The ASPB Plant Biology Learning Objectives, Outreach Materials & Education (BLOOME)
Grant 2024
Complete REQUEST FOR PROPOSAL (RFP)

The purpose of this RFP is to fund the development of curricular materials (activities and labs) to support teaching the new Principles for Teaching Plant Biology in K-12 and undergraduate classrooms.

➔ The Project Leader/PI must be a current ASPB member or agrees to join ASPB if their project is funded. The cost of membership for the Project Leader **may** be included in the budget. For more information on dues, please visit https://aspb.org/membership/membership-dues/. Reduced rates are available for K-12 and community college educators.

➔ Maximum request: $8,500 for one year to fund the development of classroom activities and labs. Up to 9 projects will be fully funded.

➔ Successful proposals will describe the creation and dissemination of classroom activity modules to use in K-12 classrooms. Proposals for first year undergraduate courses may be considered if a K-12 adaptation is also provided in the proposal. For deliverables and dissemination information, please see the next topic below. The proposed classroom activities/labs should meet the following criteria:
   ◆ The learning outcomes are clearly stated and explicitly align with one or more of the four categories of Principles for Teaching Plant Biology.
   ◆ The activities/labs in the module are achievable without highly specialized equipment, expertise/background knowledge, or a large monetary investment.
   ◆ The module can be worked into an existing course and is not itself a stand-alone course
   ◆ The activities/labs in the module are written in or translated into English prior to dissemination
   ◆ The deliverables include all information needed to execute the activity/lab with students (see below)
   ◆ There is a clear assessment plan for the stated learning outcomes.
   ◆ Priority will be given to proposals that include K-12 educators as Project Leaders or Co-Leaders

➔ Funded projects will be required to submit a final report and deliverables that include the following types of items:
   ◆ A one-page lesson overview of the lesson and its components for interested educators
   ◆ All teaching materials, slides, labs, student guides, handouts
   ◆ Teacher preparation guides, teacher content review/notes, written or video tutorials (example of a video demonstration from a funded project), rubrics

- ◆ Student assessment questions, homework assignments, and answer guide
- ◆ List of any required materials with sources and approximate costs
- ◆ Suggestions for adaptation for different age groups (e.g., if Undergraduate, include an adaptation for high school), classroom sizes, funding levels, length of classes, etc.

→ The 2024 application opens on January 22.

→ Prepare the proposal using the guidelines below and then submit the information using the fillable form at http://bloome.aspb.org by 11:59 p.m. ET on April 8, 2023.

→ Previously funded projects can be found at https://plantae.org/education/#grant-supported-resources

→ Applicants will be notified of the committee's decision by email, usually within one month of the submission deadline.

Grant proposals are limited to 6 total pages. They MUST include the following labeled sections and adhere to these general formatting guidelines:
- ◆ single spaced
- ◆ 12-point font
- ◆ minimum of one-inch margins

1. **Introduction – Limited to one page**
   - ◆ Project title
   - ◆ Project Leader's name and institutional/school affiliation
   - ◆ Co-Leader name(s) and institutional/school affiliation(s)
   - ◆ Total amount requested
   - ◆ 300-word summary that addresses the three major elements of the project description: A) goals and objectives, B) project details, and C) assessment plan

2. **Project Description - Limited to three pages**

   A. **Goals and Objectives**
   - ▪ Clear statement of project goals and objectives
   - ▪ Importance of project
   - ▪ Alignment with one or more Principles for Teaching Plant Biology
   - ▪ List of specific NGSS learning outcomes that will be addressed (use this document to select the relevant NGSS LOs for each principle)

   B. **Project Details**
   - ▪ Project activities with estimated preparatory and classroom time required for implementation of the activity or lab.

- ▪ Alignment of each activity with the learning outcomes described in Part A
- ▪ Target audience(s)/grade level and number of participants
- ▪ Project timeline: written or graphical description indicating the timeline of grant activities during the one-year funding period

C. Assessment Plan
- ▪ Description of how achievement of the proposed goals and objectives (part A) will be evaluated
- ▪ Description of assessment tools to be used to evaluate the activity/lab and explanation of why they are appropriate for this specific project
- ▪ Summary of how your assessment will inform further development or iterations of the activity/lab
- ▪ List of assessment topics to be developed for teacher use (e.g., homework assignments, quiz and test questions, etc.)
- ▪ Note: Priority will be given to proposals that include and reference a valid, knowledge-based assessment to be used with the activity/lab.

3. Statement of Teaching Philosophy for the Project Leader and Co-Leaders (if applicable) – Limited to one page
- ◆ Relevant pedagogical techniques
- ◆ Teaching experience
- ◆ Previously developed lab or classroom activities
- ◆ Other relevant credentials

4. Itemized Budget – Limited to one page
- ○ Budget limit is $8,500
- ○ The following items **should** be considered for inclusion in the budget (each should be itemized and justified separately):
    - • $30/hr stipend for the project leader and additional personnel to cover the development of materials, assessment, videography, or other costs. Estimate hours for each member of the team and provide justification.
    - • Cost of consumable supplies or inexpensive equipment needed to test the module implementation. Costs should be reasonable, and a list of required supplies and prices must be provided in the deliverables.
    - • ASPB membership for the Project Leader (if not currently a member)
    - • Travel costs if the travel enhances the development of the module (e.g., site visits, collaboration visits, classroom implementation tests, assessment)
    - • Any cost related to the project even if funded by an outside source (indicate as such)
- ○ The following items **may not** be included in the budget:
    - • Fringe benefits
    - • Indirect costs (overhead)
    - • Expensive, long-term equipment acquisitions

- Additional ASPB memberships beyond the Project Leader
- Publication costs
- Dissemination costs (e.g., conference travel)
- Funds to support endowments or granting programs

Requirements:

➔ The Project Leader must be a current ASPB member or agrees to join ASPB if their project is funded. The cost of membership for the Project Leader may be included in the budget.

➔ ASPB retains the right to the use of projects, materials, and results developed with grant funding. Upon project completion, recipients **must** submit a final report, all generated materials, and a one-page handout to ASPB for dissemination online and at education/outreach events. The project leader may choose to additionally seek publication of the activity/lab **after the final report and deliverables are submitted to ASPB**.

➔ All recipients are invited to advise future applicants who seek their consultation on developing a winning proposal.

➔ Project Leaders whose proposals are funded will attend an onboarding Zoom call before the start of the funding period and a mid-point Zoom call midway through the funding period.

Questions?

Winnie Nham
Education Coordinator
American Society of Plant
Biologists 15501 Monona Drive
Rockville, MD 20855

Email: education@aspb.org
Phone: 301-296-0902