

# Strengthening *the core*

A Department of Health and Human Performance publication for students and alumni

Winter 2003

## Technology in health and human performance

by April Frey, Melissa Goshow, Sara Hughes, Carey Wolgemuth



*Students developing the Pi Phi Epsilon website.*

In a world which revolves around technology, this course has prepared students to become better equipped to keep up with such advancements.

This past fall, a new course, Technology in Health and Human Performance, was added to the major requirements to better prepare students to use computers and other forms of technology in their aspiring careers. This course provides the basic foundation of computer knowledge for amateur computer users, but also allows the advanced students to work and progress at their own pace. Through the course, students were given the opportunity to gain practical knowledge on how to apply technology to their health occupation, from health and physical education to sport and exercise science to athletic training.

Programs used for the course included Dreamweaver for webpage design, Microsoft Excel for the use of spreadsheets, Microsoft Word for word processing documents, Microsoft PowerPoint for presentations, and Quicktime for video analysis and editing. Assignments for Technology in HHP allowed students to explore situations they might face in their field.

One of the first projects completed by the students was a package of word processing documents which consisted of memos, resumes, cover letters, flyers, and newsletters. Another applicable project involved students buying their own computers within a specific budget, and the justification of the various hardware and software purchased. The use of PowerPoint was another relevant tool for the students to master, since more professional and organized presentations in their various fields are critical. Finally, the use of Dreamweaver for the creation of a webpage was another unique project, allowing students to create an interactive website that could be used within each student's respective field of study.

In a world which revolves around technology, this course has prepared students to become better equipped to keep up with such advancements. Technology in Health and Human Performance gives students the opportunity to practice technological skills that will help them in their future professions.



## From the chair

### HHP department initiates honor society chapter

*The Department of Health and Human Performance is in the process of applying to Phi Kappa Epsilon, the*

*National Physical Education Honors Society, to establish a Messiah College chapter.*

Phi Epsilon Kappa Fraternity is a national professional fraternity for persons engaged in or pursuing careers in physical education, health, recreation, dance, exercise science, sports medicine and sports management. Phi Epsilon Kappa will become part of our current majors club (Pi Phi Epsilon) and serve as the honors fraternity for those meeting the criteria selected by our student leadership. As part of the application process, we were required to submit a brief history of our department. I have included the history in this column as a reflection of our rich departmental history.

The Health, Physical Education and Recreation Department experienced some of the same growth surges that were also evident college wide in other programs. In particular the Pennsylvania Department

of Education's certification of the Teacher Certification Program in Health and Physical Education fueled some of that growth in the 1970's. Further growth continued with the NATA Certification of the Sports Medicine program in the early 1980's. However, in the last ten years there has been significant growth with the addition of new programs, innovative curriculum, new facilities/labs and additional faculty hires. Majors in therapeutic recreation, recreation, athletic training, sports and exercise science with concentrations in pre-physical therapy, sport management or health and fitness, and health and physical education certification are all programs options for students in the department.

Most recently in 2001, the department changed its name to Health and Human Performance to better reflect the plethora of choices in majors and minors that are offered in the department. In addition to the name change some curriculum changes were also proposed to offer more option for students to be involved in research. A research methods course is now an option for students with a second

semester independent study option for students who wish to complete their research study. In addition to this course, a two-semester, six- credit department honors course was initiated in 2000 for students with exceptional academic credentials.

Presently the department has 180 majors, eleven full-time faculty and 12 part-time faculty. More recently there has been an increase in the number of students who go on to graduate school, more students who seek out internships and clinical experience options and more students who are eager to pursue research studies and independent study options with department faculty. These Health and Human Performance Department graduates are characterized by strong academic credentials, fine-tuned professional skills and personal qualities of integrity and moral courage. These same qualities are reflective of the institutional mission: To educate men and women toward maturity of intellect, character and Christian faith in the preparation for lives of service, leadership and reconciliation in church and society.

## KUDOS

### **Molly Hayes, Senior**

Double major HPE and Athletic training

Molly was awarded Outstanding Young Professional Award from the Pennsylvania State Association for Health, Physical Education, Recreation, & Dance (PSAH-PERD)

### **Katie Price, Senior**

Athletic Training Major

Katie was awarded the Eastern Athletic Training Association Scholarship

### **Mindy Miller, Junior**

Health and Physical Education Major

Mindy was named to the NCAA DIII Women's Soccer 1st Team All-American and was honored as a NCAA DIII Women's Soccer Academic All-American

### **Spud Wentzell, Professor**

Health and Physical Education

Spud was elected as President of PSAH-PERD

### **Kristin M. Hansen-Kieffer, Assistant Professor**

Exercise Science

Kris was named Title IX Liason for the State of Pennsylvania for the American Alliance for Health, Physical Education, Recreation, and Dance

### **Jessica Oden, Senior**

Exercise Science

Jessica was granted early admission to the University of Maryland Physical Therapy Program

### **Desiree Ney, Junior**

Recreation

Desi will be attending the National Outdoor Leadership School (NOLS) in the Desert Southwest

### **Justin Kline, Senior**

Recreation

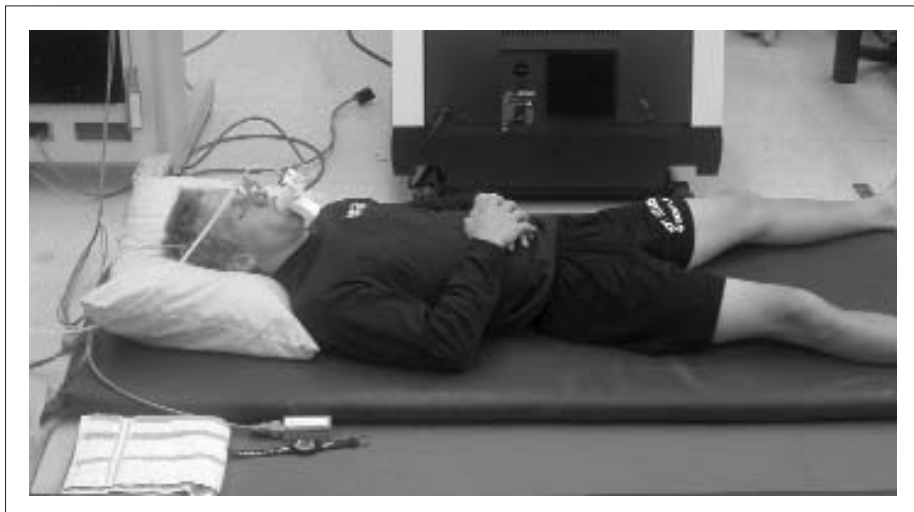
Justin will be attending NOLS in the Rocky Mountains

### **Student involvement in professional organizations**

Eleven students attended the Mid-Atlantic Region of the American College of Sports Medicine convention in the Poconos and six students attended the State Convention for PSAHPERD

# Undergraduate research: worth the effort

by Tanner Kolb '03



Geoff Harner hooked up to an oxygen analyzer testing his resting metabolic rate.

Despite all the work, it has been an enriching experience that I encourage anyone who is interested in research or graduate school to look into.

This past November I and other students led by Dr. Doug Miller and Dr. Scott Kieffer had the opportunity to attend the Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Meeting. This was a great opportunity because it exposed us to what was going on with research at other schools. Sometimes it may seem as though here at Messiah we may miss out on some of the opportunities that students at other schools have, but after attending the conference and seeing what is being done by other students around the region it is clear that we have the same opportunities, as far as research goes.

This semester in Research Methods, Dan Stone and I, overseen by our committee Dr. Kris-Hansen Kieffer, Dr. H. Scott Kieffer, and Dr. Doug Miller, chose to do our research project on the effect of a competitive Division III wrestling season on the resting metabolic rate (RMR) of an athlete.

Because of our connection with wrestling and our fascination with the functions of the human body it made our choice for a topic easy.

The basic aim of our study is to see any effects that the extreme training conditions of wrestling have on the RMR of an athlete. RMR is the amount of kilocalories that the body burns at rest, and this accounts for approximately 60–75% of the kilocalories that are burned during the day. Because of the desire of a competitor in wrestling to compete at a weight that optimizes his fat-free mass with the least amount of fat mass, it is easy to see the connection between the two topics. Those who have a higher RMR will have an easier time losing weight. From our research we have found mixed reviews as to whether or not training has adverse effects on the level of an athlete's RMR, and this is an additional reason for the topic.

The class itself requires more out of class work than any other I have taken at Messiah, and similar to the other student groups that are in our class we have spent countless hours in the library looking into literature as well as preparing to present our information. It is almost humorous, but the least time-consuming act has been data collection. Despite all the work, it has been an enriching experience that I encourage anyone who is interested in research or graduate school to look into. I believe that as students it is our obligation to take advantage of all the resources that our school provides and this class is one of those.

*Tanner Kolb '03 is an exercise science major and hopes to attend graduate school for exercise physiology.*

## Current student research projects

The Effects of a NCAA Division III Wrestling Season on the Resting Metabolic Rate of a Wrestler

—Daniel E. Stone '02  
& Tanner Kolb '03

Exercise and Body Image

—Emily Kelly '04, Megan Lucia '04,  
and Jenna Mang '04

The Physiological Differences in HR and VO<sub>2</sub> in College Age Men and Women During Impact (Treadmill) vs. Non-impact (Elliptical Trainer) Cardiovascular Exercise at an RPE of 13 During a Single Bout of Exercise

—Jessica Sauve '03, Beth Swift '04,  
& Jess Unick '04

The Effects of a Walking Program on Balance in the Elderly

—Lauren D'Aquino '04, Kelly Hess '03  
& Jessica Oden '03

Effect of Time of Day on Exercise

—John Cuddy '04, Karissa Stauffer '03  
& Amiee Stunkel '03



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## Alumni news & information

The Department of Health and Human Performance would like to include your alumni news in future editions of *Strengthening the Core*. Please take a few minutes and complete the following form.

NAME YEAR GRADUATED

STREET

CITY STATE ZIP CODE

E-MAIL ADDRESS

News/Information:

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Send completed form to: Barbara Burwell, Messiah College, P.O. Box 4501,  
One College Avenue, Grantham, PA 17027  
E-mail: burwell@messiah.edu