Business Unit & Req. #___1902___ ECCN:___EAR 99___ Total Amount: 107,976.25

Note: This Sole Source Certification will become a public document, open to public inspection; therefore, you should be certain all material facts are true, relevant and clearly understandable.

SOLE SOURCE CERTIFICATION

Under the requirement of University of Florida Rule No. 6C1-3.020(5)(e)(2), the following is submitted in support of this request for authority to purchase, without bidding, the items available from only one source.

Note: Sole Source means that the item/service is unique and that the vendor is the only one from whom the item/service can be provided. Best Price alone cannot be used for sole source. If the item/service is available from more than one source of supply, best price must be determined through the competitive bid process.

A. Sole Source Vendor Company Name: **Bertec Coorporation**

Contact Person: **Bill Burns**

Address: **2500 Citygate Dr, Columbus, OH, 43219**

Telephone: **614-543-1127** Fax: **614-430-5425** Email: **bill.burns@bertec.com**

B. Describe in lay language, what the item/service is and how it is to be used in your area of research. (cont. P2)

I will be purchasing a Bertec instrumented treadmill, which is an advanced treadmill that captures ground reaction forces while walking.

C. What feature or special condition of this commodity/service is unique and cannot be obtained from any other source? Why are these features or special conditions important to the research? (cont. P2)

The Bertec instrumented treadmill has several advanced features that are critical for my research. (1) It is instrumented with two side-by-side force plates (i.e., one under each foot) that can be synchronized with any motion capture system. (2) It uses a split-belt design in which there are two separate belts running alongside each other (i.e., one for each leg). (3) Each belt can be independently controlled in both directions up to 7 m/s at 0.01 m/s increments with accelerations up to 5 m/s2. (4) Control of treadmill motors can be customized with user-defined code using multiple computing languages (e.g., Matlab, C/C++, Labview, etc.). The combination of these four features allows us to design custom speed profiles that simulate real-world challenging walking conditions.

D. Is this product being purchased directly from the manufacturer? ■ Yes ☐ No

If No, is it available from more than one dealer? ☐ Yes ☐ No

If Yes, it is available from more than one dealer, why can this item not be bid? (cont. P2)

E. Prior to submitting this requisition, did you investigate other possible sources? ■ Yes ☐ No

If Yes: 1) Did you obtain quotes from the other sources? ■ Yes ☐ No If Yes, attach copies.

2) Is this Vendor's price lower than the other sources? ☐ Yes ☐ No If No, justify the additional cost below.

Other vendors don't meet research requirements.

F. What efforts have been made to obtain the best price possible? Why do you feel this price is fair and reasonable? (cont. P2)

I / We, the undersigned, certify the above to be true and correct to the best of my / our knowledge and belief and the user and / or undersigned does not have a financial interest in the above named vendor.

DEPARTMENT APPROVAL	PURCHASING APPROVAL
I hereby certify the validity of the information and feel confident the Sole Source Certification will meet University criteria and would withstand any audit or vendor protest.	This acquisition is approved as a non-competitive purchase.
Jessica Allen *Digitally signed by Jessica Allen Date: 2022.06.27 09:04:24 -04'00'* 06/27/2022	*ann Wright* 6/28/22
Principal Investigator's Signature Date	Purchasing Coordinator Signature Date
FAILURE TO FILE A PROTEST IN ACCORDANCE WITH BOARD OF GOVERNORS (BOG) REGULATION 18.002 OR FAILURE TO POST THE BOND OR OTHER SECURITY AS REQUIRED IN THE BOG REGULATION 18.002 AND 18.003(3) SHALL CONSTITUTE A WAIVER OF PROTEST PROCEEDING.	*N J Heredia* 6/28/2022
	Purchasing Authorized Signature Date

FA-PDS-SOLSRC 12/2018

Sole Source Certification (Continued)
Please use the following sections to continue documentation if needed.

B. continued

In lay terms, this means that the treadmill can measure how much a person "pushes" on the ground to move. In addition, the treadmill has two belts (one for each leg) that can be independently and precisely controlled. This functionality allows us to induce disturbances to walking balance, such as slips and trips. My research is focused on understanding how individuals with various musculoskeletal and neurological pathologies control their balance during movement (e.g., standing, walking, running, etc.). The data from experiments using this treadmill will allow us to quantitatively compare how pathologic and non-pathologic individuals move and respond to balance challenges, which can inform surgeries and rehabilitation protocols to improve and restore function.

C. continued

For example, we can simulate a slip during walking by quickly changing the speed of a single belt when the foot hits the ground. Feature 1 is required because the side-by-side force plates allow us to determine when each foot hits the ground. This defines when the "slip" should start. Feature 2 is required because the "slip" is simulated by changing the speed of only one of the treadmill belts (similar to one foot slipping when unexpectedly stepping on a patch of ice). The third feature (speed/acceleration control) is required to enable the quickly speed changes with high enough velocity and acceleration levels for the disturbance to feel like a "slip". And finally, the fourth feature (custom motor control) is required to integrate each of the previous features together to control the treadmill belts to move as desired.

There are two primary competitors that have split-belt instrumented treadmills (Features 1 and 2), but they don't meet our research requirements for speed/acceleration (Feature 3) and custom motor control (Feature 4). Only one of the competitors has an option for custom motor control, but their software does not allow us to write custom written code in common computing languages.

D. continued

E. continued

F. continued

FA-PDS-SOLSRC 12/2018

Reset