

2025 WSSA Travel Enrichment Experience Award

Purpose: The Travel Enrichment Experience (TEE) will provide an opportunity for WSSA graduate students to participate in a five-day, four-night educational experience with professionals in a different WSSA region.

Student Application Deadline: Cara McCauley (<u>cara.mccauley@corteva.com</u>) must receive applications by **May 10, 2025**. Please put "WSSA Travel Enrichment Experience" in the subject line.

Description of Scholarship: Scholarship winners will have a five-day, four-night educational experience of their choosing as described in the "Host Opportunities" table below. These opportunities for broadening each student's knowledge of weed science include visits with industry, government, or university professionals working in field, lab, or extension settings. Each recipient will be awarded \$2000 from the WSSA to pay for expenses incurred during their experience.

Eligibility Requirements: Applicants must meet the following criteria:

- 1. Enrolled as a current degree-seeking graduate student (M.S. or Ph.D.) in good academic standing at an accredited college or university.
- 2. Currently conducting or recently finished research in weed science.
- 3. An active member of the WSSA at the time of application.
- 4. Must submit an abstract and present a 10-minute oral presentation about his/her experience at the next WSSA annual meeting. Specifics will be provided directly to recipients.

Application Procedure: Submission of the following information as a single PDF file is required.

- 1. Completed application form (the final page of this document)
- 2. Cover letter describing applicant's interest in weed science and the travel enrichment experience (<1 page)
- 3. Brief resume or CV summary highlighting recent relevant experiences, include current GPA (<1 page)
- 4. Two letters of support (<1 page each), one of which must be from the applicant's graduate advisor
 - a. <u>Guidance to support letter writers</u>: please detail the student's impact to the lab and/or weed science discipline, student need for this experience, and their unique qualifications for it

Email the application information to Cara McCauley (cara.mccauley@corteva.com) by May 10, 2025 as a single PDF with "WSSA Travel Enrichment Experience" in the subject line.

Selection Criteria and Process: Applicants will be evaluated based on the contribution of their research to the discipline of weed science and to the WSSA objectives, their academic record, scholarly achievements, service to society, and their potential contributions to the future of weed science. One student from each US region and

one from Canada will be selected by an independent WSSA panel with no personal or advisory affiliation with the applicants.

Timeline: The selection process will be completed and applicants will be notified by May 31, 2025. TEE recipients and their host(s) will determine the date in 2025 for the experience to occur. The selection committee will function as a liaison between the recipients and their host(s) throughout the process.

Host Opportunities Organized by Region

Host Name and Institution	Location	Experience
C	Canadian Weed Science	ee Society
Dalhousie University: Dr. Scott White	Truro, NS	Weed management in perennial cropping systems; integrating knowledge of weed population ecology and reproductive biology to improve weed management in these systems; development and use of predictive models for improving the timing, efficiency and effectiveness of management practices; maximizing the effectiveness of currently registered herbicide products in these systems.
Agriculture and Agri-Food Canada: Dr. Andrew McKenzie-Gopsill	Charlottetown, PE	Weed biology, ecology, and management in Atlantic Canada; cover crops; invasive species management; conventional and organic hort and field crops; novel weed management tactics in horticulture crops.
Agriculture and Agri-Food Canada: Drs. Charles Geddes & Breanne Tidemann	Lethbridge & Lacombe, AB	Weed ecology & IWM on the Canadian Prairies; 2 different research centres; dryland & irrigated cropping systems; herbicide-resistant weed discovery, monitoring & management; resistance mechanisms; novel weed management tactics; HWSC.
North Central Weed Science Society		
University of Illinois: Drs. Aaron Hager & Pat Tranel	Champaign, IL	Herbicide-resistant weed challenges in Midwest corn and soybean production, from the field to the lab.
Purdue University: Drs. Bryan Young, & Tommy Butts	West Lafayette, IN	Weed science research and extension in corn and soybeans involving herbicideresistant weeds, integrated herbicide programs, cover crops, and advanced application technologies.

North Dakota State University: Dr. Joe Ikley	Fargo, ND	Exposure to an Extension weed science program and applied weed control research in corn, soybean, and dry beans in North Dakota. There will be opportunities to visit with other NDSU Weed Scientists and tour weed control research in over a dozen crops across the state of North Dakota.
Michigan State University: Dr. Eric Patterson	East Lansing, MI	Dive into the deep end of molecular biology and bioinformatics and how those things combine to increase our understanding of weedy traits! Also, Brazilian barbeque if the weather is nice, just need to convince my post-docs and students.
Michigan State University: Drs. Christy Sprague & Erin Burns	East Lansing, MI	Extension weed science focusing on integrated weed management, biology, and ecology in corn, soybean, sugar beet, dry bean, alfalfa, small grains and potato production.
Corteva Agriscience: Dr. Dawn Refsell	Johnston, IA	From discovery to commercialization, this experience will give you exposure from beginning to end of what it takes and who's involved in bringing a herbicide trait to market. The intertwining of trait technology, herbicide development, and commercial development and support are imperative for success. You will go from the lab bench to the field while meeting with seed partners, product managers, and research and commercial development team.
Corteva Agriscience: Dr. David Simpson	Indianapolis, IN	Interaction with weed scientists in Application Technology, Biological Characterization, Regulatory, and Crop Protection Development and Discovery. Discover how we bring products from the lab to the field.
Northeastern Weed Science Society		

Syngenta: Drs. Larissa Smith & Erin Hitchner	King Ferry, NY	A snapshot into the world of agricultural research and innovation. Students will receive an introduction to Syngenta's research facilities and current projects in New York and New Jersey, including field trial visits to observe and participate in experimental design and data collection firsthand. Students will engage in team meetings, participate in discussions, and network with scientists from various disciplines. This immersive week not only showcases the day-to-day responsibilities of an R&D Scientist but also highlights Syngenta's role in addressing global food security challenges. Through innovative research, students will gain insight into how the company tackles real-world problems and provides impactful solutions.
Virginia Tech: Drs. Shawn Askew, Jacob Barney, & Michael Flessner	Blacksburg, VA	Exposure to multiple disciplines, including environmental, chemical, and cultural effects on weed management in turfgrass (Dr. Askew); propagule pressure and ecological/niche/habitat impacts of invasive species on natural landscapes, as well as perennial grass bioenergy potential (Dr. Barney); and high-residue cover crops for managing herbicide-resistant weeds with consideration for herbicide carry-over from the cash crop to the cover crop (Dr. Flessner).
Virginia Tech: Drs. Shawn Askew & Dr Jeff Derr	Blacksburg, VA	Students will take a turf and ornamental tour where they will visit high-end golf courses, professional athletics venues, and a wide range of industry sponsors that support the industry. The tour will take students across the state of Virginia from our Virginia Tech campus in the western mountains to coastal research stations at Virginia Beach. We would showcase research spanning putting robots to spray drones and demonstrate industry leading equipment from sod-production farms to lawn-care operations.

Syngenta: Drs. David Belles, Lewis Braswell, Pete Eure & Eric Palmer	Greensboro, NC	The Syngenta facility in Greensboro features a unique exposure to the weed science industry.
Rutgers University (Dr. Thierry Besançon) and Cornell University (Dr. Lynn Sosnoskie)	Chatsworth, NJ (Rutgers) and Geneva, NY (Cornell)	Dr. Besançon and Dr. Sosnoskie's labs focuses on the evaluation of novel technology for weed suppression including targeted vision-spraying (Weed-It), electric weeding (Zasso Electroherb), and autonomous weeding robots (Naio Oz, Farm-ng Amiga). TEE awardee w will have the opportunity to work with both Dr. Sosnoskie at Cornell University (2 days) and Dr. Thierry Besançon at Rutgers University (2 days). Students will be exposed to a wide range of specialty crop systems important to the Northeastern US, including fresh and processing vegetables, fruits, and horticultural commodities and production conditions ranging from coastal plain herbs and vegetables to pine barren cranberry bogs to Hudson Valley apples to Finger Lakes vineyards.
Cornell University: Dr. Antonio (Toni) DiTommaso	Ithaca, NY	Experience may include participation in research on the impact of climate change on the biology and ecology of weeds; Weed seedling emergence modeling; Strategies for increasing biodiversity and ecosystem services in cropping systems; Agrivoltaics- growing crops and managing weeds on solar farms. Facilitating interactions with other Cornell weed scientists and agroecologists. Cornell Weed Ecology & Management Lab
USDA ARS: Dr. Steven Mirsky	Beltsville, MD	Experience working on integrated weed management projects with a focus on harvest weed seed control and cover crops. Experience working with a digital weeds team to develop a national weed image repository and low-cost weed mapping tools.
Southern Weed Science Society		

Auburn University/USDA-ARS: Dr. Andrew Price	Auburn, AL	Applied research in weed management for conservation vegetable and row crop production systems.
Bayer Crop Science: Dr. Jay Mahaffey	Scott, MS	Research and demonstration trials in multiple crops and disciplines; field tours; operation of an industry research and demonstration facility.
Mississippi State University: Dr. Te-Ming (Paul) Tseng	Starkville, MS	The students will engage in cutting-edge research on herbicide resistance and weed competitive traits. Through interdisciplinary approaches, including molecular biology, genetics, remote sensing, and agronomy, they will explore genetic resistance mechanisms and use remote sensing to detect weeds and assess herbicide crop injury. This hands-on experience offers valuable insights into the forefront of weed science.
BASF Corporation: Drs. Clete Youmans & Greg Stapleton	Western TN, Southeast MO, Western KE, AR	Cotton, corn, and soybean herbicide and fungicide research and demonstrations. Marketing, sales, and development experience. Visit and ride with a sales rep, a Tech rep or two, and a Field Biologist. *Best time to visit is June 25-July 15 for herbicide trials.
Texas A&M University: Dr. Muthu Bagavathiannan	College Station, TX	Computer vision and machine learning for weed recognition; drones and ground robots for precision weed control; weed image repository activities; weed ecology, gene flow, modeling and decision-support tools; Non-chemical weed management tactics/IWM.

Mississippi State University: Drs. Darrin Dodds	Starkville, MS	Research, teaching, extension, and administrative experiences that could include use of drones in agriculture (OTM, crop health); assessment of herbicide volatility; use of PWM sprayer technology; use of Canvas / Respondus in teaching and training; measurement of sprays – droplet size and imaging; use of tracer dyes to assess off-target movement; adjuvants in weed science – field and lab; weed control programs in corn, cotton, peanut; UAVs in weed science; role of extension in generating and disseminating information; role of administration in relation to faculty activities
Louisiana State University: Dr. Connor Webster	Crowley/ Baton Rouge, LA	Applied rice weed management research at the H. Rouse Caffey Rice Research Station in Crowley, LA and various research stations across the state. In addition to research, you will see firsthand the responsibilities of a statewide extension weed specialist.
University of Tennessee: Dr. Jim Brosnan	Knoxville, TN	Weed management in turfgrass systems
Valent: Mallory Scott	AR, West TN, MS, North AL, & bootheel of MO	Students will travel with our Field Market Development representative within the territory to better learn about their daily activities. Duties may include evaluating research trials, visiting with research cooperators, providing technical support to sales, etc.
Syngenta: Jason Adams	Syngenta Vero Beach Research Center, Vero Beach, FL	Work alongside the herbicide development team conducting greenhouse and field trial work. Opportunity to meet with and have exposure to other disciplines as well.

FMC: Drs. Matthew Wiggins, Chris Leon, Lawson Priess, Drake Copeland, Annu Kumari, Aman Chandi, Chris Rouse, and Dickie Edmond	AR, DE, and PA	First day visit with local Technical Service Managers and Field Development with FMC. View and discuss plot work and sales support with the local team in the Midsouth (Northeast Arkansas area). Travel to Philadelphia, PA to visit the FMC Stine Research Center in Newark, DE. While at Stine, the participant would get to visit with a variety of hosts and topics, including Herbicide, Fungicide, and Insecticide Discovery. Sample management and high-throughput screening. Product support and renewal. Biological statistics and formulations. The participant would then go visit FMC Global Headquarters in Philadelphia to visit with US and North American regulatory and registrations, product development, sales and marketing.
North Carolina State University: Dr. Rob Richardson	Raleigh, NC	Aquatic and non-cropland invasive weeds. Integrated and sustainable weed management programs for reservoirs, lakes, ponds, other bodies of water, and non-cropland in North Carolina and the surrounding region extension.
Bayer Crop Science: Dr. Gary Schwarzlose	Corpus Christi, TX	Research and demonstration trials in multiple crops and disciplines; field tours; operation on an industry research and demonstration facility. Exposure to Trait and Crop Protection R&D, Development, and Technical Services aspects of the organization.
Western Society of Weed Society		

Utah State University: Drs. Mirella Ortiz, Corey Ransom, & Eric Westra	Logan, UT	Weed science program working in broad areas including rangeland, natural areas, invasive and aquatic species, agronomic and specialty crops, where we can provide exposure from the field to the lab.
Syngenta: Dr. Marty Schraer	Meridian, ID	Marty Schraer is a field development scientist with responsibility for developing herbicides, insecticides, fungicides, biologicals, & seed treatments in Idaho, Oregon, Utah, & Nevada with a about a 50:50 split in in-house versus external (university & contracted) research trials. The bulk of his in-house research projects are conducted on a 40-acre, irrigated, research farm in southwest Idaho within eyesight of the Snake River. On-site crops can include wheat, barley, onions, potatoes, sugar beets, peas, lentils, chickpeas, sunflowers, corn, & sweet corn. Research projects target the control soil borne and foliar pathogens, insects, and of course weeds.
Oregon State University: Dr. Joel Felix	Ontario, OR	Development and support of weed management tactics that address grower economic growth while enhancing environmental stewardship for a viable and sustainable agriculture. Currently, we have ongoing studies on weed management in dry bulb onions, sugar beets, corn, potato, alfalfa, and dry beans in the irrigated fields of Eastern Oregon.
Corteva Agriscience: Dr. Marc Fisher	Sacramento, CA	Inside look at the role of an industry Field Scientist; applied field research in CA specialty crops (tree nuts, tree fruit, rice, leafy vegetables, tomatoes, and many more); field trial establishment, applications and data assessments, meetings with growers and distributor customers, and diagnosing problems.

University of Wyoming: Dr. Andrew Kniss	Laramie, WY	Opportunity to learn more about field research to evaluate weed management strategies in sugar beets, dry beans, small grains, and other agronomic crops grown in the High Plains. Crop-weed interaction research involving shade avoidance and light quality impacts on crops, weeds, and weed seeds under field, greenhouse, and laboratory conditions. Potential to learn about rangeland or forage weed science approaches, data analytics applications in weed science, and networking opportunities depending on student interests and timing of the experience.
Colorado State University: Drs. Franck Dayan & Todd Gaines	Fort Collins, CO	Molecular genetics lab experience includes DNA extraction, genotyping assays, and qPCR for gene copy number; weed genomics for understanding competitiveness and hardiness.
New Mexico State University: Dr. Brian Schutte	Las Cruces, NM	Working with farmers to develop integrated weed management strategies for field and specialty crops in New Mexico.

Scholarship Application Form

Send all documents to Cara McCauley (cara.mccauley@corteva.com) by May 10, 2025 as a single PDF with "WSSA Travel Enrichment Experience" in the subject line. Applications that are not submitted by the deadline as a single PDF with the correct subject line may not be considered.

1.	Applicant Name:
2.	Selection of Host Institution for the WSSA Travel Enrichment Experience: First Choice: Second Choice: Third Choice:
3.	Cover Letter (max 1 page):
4.	Resume or CV Summary (max 1 page):

5. Include two letters of support, including one from your academic advisor.