

# Henry Ford College

## Application for Funding through the Technology Investment Fund HFC Exercise Laboratory (Initiative ID#23900)

Project Director: Carole Sloan  
Department: Health & Physical Education

Date: February 15, 2017  
Division: Social Science, Arts, & Fitness

**1. Please describe your project as specifically as possible. Include, but do not limit yourself to, answers to these questions:**

**What do you propose to do?**

Continue development of the exercise science lab with the addition of lab equipment and improved classroom/laboratory space.

**Why do you propose to do this?**

To provide students with an exceptional learning experience. The increased "hands-on" learning gives students the training and knowledge that employers expect from graduates of HFC. Additionally, students are more successful and engaged in class because students participate in the ideas and concepts they are learning, instead of just discussing the concepts.

**2. How many unique students will be served each academic year (Fall through Summer) by your project? "Unique students" refers to unduplicated headcount. Provide detail (course numbers, titles, and enrollments, for example).**

The students who will benefit from funding of this proposal include students enrolled in the Associate of Applied Science and Certificate program in Fitness Leadership (58 students) and students enrolled in the Sports Management program (55 students). \* Students in these programs must take the following classes that will make use of the new equipment and have classes in the laboratory:

HPE 150 Exercise Physiology (approximately 100 students/year)

HPE 151 Methods for Teaching Exercise (30 students)

HPE 154 Tests and Measurements (24 students). \*\*

\*State numbers reported November 2016.

\*\*Enrollment from 2015 - 2017

**3. Please provide your project's budget. Address each of the questions, or meet each request, listed below. What will be purchased (including model numbers, if appropriate), and what will it cost? Include amounts that are committed from funds other than the Technology Investment Fund, and indicate the source of those other funds.**

The total cost of the project is \$80,416. The classroom renovation costs total \$25,200 and the exercise science laboratory equipment cost \$55,216. Specific costs are detailed below.

## Laboratory Equipment

Quantity	Equipment	Unit Cost	Extended Cost
1	Body composition assessment using air displacement plethysmography (see attached bid)		49846
1	IX4-Bio4-Channel Biopotential EMG Recording Module (see attached bid)		2495
5	Y-valve assembly	575	2875
	Total Laboratory Equipment Cost:		\$55216

## Classroom Renovation

Quantity	Equipment	Unit Cost	Extended Cost
9	Outlet removal from floor because of safety hazard	800.00	7200
1	Lecture capture system: Electrical - \$1000, AV - \$15000, White Board - \$1,000		17000
1	Sink added to existing plumbing		1000
1	Instructor's station	Funded by TLS	
	Classroom Renovation Cost:		\$25200

Total Project Cost: \$80,416

**Where will funds for future maintenance needs, consumables, and such come from?**

We have two avenues to provide support for the ongoing operation of the exercise science laboratory. First, we attach a laboratory fee to the classes that use the equipment and consumable supplies. Second, we plan to offer testing of  $VO_{2max}$  and body composition to the HFC and Dearborn community to generate funding for the laboratory and to offer additional exposure to the equipment for students.

**Attach any support for your budget (quotes, for example) to this application, and indicate here what is attached.**

See bid proposals attached to this application.

- Cosmed USA for Bod Pod GS – Body composition assessment with air displacement plethysmography
- Iworx 4 channel biopotential EMG recorder

**Rank your needs so that the Technology Investment Committee will have guidance should only partial funding be available to recommend.**

If this project were partially funded, I would recommend that we purchase the laboratory equipment and fund the classroom renovation later.

**4. Regarding project location and equipment security, please address each of the questions, or meet each request, listed below. Describe specifically where items to be purchased will be located or installed. Include room-layout diagrams if appropriate.**

The new exercise science laboratory equipment will be located in E-220.

**Indicate the status of any necessary approvals for using the space in which items will be located or installed.**

E-220 has been used as an electronics laboratory but the creation of the new electronics lab leaves the space available for joint use by HPE and Industrial Arts and Technology.

Since the classroom was used as a computer lab, there is adequate infrastructure for the technology to be changed in the classroom and for the new laboratory equipment to be installed.

**Who, specifically, will do the installation?**

Installation has been included in the costs of the new laboratory and classroom equipment.

**How will equipment purchases be secured?**

The classroom (E-220) has a high security lock.

**5. How, specifically, will you determine the success or shortcomings of your project?**

The success of the use of the student funded TIF will be measured by the students receiving a more collaborative and experiential learning environment and by providing students with exposure to equipment and knowledge they will be expected to know when entering the work environment. Specifically, to measure these outcomes, we can evaluate enrollment over several semesters and survey instructors/students on their experience in the classroom.

Approved .

*Cynthia J. Stiles*



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 Concord, CA 94520  
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 Fax: 925-676-6005  
 www.cosmed.com

**Henry Ford College**

5101 Evergreen Road  
 Dearborn, MI 48128

Health and Physical Education  
 Attn: Carole Sloan Ph.D.

**QUOTATION**

**NUMBER: 1211356**  
**DATE: 11-22-2016**

**DELIVERY:** 45 Days from Signed P/O

**WARRANTY:** 1 Year Parts and Labor

**QUOTE VALIDITY:** 90 days  
**SALES MANAGER:** Tony Wilk

**PAYMENT:** Net 30 days upon delivery

**INSTALLATION:** Included

BOD POD GS - Body Composition Assessment					
ITEM #	DESCRIPTION	QTY	UNIT PRICE	TOTAL	
A-661-230-023	BOD POD Gold Standard Bod Pod Unit, calibration cylinder, electronic scale, computer, monitor, printer, printer cable, power supply, serial cable, transformer assembly, calibration weights (2 pcs.), nose clip, breathing tube and filter kits (50 pcs.), window cleaner; window cleaning cloths (5 pcs.), body composition posters (1 tube), software, quick reference guide, user manual.	1	\$47,500.00	\$ 47,500.00	
1650300	Computer Cart BOD POD GS	1	\$ 750.00	\$ 750.00	
A-661-923-008	BOD POD GS Breathing Tube and Filter Kits (1 tube and 1 filter per kit - 50 kits)	2	\$ 169.00	\$ 338.00	
ECE1	1 Day Exercise or Body Composition On-Site Product Clinical Education (at installation) Onsite Training with a Clinical Specialist. Interactive session on the proper operation of the instrument.	1	\$ 1,750.00	\$ 1,750.00	
	Shipping	1	\$ 2,132.00	\$ 2,132.00	
<b>TOTAL</b>				<b>\$ 52,470.00</b>	
<b>EDUCATIONAL DISCOUNT</b>				<b>\$</b>	
<b>SALES TAX</b>				<b>0.00%</b>	<b>(2,623.80)</b>
<b>GRAND TOTAL</b>				<b>\$</b>	<b>-</b>
<b>GRAND TOTAL</b>				<b>\$ 49,846.20</b>	

To place your order please sign quotation and return along with your P/O via email to [ordersusa@cosmed.com](mailto:ordersusa@cosmed.com) or Fax to 925-676-6005.

Authorized Signature - Date



iWorx Systems, Inc.

62 Littleworth Road  
Dover, NH 03820

Phone: 800-234-1757  
FAX: 603-742-2455

Quote No	28348
Date	Feb 28, 2017

Federal Tax ID  
04-3211-969

Carole Sloan  
Henry Ford College  
Health and Physical Education  
Athletic Memorial Building  
5101 Evergreen Road  
Dearborn, MI 48128

NOTE: Prices and Terms presented in this document are confidential and not to be shared with those outside your organization.

QTY.	PART NO.	DESCRIPTION	PRICE/UNIT	AMOUNT
1	IX-BIO4	4 Channel Biopotential Recorder with LabScribe Software	\$2,495	\$2,495

**TERMS AND CONDITIONS:**

- Net 30 Days (1.5% surcharge on credit card payments)
- All quoted products manufactured and provided exclusively through iWorx Systems, Inc.
- Prices are **FOB Destination** - Prepay and added to invoice.
- Quoted Prices are in USD and are Valid for 60 days.
- All Hardware warranted for 36 months.
- Software and Firmware Upgrades Provided at No Charge.
- Lab manuals provided in PDF and HTML, which may be modified and duplicated in part or whole.

Sub Total: \$2,495  
Shipping: \$39  
**Total: \$2,534**

Ashish More