, innovative and transformative practices that focus on student-centered learning, practices that support learning for students from varying backgrounds and experience, and/or reliable assessments for science education programming. This faculty member is expected to secure external funding (federal, private, and industry sources) to support DBER research and education innovation; translate research output into high-impact, peer-reviewed journal articles, learning programs and tools, and professional presentations; participate in scientific meetings and other appropriate professional activities; and engage with national and international networks to drive genetics education research and contribute to broader educational reform in genetics and plant sciences. The incumbent will be an integral part of interdisciplinary teams that bridge genetics research and education innovation. They will actively collaborate with plant genetics researchers on externally funded grants and publications that integrate genetics research, education and workforce development. Recognizing that collaboration and participation in teams enhances creativity, innovation, impact, and a sense of belonging, the Institute of Agriculture and Natural Resources (IANR) and AGHT

are committed to creating learning, research, and extension programming environments where the unique contributions of each individual are acknowledged and valued. Consistent with the University's N2025 Strategic Plan, we see every person and every interaction as important to our collective wellbeing and our ability to deliver on our mission.

As an EO/AA employer, the University of Nebraska considers qualified applicants for employment without regard to race, color, ethnicity, national origin, sex, pregnancy, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, marital status, and/or political affiliation. See **https://equity.unl.edu/notice-nondiscrimination/**.

Minimum Required Qualifications

- Ph.D. in Biological Sciences, Plant Biology, Plant Biochemistry, Crop Physiology, Weed Science, Plant Breeding and Genetics, or a closely related field ***OR*** an M.S. in any of the above disciplines with a Ph.D. in Science Education.
- Demonstrated college-level teaching experience in life sciences, such as foundational biology, genetics, biochemistry, or related courses.
- Demonstrated accomplishments in innovating STEM education.

Preferred Qualifications

- An established record in Discipline-Based Education Research (DBER), with a record of scholarly activity in areas related to science pedagogy.
- A track record of plant science or plant genetics scholarly work (creative works, teaching and learning products, technical reports, academic journals, and/or industry publications).
- Evidence of teaching using technological literacy to enhance learning outcomes and student engagement.
- Experience using learning analytics to assess the effectiveness of teaching strategies and to refine curriculum design.
- A demonstrated record of potential to obtain external funding.
- Demonstrated leadership in development of interdisciplinary programs, research, coursework, and curricula.
- Excellent communication skills using a variety of methods and platforms.

Work Location (City, State)

Lincoln, NE

Pre-Placement Driving Record Review Required

Criminal History Background Check Required

Posted Salary

How to Apply

Click "Apply for this Job" and then "Faculty Application." Complete the application and attached the following documents:

1. A letter of interest that describes:
   - Your qualifications for the job.
   - Your anticipated contributions to service, research, and teaching.
   - A statement describing your experience working in teams or groups and your anticipated contributions to environments where every person and every interaction matters (2-page maximum). See **https://ianr.unl.edu/guidance-applicant-statements-about-contributions-teams-or-groups/** for guidance in writing this statement.
2. Your curriculum vitae.
3. Contact information for three (3) professional references.

For questions or accommodations related to this position contact

Jodi Mackin
jmackin1@unl.edu

Job Category

Job Category (old)

Faculty Tenure/Tenure Leading

Job Type

12 Month (Faculty Only)

Position funded by grant or other form of temporary funding?	No
If Temporary, indicate end date	
Planned Hire Date	
Appointment End Date	
Organizational Location	Default Location

Supplemental Questions

Required fields are indicated with an asterisk (*).

Required Documents

Required Documents

1. Letter of Interest
2. Curriculum Vitae
3. List of References

Optional Documents