

HHP TODAY



Dr. Adam Thrasher, from the Rehabilitation Engineering Laboratory at Toronto Rehab, began their teaching assignments; we held our 4th annual HHP Research Day; hosted a weekend-long session for gifted and talented students from the Duke Talent Identification Program (see page 4); continued our active research

Greetings and welcome to the summer of 2007. I hope this edition of HHP Today finds you happy and practicing your healthy living habits. Your department has had a very busy and productive spring semester. Our two new faculty members, Dr. Paula Rhode, who came to us from the University of Kansas Medical Center, and

and teaching agendas, and graduated over one hundred of your now fellow alumni.

Of particular interest is the fact that our exercise science program was recently certified by the American College of Sports Medicine (ACSM), and our sponsorship of the Cystic Fibrosis Foundation's annual walk-a-thon, Great Strides: Taking Steps to Cure Cystic Fibrosis, was very successful (see page 4).

Thanks to all who completed our reader's interest survey in the last issue of HHP Today. We are trying to respond to your feedback. As always, you can view the happenings in your old department 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 amazing, interesting or unique tell us; we're always looking for someone to feature in our **Alumni Spotlight**. Just e-mail me at clayne2@uh.edu. Have a safe, happy and healthy summer.

RECENT DEVELOPMENTS

The ACSM University Connection Endorsement Program (UCEP) is designed to recognize academic institutions with educational programs that cover and meet all of the knowledge, skills, and abilities (KSAs) specified by the ACSM Committee on Certification and Registry Boards (CCRB) to prepare students for successful careers in the health and fitness and clinical exercise programming fields. These KSAs appear in Appendix A of ACSM's *Guidelines for Exercise Testing and Prescription, 7th edition*.

The ACSM UCEP was developed to assure program quality and consistency for associate's, bachelor's, and master's degree programs in health/fitness and clinical exercise physiology at colleges and universities.

UCEP students receive a comprehensive and standardized curriculum that addresses the KSAs for both the ACSM Health/Fitness Instructor and the ACSM Exercise Specialist certification examinations. Students of UCEP also receive a substantial discount on the ACSM certification examinations. UCEP students in the last semester of their degree program are eligible to sit for the ACSM certification examination.

Dr. Jill Bush is the HHP program director of the ACSM Exercise Specialist certification. Students are encouraged to discuss this program with her and may send inquiries to her e-mail address: jbush@uh.edu. They may also contact the ACSM Certification and Registry Department for more information at: certification@ACSM.org.

Faculty members Dr. Adam Thrasher and Dr. Paula Rhode joined the Department of Health and Human Performance in the fall of 2006. During that time they each worked on course development and research initiatives and then, in the spring of 2007, began teaching their students. They also collaborated on putting together the 4th annual Research Day which was very well attended by both HHP students and colleagues from other departments.

Dr. Rhode's research interests revolve around the psychosocial factors that influence the expression of obesity-related illnesses, such as stress and co-morbid psychopathology; behavioral and multi-modal weight loss interventions, and adherence to dietary and physical activity regimens.

Dr. Thrasher's research focuses on neuromuscular physiology and motor learning; biomechanics and gait analysis; electrical stimulation of paralyzed muscles to restore function; rehabilitation engineering, and pathological locomotion.



Dr. Adam Thrasher and Dr. Paula Rhode



Dr. Jill A. Bush, is a certified Strength and Conditioning Specialist (CSCS) and an ACSM certified Exercise Specialist (ES). In a recent interview, she shared a bit more about herself.

Q. Did you always want to be a professor and scientist, or was it something you realized after you started college?

A. From a very young age I knew that I wanted to be an academian. As a child, I would always investigate many things around the house and neighborhood. I have played team sports all my life and was interested in the performance aspects of athleticism leading to my current research interests in sports medicine and performance. It was always fascinating how an individual can change their exercise training/routines and diet to cause varying outcomes in their performance.

Q. Your research is centered on exercise physiology and strength conditioning. Has there ever been a favorite project? Why?

A. One of my favorite research projects was my work with swine and growth hormone. I was able to incorporate my research training on muscle physiology and endocrinology. Because the research was so invasive, I was trained in animal surgical techniques as well as advanced substrate and biochemical analyses by experts in the field. I would like to transition this animal model that I created for this research area into a more adaptable human model

examining changes in muscle metabolism and turnover resulting from resistance exercise.

Q. As a professor, besides the course material, what else do you want your students to learn?

A. My students learn from me that attaining your goals is possible in life if you have self-discipline and motivation as well as a high level of organization. I tell them that they need to focus not only on reaching an immediate goal (i.e., next week) but to keep a timeline of at least 5 years in order to stay on track to reach their goal. I always tell them that life is ever-changing and they need to be not only resourceful, but willing to adapt to different situations and conditions. I also tell my students not to be too critical of yourself as 'you are your harshest critic'. Even though you should work hard, life should be fun and to not always take everything so seriously. Life just happens.

Q. What do you envision yourself doing career-wise in the future?

A. My future goals would include achieving the next level of rank of Full Professor. I would like to more fully develop master and doctoral graduate level courses that are both based in critical thinking and practical laboratory-based experiences in my research discipline. Other goals are to take more leadership roles in strength and conditioning to become a national leader in this discipline. In addition, I would like to establish and develop more advanced techniques in the field of strength and conditioning and muscle physiology and develop these skills in my graduate students. Another aspiration would be to continue my work as Associate Editors of the two leading journals in my discipline and increase my responsibility to section editor status. As program director of the ACSM Exercise Specialist certification, I would like to see this program more developed and be more successful such that we are able to place students in clinical occupations within the emerging field of clinical cardiac exercise physiologist.

ALUMNI SPOTLIGHT

Stephanie Meyers earned her B.S. in 2000, her M.Ed. in 2003, and is currently working on her Doctorate of Science in Nursing (DSN) at the University of Texas Health Science Center (UTHSC), where she is a full-time teaching associate/clinical instructor in the department of Integrative Nursing Care.

Although Stephanie always had her sights set on a career in the health professions, she went through a few different majors before committing to nursing. "I started out as a chemistry major and intended to become a physician's assistant," says Stephanie, "but when that didn't work out, I went into nursing and have never regretted it for a moment! I love being a nurse."

When asked if there was a "defining moment" during the course of her undergraduate or graduate studies that has stayed with her, she laughingly replied, "Organic chemistry! I made it through one semester—twice, but it quickly made me realize that medical school was not for me."

Stephanie talked about what an amazing role model and mentor Dr. Jenny Yi was and said, "She demonstrated how to be professional both in the classroom and as a researcher. She allowed me to work with her on research projects, and was always supportive of my educational goals and endeavors."

For Stephanie, the most satisfying part of teaching is having the opportunity to work with the wide variety of students that go to UTHSC. The diverse group spans every cultural background you could imagine and ages range from 20 years old to over 50. She said that attending UH with its vastly diverse student body and faculty taught her how to relate to many different types of people; something she greatly appreciates and knows will benefit her both personally and professionally.



Stephanie Meyers

Ms. Meyers wants to know more about the experiences of women hospitalized with high-risk pregnancies, the psychosocial factors that impact them personally, and the nursing care they receive. It's possible that the pilot study she will design to complete her DSN will focus on these issues.

As far as future plans after completing her doctorate go, Stephanie said, "I would love to stay at UT and continue teaching and doing research. The Health Science Center is full of resources and opportunities for collaboration, and Houston is my home! GO COOGS!"

Almost every cell in your body contains DNA, which is the set of “master instructions” that directs development, bodily functions, and even behavior. Even though the DNA of all humans is more than 99% identical, we only need to look around us at the variety of sizes, shapes, colors, and faces to know that there is variation in the human genome. It is the small differences in DNA sequence between people that influence, at least in part, why people look different, have different risks for some diseases and conditions, and/or respond differently to the same medical treatment or training program. The TIGER (Training Interventions & Genetics of Exercise Response) Study is designed to investigate how variation in DNA sequence may influence levels of body fatness and fitness both prior to and following a 30-week exercise program.

While we know that genes are important in our overall fitness, how genes may alter response to exercise and diet interventions is not known. “If we can determine the genes involved, then we might be able to prescribe an exercise program that fits an individual person’s needs, one that really works for them and is easier to stick with,” says Dr. Molly Bray, Principal Investigator and HHP alumna. Dr. Bray is an associate professor of Pediatrics at Baylor College of Medicine and an adjunct professor at UH. Dr. Andrew Jackson and Dr. Brian McFarlin are co-investigators in the study.



“The common method overweight people use to lose weight is some form of diet, but research shows that diets fail to keep weight off,” Dr. Jackson said. “The TIGER study uses a well-established exercise program that has been shown to educate students about how to exercise for fitness and control.”

Step Aerobics

Basic stepping is combined with dance and power moves for a fun way to include exercise in your day!

Sports conditioning

Combines sports moves like sprinting and jogging with power moves like lunges and squats for an overall whole body workout that is a perfect complement to sports.



Cardio Karate

Participants move within their aerobic training heart rate zone, while learning kicks, blocks, punches and other basic techniques from traditional Japanese karate in an intense but fun and non-threatening atmosphere.

Cross training

Cross training involves high intensity aerobic activities with lower intensity strength movements utilizing hand weights and exercise bands.

Fat burner

Designed to maintain heart rate within an optimal zone for burning fat by limiting high intensity moves while maximizing caloric expenditure with constant low level movement for the upper and lower body.

QUICK HITS

Dr. Brian McFarlin won the UH Provost’s Core Award for Teaching Excellence (2006-2007).

Dr. Charles Layne was appointed to serve on the proposal development team for the Houston Center for Clinical and Translational Science (HCCTS) in response to NIH’s call for Institutional Clinical and Translational Science Award (U54) RFA.

Dr. Jill Bush was appointed Research Interest Chair, Energy Macronutrient and Metabolism Research Interest Section, American Society for Nutrition.

Dr. Joel Bloom was selected to chair the Senior Wellness Committee for the Mayor of Houston’s Wellness Council.

Dr. Rebecca Lee was appointed UH Obesity Research Center Director.

Dr. Paula Rhode was Scientific Track Chair at the 28th Annual Meeting and Scientific Sessions, Society of Behavioral Medicine, March 21-24, 2007.

Dr. Norma Olvera received the Phi Delta Kappa Advocate for Education 2007 Bridge to the Future Award by the Houston Chapter of Phi Delta Kappa.

Outstanding Students for 2007

Ph.D.: Melissa Scot-Pandorf

M.Ed.: Diana Abuamer

TAHPERD Student of the Year: Steven Zbranek

Exercise Science: Jennifer Dry

Health: Khurram Shazad

Movement & Sports: Jennifer Everett

Nutrition: Safia Hussain

Sport Administration: Jeremy Matthew McDonald



COMMUNITY OUTREACH

Duke TIP Scholar Weekends provide opportunities for academically talented students in grades 8-12 to take short courses during weekend-long programs at a college or university. To be eligible, students must have participated in the Duke TIP talent search or been identified as academically gifted/talented by local school criteria. Courses introduce topics that might not be available in students' local schools. They provide enrichment, sharpen skills, and help students define pathways to college majors and careers. In addition, they provide a glimpse into the collegiate experience.



"Fly Me to the Moon: the Effects of Space Flight on the Human" was the session these students chose. Drs. Clarke (pictured), Kurz, Layne and McFarlin took them through their paces in the Laboratory of Integrated Physiology (LIP).



Cystic fibrosis is an inherited chronic disease that affects the lungs and digestive system of about 30,000 children and adults in the United States and 70,000 people worldwide.

In the 1950s, few children with cystic fibrosis lived to attend elementary school. Today, advances in research and medical treatments have further enhanced and extended life for children and adults with CF. Many people with the disease can now expect to live into their 30s, 40s and beyond.

On May 19, HHP sponsored the Texas Gulf Coast Chapter's 2007 walk-a-thon, **Great Strides: Taking Steps to Cure Cystic Fibrosis**. Kim Organ, director of special events, told us "We raised over **\$586,000** for CF research and patient care, and we are still receiving comments about how nice the UH campus is and how lovely the walk route is around campus."

To view a slide show of the event, go to:
http://hhp.uh.edu/Currentevents/07_cystic_fibrosis.cfm#



For more information on CF go to: www.cff.org

understanding, developing and promoting a healthy lifestyle

Health & Human Performance 

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



<http://hhp.uh.edu>