Request for Proposal (RFP): Spatial Transcriptomics Services for MLSC Biobank Program

Ends on Fri, Apr 17, 2026 11:59 PM

1. Background and Purpose

The Massachusetts Life Sciences Center (MLSC) Biobank Program is a statewide, multi-institutional initiative designed to support biomedical research through secure, equitable access to high-quality biospecimens and associated data. As part of this effort, MLSC seeks qualified vendors to provide **spatial transcriptomics services** for human tissue specimens collected across participating academic medical centers.

The objective of this RFP is to enable generation of high-quality, research-grade spatial gene expression data from intact tissue sections, preserving spatial context and enabling downstream discovery, translational research, and data integration under MLSC governance frameworks.

2. Scope of Work

A. Tissue and Assay Support

- Support for spatial transcriptomics assays performed on intact tissue sections, including FFPE and fresh frozen tissue, as applicable.
- Clear specification of supported platforms and technologies.
- Defined tissue input requirements and pre-analytic criteria.
- Adherence to standardized sample handling and chain-of-custody procedures.

B. Data Generation and Quality Control

- Generation of spatially resolved gene expression data.
- Defined quality control metrics and performance thresholds.
- Documentation of assay performance, batch effects, and technical variability.

C. Data Delivery and Integration

- Secure delivery of raw and processed data outputs.
- Delivery of associated metadata, imaging files, and QC reports.
- Compatibility with downstream bioinformatics, visualization, and data curation pipelines designated by MLSC.

D. Compliance and Security

- Compliance with HIPAA and applicable data protection requirements, as well as MA regulations for handling human samples.
- Secure handling of human genomic and imaging data.

- Encryption of data in transit and at rest.

3. Vendor Qualifications

- Demonstrated experience providing spatial transcriptomics services for human research tissue samples.
- Proven expertise with one or more spatial transcriptomics platforms.
- Capacity to support large-scale, multi-institutional research programs.
- Established quality control, reproducibility, and documentation practices.

4. Proposal Requirements

Proposals should include an executive summary, technical approach, quality controls, experience and references, implementation plan, pricing, and assumptions.

5. Evaluation Criteria

Proposals will be evaluated based on technical quality, data quality, scalability, platform suitability, compliance, experience, and cost.

6. Timeline

Deadline: 4.17.2026

Evaluation Period: Proposals will be weighted based on technical expertise, alignment with the MLSC's needs and cost-efficiency. Finalists may be interviewed in mid/late May. A decision will be made in May/June with a tentative commencement in June.

MLSC reserves the right to modify this timeline at its discretion.

7. Additional Terms

For questions regarding this RFP, contact: BioBank@masslifesciences.com

This RFP does not constitute an obligation to fund any proposals. The MLSC reserves the right to modify or cancel this RFP at any time and may request further clarifications or conduct interviews as part of the selection process.

Thank you for your interest in the MLSC Biobank Program

Please read the scope of work prior to submitting the proposal.

Requirements

Proposal Requirements

Responding organizations must submit a complete proposal that addresses the following elements. Proposals that do not include all required components may be considered non-responsive.

Applicant Information

Legal Name of Organization (required)

Primary Point of Contact Name (required)

First Name (required)

Last Name (required)

Primary Point of Contact Email (required)

email@example.com

Primary Point of Contact Phone (required)

Company Website (required)

example.com

Headquarters Location (required)

Country (required)

Select...

Address (required)

Address Line 2 (optional)

City (required)

State, Province, or Region (required)

Zip or Postal Code (required)

Section 1: Executive Summary

1.1 Overview of Spatial Transcriptomics Services (required)

Limit: 500 words

Provide a concise summary of your spatial transcriptomics capabilities and how they align with the MLSC Biobank Program.

Section 2: Technical Approach

2.1 Supported Tissue Types (required)

Limit: 300 words

Describe supported tissue types, section formats, and input requirements.

2.2 Spatial Transcriptomics Platforms and Assays (required)

Limit: 300 words

Describe supported platforms, assay workflows, and target capture methods.

2.3 Quality Control Metrics (required)

Limit: 300 words

Describe QC thresholds and performance metrics used to assess spatial data quality.

2.4 Quality Control Metrics (required)

Limit: 300 characters

Describe QC procedures and thresholds used to assess block and slide quality.

Section 3. Data Delivery and Integration

3.1 Data Outputs (required)

Limit: 300 words

Describe raw and processed data deliverables, imaging outputs, and associated metadata.

3.2 Secure Data Transfer (required)

Limit: 300 words

Describe data transfer methods and security controls.

Section 4. Compliance and Security

4.1 Regulatory Compliance (required)

Limit: 300 words

Describe compliance with HIPAA and applicable data protection requirements.

4.2 Data Security Controls (required)

Limit: 300 words

Describe encryption, access controls, and audit mechanisms.

4.3 Certification Upload: Please upload documentation for all applicable laboratory accreditations, quality management certifications, and data security or privacy certifications held by your organization. (required)

Choose File

Upload a file. No files have been attached yet.

Acceptable file types: .csv, .doc, .docx, .odt, .pdf, .rtf, .txt, .wpd, .wpf, .gif, .jpg, .jpeg, .png, .svg, .tif, .tiff

Examples include, but are not limited to:

Laboratory and Quality Systems

- CLIA certification (optional, not required)
- CAP accreditation (optional, not required)
- ISO 9001 (Quality Management)
- ISO 20387 (Biobanking)

Data Security and Privacy

- SOC 2 Type II
- ISO/IEC 27001
- Other third-party security or compliance audits

Section 5. Experience and References

5.1 Relevant Experience (required)

Limit: 300 words

Describe prior spatial transcriptomics projects involving human research tissue samples.

5.2 References (required)

Limit: 300 words

Provide at least two references, including organization name, contact name, and email.

Section 6. Implementation and Pricing

6.1 Implementation Timeline (required)

Limit: 300 words

Describe onboarding approach and expected turnaround times.

6.2 Pricing Structure (required)

Limit: 300 words

Describe pricing model and cost assumptions.

Section 7. Supporting Materials

7.1 Optional Uploads (required)

Choose File

Upload a file. No files have been attached yet.

Acceptable file types: .csv, .doc, .docx, .odt, .pdf, .rtf, .txt, .wpd, .wpf, .gif, .jpg, .jpeg, .png, .svg, .tif, .tiff

Upload technical documentation, sample reports, or representative data.

Save Draft Apply

Drafts may be visible to the administrators of this program.