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Tender

## **Tender for the Supply and Installation of a Preclinical Ultrasound Imaging System - University of Birmingham**

THE UNIVERSITY OF BIRMINGHAM

F02: Contract notice

Notice identifier: 2022/S 000-019185

Procurement identifier (OCID): ocids-h6vhtk-035199

Published 13 July 2022, 2:39pm

### **Section I: Contracting authority**

#### **I.1) Name and addresses**

THE UNIVERSITY OF BIRMINGHAM

Chancellors Close

BIRMINGHAM

B152TT

#### **Contact**

Kseniya Samsonik

#### **Email**

[K.Samsonik@bham.ac.uk](mailto:K.Samsonik@bham.ac.uk)

#### **Telephone**

+44 1214146899

#### **Country**

United Kingdom

**NUTS code**

UKG31 - Birmingham

**Internet address(es)**

Main address

<https://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.in-tendhost.co.uk/universityofbirmingham>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<http://www.in-tendhost.co.uk/universityofbirmingham>

**I.4) Type of the contracting authority**

Body governed by public law

**I.5) Main activity**

Education

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## **Section II: Object**

### **II.1) Scope of the procurement**

#### **II.1.1) Title**

Tender for the Supply and Installation of a Preclinical Ultrasound Imaging System -  
University of Birmingham

Reference number

SC10849/22

#### **II.1.2) Main CPV code**

- 33112000 - Echo, ultrasound and doppler imaging equipment

#### **II.1.3) Type of contract**

Supplies

#### **II.1.4) Short description**

Please be aware that the award of this project will be conditional, based on whether the bid for funding is successful.

(This project is funded by the Medical Research Council and the procurement is dependent on the final funding agreement.)

The University of Birmingham invites tenders for supply of an ultrasound imaging system to image small preclinical disease models with high frame rates to accurately image small mobile structures with fast frequency cyclic changes. The equipment will be used for echocardiography and imaging of tissue structures and blood flow.

The workstation should perform image acquisition, data storage and in-line as well as off-line data analysis to derive functional parameters. It should allow for a future upgrade of the setup, both in terms of hardware (especially transducers) and software.

#### **II.1.5) Estimated total value**

Value excluding VAT: £301,612

#### **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

Main site or place of performance

Delivery Location is:

Biomedical Service Unit

Vincent Drive

University of Birmingham

Edgbaston

Birmingham

B15 2TT

### **II.2.4) Description of the procurement**

The University of Birmingham invites tenders for supply of an ultrasound imaging system to image small preclinical disease models with high frame rates to accurately image small mobile structures with fast frequency cyclic changes. The equipment will be used for echocardiography and imaging of tissue structure and fluid (blood) flow, also in other organs.

General characteristics

A workstation needs to fit the footprint of the existing, obsolete system (VisualSonics, Vevo 2100). This equipment will be traded in as part of the purchase.

It will be a stand-alone system

Specification

i. Imaging station

1) Capabilities for carrying out ultrasound imaging in small preclinical models in the Biomedical Services Unit

- 2) Capabilities for using high frequency ultrasound (>40 MHz) to image small structures (approx. 1 - 10 mm) dynamically at high resolution in vivo, with the ability to upgrade to higher frequencies (~ 70 MHz)
- 3) Visualization of images in real time on screen
- 4) Ability to monitor physiological parameters (ECG, respiratory rate, core temperature)
- 5) Possibility to move platform around easily
- 6) Customizable touch screen controls during the image acquisition
- 7) Ability to attach more than one transducer to the system at a time to allow for quick change between analysis programmes

## ii. Data analysis

- 8) Software platform that allows for on-line and off-line data analysis, with ability to upgrade to multiple users; compatible with Windows laptops and PC used as standard at the University of Birmingham
- 9) Ability to store and back up data on hard drives and file servers
- 10) Ability to gate for ECG and respiratory motion in echocardiography, hence to provide 3D info on highly dynamic small structures, with ability to reconstruct volumes at framerates 100-300 fps
- 11) Ability to visualize fluid (blood) flow via Doppler ultrasound with information of directionality of flow
- 12) Ability to analyze tissue function through strain analyses
- 13) Ability to perform M- and B-mode analysis as well as AM-mode analysis for customizable angle dependent measurements
- 14) Ability to analyze blood vessels with vascular strain tools, for stiffness and anatomical composition
- 15) Ability to derive left ventricular functional parameters (e.g. Cardiac Output, Stroke Volume, Ejection Fraction from image recordings in automated form
- 16) EKV (ECG-gated KiloHertz Visualisation) mode enabled to reach optimal frame-rate processing for fast moving structures during B-mode analysis

iii. Options for future upgrade

17) Ability to add other transducers for higher resolution or better image depth

18) Ability to add software packages for oncology

19) Ability to add contrast imaging option

#### **II.2.5) Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

#### **II.2.6) Estimated value**

Value excluding VAT: £301,612

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

Start date

22 August 2022

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

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## **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

10 August 2022

Local time

12:00pm

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

English

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

Date

10 August 2022

Local time

12:01pm

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## **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**

The University of Birmingham

University of Birmingham

Birmingham

B15 2TT

Country

United Kingdom