



Dr. Chuck Layne

Greetings and welcome to the Spring 2008 HHP TODAY newsletter. As always, many exciting events continue to occur in your old department foremost of which is that HHP has been named as the #1 department in Health, Physical Education and Recreation in the entire nation by Academic Analytics. Academic Analytics ranks departments that offer doctoral degrees by assessing faculty productivity including the number of books and journal publications of faculty, along with their journal article citations and federally funded grants and honorific awards. This wonderful achievement confirms what many of you know already: your professors are collectively the BEST in all of America!

In this issue you will read about Dr. Pearson in our Faculty Spotlight section, the Laboratory of Integrated Physiology, our new staff organizational structure, and our featured alumnus.

We have added an HHP Alumni link to our main web page. I invite you to take a look and update your contact information so that we can be sure you are receiving the most up to date information about your home department. <http://grants.hhp.coe.uh.edu/alumni/index.htm>. Thanks to the many of you who completed our online Newsletter survey. We are working hard to incorporate your suggestions.

You can follow all of the excitement in HHP by checking the Current Events page on our website at <http://hhp.uh.edu/Currentevents/currentevents.cfm>. If you or another HHP alumnus you know is doing something that you think would be interesting to your fellow alums to know about please let me know and we may just feature them in our next Alumni Spotlight. Please e-mail me at clayne2@uh.edu. Have a healthy and happy spring!

RECENT DEVELOPMENTS

Do you remember when you visited the HHP front office and there were just three employees taking care of all of the needs of the students and faculty? Well, if you visit today's HHP office you will find it fully staffed with twelve people as busy as a beehive. "What improvements have we made?" I'm glad you asked.

We now have four academic advisors to meet the needs of our students. Five years ago we had only one advisor working with our students, and when Nutrition studies was transferred to our department in 2002-2003 we gained another advisor. Within the last year we've added a third undergraduate advisor, plus a graduate studies counselor, and have created a variety of options for scheduling time with them. Instead of coming into the office or calling on the telephone for an appointment, students can now make appointments with advisors through our online reservation system, and if their schedules are very busy, students can now engage in online chat sessions about their academic needs.

We have substantially improved the look and feel of the Garrison/Melcher complex. Many classrooms have been enlarged, painted, equipped with computers in the desks, and contain modern audio/visual equipment to enhance learning. The hallways have been painted and there are posters on display about our faculty members, people engaged in physical activity, scientific presentations and general information. A student lounge was also added within the last year and a half to provide students with a place to gather.



room 205 Garrison

Joining our program coordinator, we now have a program director that oversees all office procedures, a business administrator, financial coordinator and a support team of media personnel that promote the department and keep our alumni, students and the community well informed. Included in this group are two educational technology specialists and a graphics designer who combine efforts to create first rate web pages, print media and video, some of which are integrated into many courses. Additionally, the website promotes a variety of interesting HHP activities, including our own YouTube channel at <http://www.youtube.com/user/HHPUnivofHouston>, and our weekly menu from Shasta's culinary workshop at <http://grants.hhp.coe.uh.edu/shasta's>.

Our hard working and efficient staff are providing high quality service to our students, both current and prospective, as well as to our faculty. I invite you to stop by anytime and say hello to the hardest working staff at UH! I think you'll be very pleased with the current state of affairs in your department.



Dr. Demetrius Pearson

Q. You have a B.A. from Lincoln U in PA, and an M.A. from Case Western Reserve in Cleveland, OH. Why did you choose UH for your Ed.D?

A. Well, there are several answers to that question. First, I had made a decision to seek another master's degree, but it had to be somewhere warm. I lived in Cleveland during some of the coldest weather ever recorded. One year the average temperature for the month was 9° F. I told my wife that it was time to go.

Secondly, Houston was definitely a viable option because of the temperate weather, growth potential, and cosmopolitan atmosphere. Although I'd applied and was accepted to several other universities, UH became the choice. This was due in part to its size, diversity, and nationally renowned faculty. The HPERD department (now HHP) was particularly unique in that its chair at the time was a woman (Dr. Linda Bain). I thought that was quite progressive for 1981. I started my degree program in 1982.

Q. You teach courses in Sport and Fitness Administration. Why/how did you choose that field as your focus?

A. You would ask that question. I was a college administrator at Baldwin-Wallace College in Berea, OH (where the Cleveland Browns have their training site) prior to relocating to Houston. It was an ideal situation, but utopia too soon. At UH I taught in the HPERD Department, and eventually served as an academic advisor in the newly developed student-athlete academic support program. During those years I was fortunate to have worked with some of the most talented athletes in the history of collegiate sports. On the weekends, I covered high school football for the *Houston Post*. It was an interesting experience. After I finished my doctoral course work I took an administrative position at UT-Medical School (Houston). I worked with the dental school

as well, before I moved to Baylor College of Medicine. Each of these positions helped me hone my administrative skills. After nine years in the Texas Medical Center, Drs. Bloom and Pease asked if I'd be interested in returning to UH. I wasn't exactly sure if this was the right career move, but decided to give it a try. To date, I've enjoyed working with the students interested in the administration of sport programs. It has also been a pretty rewarding experience.

Q. You take your students to a variety of venues so that they can see how different facilities operate. What has been the most memorable experience you've shared with your students on these excursions?

A. We've visited a number of awesome state-of-the-art facilities over the years. I think the most memorable experience was when my students and I visited Reliant Stadium for the first time, before the giant scoreboard was installed and the grass was laid. It was an awesome sight.

Q. You've written a number of articles about sociological issues and sport (e.g., women and sport films; faith-based physical activity programs; American rodeo, etc.), and some refer to you as an expert on "Shadow Riders" or African American rodeo cowboys. As a native Philadelphian, when and how did you get involved with the study of rodeo cowboys?

A. It was a gradual evolution. Dr. C. Allen Haney and I noted a resurgence in the sport of rodeo and decided to study it more in depth. The fact that Texas has the most rodeo cowboys, and particularly African American cowboys, in the world afforded us a rich environment to study. In an early study that we were conducting on career access to rodeo we serendipitously came across a little known rodeo circuit comprised primarily of African American rodeo cowboys. After further study we found that the circuit had been operating for over 60 years in Texas, Oklahoma and Louisiana. We also found that some of the rodeo cowboys were among the best in the world, yet unheralded because of the lack of media attention, small rural environs, and discriminatory practices. Our work, although Dr. Haney is deceased, is ongoing because there is still so much to tell.

ALUMNI SPOTLIGHT



Dr. Alexander Hutchison

Dr. Alexander Hutchison refers to himself as the "Latin Scotsman," and if you believe that character traits are as inherited as eye color, this man is either stubbornly passionate, or passionately stubborn. Actually, he's a bit of both and has fine-tuned the skill of channeling these traits in positive directions. During the course of completing his Ph.D. in

Exercise Physiology, Alexander found himself relying heavily on his inherent determination; he was undergoing radiation treatments while finishing his dissertation, and quitting was never an option. He's fine now, and a very happy professor at St. Mary's University in San Antonio, TX. He also owns a consulting business, Highlander Triathlon, where he customizes training programs for athletes.

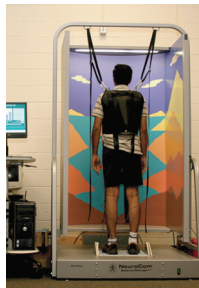
He is a 14-time Swimming All-American, was a member of the NAIA National Swimming Championship Teams in 1995

& 1996, and finished the 2005 USAT season in the top 15% of the 30-34 age group. Passion is a must for anyone who needs the self discipline it takes to train and compete for years.

A swimming scholarship sent Alexander to the University of Puget Sound where he obtained his B.S. in Natural Science, and after three years as a high school swim coach, and math & science teacher, he decided he needed a master's degree and went to Texas A & M where he earned his M.S. in Exercise Physiology. A Ph.D. seemed the only logical finish to what he started, so he came to UH where he accomplished his goal in 2007.

During the course of his doctoral studies, Alexander participated in a variety of research projects, a study on elderly leg strength, chronic inflammation, and finally—the focus of his dissertation—the effects of [over] exercise on the immune system and the use of acupuncture as a form of treatment. Dr. Hutchison said, "Of all the people I worked with, Dr. Dan O'Connor was the one who most influenced the way I interact with my students. One of the lessons he taught me was *how* to treat people. He is a very kind and hard working man."

The Laboratory of Integrated Physiology (LIP) in the Department of Health and Human Performance is a fully equipped human performance/physiology/biochemistry laboratory capable of performing a wide variety of human performance testing, including exercise testing, muscle strength assessment, motor coordination/motor performance testing, learning/memory assessment and biochemical analysis of biological samples. The LIP is made up of three interconnected areas, a biochemical analysis laboratory (1400 sq. feet), a physiological/motor control testing laboratory (2400 sq. feet) and an exercise/strength testing laboratory with attached seminar/teaching area (2100 sq. feet). The LIP has a separate minor surgical procedure room (140 sq. feet) attached to the biochemical analysis laboratory that houses three phlebotomy stations and one minor surgical bed/station.



Learning a Postural Control Task Under Altered Sensory Conditions

Although much is known about how vision and vestibular information influences our ability to remain on our feet, little is known about the role of proprioception in remaining upright. Applying vibration to a muscle tendon provides a strong stimulus that disrupts the processing of muscle and skin receptors. In this study, we are investigating how individuals learn to control their upright posture while experiencing tendon vibration applied to their Achilles tendon and to their tibialis anterior muscle. We are evaluating the time course and the form of the recovery by comparing center of pressure data obtained from a force plate during trials with and without vibration. The findings will be of interest to therapists who work with patients who are experiencing loss of proprioceptive information as a result of disease or aging.

Enhancing Muscular Strength Utilizing Whole-Body Vibration

Resistance training is a dynamic area of study with constantly changing theories concerning muscular development and enhancement. We are currently studying the effects on muscle strength following an acute exposure to whole-body vibration in which subjects perform various exercises while standing on a vibration plate machine. Previous studies have already shown evidence that the use of whole-body vibration may lead to significant increases in muscle power, jump height, muscle activation, and flexibility. However there is limited information about the effects of applying whole-body vibration during different types of movements, specifically dynamic muscle actions and static muscle actions. This study will bridge the gap between studies of dynamic muscle action and static muscle action during whole-body vibration.



Parkinsonian Gait: Adaptations in Muscle Activation Resulting from Increasing Speed during Treadmill Walking

Parkinson's disease negatively affects the motor control system, including the ability to walk. In this study, we are assessing the neuromuscular activation of the leg muscles of patients with Parkinson's as they walk on a treadmill. The treadmill speed is progressively increased and the pattern and amplitude of activation is evaluated to determine how individuals adapt to the increases in speed. The individuals are assessed while they are both on and off their anti-Parkinson's medication. This investigation will enable us to determine the effects of L-dopa medication when patients are confronted with a challenging walking task, and will be useful in developing new drugs and rehabilitation protocols.

Preventing Pressure Ulcers using Functional Electrical Stimulation

Pressure ulcers are among the most common secondary complications following Spinal Cord Injury (SCI) and any other disease that results in severe immobility. Pressure ulcers can lead to infection, rehospitalization, and in many cases death. At present, the best options used for preventing pressure ulcers are specialized cushions to reduce interface pressures combined with pressure relief from the patient performing 'push-ups', 'leaning forward' or reclining the chair. Neuromuscular Electrical Stimulation is a technology by which paralyzed muscles can be activated by passing small electrical current through the nervous tissue. In this project, we are developing stimulation strategies that produce clinically significant reductions in sitting pressure using safe, non-invasive methods.



Inflammatory Capacity of Adipose Tissue

This research is aimed at understanding the physiologic pathways that mediate inflammatory capacity in adipose tissue. The accumulation of systemic inflammation is associated with the development of Type II Diabetes Mellitus and various forms of Cardiovascular Disease. We are presently comparing inflammatory capacity of adipose tissue from in vitro cell cultures, mice, and humans of differing obesity status. Our work is funded by grants from the NIH and various corporate entities.

LABORATORY of
INTEGRATED
PHYSIOLOGY

COMMUNITY OUTREACH



BOUNCE dances for fitness

Dr. Olvera and the BOUNCE group participated in a Health Fair in October at Reliant Hall. An organization called Children at Risk, and TV network, Univision, launched their “Latino Children’s Health Initiative” to educate Houston’s Latino community about the importance of continuous health care and healthy living.

The health fair, *Nuestra Familia, Nuestra Salud*, drew an estimated crowd of about 7,000 and offered free health screenings and immunizations.

One the main goals of the fair was to educate parents and youth on nutrition, physical fitness, and stress management, and to provide information and resources for prevention and intervention of various health conditions (e.g. obesity, heart disease and diabetes).

Dr. Olvera and several members of the BOUNCE team were on-site to demonstrate fun ways to get fit, and to talk about healthy lifestyle behaviors for preadolescent Hispanic girls.

Dr. Joel Bloom was out in the community teaching children with Diabetes how to ride bicycles, and made sure they also learned best safety practices.

The Baylor College of Medicine’s Family Center Program coordinates with the Texas Bicycle Coalition and Texas Department of Transportation with their Super Cyclist Program to put on the event every year.

The diabetic children, as well as any of their siblings that participated, were given a bike helmet to keep. They learned all about road signs, hand signals and even what to do if a dog approaches. Leading the pack was famous muppet Betsy the Biker Chick.

Interestingly enough, some of the children’s parents did not know how to ride, so some of Dr. Bloom’s group took them aside and taught them too. Now the whole family can ride together!



Dr. Joel Bloom talks about helmet safety



understanding, developing and promoting a healthy lifestyle

Health & Human Performance 

University of Houston
3855 Holman, room 104 Garrison Gym
Houston, TX 77204-6015