

Bits to Bytes FY25 Application

Applicant Name (Organization) (required)

This will automatically be blinded to reviewers.

Non-Profit Principal Investigator (required)

First Name Last Name

This will automatically be blinded to reviewers.

Title of Non-Profit Principal Investigator (required)

This will automatically be blinded to reviewers.

Email of Non-Profit Principal Investigator (required)

This will automatically be blinded to reviewers.

Phone of Non-Profit Principal Investigator (required)

This will automatically be blinded to reviewers.

Authorized Representative (required)

This will automatically be blinded to reviewers.

Title of Authorized Representative (required)

This will automatically be blinded to reviewers.

Email of Authorized Representative (required)

email@example.com

This will automatically be blinded to reviewers.

Address of Non-Profit Entity (required)

This will automatically be blinded to reviewers.

City/Town of Non-Profit Entity (required)

This will automatically be blinded to reviewers.

Zip Code of Non-Profit Entity (required)

This will automatically be blinded to reviewers.

Name of Press Contact (required)

This will automatically be blinded to reviewers.

Email Address of Press Contact (required)

This will automatically be blinded to reviewers.

Press Contact Telephone (required)

This will automatically be blinded to reviewers.

Project Team Members (required)



	A	B	C	D	E	F	G
1		Organization Name	Entity Type (For-Profit or Non-Profit)	Contact Name	Title of Contact	Organization Location	Contact Address

	A	B	C	D	E	F	G
2	1						
3	2						
4	3						
5	4						
6	5						
7	6						

List all partners of the project team for which you are submitting a proposal. This field will automatically be blinded to reviewers.

Qualifications of the Management Team

In an effort to review all applications, based solely on the merits of the proposal and qualifications of the team, the MLSC will blind the identities of team members to reviewers during the review process.

Non-Profit PI Lead Name (required)

This field will be blinded to reviewers.

Non-Profit PI Title and Department (required)

Non-Profit PI Institution (required)

Please describe the PI's relevant experience, without identifying him/her by name or gender. (required)

Limit: 500 words

Ex. The PI has 10 years of experience administering and managing projects, several of which have included small clinical trials. The PI is the research group leader with expertise in the areas of XYZ...

Company 1: Lead Scientist Name (required)

Company 1: Title and Department (required)

Company 1: Company Name (required)

Company 1: Please describe the company lead's relevant experience without identifying him/her by name or gender. (required)

Limit: 150 words

Ex. The X at the company has more than 10 years of medical device experience, where they developed novel pumps and algorithms to deliver compounds through subcutaneous infusion. The lead has held previous roles as X, responsible for XYZ.

Company 1: Please describe the company's role in the project proposal, without identifying members of the team by name. (required)

Limit: 150 words

Do you have another industry partner? (required)

Yes

No

For the new postdoctoral data scientist, please upload a sample job description, which includes qualifications of the potential candidate and responsibilities. (required)

Upload a file. No files have been attached yet.

Acceptable file types: .pdf

Note: Uploaded document must be in .PDF file format.

1. Proposal Title (required)

What disease(s) and/or conditions does this study primarily target? Please choose up to three options.
(required)

- | | | | |
|---|--|--|---|
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Autoimmune Disorders | <input type="checkbox"/> Cancer - Breast | <input type="checkbox"/> Cancer - Others |
| <input type="checkbox"/> Cancer - Ovarian | <input type="checkbox"/> Cardiology/
Cardiovascular
Research | <input type="checkbox"/> Chronic
Illness/Disease | <input type="checkbox"/> Endocrinology |
| <input type="checkbox"/> Environmental Health | <input type="checkbox"/> Gastrointestinal (GI) | <input type="checkbox"/> Geriatrics &
Gerontology | <input type="checkbox"/> Hematology |
| <input type="checkbox"/> Immunology/Inflammat
ion | <input type="checkbox"/> Infectious Diseases | <input type="checkbox"/> Liver | <input type="checkbox"/> Maternal/Infant Health |
| <input type="checkbox"/> Metabolic Diseases | <input type="checkbox"/> Microbiome | <input type="checkbox"/> Neuroscience | <input type="checkbox"/> Nutritional Science |
| <input type="checkbox"/> Oral Health | <input type="checkbox"/> Orthopedic Research | <input type="checkbox"/> Pediatric Research | <input type="checkbox"/> Psychiatry/ Mental
Health |
| <input type="checkbox"/> Public Health/
Epidemiology | <input type="checkbox"/> Rare Diseases | <input type="checkbox"/> Regenerative
Medicine | <input type="checkbox"/> Reproductive Health |
| <input type="checkbox"/> Toxicology | <input type="checkbox"/> Women's Health/
Gender Studies | <input type="checkbox"/> Other | <input type="checkbox"/> N/A |

What modality/modalities does your project primarily employ? Please choose up to three options.
(required)

- | | | | |
|--|--|---|---------------------------------------|
| <input type="checkbox"/> Cell & Gene Therapy | <input type="checkbox"/> Clinical Trials | <input type="checkbox"/> Data Science | <input type="checkbox"/> Diagnostics |
| <input type="checkbox"/> Digital Health | <input type="checkbox"/> Drug Delivery | <input type="checkbox"/> Drug Discovery &
Development | <input type="checkbox"/> Imaging |
| <input type="checkbox"/> Medical Device | <input type="checkbox"/> mRNA/siRNA/ RNA
Research | <input type="checkbox"/> Personalized/Precision
Medicine | <input type="checkbox"/> Phototherapy |
| <input type="checkbox"/> Radiation Therapy | <input type="checkbox"/> Robotics | <input type="checkbox"/> Vaccines | <input type="checkbox"/> Other |
| <input type="checkbox"/> N/A | | | |

What are tools and techniques used in your project? Please choose up to three options. (required)

- | | | | |
|---|--|---|-------------------------------------|
| <input type="checkbox"/> 3D printing | <input type="checkbox"/> AI/ML/Deep Learning | <input type="checkbox"/> Antibody | <input type="checkbox"/> Automation |
| <input type="checkbox"/> Biomanufacturing | <input type="checkbox"/> Biomarker
Identification | <input type="checkbox"/> Biomaterials/ Material
Sciences | <input type="checkbox"/> Biosensor |

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> Contract Work-
CRO/CDMO/CMO | <input type="checkbox"/> Crystallography/
Peptide synthesis | <input type="checkbox"/> CT/MRI | <input type="checkbox"/> Data Optimization |
| <input type="checkbox"/> EEG&ECG | <input type="checkbox"/> Electronic Medical
Record (EMR) | <input type="checkbox"/> Engineered Microbes | <input type="checkbox"/> FACS/ Flow Cytometry |
| <input type="checkbox"/> Genome Editing | <input type="checkbox"/> Genomics | <input type="checkbox"/> In Vitro cultures | <input type="checkbox"/> In Vivo animal models |
| <input type="checkbox"/> Liquid
Chromatography | <input type="checkbox"/> Mass Spectroscopy | <input type="checkbox"/> Metabolomics | <input type="checkbox"/> Microscopy |
| <input type="checkbox"/> Nanotechnology | <input type="checkbox"/> Next-generation
Sequencing | <input type="checkbox"/> NMR/MRS | <input type="checkbox"/> Organoid/ Organ-on-a-
chip |
| <input type="checkbox"/> Pasteurization/
Sterilization | <input type="checkbox"/> Patient Avatars | <input type="checkbox"/> Proteomics | <input type="checkbox"/> Small Molecule |
| <input type="checkbox"/> Software & Algorithms | <input type="checkbox"/> Transcriptomics | <input type="checkbox"/> Ultrasound | <input type="checkbox"/> Viral Vector |
| <input type="checkbox"/> N/A | <input type="checkbox"/> Other | | |

2. In lay terms, describe the unmet need, proposed solution, and the impact of this project on MA.

(required)

Limit: 75 words

Data Handling

Bits to Bytes aims to support the generation and analysis of large data sets to answer pressing questions in the life sciences. Strong applications will be able to demonstrate a commitment and ability to structure and share data in a standardized way. The MLSC acknowledges that data may be kept proprietary to the parties for a reasonable amount of time, but ultimately will need to be made available to the greater life sciences research community.

3. Clearly describe the nature and value of the data sets and tools to be generated under this program.

(required)

Limit: 200 words

4. Please address your plans to make all data sets (with accompanying metadata and tools) generated using MLSC funds available to the public, including where the data will be stored, timing of upload, how access will be managed, and long-term sustainability. (required)

Limit: 500 words

5. Please describe previous experience with data sharing, including details of the nature of the data, mode of sharing, and how access was determined. (required)

Limit: 200 words

6. How will you track the number of downloads of your data? If your data will not be placed in a public repository, do you have experience generating repositories (please provide examples)? If not, please provide a detailed plan for the new repository that will house the data generated under the award.

(required)

Limit: 200 words

7. Provide details about the data science/analytics skills applied (machine learning, AI, etc.) Include information about the nature/size of the datasets, test data, algorithm development, etc. Please be detailed! (required)

Limit: 400 words

8. Data Sharing Confirmation: I have secured approval from both my institution and industry partner to publicly release all data, metadata and tools generated under this award in a useable and interoperative way. (required)

Proposal Details

9. Describe the clinical/scientific need or problem the project seeks to address. (required)

Limit: 150 words

10. Describe the current solution. (required)

Limit: 150 words

11. Describe the potential impact and the importance the project will have in moving this field forward.

(required)

Limit: 250 words

12. What are the detailed activities (including experimental design, if you already have the samples on hand or anticipated time to acquire, and type of analysis) you propose to meet the milestones outlined with the MLSC funds? (required)

Limit: 300 words

13. What is the gender distribution between animals/cell lines to be studied and how will gender differences be reported? If gender will not be studied in equal numbers, please explain why. (required)

Limit: 50 words

14. What is the distribution of racial, geographic, and any other identifiable social determinants of health, and how will differences be reported? Please list which factors will be studied. If none are studied, please explain why. (required)

Limit: 50 words

15. What is your competitive advantage over other similar approaches in this field? (required)

Limit: 100 words

16. What is the current intellectual property status (including foundational IP)? Is IP generation under this project expected? (required)

Limit: 75 words

17. Does the requested capital equipment already exist at your institution or others in the state? If so, please describe the value in purchasing additional infrastructure. (required)

Limit: 250 words

18. This grant also requires that capital equipment/data purchased using MLSC funds be made available to the public. Please describe your plans for promoting and allowing access to outside scientists and the timeline, as well as the business model of the facility (if applicable). (required)

Limit: 250 words

19. Please include letters of interest (max 3) from academic scientist(s) external to your institution/industry partner(s). The letter should include a brief (3 sentence) description describing a project that would use the capital equipment and/or data set generated under the award. (required)

Choose File

Upload a file. No files have been attached yet.

Acceptable file types: .pdf

Please upload up to three letters in one PDF file.

20. Please include letters of interest (max 3) from industry scientists external to your institution/industry partner(s). The letter should include a brief (3 sentence) description describing a project that would use the capital equipment and/or data set generated under the award. (required)

Choose File

Upload a file. No files have been attached yet.

Acceptable file types: .pdf

Please upload up to three letters in one PDF file.

21. What are the key challenges to successful translation of the outcomes/technology and how do you plan to overcome them? (required)

Limit: 200 words

22. Describe the impact of your proposed project in Massachusetts (in the context of local business or research partnerships, local purchasing, local prototyping, patients, jobs etc.) (required)

Limit: 200 words

23. Who will be responsible for training the new postdoctoral scientist(s), and what additional skillsets should they expect to gain? (required)

Limit: 200 words

Financial Considerations and Project Timeline

24. Total amount requested from MLSC (required)

\$ USD

25. Total Committed from Industry Partner(s) (required)

\$ USD

26. Total Committed from Non-Profit Applicant(s) (required)

\$ USD

27. Typical grant requests for this program are up to \$750,000. If you are requesting more than \$750,000, please describe the compelling circumstances and provide sufficient information to justify this special request. The Center reserves the right to adjust the requested amount. (required)

Limit: 150 words

28. Breakdown of MLSC Expenditures: Please complete the MLSC Budget to show the detailed breakdown of expenditures for MLSC funds.



	A	B	C	D
1	MLSC Expenses for Project			
2	Category Options: Equipment, Supplies/Reagents, Renovation/Construction, Core Facilities			
3				
4	Total Contribution MLSC	0		
5	FY26 (7/1/25 – 6/30/26)	0		
6	FY27 (7/1/26 – 6/30/27)	0		
7	FY28 (7/1/27 – 6/30/28)	0		
8				
9				

29. For the MLSC Budget, please include vendor quotations of capital equipment over \$100,000. Please only include the page that shows the cost of the item, not the entire document.

Choose File

Upload a file. No files have been attached yet.

Acceptable file types: .pdf

DO NOT MENTION THE PI BY NAME OR GENDER IN ANY UPLOADS.

30. Breakdown of Academic Non-Profit Expenditures: Please complete the Academic Budget to show the detailed breakdown of expenditures for funds to be contributed by the Academic Partner(s). For this application, contributions includes funds committed or dollars leveraged. This can include contributions from for-profit institutions and non-profit/federal entities.



	A	B	C	D	E
1	Academic Non-Profit Expenses for Project				
2	Category Options: Equipment, Supplies/Reagents, Renovation/Construction, Salaries, Indirects, Facility Costs				
3					
4	Total Contribution - Academic	0			
5	FY26 (7/1/25 – 6/30/26)	0			
6	FY27 (7/1/26 – 6/30/27)	0			
7	FY28 (7/1/27 – 6/30/28)	0			
8					
9					

DO NOT MENTION THE PI BY NAME OR GENDER IN ANY UPLOADS.

31. Breakdown of Industry Partner(s) Expenditures: Please complete the Industry Partner Budget to show the detailed breakdown of expenditures for funds to be contributed by the Industry partner(s).



	A	B	C	D	E
1	Industry Expenses for Project				
2	Category Options: Equipment, Supplies/Reagents, Renovation/Construction, Salaries, Indirects, Facility Costs				
3					
4	Total Contribution - Industry	0			
5	FY26 (7/1/25 – 6/30/26)	0			
6	FY27 (7/1/26 – 6/30/27)	0			
7	FY28 (7/1/27 – 6/30/28)	0			
8					
9					

DO NOT MENTION THE PI BY NAME OR GENDER IN ANY UPLOADS.

32. Upload letter(s) of commitment from each non-profit and Company partner outlining their financial and in-kind contributions (reagents, supplies, in-kind salary support, etc.) described in the budget form. Please have the letter reference your project title, but do not include applicant name/gender. If the non-profit applicant is not committing cost-share dollars, please include a letter from the institution describing their commitment to house the equipment and support the project in general. Reminder: At

least one Company letter must include a commitment to pay the salary of at least one new postdoctoral scientist for the duration of the project. (required)

Choose File

Upload a file. No files have been attached yet.

Acceptable file types: .pdf

DO NOT MENTION THE PI BY NAME OR GENDER IN ANY UPLOADS.

33. Is this a new project the team will be pursuing together, or a follow up to a previous research endeavor? Please describe. (required)

Limit: 75 words

Note: Sponsored Research Agreements (or other such similar arrangements) between parties that are executed before the application due date will not be considered as part of the letter of support for this program.

34. Supporting Data

Choose File

Upload a file. No files have been attached yet.

Acceptable file types: .pdf

Please upload a **.PDF** of any supporting data generated to date. Please limit this to **one** page. DO NOT MENTION THE PI BY NAME OR GENDER IN ANY UPLOADS.

Signature

Blinded Declaration

The MLSC is making a concerted effort to blind applications from reviewers. As such we are requesting that you please do not mention the PI by name or gender unless specifically requested.

If there is mention of the PI's name or gender in the submitted application, except where explicitly requested, **your application may be deemed ineligible.** Prior to submission, please use **CTRL+F** to search the application for the **PI's name and gendered pronouns (he/him/his or she/her/hers)** in all text fields, references, patents, budget forms, letters, and other uploads to ensure that they are only found in fields where specifically requested.

Once you are ready to submit, please agree to the declaration below by selecting the below checkbox.

- I agree that I have removed any mention of the PI's name or gender in any text fields or uploads, (re
qui
red
)
 except where explicitly asked. I understand that if the PI's name or gender remains in the application, except where explicitly requested, my application may be ineligible.

Authorized Signature and Acceptance (required)

Upload a file. No files have been attached yet.

Acceptable file types: .pdf, .jpg, .jpeg, .png

Please upload an image of the signature

Authorized Representative Signature and Acceptance -

I verify that I am authorized to commit my organization and to make this application on behalf of the organization. I certify that the above information is correct and that the statements made herein, including all attachments and exhibits, are true and correct to the best of my knowledge. The submission of false information to the Massachusetts Life Sciences Center (MLSC) is subject to prosecution under the False Claims Law at M.G.L. c. 12, sections 5A – 5O. I understand that this Bits to Bytes Program Application may be disqualified if it does not contain all required information or if the Applicant does not meet the eligibility criteria required under the Program. I also acknowledge and agree that the MLSC has sole discretion to determine which applicants receive benefits under the Program. I specifically acknowledge that all of the terms and conditions of the Solicitation are mandatory. On behalf of the applicant, I understand and acknowledge that all materials submitted as part of this application may be subject to disclosure under the Massachusetts Public Records Law. "Public records" may not, however, include materials or data which fall within a specifically enumerated exemption set forth in the MLSC's enabling act, M.G.L. Chapter 23I. Such exemption may be applicable to materials or data submitted to the MLSC that consist of trade secrets or commercial or financial information regarding the operation of any business conducted by the company, or regarding the competitive position of such company in a particular field of endeavor (Trade Secrets Exemption). I understand and acknowledge that if I wish to submit materials or data to the MLSC that may be proprietary in nature and may fall within the parameters of the Trade Secrets Exemption, I must identify such materials and data as Confidential. I also understand that the receipt of such materials/data by the MLSC does not represent a finding that such materials/data do qualify for protection under the Trade Secrets Exemption.

How did you hear about the program? (required)

- Social Media
- MLSC Newsletter/Website
- Third Party (MassBio, MassMedic, etc.)
- Other (specify below)

- Select for the Principal Investigator to receive email notices and updates from the MLSC**

You may unsubscribe at any time.

We look forward to reviewing your application and working together to advance life sciences research with big data in Massachusetts. If you have any questions or need assistance, please contact our team at BitsToBytes@masslifesciences.com.

Save Draft

Submit Form

Drafts may be visible to the administrators of this program.