

Education Update – April 2025

Prepared by Catrina Adams, BSA Education Director

Education Committee Activities:

- **Education Committee met 9/20/24**
 - Bessey award (evaluated by Education and the Teaching Section):
 - 2025 Nominations now open, close April 28
 - Please nominate exceptional botany educators...nominations active for 2 years.
 - Still working on updating state-by-state regional botany resources on the Botany.org website.
 - Looking for most recent floras, field guides, botanical websites, botanical organizations, degree programs for each US state/territory.
 - Results available to view here:
<https://docs.google.com/spreadsheets/d/14nM9c4sE9e0BjWt4SCTbhuD5-GJPgHSacdA8o1oNR9c/edit?usp=sharing>
 - Interest from Ed committee in working on a formal policy/rubric for evaluating botany.org education resources, but have not yet pursued due to grant-writing priorities
- Potential Botany 360 on Open Education Resources (OER) discussed, no date or firm plans yet

PlantingScience Program Activities:

- **20th anniversary of PlantingScience this year**
 - Would like to recognize PS mentors (stand, applause) during plenary introduction to increase visibility & celebrate 20 years, <1 minute needed
 - Will have PS booth with prizes for mentors, examples of student work
 - Will submit abstract for talk sharing preliminary F2 results in teaching section session
 - Hoping to send mentors customized thank-you notes with team names/number of teams worked with, etc.
 - Possible PS mentor award(s)?
- **PlantingScience Spring Session is in progress**
 - 17 teachers
 - Much broader range of modules and age groups (welcome after photosynthesis/high school focus of F2 research)
- **Steep increase in annual hosting fee for HubZero platform supporting PlantingScience.org**
 - 51K --> 76K

GRANTS:

Current Grants:

- **PlantingScience F2 *Comparing the Efficacy of Collaborative Professional Development Formats for Improving Student Outcomes of a Student-Teacher-Scientist Partnership Program* (EDU DRK-12:2010556: PI C. Adams, \$3,886,870, 2020-2026)**
 - In year 5 of 5, submitted no cost extension through 8/31/2026; appears to be processed/reviewed
 - Working on rebudgeting with coPIs for the NCE year, will be bringing some money back to BSA as we've had some changes in scope of work and budget allocations across organizations when we decided to shift workshops from CO to MO.
 - Data collection is just completed, starting analysis and writing up now
 - New postdoc will join project from University of Colorado Colorado Springs (April 1)
 - Will be hosting a small "compensatory" online professional learning workshop this June for teachers who participated in the research study as control group members, facilitated by past teacher and scientist participant leaders.

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- **ROOT & SHOOT RCN: LEAPS: [Rooting out Oppression Together and Sharing our Outcomes Transparently](#)** (DBI 2134321: PI Mary Williams (ASPB), \$2,141,750, 2021-2026)
 - Unsure of future of this grant as the [LEAPS program](#) has been archived by NSF. ASPB is being conservative with expenses, but ASPB plans to continue to support the full-time staff coordinator for the project.
 - Waiting on beta-testing the working group-developed culturally responsive mentoring course until we have more information on the future of the grant
 - Continuing with steering committee meetings (Brenda Molano-Flores and Catrina Adams represent BSA)
 - Planned bystander training workshops for February were cancelled by the facilitators ([ADVANCEGeo Partnership](#)) due to concerns about EOs. Not sure yet if we will be able to have these in June as planned.
 - Continuing with student-organized online seminar series
 - February 2025: [Perspectives from Black professionals in the plant sciences](#)
 - March 2025: [A teach-in for plant scientists: Organizing for political impact](#)

Submitted Grants:

- **BIO-LEAPS SSAS: [Supporting Success for All Students \(SSAS\)](#)** PI: Teresa Mourad (ESA), partners SSE, BSA, 2,000,000, 2025-2030, Submitted July 15, 2024
 - **STATUS: Pending**
 - LEAPS has been archived, so not sure if any new awards will be made under this solicitation. Not optimistic.
- **IUSE: ICT [Professional Association Action Teams: Co-Creating Shared Vision and Plans to Dismantle Barriers to Undergraduate Biology Instructor Engagement with Discipline-Based Education Research](#)** PI: Catrina Adams, partners SSE, \$389,311, 2025-2027, Submitted January 15, 2025)
 - **STATUS: Rejected without review**
 - NSF did not consider the BSA and SSE grant collaborative, and the budget was over the limit for a single organization so was rejected without review
 - I reached out to NSF program officer about whether BSA and SSE could restructure the grant to qualify as collaborative, but did not receive a reply.
 - Will follow up with NSF and discuss revision/resubmission with SSE for January 2026.
- **ECR: BCSE: Institutes for Methods and Practices in STEM Education Research [Building Education Research Leaders through Authentic Mentored Experiences in Team Science \(BERL\)](#)** PI: Catrina Adams, coPI: Jenine Cotton-Proby (BSCS Science Learning), \$1,000,000, 2026-2029, Submitted February 28, 2025)
 - **STATUS: Pending**

Grants in Prep:

- **EPA: [Environmental Justice Thriving Communities Grantmaking Program: Cultivating Healthy Environments](#)** (PI: Jennifer Hartley, Tier III: max \$350,000 over 2 years, target dates for funding: April 30, 2025; July 31, 2025)
 - Good opportunity to expand “[DIRTLIFE](#)” soil ecology unit developed by Jennifer Hartley as part of her graduate degree (Miami University: [Advanced Inquiry Program](#)) into a PlantingScience module to be tested in St. Louis region.

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- Could fund needed hosting/development of PlantingScience.org platform
- Potential partners: Entomological Society of America, MOBOT Butterfly House
- This is a novel method for funding smaller organizations via a large grant to region-specific coordinating organizations who subaward and manage smaller community-based projects.
- Status of this grant subaward opportunity is uncertain, [legal challenges](#) planned as Trump admin is challenging the novel funding method.
- **Life Discovery: Doing Science conference: seeking ~30K funding from University of Colorado Boulder for a Spring 2024 LDC, potentially on new technologies in biology education**
 - [The Life Discovery: Doing Science](#) conference is a longstanding stand-alone Education conference cosponsored by the BSA with the Ecological Society of America and Society for the Study of Evolution. The audience is high school teachers, faculty who teach undergraduate-level botany/ecology/evolution classes, and others (education researchers, informal educators, etc.) interested in the themes. Eight conferences were held every ~18 months in different locations each year 2013-2023. Phil Gibson and Jennifer Hartley have represented BSA on the planning committee.
 - Grant funds would be mostly used to support travel for faculty attendees, may support travel of planning committee
 - Seeking potential sponsors/vendors

Past/Future Presentations:

- [“How does online mentoring of student-led plant biology investigations impact students’ views of scientists?”](#) Society for the Advancement of Biology Education Research (SABER-Midwest) conference, St. Louis MO, Oct 4-6, 2024
- [“PlantingScience: promoting plant science literacy and inspiring the next generation to value and conserve plant diversity”](#) Invited talk, University of Florida Plant Science Symposium, Gainesville FL, January 20-22, 2025
- “Impacts of a Plant Biology-Focused Student-Teacher-Scientist Partnership (STSP) on High School Students' Motivation to Study Plants” Submitted talk: Society for the Advancement of Biology Education Research (SABER) Annual Meeting, University of Minnesota, Twin Cities, July 10-13 2025

Past/Future Booth Recruitment:

- [Missouri Environmental Education Association Annual Conference](#), Springfield MO, November 1-2, 2024
- [BOTANY 2025](#)
 - The BSA Education/PlantingScience booth at this year’s Botany conference will focus on mentor appreciation and celebrating 20th anniversary of the program
- [National Association of Biology Teachers \(NABT\) Annual Conference](#), St. Louis, MO Oct 30-Nov 2 2025