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Greetings!

I'm Dr. Chuck Layne, professor and chair of the department of Health and Human Performance at the University of Houston. I invite you to read the very first issue of our newsletter.

Dr. Charles Layne, Chair

The intent of this publication is to keep you informed of the activities and productivity of

the department. We know our alumni are proud of their degrees and are interested in the continuing progress of the department. The various projects your HHP professors are involved with are exciting, progressive and cutting-edge.

Much has changed since many of you graduated. The Garrison/Melcher building has been substantially remodeled, including the development of a new student lounge, and there are many new professors working in our world class laboratories.

Several years ago we inherited the Nutrition degree program which is a perfect match for our department's emphasis on promoting a healthy lifestyle through proper dietary and exercise habits.

To keep up with all the excitement please check our web page at <u>http://hhp.uh.edu</u>. I sincerely hope you enjoy our inaugural issue of the HHP newsletter and look forward to receiving many more. If you have comments or questions I would welcome hearing from you either by e-mail: clayne2@uh.edu or telephone: 713.743.9868.

#### **OBESITY EPIDEMIC: FAT OF THE LAND**

On April 03, 2006 HHP, in conjunction with the TIGER study, hosted a mini symposium that focused on research related to our nation's obesity epidemic. The symposium was held in the Elizabeth Rockwell Pavilion in the newly remodeled M.D. Anderson Library on the main campus. In addition to presentations by several of the HHP faculty, this event featured two speakers of international prominence,



UH faculty and students at the symposium

Dr. John Foreyt from the Baylor College of Medicine and Dr. Rod Dishman from the University of Georgia. Dr. Foreyt has written many books and appeared on *Good Morning America* and *Oprah*.

Dr. Dishman has written several books as well, and is an expert in the field of the neurobiology of exercise adherence. The event was well attended by University of Houston students and faculty, medical professionals from the Texas Children's Hospital, and community leaders from several area youth organizations. Those in attendance learned that treatment for obesity requires a multifaceted approach encompassing elements of traditional weight loss and exercise treatments, nutrition management, and behavior modification.



right to left: Drs. Foreyt, McFarlin and Dishman

Assessment of genetics may enhance the tailoring of weight loss interventions that better meet the individual's needs. Thus, the combination of comprehensive laboratory assessments and behavioral approaches to weight loss may augment existing exercise and nutritional strategies. As might be expected, many of the speakers emphasized that the old fashion way to weight loss—exercise and eating right—is still a very effective way to manage your weight.

The HHP Doctor of Philosophy (Ph.D.) Kinesiology program was recently ranked 15<sup>th</sup> best in the nation by the American Academy of Kinesiology and Physical Education. The review process required each participating institution's Kinesiology department to submit detailed information about their programs. Rankings were based on the number of scientific articles and presentations generated; research-related funding received; caliber of students accepted into the program; financial support made available to the students and other relevant information. Our program was ranked above well-established ones like those at the University of Wisconsin, Michigan State, the University of Michigan, and right behind the University of Texas at Austin. As a program that is only four years old this ranking is quite an accomplishment and we are proud of it. Penn State, the number one ranked program, will soon see HHP approaching in their rear view mirror! For a complete list of rankings visit http://hhp.uh.edu/popup/Rank.htm.







### FOCUS ON FACULT



Dr. Joel Bloom received his Ph.D. from the University of Wisconsin in 1972. Prior to completing his terminal degree, he was recruited by Mr. Harry Fouke and President Phillip Hoffman to join the UH faculty in 1970. He was the University of Houston's first Aquatics Director, received tenure in 1973, and was promoted to Associate Professor in 1978.

Dr. Joel Bloom

His teaching areas include Kinesiology, Sports Therapy, Athletic Injuries, Facilities

Planning and Aquatics. He is also co-owner of Cyclistics, a company specializing in Indoor Cycling Certification Programs and continuing education for fitness professionals.

Looking for a clinician with specific biomechanics qualifications, the owner of Koala Health and Wellness Centers, Dr. Ed Kieke, recruited Dr. Bloom to work with patients needing physical rehabilitation. He administers testing for strength and post-op conditions for spine, knees, hips and backs as well as conducting running gait and cycling film analyses for clients.

Dr. Bloom's perspective on physical therapy and sports medicine comes from personal experience. In 1983, after a double hip replacement it became obvious that new techniques needed to be explored because, at that time, no one knew how to rehab a hip on someone under the age of 70. While searching for a solution,

Dr. Bloom read an article about Russian athletes training in water and was inspired to try running in water.

He started Water Exercise Therapy (W.E.T.) in 1991 for arthritic patients using watsu, a gentle form of body therapy performed in warm water. It combines elements of massage, joint mobilization, shiatsu, muscle stretching and dance. The receiver is continuously supported while being floated, cradled, rocked and stretched.

Dr. Bloom is a very busy man. Besides his academic and clinical obligations he has been involved with the Lance Armstrong Foundation since 2003. He's worked with the Super Cyclist Program for TAHPERD since 1999 providing instruction on how to teach cycling safety to fourth graders, and The Texas Department of Transportation has him traveling around Texas teaching speed training, endurance and bicycle safety to children.

He is co-author of several books: "Cyclistics for the Rider", "Cyclistics-The Art & Science of Cycling"-2nd Edition; "Science of Intermediate Swimming" and "500 Things to do in Houston for Free".

Dr. Bloom is the recipient of many awards; some of the more recent include: 2005 Teacher of the Year-Recreation Division-Texas Association of Health, Physical Education, Recreation & Dance (TAHPERD); 2002 TAHPERD Honor Award Recipient; 2002 Conference USA Excellence Award; 2001 University of Houston, George W. Magner Award for Outstanding Student Advising and Degree direction, and the University of Houston 30-year service award in 2000.

#### alumni spotlight

Dr. Danny Hughes received his Ph.D. in Kinesiology from UH in December, 2004. After completing the doctoral program he accepted a post-doc fellowship with the M.D. Anderson Cancer Center's Behavioral Sciences department. Initially, he was responsible for running the pilot study "Active for Life", which was designed to encourage regular exercise in order to help reduce some of the debilitating side effects of breast cancer treatment such as depression, anxiety, weight gain, fatigue and problems with shoulder mobility. He set up exercise testing labs with state-of-the-art equipment, designed and implemented the protocol, and conducted participant assessments.

Dr. Karen Basen-Engquist, Danny's mentor and the principal investigator on the pilot study, has two more projects that are keeping him busy: "Steps to Health", an NCI grant determining exercise adherence for endometrial cancer survivors as explained by Social Cognitive Theory, and "Project Balance" which is a diet and exercise intervention for breast cancer survivors that follows them from the start of their chemotherapy, to the subsequent surgery and through a 6-month post surgery period.

Dr. Hughes's doctoral dissertation, "Physical Activity and Stress in Hispanic Breast Cancer Survivors" made him a prime candidate for the post-doc fellowship. During the 10-week investigation he conducted with several breast cancer survivors, there were measurable, significant results showing improved aerobic and

physical fitness, strength, flexibility, and fat loss. Many of the participants reported a reduction in stress as well.

Danny Hughes has a past; he worked for Dow as a chemical engineer for over 20 years and after 18 years in mid-management, he realized he had a desire to teach. Testing the waters, he enrolled in Dr. Dale Pease's Motor Learning class. When Dr. Pease started talking about reality being a chemical, mechanical reconstruction in our brains, Danny was inspired and



Dr. Danny Hughes

made the decision to go for his master's degree. His intention was to go into business as a personal trainer, but the drive for exploration and discovery compelled him to pursue his Ph.D.

Dr. Hughes was able to satisfy his desire to teach while in the HHP doctoral program; he taught Sport Psychology and Health & Fitness. As a graduate student, and being able to take advantage of facilities like the Laboratory of Integrated Physiology (LIP), he found out how much he liked research. His goal became that of independent researcher working on cancer survivorship and stress.

Implementing a pilot study at a world renowned cancer research institute hits the mark!

DID YOU KNOW that HHP now offers an online Master's degree in Physical Education? http://www.coe.uh.edu/mycoe/hhp/medpe/



## RESEARCH HAPPENINGS



Dr. Max Kurz and the King talk about it.

Dr. Max Kurz, HHP's new professor of motor control and biomechanics, is studying the walking behavior of that adorable creature from down under, the penguin. Dr. Kurz's study on walking stability features dozens of King penguins from Moody Gardens in Galveston. Though these endearing animals may seem unsuited for rough terrain, penguins will travel more than 75 miles across rugged ground terrain to reach their nesting sites. Kurz believes the penguins have learned to use the waddling motion in a way that makes their movements more efficient, adjusting for the limitations of the size of their legs and their weight. Humans, on the other hand, have not developed such a mechanism to adjust for such dramatic side-to-side motion. So, if we simply waddle, chances are we'll fall, but some aspects of a penguin's wobble could be very beneficial.

"We can envision a scenario where elderly may be able to put their walkers or canes down because they've learned to make the same adjustments in their walking patterns," Kurz said. "This research may aid in developing a way to teach those people how to walk more efficiently despite their side-to-side motion, to learn the same kind of stability as the penguin."

Another application for this research involves the construction of sophisticated robots. Kurz said it is very expensive to construct a robot that can successfully adjust to side to side, or medial-lateral, motion. Robots currently in use, such as the Asimo robot that mimics human walking patterns, have large, expensive and cumbersome computers built onto their "bodies" to keep them from tipping over when they walk and run. His research can be used to build smaller computers for such robots that will become increasingly more life-like. To find out more go to http://www.hhp.uh.edu/faculty/Kurz/research/press.html. Dr. Kurz's next adventure into nature involves the study of the walking patterns of both alligators and elephants. Stay tuned!

# QUICK HITS

- Associate Professor Dr. Norma Olvera's "Bounce Lite" program that focuses on exercise and nutrition for middle school girls was selected by the Texas Public Health Association as a 2006 Nutrition and Physical Activity Best Practices program.
- $\oplus$ Assistant Professor Dr. Rebecca Lee was named to the review panel for National Institutes of Health (NIH) Center for Scientific Review as a member of the Community-Level Health Promotion Study Section.
- Visiting Assistant Professor Dr. Lisa Alastuey was elected President of the Texas School Health Association (TSHA).  $\oplus$
- -Associate Professor Dr. Joel Bloom was awarded the Recreation Professional of the Year Award by the Texas Associated of Health, Physical Education, Recreation and Dance organization (TAHPERD).
- Assistant Professor Dr. Rebecca Lee was named 2006 National Center on Minority Health and Health Disparities Health Disparities Scholar.
- $\oplus$ Assistant Professor Dr. Rebecca Lee was elected to the City of Houston Mayor's Wellness Council to serve as the Chair of the Policy Subcommittee.
- -Clinical Professor Dr. Sharon Bode was elected as a Didactic Program Representative to the Commission on Accreditation in Dietetic Education (CADE).
- Associate Professor Dr. Norma Olvera was asked to serve on the City of Houston, Mayor's Wellness Council.
- $\oplus$ Master's of Exercise Science student Chris Arellano was awarded a prestigious Congressional Hispanic Caucus Institute (CHCI) Scholarship to continue his studies in our department. Chris was also awarded National Space Biomedical Research Institute Student Summer Fellowship to work at NASA-Johnson Space Center.
- Doctor of Philosophy student Alexander Hutchison was awarded a National Science Foundation Alliances for Graduate Education and the Professoriate (AGEP) Summer Research Internship.
- Doctor of Philosophy student Melissa Scott-Pandorf was awarded National Space Biomedical Research Institute Student  $\oplus$ Summer Fellowship to work at NASA-Johnson Space Center. Melissa was also selected as a NASA/Texas Space Grant Consortium Fellow for the 2006-2007 academic year.













Dr. Rebecca Lee's research group with congresswoman Jackson-Lee

**Dr. Rebecca Lee** hosted the first annual Community Advisory Board (CAB) luncheon for the UNDO (Understanding Neighborhood Determinants of Obesity) projects on June 30, 2006. The CAB members are community partners with Dr. Lee and the UNDO projects, "Health Is Power" (HIP) and "Healthful Options Using Streets and Transportation in Our Neighborhoods" (HOUSTON). Invited guest, Congresswoman **Sheila Jackson Lee**, addressed the partners on the importance of research to promote African-American health and fitness. Dr. Rebecca Lee, along with HIP Houston staff and the CAB partners are excited to partner with Sheila Jackson Lee on the important issue of health and fitness in the African-American community.



Dr. Olvera and the BOUNCE Lite group with US Tennis Assocciation clinician Paris Watt

The US Tennis Association's **Paris Watt** held a tennis workshop for **Dr. Norma Olvera's** BOUNCE Lite participants on July 25, 2006. The 3-hour workshop covered everything from all the parts of the racquet, to the court layout, game rules and practice drills. **Dr. Joel Bloom** coordinated the workshop for the group and was involved in several of the demonstrations on technique and posture.

Many of the girls had never had the opportunity to learn the game and had a great deal of fun. The workshop was one of many exercise and "horizon expanding" activities provided in the BOUNCE Lite program.

# Health & Human **F**

