



GRANT ANNOUNCEMENT

STEM Equipment and Professional Development Grant Program

Solicitation No. MLSC-EQUIP-11

Program Manager: Ryan Mudawar
Contact: equip@masslifesciences.com
Solicitation Issued: December 11, 2023

Application: www.masslifesciences.com/programs/equip
Applications Due: **March 29, 2024 at 5:00 p.m.**

1. Introduction

1.1. Overview of Program

Consistent with its commitment to STEM (Science, Technology, Engineering, and Math) education and workforce development, the Massachusetts Life Sciences Center (MLSC), through this solicitation, seeks to further the development and expansion of life sciences education at Massachusetts public high schools, middle schools, and elementary schools (grades 3-5) by investing in project- and inquiry-based curriculum and instruction.

The program will offer grant funding for the purpose of purchasing life sciences equipment, materials, supplies, technology, and providing teachers with professional development (PD). Funding will enable teachers to educate students in real-world scenarios that will prepare them for career opportunities in the life sciences. Funding for teacher professional development will ensure that educators receive the technical training needed to effectively use newly acquired equipment and technology.

Investments made through this program seek to:

- Expand student access to life sciences equipment and project-based curriculum.
- Provide relevant professional development for teachers.
- Increase educational equity and help close the achievement and opportunity gaps.
- Train a diverse workforce pipeline.
- Support the implementation of Massachusetts Science, Technology, and Engineering Standards.
- Increase student achievement and interest in STEM.
- Increase awareness of life sciences careers.
- Improve college & career readiness.
- Leverage partnerships.

1.2. About the Massachusetts Life Sciences Center

The Massachusetts Life Sciences Center (MLSC) is an economic development and investment agency with a mission of supporting the growth and development of the life sciences in Massachusetts. Through public-private funding initiatives, the MLSC supports innovation, education, research and development, commercialization, and manufacturing activities in the fields of biopharma, medical device, diagnostics, and digital health. As a quasi-public agency, MLSC also offers programs that fund innovation-driven economic and workforce development initiatives in Massachusetts. The MLSC's mission is to serve as the "hub" of the Massachusetts life sciences ecosystem, encourage innovation through investments in good science and good business, strengthen and protect Massachusetts' global leadership position in the life sciences, accelerate the commercialization of promising treatments, therapies, and cures that will improve patient care, and create jobs and drive economic and STEM workforce development.

For more information, please visit www.masslifesciences.com.

2. Eligible Applicant Minimum Criteria

Applicant must demonstrate compliance with the following minimum criteria:

Criteria	Minimum Requirement
Applicant	<p>Must be at least <u>one</u> of the following:</p> <ul style="list-style-type: none">A. Vocational technical high school as determined by Chapter 74 of the General Laws of Massachusetts or a comprehensive public high school with a life sciences Chapter 74 program;B. Public middle schools or high schools* (including charter schools) located in one of the following “Gateway Cities” as determined by Section 3A of Chapter 23A of the General Laws of Massachusetts: Attleboro, Barnstable, Brockton, Chelsea, Chicopee, Everett, Fall River, Fitchburg, Haverhill, Holyoke, Lawrence, Leominster, Lowell, Lynn, Malden, Methuen, New Bedford, Peabody, Pittsfield, Quincy, Revere, Salem, Springfield, Taunton, and Westfield, and Worcester.C. Public high schools, middle schools, and elementary schools (including charter schools) with a student population of at least 25% classified as “low income” by the Massachusetts Department of Elementary and Secondary Education.*D. Non-profit curriculum provider, with a presence in Massachusetts, delivering STEM curriculum and teacher professional development to schools that meet any of the above-stated criteria. Any equipment requested on behalf of partner schools must be delivered to and remain housed at the schools. <p>* For schools belonging to a district, the district must be the applicant and only one application can be submitted per school district. Districts must submit applications that reflect district-wide resource needs and promote curriculum alignment.</p> <p>Please Note: Past MLSC awardees are eligible to apply, however they must make a compelling case as to the need for additional funding, particularly if funding is requested for the same program or if a prior award is not fully expended at the time of application submission. To be considered for future funding, all required annual reports due through the academic year 2023 must be received by MLSC. The application asks that you identify past funding and discuss the impact/outcomes of such funding.</p>

<p>Program</p>	<p>Funding must be requested for teacher professional development and equipment, supplies, materials, and/or technology to support in-school curriculum that prepares students with skills needed for life sciences careers. Schools must identify the project and inquiry-based curriculum that will be implemented and how the requested equipment will support curriculum implementation and instruction.</p> <p>The “life sciences” are defined in the MLSC’s enabling legislation as “<i>advanced and applied sciences that expand the understanding of human physiology and have the potential to lead to medical advances or therapeutic applications.</i>” Requested equipment and training should seek to enhance STEM skills relating to human biology/biomedical sciences, chemistry, engineering, robotics, and/or computer/data science that will prepare them for life sciences careers in sectors such as biotechnology, pharmaceuticals, medical device/technology, bioinformatics, and digital health.</p> <p>Equipment related to the following will NOT be eligible for funding: Earth and Space Science, Clean Tech/Energy, Environmental Science, Animal Science/Veterinary Assisting, and allied health/healthcare training programs.</p>
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3. Allowable Costs

Grant recipients can only request reimbursement for approved costs as itemized in their budget (post-award budget modifications are permissible with MLSC approval). Allowable costs include equipment, supplies, materials, technology, and professional development relevant to *life sciences* education (as defined in Section 2 above). Equipment installation and maintenance costs are also reimbursable. Allowable professional development costs consist of training fees for instructors and teacher stipends for summer, weekend, or evening training.

Non-allowable expenses include curriculum subscription fees, conference registration, wages for substitute teachers, travel, legal expenses, operating costs such as rent and utilities, other subscription fees, overhead/indirect costs, and activities funded by other funding sources.

The MLSC reserves the right to adjust the requested amount of funding for each proposal. Following execution of the Grant Agreement, **funds will be provided on a reimbursement basis to awardees via electronic fund transfer (EFT) upon verification of costs incurred.**

4. Purchasing Period

Through this solicitation, grants are to be awarded for Fiscal Year 2025. All equipment, materials, supplies, and/or technology must be shipped to grant recipients between July 1, 2024 and June 30, 2025. Funding for professional development can be expended through December 31, 2025.

5. Review Process and Criteria

MLSC staff will conduct an initial administrative review to determine eligibility of all submitted applications. Eligible applicants will then be reviewed and scored by a panel of external reviewers consisting of life sciences educators and industry professionals. Funding recommendations will then be made to the MLSC Board of Directors based on reviewer feedback and scores. Grant recipients will be selected on a competitive basis according to the criteria presented below. These criteria will be used to: 1) identify applicants that meet minimum threshold criteria; and 2) compare and select an applicant that best meets the goals of the solicitation. For this solicitation, the MLSC is particularly interested in

supporting applicants that will further its goal of supporting a trained workforce suitable for employment in the life sciences, encouraging student interest in STEM careers, and inspiring the younger students through hands-on, engaging activities focused on scientific literacy. Successful proposals will use SMART goals (specific, measurable, achievable, relevant, and time-based goals) and rational impact assessment strategies to evaluate how the requested equipment and supplies will create learning opportunities relevant to the life sciences. Proposals should detail how the requested equipment and professional development will enable schools to provide curriculum, instruction and student learning experiences that align with the following Massachusetts Science and Technology/Engineering Learning Standards relevant to the life sciences: LS1, LS3, LS4, PS1, PS2, PS3, ETS1, ETS2, and ETS3. Full description of the standards can be downloaded here: www.doe.mass.edu/frameworks/scitech/2016-04.pdf.

MLSC reserves the right to consider only applications that, in its sole judgment, meet the minimum threshold requirements. MLSC staff may contact the applicant to request supplemental information prior to formal review. In addition, MLSC reserves the right to make no awards, to award less than the applicant requests, and/or to award less than the maximum amount of funds potentially available through this solicitation.

Criteria	Sub-Criteria
Minimum Threshold	<ul style="list-style-type: none"> • The applicant meets the minimum requirements discussed in Section 2. • The application is complete and responsive to the solicitation's requirements. • The application is submitted prior to the established deadline.
Program Description	<p>Description of curriculum to be implemented/expanded and equipment and professional development requested, including the following:</p> <ul style="list-style-type: none"> • Summary of requested items (per school if more than one) to be purchased and justification for why they are needed. • Number of schools requesting funds (if applicable), estimated/anticipated number of participating students, and number of teachers seeking professional development. Curriculum providers are encouraged to serve no fewer than three schools. • Plan for recruiting students into life sciences electives (if applicable). • Purposeful use of the equipment and training to create engaging curriculum, advance scientific literacy, achieve state STEM standards, and improve MCAS scores. • Effectiveness of industry collaboration in developing and implementing a program that prepares students with skills needed for life sciences careers (high school). • Career exploration activities linking equipment and skills training to real world applications and life sciences careers through exposure to professionals (e.g., field trips & site visits, guest speakers, career projects, career fairs, internships/co-ops, etc.). • Efforts by the applicant to evaluate the success of its curriculum and training programs by tracking student outcomes. • Cash or in-kind matching funds awarded or anticipated. Applicants are strongly encouraged to identify matching funds that leverage MLSC funding. Matching funds should directly relate to the proposal and can include other grants (from state or private entities) or any non-allowable costs covered by the district (e.g. substitute teachers, curriculum fees).

Team and Qualifications	<ul style="list-style-type: none"> • Identification of personnel implementing curriculum and providing professional development. • Identification and number of staff who would be using requested equipment and participating in professional development. • To the extent possible, brief summaries of the qualifications, experience, and expertise of such individuals. 															
Professional Development	<ul style="list-style-type: none"> • Detailed description of the teacher training that will be offered and how it relates to the equipment requested in the proposal. • Reasonableness and validity of professional development offerings. 															
Partnerships	<ul style="list-style-type: none"> • Applicants must demonstrate how they are working collaboratively with industry or non-profit partners in the development and implementation of training, such as identifying skills gaps and ensuring that curriculum meets the needs of industry. The MLSC encourages plans to include employer input in training development, delivery, and evaluation. Applicants may partner with existing industry collaborators to meet this requirement. 															
Budget	<p>Applicants can request funding as follows (maximum <i>per school</i>):</p> <table border="1" data-bbox="527 863 1446 1136"> <thead> <tr> <th></th> <th>Equipment & Supplies</th> <th>Professional Development</th> </tr> </thead> <tbody> <tr> <td>High school (new program or reconfiguring lab space)</td> <td>\$85,000</td> <td>\$15,000</td> </tr> <tr> <td>High school (upgrades to existing program)</td> <td>\$65,000</td> <td>\$15,000</td> </tr> <tr> <td>Middle school</td> <td>\$30,000</td> <td>\$10,000</td> </tr> <tr> <td>Elementary school (grades 3-5)</td> <td>\$15,000</td> <td>\$10,000</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • An itemized list of equipment, materials, supplies, and/or technology with the estimated cost for each item. • A detailed, separate, breakdown of professional development costs, including the names of participating teachers (if available). • If multiple schools are expected to receive equipment and/or professional development, costs must be separated by school and by fiscal year. • Reasonableness and validity of funding requested must be conveyed in the proposal. • Budget should include any non-MLSC funding that will support the program/project, including school/district cash or in-kind support. Such matching funds may include expenses for curriculum fees and substitute teachers, which are not allowable MLSC costs. • Applicants must use the Excel template provided in the application. 		Equipment & Supplies	Professional Development	High school (new program or reconfiguring lab space)	\$85,000	\$15,000	High school (upgrades to existing program)	\$65,000	\$15,000	Middle school	\$30,000	\$10,000	Elementary school (grades 3-5)	\$15,000	\$10,000
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6. Application and Review Process

6.1. Application Submission

Applications will only be accepted through the MLSC’s online application portal, accessed via the programs webpage: www.masslifesciences.com/programs/equip. Applicants are required to create an account and complete a user profile before starting the application. It is recommended that applicants carefully follow the online instructions and provide complete, clear, and concise responses to all required questions. It is the sole responsibility of the applicant to ensure that its application is complete, meets

minimum threshold requirements and is properly submitted to MLSC prior to the established deadline. Multiple users can be given access to the application. Applicants are asked to review the MLSC's Public Disclosure policy (Section 7 below) prior to submitting their application.

6.2. Program Schedule

The solicitation process will proceed according to the schedule outlined below (target dates are subject to change). Applications cannot be submitted after the date and time specified.

Application Available:	December 4, 2023
Application Deadline:	March 29, 2024 at 5:00 P.M.
Awards Announced:	June 2024

7. General Request for Response Conditions

7.1. Notice of Public Disclosure

As a public entity, the MLSC is subject to Massachusetts' Public Records Law, codified at Chapter 66 of the Massachusetts General Laws. Thus, except for those documents exempted from disclosure, any documentary material, data, or other information received by the MLSC from an applicant is a public record subject to disclosure. Applicants are advised to review Chapter 66 prior to submitting any information to the MLSC.

Notwithstanding the above, certain kinds of information may be statutorily exempt from public disclosure under the limited exemption at Chapter 23I, Section 3(l) of the Massachusetts General Laws. Specifically, materials that fall under one of the following categories may be determined to be not public records and thus not subject to disclosure:

- Information, documents, or data that consist of trade secrets,
- Information, documents, or data that consist of commercial or financial information regarding the operation of any business conducted by the applicant, and
- Information, documents, or data regarding the applicant's competitive position in a particular field of endeavor.

An applicant may assert a claim of confidentiality for part, or all of the information submitted to the MLSC. To make a claim of confidentiality, an applicant must:

- a) Clearly identify the documents, reports, or other information you wish to receive confidential treatment and mark such materials "CONFIDENTIAL". Where a portion of an otherwise non-confidential document is alleged to be confidential, the confidential portions should be clearly identified and marked.
- b) State the basis for your claim of confidentiality (whether trade secret, commercial or financial information, or competitive position information) and whether disclosure of the information would likely result in substantial harm to your business. If substantial harm would result from disclosure, state what those harmful effects would be and their causal connection to disclosure of the information.
- c) State the period for which confidential treatment is desired (e.g., until a certain date, until the occurrence of a specific event, or permanently).
- d) Submit non-confidential information (including any redacted versions of partially confidential documents) separate from all materials for which you request confidential treatment.

All confidentiality claims are subject to verification by the MLSC. If no confidentiality claim is made when information is received by the MLSC, then it may be made publicly available without further notice to you.

7.2. Contractual Requirements

MLSC intends to enter into an agreement with the selected applicant and reserves the right to amend the Agreement without further issuance of another solicitation.

Awardee agrees to complete an annual report for three (3) consecutive years beginning one year from contract commencement.

7.3. Waiver Authority

MLSC reserves the right, at its sole discretion, to waive minor irregularities in submittal requirements, to request modifications of the application, to accept or reject any or all applications received, and/or to cancel all or part of this Solicitation at any time prior to awards.

7.4. Disclaimer

This Solicitation does not commit MLSC to award any funds, pay any costs incurred in preparing an application, or procure or contract for services or supplies. MLSC reserves the right to accept or reject any or all applications received, negotiate with all qualified applicants, cancel or modify the Solicitation in part or in its entirety, or change the application guidelines, when it is in its best interest.