Education Update -November 2020

Prepared by Catrina Adams, BSA Education Director

Grant Funding Updates:

- NSF DRK-12 grant funded(C. Adams PI, 3.9M, 2020-2025). Details available: https://www.nsf.gov/awardsearch/showAward?AWD_ID=2010556&HistoricalAwards=false
- Received a second no-cost extension year of our existing Digging Deeper (DIG) grant (through September 30, 2021; remaining budget of ~150K).
- Received a no-cost extension on NSF RCN-UBE grant: Conference: Educating for a Diverse and Inclusive Community in Botany for the 21st Century (C. Adams PI, Kyra Krakos coPI, \$63,599; remaining participant support budget of ~12K).

PlantingScience Updates:

- COVID-19 continues to make PlantingScience participation difficult for teachers due to remote learning. Several teachers signed up for fall but had to drop out of the session due to changing situations at their schools. Currently we have 15 teachers enrolled and active in the Fall 2020 PlantingScience session. We are learning from these teachers what might be necessary to adjust some modules for use by students at home with very limited access to supplies. We have several teachers already signed up for the Spring 2021 session.
- We have added a new module "<u>Treemendous Trees</u>" developed by longtime PlantingScience mentor and Plant Pathologist Monica Lewandowski. The new module is COVID-friendly and may play a role as a bridge for teachers looking for easy-to-implement modules students can do on their own in their own backyards.
- Year 1 activities for the new PlantingScience grant will involve building online professional development capabilities for PlantingScience and collecting classroom video of PlantingScience activities and from scientists working on research related to photosynthesis and respiration. Recruiting for research participants will not occur until Y2.

Collaborative agreement with US Botanic Garden RE new "Careers for Plant People" resource on hold: We have mutually agreed to delay further pursuing this initiative until after BSA's strategic planning in January.

Fall Online Teaching Peer Support Sessions were successful, with 6 sessions hosted by members of the Education Committee and Teaching Section over the course of the semester. Meetings involved informal networking and resource sharing with $\sim \! 12$ attendees per session. Two of the sessions had foci: early career faculty and CC/2 year institutions. Many attendees shared that they would like these opportunities to continue.

Life Discovery: Doing Science Virtual Conference draws close to double usual attendance: We partner in hosting this education conference along with ESA and SSE. Typically a BSA staff member and/or a member of the education committee participate on the Life Discovery planning committee and BSA funds their travel to the conference (registration and sometimes hotel costs for planning committee members are covered by the conference). BSA also helps to advertise the conference to the BSA membership and helps to pick speakers that would appeal to BSA membership interests. The conference was originally planned for Estes Park, Colorado in October. This year no travel funds were needed for planning committee members as the conference was virtual. The planning committee ran a virtual conference October 22-24 that brought in about 200 attendees, up from ~100 in a usual year. The LDC planning committee has renegotiated new dates with YMCA Estes Park, CO for October 2021. More info on the conference is available here: https://www.esa.org/ldc/

Publications under review:

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Taylor, J., Westbrook, A., Adams, C., Creasap-Gee, J. The effect of participation in a student-scientist partnership-based online plant science mentoring community on high school students' science achievement and attitudes about scientists. Submitted Aug 14 to the Journal of Research on Science Teaching (JRST).

Publications in prep:

Two additional papers on DIG results are in rough draft form in preparation for submission to the *The American Biology Teacher* and *BioScience*

Presentations Given:

PlantingScience Workshop, National Association of Biology Teachers. Virtual, 11/7/2020. C. Adams will co-present with PlantingScience teacher Aubrey Mikos.

PlantingScience Mentor Opportunity talk for UC Davis Horticulture and Agronomy Graduate Group requested and arranged by Anca Barcu, PS mentor. Virtual, 11/12/2020. Presented by J. Creasap Gee and C. Adams.