Department Incorporates New Teaching Technologies

The Department of Human Physiology has been at the forefront of the University of Oregon in the development of new teaching technologies. In recent years, the use of online tools for instructional delivery has increased dramatically and these tools are now an integral part of virtually all department courses. Two such technologies with great potential are rapidly gaining a foothold. They are “streaming media” and a related but more sophisticated approach to streaming that uses the commercial software Virage.

Audio-video streaming permits instructional material such as live laboratory demonstrations and clinical exam techniques to be filmed, stored in their entirety, and made available for student use on-demand via the Internet. Thus, prior to coming to class, students can study experimental protocols they will be expected to conduct later in the laboratory. The result is that more time can be given to hands-on instruction. An example of this particular technology, developed by human physiology student Eric Sorenson and graduate athletic training students, is ready for your viewing at [http://www.uoregon.edu/~hphy/alumni.htm](http://www.uoregon.edu/~hphy/alumni.htm) (go to “Streaming Video”). Check it out!

The other streaming media approach uses the newly developed, integrated software by Virage, Inc. This software can process and store text, voice, and video data from a formal lecture class, and identify its main concepts. Our instructors and students are utilizing this program, a tool popular in business, to bring physiology instruction into the virtual world. In university classes, faculty lectures are typically accompanied by PowerPoint slide presentations to streaming that uses the commercial software Virage.

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Greetings from the Department Lead

Throughout the last year, it has been a privilege to inform you about the ongoing reconstruction of our department and the myriad changes that have occurred. The depth of the support that some of you have sent our way has been gratifying. It was particularly enjoyable for me personally to trade e-mails and phone calls with various alumni during the last few months. In addition, I am humbled by the fact that charitable giving from our alumni and friends has tripled this past year.

By any measure of productivity, the Department of Human Physiology is clearly being established as one of the primary gateways at the UO for undergraduates to enter health science professions. Our “exercise and wellness” approach to preparation for these fields continues to resonate with students, as the number of students declaring primary gateways at the UO for undergraduates to enter health science professions. Our “exercise and wellness” approach to preparation for these fields continues to resonate with students, as the number of students declaring these as their major has steadily increased well beyond the 400 mark.

Progress is also being made on the initiative to bring medical students to the Eugene campus (see In Vivo, spring 2005). Committees on curriculum and space allocation are organized and, by the time you receive this issue of In Vivo, a major meeting with Oregon Health & Science University, Peace Health, and the UO will have taken place to determine the viability of the concept. If an operational plan does indeed emerge from this meeting, the department will be one of the key players in offering course work for future physicians.

Despite our recent success, problems have emerged from our expanded enrollment. Required classes that historically had enrollments of fifty now have more than 100, and new classes designed for thirty have also broken

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- **Alumna Profile**
- **Faculty Profile**
- **Motor Control Lab**
- **Student Profiles**
- **Our Support Staff**

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**Connect to the Department!**

Be sure to log on to the Department of Human Physiology Alumni Website. You can access past issues of In Vivo as well as learn about department events and highlights. Go to [http://www.uoregon.edu/~hphy](http://www.uoregon.edu/~hphy), select your browser (Explorer, Netscape, or Safari), and then click on “Alumni” in the lower-left-hand column.

We value your comments and encourage you to communicate with us through e-mail at hphy@uoregon.edu or regular mail at Department of Human Physiology, 1940 University of Oregon, Eugene OR 97403-1240.

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**In Vivo**

**Department of Human Physiology**

Dr. Stan James presents the lecture, “Tendon, Normal and Pathological Function,” using Virage streaming-video technology. On the left is a single frame of the video presentation with user-accessible keywords. On the right is one of the PowerPoint slides. To access the complete lecture, refer to article.

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**Distinguished Department Colleague to Receive Iowa Medical College Honor**

Stanley L. James, M.D., has been selected to receive the University of Iowa (UI) Carver College of Medicine 2006 Distinguished Alumnus Award for Achievement. The award is the highest honor bestowed upon UI medical college alumni and recognizes those who have transcended their fundamental roles as health care providers, scientists, and educators to become influential participants in the advancement of the art and science of medicine.

Dr. James’ commitment and contributions to basic and clinical research have established him as one of the most highly regarded experts in orthopedic sports medicine over the past thirty-five years. After moving to Eugene, in 1967, Dr. James received an academic appointment to the Department of Physical Education at the UO. His interest in running injuries led him to collaborate with his orthopedist colleague, the late Donald Slocum M.D., and Cliff Brubaker, Ph.D. ’68, of the University of Oregon in publishing a number of papers that are still considered to be the most definitive works on the biomechanics of running. These early works, along with his papers on knee reconstruction, brought Dr. James to the forecourt of the emerging sports medicine specialty. He was a major influence in establishing the Biomechanics-Sports Medicine Laboratory in the department and for more than three decades collaborated with colleagues on numerous studies examining lower extremity function, particularly as related to mechanisms of injury. He was, and still is, a highly valued mentor to young faculty members in the department and to numerous graduate students, many of whom are now productive scholars at various universities.

Dr. James has been an insightful and prolific contributor to understanding the prevention, mechanisms, and treatment of acute and chronic orthopedic injury. The vast respect he enjoys from his orthopedist colleagues worldwide, former fellows, and imitable research associates is a testament to a truly distinguished medical career.

Congratulations, Dr. Stan James!
Motor Control Lab Focuses on Cerebral Palsy

One of the developmental disorders that affect many children in countries around the world is cerebral palsy (CP). Children with CP have many problems with the development of motor skills, including standing and walking, and show a high incidence of falls compared to their typically developing peers. In the motor control laboratory of professor Marjorie Wilcox, students are researching various strategies that can help balance and gait problems in CP children and new therapies that can be used to alleviate these problems.

Dr. Wilcox, in collaboration with Alex Shaw, examines ways that physical therapy in a safe harness can improve their balance and show that this improved balance is retained for at least one month after training. This research is supported by the National Institute of Health, the National Institute of Child Health and Human Development, and the National Institute of Neurological Disorders and Stroke. The recent publication of Dr. Wilcox's paper is available online at: http://www.ncbi.nlm.nih.gov/entrez.

Dr. Wilcox is a professor at the Oregon Health and Science University (OHSU), and she has been researching CP for over twenty-five years. During this time, she has worked with at-risk populations. The program has attracted students from across the United States and the world.

FACULTY

Li-Shan Chen: Assistant Professor: B.S., Mechanical Engineering, Taking Institute of Technology, Taiwan; M.S. and Ph.D., Biomechanics, National Taiwan University, Taiwan, Germany. Focus: Biomechanics, at UO since 2000. http://www.uoregon.edu/~chol/

John Hallwell: Assistant Professor: B.S., Zoology, Ohio State University; M.S., Exercise Science, The Pennsylvania State University; Ph.D., Biomechanics, Medical College of Virginia. Focus: Physiology, at UO since 2003. http://europas.uoregon.edu/

Hemiltte Heling: Director, International Institute for Sport and Human Performance: DiplomSportlehrer, Physical Education, at the University of Waseda, Tokyo; M.A., Sport Science, Sporthochschule, Köln M.A., Art History, University zu Köln, Köln; M.A., Art History, University of Oregon. All publications are available online at the UO website.

Andy Kundra: Assistant Professor: B.S., Mechanical Engineering, Massachusetts Institute of Technology; M.S., Biomechanics, University of California; Ph.D., Biomedical Engineering, University of Pennsylvania. Focus: Biomechanics, at UO since 2002. http://www.uoregon.edu/~email/h.htm/


Paul van Donkelaar: Associate Professor: B.S. and M.S., Physical Education, University of British Columbia; Ph.D., Clinical Neuroscience, University of Oregon; M.S., Exercise Science, Oregon State University. Focus: Motor Control, at UO since 1997. http://www.uoregon.edu/~paulvab/academic_research.html


UNDERGRADUATE STUDENT PROFILES: Alexander DeHaan

Research and medicine are the academic goals of Alex DeHaan, a student of the Department of Human Development and Family. He is pursuing a degree in health psychology and social systems, in particular the human health and the role it plays in society. DeHaan has completed his B.S. and M.S. degrees at the UO in health education and physical education and is currently teaching in the college's School of Education.

He began his career as the head athletic trainer for women at the UO in 1979. He has spent over twenty years working for the school, and in his current position, he is a part of the academic program. In this capacity, DeHaan was responsible for coordinating medical care for the growing women's athletic program and for teaching undergraduates and graduate students. He has been responsible for running and educating the academic programs and for preparing an instructor in primary care medicine that is the only provided by my various students in what is termed "physician assistant." DeHaan has taught in the Division of Medical Education since 1986.

DeHaan has been a leader in the teaching revolution technology and, in recent years, has integrated some of the most sophisticated technology tools into his classes. He has given presentations on the use of computer software in teaching and has been recognized by his students for his dedication to the teaching environment, but will never face-to-face interaction with students. If I have time in 1979 as a freshman, I could not. I also do not have the privilege of being a member of the faculty and following my passion-teaching.

Brookhag Graduate Scholarship Achieves Milestone

It has been nine years since the Brookhag Graduate Scholarship was originally conceived by UO alumnus John Quek, a former student of the school. Since then, the program has raised over $80,000 and has been able to support seven students with full scholarships. The scholarship has been renewed for another year, and the fund has reached $50,000. The fund provides competitive scholarships each year to doctoral students in the Department of Pharmaceutical Sciences, Integrative Exercise Science, and Physical Education.

Brookhag, who died in 1991, was the last dean of the former College of Human Development and Performance, in which this department then resided. He was a professor of physical education and was a former director of the program. He had been a long-time resident of Eugene and had made many contributions to the community.

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All successful organizations require exceptional staff support and the Department of Human Physiology is no exception. The department is fortunate to have a team of professionals that has been central to its growth and development within the College of Arts and Sciences. The triumvirate composed of Jan Brady, Anni Elling, and Stephanie Swayne keeps the members of the faculty on the “straight and narrow” while smoothing the paths of their academic lives. The group provides critical support for student admission, degree processing, class scheduling, coordination of faculty evaluations, financial transactions, research grant administration, and a myriad of other administrative functions that enable the department to run like clockwork.

Jan Brady
Office Manager Jan Brady is responsible for department budget and expenditures, payroll, search, promotion and tenure files, training and supervision of office staff, preparing faculty and GFT contracts, and grant management. Brady attended San Jose State University as an English major and notes, “When I discovered I could get credit for reading the books I loved, I knew that was for me.” In 1974 she and her husband moved to Eugene where their two children were raised. Brady worked in private industry management for about twenty years before setting her sights on the UO. Prior to coming to HPHY, she was Department of Philosophy office manager for four years. Brady comments, “In the two years I’ve been with the department, the growth and change have been enormous.

Anni Elling
Born and raised in the Eugene-Springfield area, Anni Elling graduated from Oregon State University in 1993. After graduating, she returned to Eugene to work in public and private sector accounting until her son, Jacob, was born. Elling came to the UO and joined HPHY as department accountant in 2004. She has considerable responsibility and manages numerous state accounts, assists in the grant reporting processes, handles purchase orders, coordinates department travel, prepares contracts, and processes payments for lab participants, among other tasks.

Stephanie Swayne
Stephanie Swayne was born and raised in Oregon City and graduated from the UO with a bachelor of science in sociology. Following graduation, she worked with severely abused and neglected children at SCAR Jasper Mountain Community. Swayne moved on to become social services director for Eugene Rehabilitation and Speciality Care, a skilled nursing facility including long- and short-term care. Swayne joined HPHY in 2004 as the undergraduate and graduate coordinator. Her responsibilities include course scheduling, graduate admission, and academic advising.

Swayne has great affection for the UO and says, “Since seventh grade I couldn’t wait to attend the University of Oregon and be a Duck! There is an electricity on this campus—in the early morning hearing the birds and watching the squirrels, and in the late afternoon hearing the carillon ringing. It just draws you in. So it was very fitting that I find myself with the Department of Human Physiology at the UO.”

Our students and faculty members are making good use of these new strategies that will become increasingly important in serving our fast-growing program. Our students are to be instantly directed to the desired part of the lecture. An example of this technology is available for you to “test drive” by logging on to http://www.uoregon.edu/~hphy/alumni.htm (go to “Virage Presentation”). We hope you find this exercise educational and enjoyable!

Greetings from the Department Head

The Department of Human Physiology has planned its reception for UO alumni, faculty members, and students at the 2006 American College of Sports Medicine meeting in Denver, Colorado. The reception is slated from 6:30 to 7:00 p.m. Friday, June 2. The highly successful ACSM-UO inaugural reception was held last year in Nashville, and we cordially invite many department alumni who attended that meeting to join us in reconnecting with friends and colleagues who share a common heritage with the UO. If you have colleagues attending the meeting whom you think would enjoy our group, please invite them!

Stephanie Swayne was impressed not only with the professional accomplishments of the faculty members but also their willingness to work with the office staff to help us do our jobs. I look forward to coming to work every day.”

Stephanie Swayne was a member of the UO Kappa Sigma. Her hobbies included reading the books I loved, I knew that was for me.”