Tender

# Tender for the Supply and Installation of a High-Dimensional Spatial Transcriptomics/Proteomics Platform for the University of Birmingham

THE UNIVERSITY OF BIRMINGHAM

F02: Contract notice
Notice identifier: 2022/S 000-031448
Procurement identifier (OCID): ocds-h6vhtk-037fbd
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## Section I: Contracting authority

### I.1) Name and addresses

THE UNIVERSITY OF BIRMINGHAM

EDGBASTON

BIRMINGHAM

B152TT

**Contact**

Kseniya Samsonik

**Email**

K.Samsonik@bham.ac.uk

**Country**

United Kingdom

### Region code

UKG31 - Birmingham

### Companies House

RC000645

### Internet address(es)

Main address

http://www.birmingham.ac.uk/index.aspx

## I.3) Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at

http://www.intendhost.co.uk/universityofbirmingham/aspx/Home

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

http://www.intendhost.co.uk/universityofbirmingham/aspx/Home

## I.4) Type of the contracting authority

Body governed by public law

## I.5) Main activity

Education

# Section II: Object

## II.1) Scope of the procurement

### II.1.1) Title

Tender for the Supply and Installation of a High-Dimensional Spatial Transcriptomics/Proteomics Platform for the University of Birmingham

Reference number

SC10845/22

### II.1.2) Main CPV code

- 38000000 - Laboratory, optical and precision equipments (excl. glasses)

### II.1.3) Type of contract

Supplies

### II.1.4) Short description

The University of Birmingham invites tenders for supply of a high-dimensional spatial transcriptomics/proteomics platform. This will form part of the histology services offered by Birmingham Tissue Analytics (BTA), a University of Birmingham research facility. BTA already provides complex multi-parameter immuno-histochemical tissue imaging and spatial transcriptomic platforms academic, clinically focused, and industry-linked work streams.

This spatial transcriptomics platform should build on the current capabilities of the facility, particularly with regards to the capability for high dimensional protein and gene expression analysis at subcellular analytical resolution.

An ability to analyse tissue samples in a variety of formats would be desirable but it is essential to be able to work with Formalin Fixed Paraffin embedded materials in order to work with archived pathology samples. Furthermore, the platform should possess sufficient throughput to allow capacity for analysis of multiple slides per working day. It would be desirable for a data analysis package to be included with the platform which would be accessible to service users and intuitive for researchers to manage their own data analysis.

This project may be funded by the European Regional Development Fund (ERDF) or;

- European Structural and Investment Fund (ESIF) or;

- Research Councils UK (RCUK), the strategic partnership of the UK's seven Research Councils.

### II.1.6) Information about lots

This contract is divided into lots: No

## II.2) Description

### II.2.3) Place of performance

NUTS codes

- UKG31 - Birmingham

### II.2.4) Description of the procurement

The University of Birmingham invites tenders for supply of an imaging platform capable of delivering spatial high parameter, multi-omic data in single cell resolution. This platform will be operated by Birmingham Tissue Analytics, a University of Birmingham research facility that specialises in the delivery of high dimensional imaging assays as a service to academic and industry collaborators.

General characteristics

The platform in question is intended to expand the facilities capabilities in spatial transcriptomics, building on other technologies that are already used to phenotype tissue samples with but with either a lower number of parameters or lower level of resolution.

Capabilities for profiling RNA expression in human tissue samples is essential. This profiling should allow sufficient depth to characterise cell identity and effector function to generate spatial atlases of tissue samples. To achieve this, it would be expected to be able to study in excess of 500 RNA markers per imaging run. An ability to profile protein marker expression in addition to RNA would also be highly advantageous.

Specifications

1) An analytical platform capable of providing high parameter imaging assays to profile RNA expression in tissue samples at least single cell resolution.

2) Capabilities to analyse tissue samples in various formats, including Formalin Fixed Paraffin Embedded (FFPE) or frozen.

3) Pre validated reagent kits for RNA/protein profiling would be highly advantageous due to

the service delivery basis for which the platform utilised which limits the feasibility of extensive panel validations across multiple projects.

4) Access to proprietary analysis software, ideally which can be made available to multiple researchers (service users) for their own data analysis.

5) PC-based controller with capabilities for image visualization and interrogation. A solution to handle large image files in conjunction with image analysis would be beneficial.

6) The instrument must come with an up-to-date and powerful computer for system control, data acquisition and, where applicable data analysis. We expect this computer to be provided with the latest operating software.

7) The software provided for the data acquisition and/or the data analysis should provide a user friendly workflow for image visualisation and analysis.

After sales services

• We expect a swift and high quality remote and on-site technical support for the length of the instrument warranty as well additional service contracts we might purchase.

• A training package must be provided for a group of users.

• We expect the suppliers to provide us with educational resources and services dedicated to our instrument configuration.

## II.2.5) Award criteria

Quality criterion - Name: Compliance to the Specification / Weighting: 40

Quality criterion - Name: After Sales and Technical Back up / Weighting: 10

Quality criterion - Name: Delivery and Training / Weighting: 10

Quality criterion - Name: Sustainability and Environmental / Weighting: 5

Quality criterion - Name: Standard Supplier Questionnaire / Weighting: 10

Price - Weighting: 25

## II.2.7) Duration of the contract, framework agreement or dynamic purchasing system

End date

31 March 2023

This contract is subject to renewal

No

## II.2.10) Information about variants

Variants will be accepted: No

## II.2.11) Information about options

Options: No

# Section IV. Procedure

## IV.1) Description

### IV.1.1) Type of procedure

Open procedure

### IV.1.8) Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: Yes

## IV.2) Administrative information

### IV.2.2) Time limit for receipt of tenders or requests to participate

Date

7 December 2022

Local time

11:59am

### IV.2.4) Languages in which tenders or requests to participate may be submitted

English

### IV.2.7) Conditions for opening of tenders

Date

7 December 2022

Local time

12:00pm

# Section VI. Complementary information

## VI.1) Information about recurrence

This is a recurrent procurement: No

## VI.4) Procedures for review

### VI.4.1) Review body

University of Birmingham

Birmingham

B15 2TT

Country

United Kingdom