

Transforming Education in Plant Biology (TEPB) – Request for Proposals 2019

Applications accepted September 15, 2018- October 31, 2018 (11:59 p.m. ET)

In the United States, the American Association for the Advancement of Science (AAAS), the National Science Foundation (NSF), and other stakeholders have called for transformation in undergraduate biology education via the [Vision and Change report](#). The core message of the Vision and Change initiative is a focus on student-centered learning with students as active participants. Some of the key features of this initiative are: i) ensuring that courses are outcome oriented, inquiry driven, and relevant; ii) providing research experiences for all students; iii) using multiple forms of instruction; and iv) giving students ongoing, frequent, and diverse types of feedback.

The American Society of Plant Biologists (ASPB) has developed the *Transforming Education in Plant Biology* (TEPB) program to help put these recommendations into practice via development of new instructional materials in plant biology aligned with the ASPB [core concepts in plant biology](#). TEPB is particularly well suited to faculty who are planning to build or revise courses or curricula in order to incorporate evidence-based methods of teaching and learning.

TEPB has three parts.

First, the program provides financial support for the awardee to participate in focused, substantive, and practical professional development. Applicants select either from one of the multi-day professional development opportunities listed below or propose a different program that fits with the recommendations of *Vision and Change*.

- [National Center for Case Study Teaching in Science](#)
- [National Academies Summer Institutes on Undergraduate Education](#)
- [Problem-Based Learning workshop at the University of Delaware](#)

Second, following the professional development experience, the awardee submits a report describing the instructional materials they plan to create. Information required in the post-training report is provided below. The instructional materials must be directly related to plant biology.

Third, within the following year, the awardee develops the educational materials and then submits these materials to the ASPB Education Committee. By accepting TEPB funds, the awardee agrees to allow dissemination of their educational materials using *Plantae* or other channels. Awardees should include funds in their budget to defray costs associated with attending the annual ASPB meeting to present their work product. Awardees may be invited to participate in the Education Booth.

Financial support: TEPB awardees will receive up to \$4500 (reimbursable or direct-pay to professional development program) for registration and travel to the professional development program and to the ASPB annual meeting.

- Max request: \$4500
- TEPB is open exclusively to ASPB members.
- The 2018 application period opens on September 15, 2018.
- Proposals must be submitted to <http://tepb.aspb.org> by 11:59 p.m. ET on October 31, 2018.
- Applicants will be notified by email by early December.

Each application is limited to SIX pages. Text can be single-spaced and must be 12-point font.

1. **Title Page – limited to one page**
 - Applicant’s name, affiliation and email
 - URL to applicant’s previous science education work (optional)
 - Title, location, and dates of selected professional development program (including URL)
 - Total award requested

2. **Abbreviated CV - limited to two pages**

3. **Project Brief - limited to two pages**
 - **Benefits:** Describe the selected professional development program and how it will expand your abilities as an educator and benefit the plant biology community.
 - **Project description:** Provide a brief description of the project you envision at the present time (with the understanding that this idea may change after the professional development program). What is the target audience? What instructional materials are likely to be created? How will these materials enhance student-centered learning in plant biology?
 - **Previous experience:** Describe your credentials and accomplishments in undergraduate education or closely related areas.
 - **References (if applicable):** Include citations for journal articles, books, or websites cited in the project description section.

4. **Itemized Budget – limited to one page.**
 - Budget limit is \$4500. The budget should address: i) travel to and attendance at the selected professional development activity and ii) travel to and participation in the annual meeting of ASPB.
 - Each cost associated with the budget should be justified.
 - Funds will be released sequentially. Initially, funds to attend the awardee’s chosen professional development activity will be available. Contingent upon completion of the professional development activity and submission of an acceptable Post-Professional Development Report, the remaining funds will be made available.
 - If additional funds will be required to accomplish your goals, funds available to the applicant from other sources to support travel or funds/time commitments (sabbaticals, teaching release) should be indicated.

Other guidelines and requirements:

1. The awardee must be a current ASPB member. [New members](#) are welcome at any time.
2. Proposals are encouraged from ASPB members within and outside the United States. Projects may serve communities in any country as long as the projects are relevant to the objectives of [Vision and Change](#).
3. No indirect costs (overhead) are covered by the awards.
4. Proposals that leverage the Society’s funds with support from other sources are encouraged.
5. ASPB will give priority to projects that impact a broad audience and reach beyond a single institution.

6. Within one month of completing the professional development experience, awardees submit a report describing the instructional materials they plan to develop. Detailed instructions for this report will be provided at the time of the award and are summarized below.
7. Within one year of completing the professional development program, awardees will provide the Education Committee with their completed teaching materials for dissemination to the Plant Biology community. Awardees are strongly encouraged to publish their teaching materials.
8. Within 1-2 years of completing the professional development program, awardees will attend the ASPB Annual meeting to present their educational materials. Awardees should make every effort to submit their ASPB abstract early to allow for selection for a platform presentation. In some cases, the awardee may be permitted to present their educational materials in another venue instead of at the ASPB meeting.

Resources that may be helpful in preparing successful proposals:

- Project Summaries from previously funded projects
- [Vision and Change](#): A View for the 21st Century in Undergraduate Biology Education
- [12 Principles of Plant Biology](#) from the American Society of Plant Biologists

Questions?

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Instructions for the Post-Professional Development Report

Goals and objectives: Describe in as much detail as possible the instructional materials that will be developed. What plant biology learning goals or objectives will be addressed? What is the relationship of these materials to the ASPB core principles? Why are the materials important and innovative?

Mentoring plan (optional but strongly encouraged): TEPB recipients are strongly encouraged to work with a mentor experienced in the development or application of active-learning methods. The mentor will serve as a sounding board and trouble-shooter as well as suggest resources and accountability measures. Applicants may choose their mentor or request assistance in identifying a mentor from the ASPB Education Committee.

Assessment plan: What evidence will be collected to determine whether learning goals or objectives are achieved? How will project outcomes be documented (e.g., knowledge or skill gains, changes in interests or attitudes)? Who will be responsible for executing the evaluation plan and in what timeframe? (For samples of assessment plans, see <http://visionandchange.org/?s=assessment>)

Dissemination plan: All products are expected to be delivered to the Education Committee in a format suitable for dissemination on *Plantae* and to be presented at the ASPB annual meeting. If additional mechanisms for dissemination are anticipated (e.g., conference posters or presentations, peer-reviewed publications, newsletter articles, website, etc.), describe them briefly.

References: Include citations for any journal articles, books, websites, or other resources cited in the project description.