Mississippi State University
Notice of Proposed Sole Source Purchase
245-105

Mississippi State University anticipates purchasing the item(s) listed below as a sole source purchase. Anyone objecting to this purchase shall follow the procedures outlined below.

1. Commodity or commodities to be purchased (make, model, description):

PHYSIO-ENDURO - PhysioFlow Enduro Wireless Cardiac Output System with Starter Kit

Includes:

- PhysioFlow Enduro device

- sensor kits (40 subjects)

- skin gel

- USB serial adapter (2), RSS232 dual adapter

- OMNIA AUX Devices Integration Module (A-670-100-023) for use with OMNIA

Service & Training

2. Explanation of the need to be fulfilled by this item(s), how is it unique from all other options, and why it is the only one that can meet the specific needs of the department:

The PHYSIO-ENDURO - PhysioFlow Enduro Wireless Cardiac Output System with Starter Kit is essential for enhancing the Department of Kinesiology's research capabilities related to non-invasive cardiovascular monitoring and assessment of cardiac output during exercise and rest. This system offers a unique combination of portability, precision, and real-time data collection that is not found in other similar devices.

The PhysioFlow Enduro provides the following unique features:

Wireless Design for Real-Time Monitoring: Unlike traditional, lab-bound cardiovascular assessment systems, the PhysioFlow Enduro provides wireless, continuous monitoring of cardiac output, stroke volume, heart rate, and other key hemodynamic variables in real-time. This portability allows for testing in laboratory environments, athletic training facilities, and field-based research, enhancing versatility.

Non-Invasive Measurement: Provides a safe, reliable, and non-invasive method for assessing cardiac output without the need for invasive catheters or imaging techniques.

Dual-Use Capabilities: Suitable for both exercise testing and clinical assessments, making it a comprehensive tool for a wide range of research and educational applications.

Compatibility and Integration: The PhysioFlow Enduro integrates seamlessly with existing departmental research systems and data analysis tools, facilitating efficient data collection and interpretation.

Validation and Peer Acceptance: This system is widely recognized and validated by peer-reviewed studies for its accuracy, reliability, and usability across various populations and research settings.

Other commercially available systems, such as Doppler Ultrasound and inert gas rebreathing systems, are either invasive, impractical for field-based research, or unable to provide continuous, real-time data during exercise. The PhysioFlow Enduro Wireless Cardiac Output System is the only device that offers a combination of wireless functionality, high-resolution impedance cardiography, non-invasiveness, and dual-use capability required for the department's research and teaching activities.

3. Name of company/individual selling the item and why that source is the only possible source that can provide the required item(s):

COSMED; This is the only manufacturer and distributor of this equipment

4. Estimated cost of item(s) and an explanation why the amount to be expended is considered reasonable:

$20,426.50

A non-invasive cardiac output and stroke volume device that is costly due to the sensitivity and precision that provide. The methods by which these devices work require very tight tolerances and manufacturing processes.

5. Explanation of the efforts taken by the department to determine this is the only source and the efforts used to obtain the best possible price:

The department has taken several steps to ensure that the PhysioFlow Enduro Wireless Cardiac Output System with Starter Kit is the only viable option for our research and teaching needs, as well as to obtain the best possible price.

Market Research: A comprehensive review of other commercially available systems was conducted. While some devices can provide cardiac output measurements, none offer the same combination of wireless portability, non-invasive technology, and high-resolution real-time data collection as the PhysioFlow Enduro.

Web-Based Search: The manufacturer of the Physioflow only identifies COSMED as its distributor in the United States.

Vendor Communication: The department has communicated directly COSMED, confirming that it is the sole USA distributor of the device.

Price Negotiation: Efforts are being made to purchase a 2025 model year PhysioFlow Enduro system. The department is receiving improved pricing based on previous purchases of related research equipment and efforts to build a compatible inventory.

The decision to proceed with a sole source purchase from COSMED, the USA distributor of the PhysioFlow Enduro system is based on their status as the only provider of this unique, wireless cardiac output monitoring system. This device is essential for maintaining consistency and accuracy in ongoing research and instructional activities within the department.

Any person or entity that objects and proposes that the commodity listed is not sole source and can be provided by another person or entity shall submit a written notice to:

Jennifer Mayfield, CPPO
Director of Procurement & Contracts
jmayfield@procurement.msstate.edu
Subject Line must read “Sole Source Objection”

The notice shall contain a detailed explanation of why the commodity is not a sole source procurement. Appropriate documentation shall also be submitted if applicable.

If after a review of the submitted notice and documents, MSU determines that the commodity in the proposed sole source request can be provided by another person or entity, then MSU will

withdraw the sole source request publication from the procurement portal website and submit the procurement of the commodity to an advertised competitive bid or selection process.

If MSU determines after review that there is only one (1) source for the required commodity, then MSU will appeal to the Public Procurement Review Board. MSU will have the burden of proving that the commodity is only provided by one (1) source.

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