

ROAD TO TIER ONE



he University of Houston is on the road to Tier One status! The Department of Health and Human Performance is committed to assisting UH in achieving this milestone, and this year's annual report reflects our contribution to its realization.

HHP completed its first year as a department in the College of Liberal Arts and Social Sciences. The opportunities for collaboration are already paying dividends, and we anticipate building even stronger academic and research partnerships as we get to know our new colleagues.

In January 2011, the Carnegie Foundation for the Advancement of Teaching announced they had placed UH in the foundation's top category of research universities. We are contributing with the nationally competitive research conducted in HHP's Center for Neuromotor and Biomechanics Research (CNBR), The Laboratory of Integrated Physiology (LIP) and the Texas Obesity Research Center (TORC). The result of interdisciplinary collaborations and research projects fast-forwards the training of our students as professionals and leaders in health and human performance.

Student success is paramount within the goals of the department. In this report, you can see the program offerings that are the centerpiece for developing leaders in the exercise, health and fitness, sport administration and nutrition industries. We have enhanced academic and research experiences through the virtual world with innovative approaches such as the Virtual Immersive Translational Applied Learning (VITAL) Showcase.

We are also constantly expanding our outstanding and diverse faculty to further assure student success. This year we welcomed Dr. Tracey Ledoux, and this fall Dr. Stacey Gorniak will join our faculty. Meet them on page 36.

Community engagement brings the students' education full circle with opportunities to apply research and academic skills to real-world experiences. Opportunities for service not only impact the students' lives, but improve the lives of our UH neighbors, the Texas Gulf Coast and beyond. HHP received recognition from a Houston council

member for our six years as UH's host department for the Cystic Fibrosis Foundation's Great Strides walk for a cure. Learn more about these activities inside, which include internships, health-related fairs and programs. Much of the faculty and students' achievements garner local, national and international recognition in both the scientific community and in the general media. Our professors are frequently sought after by news outlets as experts in their fields and for the public's interest in their research.

HHP was instrumental in bringing and planning the International Aeronautics Association's 18th Humans in Space Symposium to Houston, which UH co-hosted with NASA. We also congratulate Dr. Rebecca Lee upon receiving the Fulbright Scholar award to Guadalajara, Mexico!

Throughout the annual report you will notice black and white QR codes like the one below. You can download a free app to your smartphone, then scan the code and receive information about HHP!

I want to thank each of you who have contributed to the support of HHP's programs through your generous gifts. We invite you to visit the campus, and I would love to hear from you at clayne2@uh.edu.

Go Coogs!

Dr. Charles Layne
Professor and Chair



SOMPETITIVE RESEARCH

THE CENTER FOR NEUROMOTOR & BIOMECHANICS RESEARCH

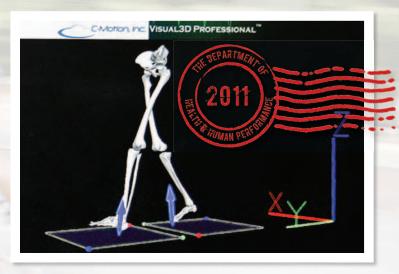
Sensory Information Explored with Split-belt Treadmill

information from the muscle, joint and skin receptors is used to support coordinated movement is important to therapists designing rehabilitation protocols. Dr. Charles Layne and his team are currently engaged in a research project intending to provide such information.

Working within the Center for Neuromotor and Biomechanics

Research (CNBR), Layne is exploring if vibration applied to either the quadriceps or hamstrings impacts the process of adaptation during split-belt treadmill locomotion. During the protocol, the participants walk on the treadmill, which then 'splits' causing one leg to move twice as fast as the other leg. This protocol is possible because the treadmill has two belts instead of one belt like most treadmills.

Humans display a remarkable ability to immediately adapt to this unusual situation and continue to stabilize their gait patterns the longer they walk on the split treadmill. Layne uses the vibrators to stimulate sensory receptors such that the receptors provide 'nonsense' input to the central nervous system. By evaluating the motion of the legs during the adaptation period with a camera-based motion analysis system, it may be possible to determine if the



disordered sensory input influences the process of adaptation and thereby gain insights into the role of sensory information in movement control.

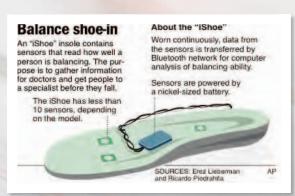
Helping Older Adults Maintain Their Balance

Shoe, a Houston based NASA spinoff company was born from the research conducted by HHP alumna, Katherine Forth (Ph.D. '05), and HHP Professor William Paloski, among others.

Originally designed for astronauts on the moon, the vision of iShoe is to provide a low cost, mobile diagnostic device for anyone who would benefit from quantifying balance. In particular, the goal is to assist elderly people maintain balance and prevent injuries from falling. In conjunction with the CNBR, iShoe conducted clinical testing of their iBalance, a device similar to a regular bathroom scale that gives a balance score after the user stands on it.

Researchers conducted their testing at a retirement community with 60 resident volunteers ranging from 77-94 years of age. During the eight-week program, the volunteers learned what balance really is; how to improve their balance by regularly walking and exercising; and a plan was developed for each individual to determine their number at any given time. Documenting one's balance number and any changes is valuable information for caregivers and physicians, and to assist in rehab efforts.

iShoe researchers are currently in discussions with a Houston-based health care system about their mechanism. Forth said "if all goes as we anticipate, the first iShoe balance devices could be on the market within two years, and we'll be able to help more seniors maintain their balance ... and their active lives."



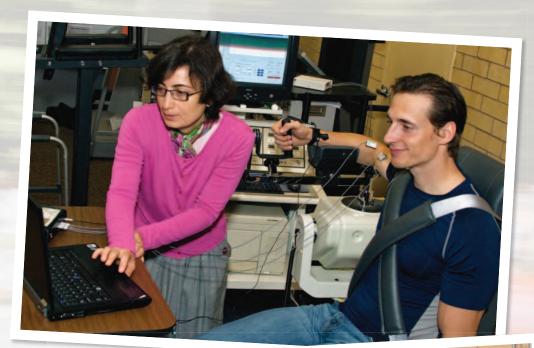
Dynamic Postural Control in Parkinson's Disease During Gesture Controlled Virtual Reality

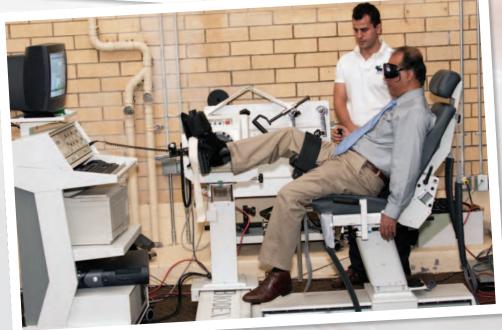
ostural instability in individuals diagnosed with idiopathic Parkinson's disease (PD) is highly associated with falls, which results in a decreased quality of life due to hospitalization, depression or disability. Typically, falls are reported during activities of daily living involving dual tasks such as reaching, turning, or grasping while standing or walking.

Recently, Virtual Reality applications have emerged as potential tools for both evaluation and treatment of balance disorders in a variety of clinical populations. However, very little is known about how individuals with PD will respond to the postural challenges of Virtual Reality. The objective of this pilot study being conducted in the CNBR is to determine the effects of various gesture-controlled Virtual Reality applications on different dynamic postural control parameters in Idiopathic PD.

The Parkinson's disease subjects are being recruited from Movement Disorders Clinic of Methodist Hospital under the guidance of expert neurologist, Dr. Stanley Fisher, and Dr. Adam Thrasher as the HHP faculty sponsor.

Results of this study will help estimate the effect sizes of various Virtual Reality applications, and to design a randomized longitudinal study to identify the potential of gesture controlled Virtual Reality in treating postural instability in PD.







SOMPETITIVE RESEARCH

THE LABORATORY OF INTEGRATED PHYSIOLOGY

Growing Real Human Bone

n the Laboratory of Integrated Physiology (LIP), HHP Associate Professor Mark Clarke and his researchers have created a process

that grows real human bone in tissue culture, which can be used to investigate how bones form and grow.

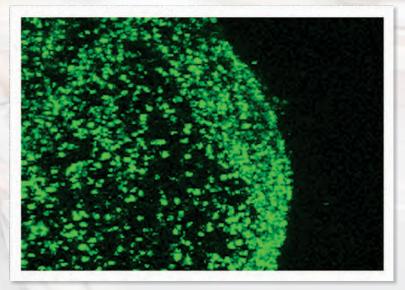
"We have manufactured a structure that has no synthetic components," according to Clarke. "It's all made by the two cell types bones start with inside the body. What you end up with is a piece of material that is identical to newly-formed, human, trabecular bone, including its mineral components, its histology and its growth factor content."

Being in a microgravity
environment causes astronauts'
bodies to lose more bone
mineral than they can replace, which makes

them more vulnerable to fractures and breaks. After returning to Earth, an astronaut's bone loss continues as their bodies slowly begin the process of replacing the bone mineral content.

The NASA-funded study, which included Clarke's collaborators at NASA-Johnson Space Center, Dr. Neal Pellis and Dr. Alamelu Sundaresan, use human osteoblasts and osteoclasts, the two major cell types involved in the formation of and

breaking down of bone. The 3-dimensional bone constructs allow for ideal conditions to investigate how bone forms and, more importantly, how bone is lost in environments such as space flight and conditions present in post-menopausal women and patients with spinal cord injuries.



His research on bone formation is also proving to be market-ready, as a newly formed start-up company, OsteoSphere Inc., examines ways the breakthrough research can be used in a clinical setting for applications such as spinal fusions, facial reconstructions following bomb blasts or the re-growing of individual bone outside of the patient.

OsteoSphere Inc. is looking at ways to commercialize the technology in a clinical setting, including culturing an individual's own bone for subsequent

transplantation back into the patient, developing other products for use in orthopedic reconstruction or using the technology as a screening tool for development of pharmaceuticals for combating bone loss or stimulating bone regeneration.

Exercise and Spinal Cord Injuries

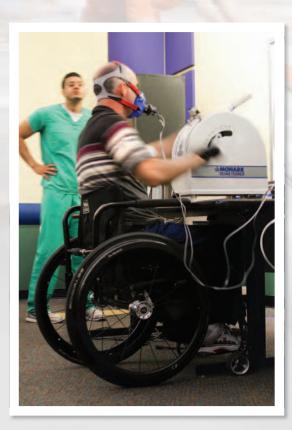
nfection is the leading cause of death for people living with spinal cord injuries for two years or more. Drs. Thrasher and Simpson are investigating why the immune system is blunted after a spinal cord injury.

Funded by a grant from The Institute for Rehabilitation and Research Foundation's (TIRR Foundation) Mission Connect, the HHP professors will investigate the immune systems of 30 patients before and after functional electrical stimulation exercise.

"People who have sustained such an injury have much higher infection rates than the general population, particularly in the urinary tract, lungs and gastro-intestinal tract," Thrasher said. "They are very susceptible to pneumonia and furthermore, because their immune system is compromised, they have a hard time fighting these infections."

Using facilities at the CNBR and the LIP, the 12-month study will examine 30 participants: 10 with quadriplegia, 10 with paraplegia and 10 without spinal cord injuries. Thrasher, a bio-engineer and principal investigator, will oversee the participants' exercise. Simpson, an immunologist, will examine blood samples of study participants before and after exercise, investigating the quantity of immune cells.

"Although long-term stress is detrimental to our immune system, the everyday release of certain stress hormones, such as epinephrine, is important to help maintain normal functioning of the immune system and the continued circulation of our white blood cells," said Simpson. "Spinal cord injured patients are unable to activate the adrenal glands that are responsible for epinephrine release, which may be one reason why they have lowered immunity and greater incidences of infection." The result of the 12-month study may be new drug therapies that stimulate the adrenal glands or new knowledge about the immune system that could benefit many populations.



Immune System Dysregulation During and After Space Flight

r. Richard Simpson is conducting a NASA-funded study concerning immune system dysregulation that occurs during and after space flight. It is not known if these changes increase infection susceptibility or pose a significant health risk to crewmembers. It is also not known if changes in immunity are due to the microgravity environment, or to the stressors associated with landing and re-adaptation to the full-gravity environment.

The project proposes a Flight Definition investigation, utilizing a longitudinal repeated mea-

sures design to determine theeffects of long-term exposure to microgravity on a host of salivary antimicrobial proteins (AMPs), latent viral reactivation, antibacterial properties of saliva, and blood markers associated with innate host immune defense, while also considering the impact of other acute stressors such as launch, landing and extra-vehicular activity.

Samples will be collected from crewmembers selected for the International Space Station (ISS) mission pre-flight, at early, mid and late phases during the six-month period on the ISS, and for



one month upon return to Earth. This investigation will help to establish if space flight alters innate mmune function, which is important to determine if altered immunity poses a significant risk of an adverse health event among crewmembers.

The data will also serve as a foundation for future countermeasure developments and technological advances to detect real-time changes in immune function during subsequent lunar or Mars missions.

"It is also not known if changes in immunity are due to the microgravity environment, or to the stressors associated with landing and re-adaptation to the full-gravity environment."



SOMPETITIVE RESEARCH

Marathon Runners Studied

ommon colds and flu account for millions of hours of lost work and school time each year. Associate Professor Brian McFarlin is studying how exercise stresses the body and compromises the body's immune system, increasing

"The stress that running a marathon places on the body makes the runner susceptible to upper respiratory illnesses, colds and flu," McFarlin said. "We want to know if there is a supplement runners can take to shore up their immune system following such a strenuous event."

Following the event, runners were given either the Wellmune WGP by Biothera or a placebo. For four weeks after the marathon, each participant filled

> out a daily survey to rate their perception of their health and wellness. With those surveys, McFarlin and his research team will evaluate the effectiveness of the supplement. Biothera, a U.S. immune health company, commissioned the research.

"Health care is a big concern for people," he said. "Staying home from work or school has consequences, as does going to work while being sick. Our findings may help other recreational athletes or those who

work outdoors in extreme weather conditions."

Science and Community hosted several interactive meetings and symposia, and have found community members are particularly interested in childhood obesity and improving dietary habits and increasing physical activity. The partnership plans to unveil an action plan to tackle the growing problem of obesity



susceptibility to infection and illness. He collected data from approximately 400 marathon runners participating in the Austin LIVESTRONG Marathon in February.

McFarlin works in the LIP and has been researching exercise and the immune system for more than a decade. He has published more than 40 studies in peer-reviewed journals documenting how exercise disrupts the immune system function.

TEXAS OBESITY RESEARCH CENTER

he Texas Obesity Research Center (TORC) hosted its second conference and annual Spring Symposium during the 2010-11 academic year, and was represented at numerous health fairs and health-related events across the Greater Houston area.

Dr. Rebecca Lee, director of the TORC, believes "It takes a multidisciplinary approach to understand, treat and reverse the obesity epidemic."

TORC's annual conference, titled "Advancing Obesity Research in a New Decade," was held Nov. 18-19, 2010, on the UH campus. The event brought together more than 200 experts and policy makers who shared information, perspectives and approaches for the prevention and treatment of obesity. Conference panels focused on clinical and translational research, community-based research, and a debate and discussion of obesity and health care reform.

At more than 25 health fairs and events, community members were encouraged to join the Science and Community partnership. The project is funded by the National Institute of Health (NIH) and aims to promote sustainable obesity prevention and reduction in our African American and Hispanic or Latino communities by capitalizing on the unique opportunities present in the city of Houston.

UNDERSTANDING NEIGHBORHOOD DETERMINANTS OF OBESITY

at the next Science and Community symposium and health fair Oct. 18, 2011, on the UH campus.

The TORC has more than 1,500 subscribers to their listserv, and continues to maintain an active Facebook page and Twitter account to reach out to community members, students, scientists and policy makers worldwide.

Five students were awarded a TORC Summer Learning Fellowship, which provides a hands-on learning experience in obesity studies and an opportunity to apply what they have learned during their course work. Students also gain real-world experiences by teaming up with a TORC faculty member like Dr. Tracey Ledoux, who is using virtual-world environments to try to induce food cravings in order to find strategies to assess and treat them.

he Understanding Neighborhood Determinants of Obesity (UNDO) research team and Dr. Rebecca Lee, principal investigator, published several papers from their innovative projects, such as Health Is Power (HIP), SAving Lives Staying Active (SALSA) study and the International Health Challenge (IHC).

Findings from the HIP project indicate group cohesion interventions may have physical and psychological health benefits. The SALSA study expanded on this, using Latin dance instead of walking, and found Latin dance interventions to improve physical activity.

In exploring the use of virtual environments for obesity prevention interventions, the IHC found that those who affiliated themselves with a country visited the site more often and completed health

promotion activities, suggesting virtual environments are a useful medium to engage participants and conduct health interventions and may lead to sustainable health promotion.

Lee's work was highlighted at several conferences and scientific meetings worldwide in 2010-11 and was recently showcased at the CDC public health and disability meeting, where she discussed the adaptability of her work for disabled populations. Lee also presented data on health disparities and the importance of understanding context at the 9th Annual Disparities in Health in America Workshop held at the M.D. Anderson Cancer Center and the NIH Workshop on Enhancing Collaboration with the HMORN Research Organization in Boston, MA.

Scherezade Mama, UNDO research lab manager, received a UH 2011 Staff Excellence Award, further demonstrating the exceptional work being conducted in the UNDO lab.

Mama is completing her doctoral degree of public health in community health practice at The University of Texas School of Public Health. Her work combines theories and techniques drawn from public health, behavioral science, social justice and community health practice and focuses on individual and psychosocial determinants of physical activity, dietary habits and obesity in ethnic minority women. "UNDO provides me a unique opportunity to gain hands-on experience and combine my classic public health training with behavioral medicine." said Mama.









STUDENT SUCCESS

HHP will have a student profile consistent with a nationally competitive public research university by creating an environment in which student success can be ensured.

HHP Degree Programs

Doctoral Programs

- · Ph.D. in Kinesiology
- Exercise Physiology
- Obesity
- Motor Behavior
- Space Life Sciences

Master's Programs

- M.S. in Exercise Science
- M.Ed. in Physical Education
- M.S. in Human Nutrition
- M.S. in Human Space Exploration Sciences

Bachelor of Science Programs

- Kinesiology
- Exercise Science
- Sport Administration
- Fitness and Sports
- Human Nutrition and Foods
 - CADE (Accredited Didactic Programs in Dietetics)



Space Life Sciences Lectures

component of HHP's Doctoral Space Life Sciences curriculum is a weekly lecture by various NASA scientists speaking on their expertise.

The series of free lectures are opportunities for any UH student to attend and hear renowned scientists address topics such as: space flight analogs, system physiology changes, and psychological and physiological stressors associated with human space flight.

The curriculum is designed to prepare doctoral students seeking careers in supporting the space program through clinical and research expertise in federal, state, and private space agencies, industry, universities and related occupational health settings.

Read more about the space life sciences curriculum at http://tiny.cc/HHPSpaceLifeSciences.

Six hundred participants, 39 presentations, three days.

HP hosted the Virtual Immersive
Translational Applied Learning (VITAL)
Showcase where peers networked and
learned about new research in the unique location of the virtual world of Second Life (SL).

Participating graduates and undergraduates came from four HHP classes: Design and Evaluation of Physical Activity Programs, Urban Fitness: Program Development and Evaluation, Public Health Issues in Physical Activity and Obesity and Motor Learning. The semester-long, collaborative project was designed to teach students management skills along with teaching the structure of community health intervention programs, all while using technological tools of today.

"Students worked together in teams to create community health and exercise programs from the ground up," said Charles Layne, professor and department chair. "From a practical standpoint, meeting in a virtual environment allowed more team members to 'meet.'"



Presentations were 15 minutes, with a questionand-answer session following from SL audience

members. The conference was open to the public and can be accessed at http://tiny.cc/HHP-SL. All the presentations are archived and available to anyone to learn more about the various health and exercise projects that HHP students are proposing.

Dr. Lisa Alastuey shared the successes of using the virtual world of SL as a part of the UH Effective Teaching Practices Showcase, a bianual event that pools in-house expertise and strategies to benefit faculty and students.

2011 HHP Outstanding Student Awards

Excellence in Undergraduate studies:

- Kathleen Woolley: Kinesiology
- Marcela De La Garza: Fitness/Wellness
- Audra Hollingsworth: Nutrition
- Shannan Arnold: Sport Administration
- Toochukwu "Ify" Mbah: Sport Administration

Excellence in M.Ed. studies:

- Mary Buckner: Motor Behavior
- Susan Bush: Sport Administration

Graduate awards in other categories:

- Ygnacio Lopez III: Teaching Excellence Award
- Heather Adamus: Overall Graduate Student Excellence Award
- Kelley Strohacker: Tony Jackson Research Excellence Award

National recognition by the American **Kinesiology Association:**

- Edrea Cook: American Kinesiology Association's 2011 National Undergraduate Scholar
- Lindsey Duramo: American Kinesiology Association's 2011 National Undergraduate Scholar

2011 HHP Scholarship Recipients

HHP Scholarships have been generously established to assist undergraduate and graduate students who are pursuing careers in the exercise, health and fitness, sport administration and nutrition industries.

Dr. "Tony" Jackson Research Excellence Award Kelley Strohacker

Barry C. Pelton Endowment Scholarship Amanda Powell

Margie Sterr Scholarship Jennifer Wooland

Mary Louise White Scholarship Yuli Pan



Audra Hollingsworth with friends

Amanda Powell with Dr. Layne

STUDENT SUCCESS

SHASTA'S CULINARY WORKSHOP

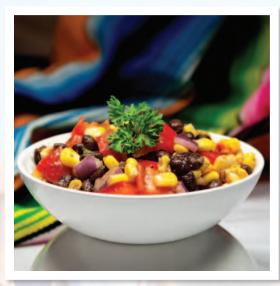
hasta's Culinary Workshop has been serving the UH community for 12 years. Faculty, staff and students of UH order and eat at the restaurant or order online with delivery available on campus.

The workshop is a lab for the Commercial Food Production class taught by Laura Moore, R.D. It gives nutrition students the opportunity to use what they've learned in the classroom by preparing and serving food.

The class works much like a restaurant, with hospitality positions given to each student in order for them to learn how to operate in commercial food production. "We have positions in sanitation, marketing, to-go orders, dining room manager, kitchen manager, cooks, salad/bake group, servers, host/hostess and expeditor," Moore said. "The goal is to have each student rotate through all the positions. The students are graded on their performance each week."

It is a requirement for each student to be certified in food safety prior to the workshop's opening each semester. Profits go back to the class as a reimbursement for supplies that are used.

All of Shasta's meals are created by the nutrition students from scratch with the highest standards and the best quality foods. The meals are designed to be healthy, appealing and representative of every type of cuisine. The workshop proudly bills itself as "The best lunch on campus."



Black Bean & Corn Salad



Spinach Souffle



Apricot-Dijon Glazed Chicken



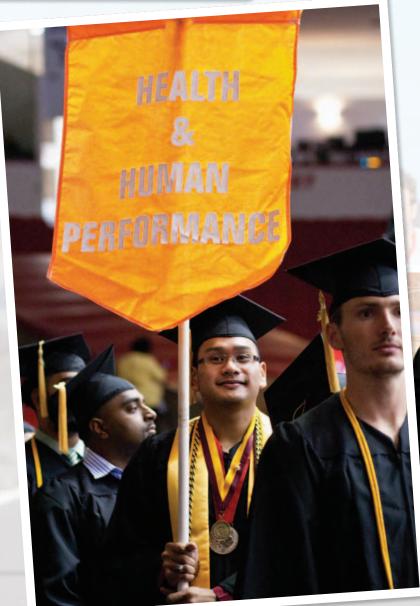
Lemon Yogurt Pound Cake



"The Best Lunch on Campus!"



STUDENT SUCCESS



Degrees Conferred

Graduate Degrees

Ph.D.	3
M.Ed.	19
M.S.	4

Undergraduate Degrees

Kinesiology/Exercise Science	
Kinesiology/Sport Administration	
Kinesiology/Fitness	9
Nutrition	75



Dedication



COMMUNITY ENGAGEMENT

The Department of Health & Human Performance will commit to fulfilling regional and state workforce needs while becoming a primary engine of social, economic and intellectual development.

Great Strides for a Cure

HP has been the UH host organization to the Texas Gulf Coast Chapter for the Cystic Fibrosis Foundation's (CFF) Great Strides annual walk since 2006. On the UH campus and across the U.S., tens of thousands of co-workers, friends and family come together each year as one community for one cause...to help find a cure for CF. This is CFF's largest national fundraising event.

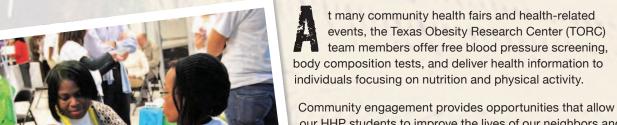
More than 1,000 participants wearing their teams' t-shirts created a sea of many colors as they made their way through the 3K route, which started and finished at the Lynn Eusan Park. Donations raised for the May 21 event were more than \$860,000.

On behalf of Melissa Noriega, a City of Houston At-Large council member, Toya Ramirez presented HHP with a certificate of appreciation for its leadership in the community by hosting the event.

Great strides are being made toward a cure of this debilitating disease that attacks the lungs and digestive system of about 30,000 children and adults in the U.S. annually. To learn more about the CFF, and to find a walk, visit their Web site at www.cff.org







Community engagement provides opportunities that allow our HHP students to improve the lives of our neighbors and to expand our students' academic and research skills.



ndergraduate kinesiology students take the Organization and Administration of Athletics class taught by Dr. Rey Treviño. In this class, students learn best practices in organization, administration, and supervision of physical education and athletic programs.

A component of this study is a servicelearning project where students perform volunteer work at community organizations.

This opportunity allows students to apply their classroom knowledge to real-world situations. The community-based learning activities and collaborations address the needs of individuals and organizations, which broadens our students' experiences and impact on others' situations.





www.koalacenters.com

LOCAL & NATIONAL RECOGNITION

The Environmental Chamber

r. McFarlin is conducting a study with the goal of one day preventing deaths from heat-related illnesses. "We don't have a really specific criterion to say this individual is prone to heat illness, and this person is not," he said.

McFarlin and his researchers are using the environmental chamber in the LIP, which is one of only three in the Texas university system that simulates summer conditions.

The chamber resembles a large cooler, where heat and humidity can be adjusted up to 120 degrees Fahrenheit with 100-percent humidity. As subjects ride stationary bikes in sultry heat, they go through a battery of tests. Under these circumstances, investigators are able to collect data where little research has been conducted.

Age, body fat and hydration status all play a role in heat-related illnesses. During the summer it happens to older individuals who lose air conditioning as well as physical laborers who work outside. Mc-Farlin said, "There's not a single person who's not at risk of having a heat-related illness."

McFarlin's study was featured on Houston's KHOU-TV Channel 11 and KIAH-TV Channel 39 news stations.

The Department of Health & Human Performance will be known for its accomplishments locally and nationally.





ssociate Professor Brian McFarlin was named president-elect of the Texas Chapter of the American College of Sports Medicine (TACSM). ACSM is a multi-disciplinary professional and scientific society dedicated to creating and disseminating knowledge concerning the motivations, responses, adaptations and health aspects of persons engaged in sport and exercise.



Fulbright Scholar Awarded to HHP Professor



r. Rebecca Lee has received the prestigious Fulbright Scholar award. She will work with researchers at the Instituto de Ciencias Aplicada a la Actividad Fisica y al Deporte in Guadalajara, Jalisco, Mexico to develop education and training protocols for health care practitioners and researchers in order

to better document and define obesity, as well as the environmental factors that contribute to the obesity epidemic.

"Recent data suggests that the problem of obesity has emerged in Mexico, particularly among youth," Lee said. "Mexico has been cited as having the second-highest obesity prevalence after the U.S. in the world."

Lee has done extensive studies on the many factors that lead to obesity and its related illnesses, including cultural, sociological and neighborhood determinants. She is hopeful her research and research methods can be used to develop strategies to prevent and reverse the emerging obesity epidemic in Jalisco, Mexico.

"My work in Texas has examined physical activity, dietary habits and body composition in women of color and how to encourage healthier habits," she said. "I'll work with colleagues in Guadalajara on similar studies with parents and children in urban and rural areas." The resulting data from the nine-month study will be presented to university and public officials.

The Fulbright Program is the flagship international educational exchange program sponsored by the U.S. Department of State's Bureau of Educational and Cultural Affairs. Fulbright scholars are chosen for their academic merit and leadership potential and are given the opportunity to study, teach and conduct research, exchange ideas and contribute to finding solutions to shared international concerns.

New Book Confronts Obesity

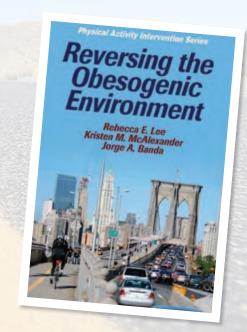
n her new book, "Reversing the Obesogenic Environment," Dr. Rebecca Lee introduces the concept of the obesogenic environment—one that leads people to become obese—and provides suggestions and strategies to alter one's environment to encourage healthier choices.

As researchers, practitioners and policy makers continue to explore the global crisis of obesity, they realize it is not enough to convince people of the benefits of healthy eating and regular physical activity. What happens when people go home to a neighborhood where fresh

vegetables are not available and opportunities for physical activity are hard to find?

"Reversing the Obesogenic Environment" speaks to scientists, practitioners, policy makers, and community members as well as students and explores public policy, the built environment, physical activity resources, transportation systems, food supply and distribution, family and cultural influences, technology, the media and marketing.

Practical recommendations based on the latest research for reversing the obesogenic environment are incorporated throughout the book. Sample programs and policies, checklists, and potential solutions offer practitioners a starting point for changes in their own communities.



LOCAL & NATIONAL RECOGNITION

ntegration and Cooperation in the Next Golden Age of Human Space Flight was the focus of the 18th International Academy of Astronautics (IAA) Humans in Space (HIS) Symposium. The event was held in Houston at the Westin Galleria Hotel, April 11-15, 2011. NASA and UH hosted the weeklong conference, which drew an international group of more than 500 researchers and space industry professionals.

Professor William Paloski played a major role in the months of planning that went into the successful forum that addressed subjects such as space technology and habitats, space medicine, education and outreach, and commercial space flight. He served as chair of the scientific organizing committee, and was co-chair with Dr. John Charles (NASA Johnson Space Center) on the local organizing committee.

Special sessions were devoted to the 50th anniversary of Yuri Gagarin's April 12, 1961 historic first manned space flight and the 30th anniversary of the first Space Shuttle mission on April 14, 1981.

In conjunction with the symposium, renowned astrophysicist Neil deGrasse Tyson presented the 2011 Elizabeth D. Rockwell Lecture on Ethics and Leadership, titled "America's Past, Present and Future in Space" on the UH campus.

The HIS Symposium also sponsored an International Youth Art Competition for students from 10–17 years of age featuring multimedia categories.

More than 500 entries from around the world were submitted. Winning art and selected pieces were displayed in various media during the symposium,

International Humans in Space Symposium

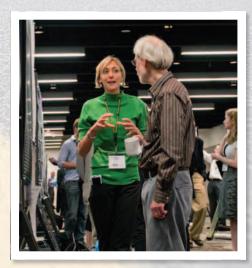


Mark Clarke, Michael Coats, Renu Khator & Charles Layne

including the opening ceremony and a reception attended by some of the artists and their families.

HHP's creative team contributed extensively to the multimedia collateral showcasing the art competition by creating videos, the art program, symposium slides and an Internet gallery.

Paloski hopes that attendees walked away "not only with the latest global developments in their own areas of expertise, but also having learned some new things about Houston, UH, and some of the broader challenges we face as we enter into the next golden age of human space flight."









he National Center for Human Performance (NCHP), where the CNBR is located in the Texas Medical Center, was designated by Congress as a national Institution for Excellence. The legislation signed by President Obama



in October 2010, recognizes the center's efforts in collecting, archiving and sharing research findings that enhance human performance in the performing arts, sports, space exploration and the military. With this recognition, the U.S. has, for the first time, an official site where scientists involved in performance-related research can come together to share expertise and develop plans of action.

Achievements and Milestones

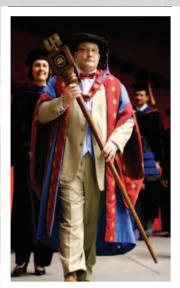
Alastuey, L. Recipient of the University of Houston Provost Teaching Excellence Award, Instructor/ Clinical Faculty Category. 2010–2011.

Alastuey, L. Featured Faculty Member, UH Cougar Trading Card Scholarship program. 2011–2012.

Buxton, R. Received a UH 2011 Staff Excellence Award. April, 2011.

Clarke, M. S. F. Inducted as a member of the Phi Kappa Phi National Honors Society. March 2011.

Clarke, M. S. F. Received the Presidential Leadership Award from President Renu Khator for his outstanding leadership and service to the UH Faculty Senate as Faculty Senate President during 2010.



Clarke, M. S. F. Served as a member of the Local Organizing Committee of the IAA 18th Humans in Space Symposium. April 11–15, 2011.

Ledoux, T. A. Received Research Excellence award at the 2010 TORC conference for poster titled Mediation and Moderation effects of the "five-a-day achievement badge" intervention for Boy Scouts.

Ledoux, T. A. Appointed to the Houston Area Dietetic Association Board of Directors as the Community Director-At-Large.

Ledoux, T. A. Invitation to attend the Dannon Nutrition Leadership Institute. June 2011.

Ledoux, T. A. Awarded the NIH Loan Repayment Program.

Lee, R. E. Received a Fulbright Core Scholars Program Award, Council for International Exchange of Scholars, Institute of International Education. 2011–2012.

Liu, J. Selected to serve on a review panel for the National Science Foundation (NSF). 12/2010.

Liu, J. Appointed to editorial advisory board for The Open Occupational Safety and Health Journal.

Liu, J. Appointed to advisory board for the National Floor Safety Institute.

Liu, J. Appointed as a member to the ANSI B101 Standards Committee on Slip, Trip and Fall Prevention.

Lowder, T. Named vice-chair of the Institutional Animal Care and Use Committee (IACUC) committee.

Lowder, T. Invited to serve on the review editorial board of Frontiers in Exercise Physiology, a specialty of Frontiers in Physiology.



Mama, S. K. Received a UH 2011 Staff Excellence Award. April, 2011.

McFarlin, B. K. Chosen as president-elect of the Texas Chapter of the American College of Sports Medicine (TACSM). Feb. 2011.

McFarlin, B. K. Associate Editor-in-Chief for *International Journal of Exercise Science*.

McFarlin, B. K., Alastuey, L., Layne, C. S., & Lee, R. E. Finalists for UH Group Teaching Award.

Michals-Matalon, K. Member of the National Institutes of Health: Phenylketonuria Review Group. 2010–2011.

Paloski, W. H. Chair, Scientific Organizing Committee & Co-Chair (with J.B. Charles, NASA JSC), Local Organizing Committee. 18th IAA Humans in Space Symposium. Westin Galleria Hotel, Houston, Texas. April 10–15, 2011.

Oman, C. S., Black, F. O., **Paloski, W.H.,** & Young, L. R. (Organizing Committee) 8th Symposium on the Role of the Vestibular System in Space Exploration. Sheraton Suites Galleria Hotel, Houston, Texas. April 8–10, 2011.

Paloski, W. H. Invited Chair: Neurophysiology Expert Group. European Science Foundation THESEUS Project: Towards Human Exploration of Space: A European Strategy. Hammamet, Tunisia. Oct. 26–27, 2010. **Paloski, W. H.** Appointed Aerospace Section Editor for the new BMC Journal: *Extreme Physiology & Medicine*, <u>www.extremephysiolmed.com</u>. Feb. 2011.

Pearson, D. W. Appointed by Dean Roberts to College of Liberal Arts and Social Sciences Ad Hoc Committee on Diversity. Nov. 2010.

Pearson, D. W. Diversity and Conference Climate Committee (DCCC) Interim Chair and Annual Diversity Award Presenter at North American Society for the Sociology of Sport (NASSS) Annual Conference, San Diego, CA. Nov. 2010.

Pearson, D. W. Abstract Reviewer for Research



Consortium,
Sociocultural Section,
AAHPERD National
Convention, 2010–2011.
July/Oct. 2010.

Pearson, D. W. Elected Chair of the North American Society for the Sociology of Sport, Diversity and Conference Climate Committee (DCCC). March 2011.

Pearson, D. W. Conference Abstract Reviewer for Association for Education in Journalism & Mass Communication. April 2011.

Simpson, R. J. Appointed as a reviewer for *Biological Psychiatry*.

Simpson, R. J. Appointed as a reviewer for *Psychosomatic Medicine*.

Simpson, R. J. Reviews manuscripts for: Medicine and Science in Sports and Exercise; Brain, Behavior and immunity; Antioxidants and Redox Signaling; Journal of Applied Physiology.

Simpson, R. J. Appointed as an alternate member of the UH Committee for the Protection of Human Subjects. Nov. 2010.

Simpson, R. J. Contributed a chapter titled "Exercise and Immunosenescence" in the textbook: Immunosenescence: Behavioural and Psychosocial Determinants. Editors Bosch, J.A., Phillips, A.C. & Lord, J.M. Springer, NY, USA. 2011.

Weintraub Betts, R. J. Received a graduate scholarship from the UH University Commission on Women. April 2011.

Alumni Accomplishments

Banda, Jorge A. ('04, M.S. '07) Received Dean's Award of Excellence in Graduate Study from the University of South Carolina (Cash award).

Layne, C. S., Mama, S. K., **Banda, Jorge A.** ('04, M.S. '07), & Lee, R. E. (2011). Development of an ecologically valid approach to assess moderate physical activity using accelerometry in community dwelling women of color: A cross-sectional study. *International Journal of Behavioral Nutrition and Physical Activity, 8*(1), 21. PMID: 21439052.

Lee, R. E., Mama, S. K., Medina, A. V., Reese-Smith, J. Y., **Banda, Jorge A.** ('04, M.S. '07), Layne, C. S., Baxter, M, O'Connor, D. P., McNeill, L., & Estabrooks, P. A. (2011). Multiple measures of physical activity, dietary habits and weight status in African American and Hispanic or Latina Women. *Journal of Community Health*. (Epub ahead of print), PMID:21519867.

Esposito, L. A., Simpson, R. J., Strohacker, K., Carpenter, K. C., & McFarlin, B. K. (Epub: 2010). Defining a longitudinal survival model to examine forced treadmill running as a countermeasure for diet-induced weight gain. *Lab Animal*, 44(4), 305–11.

Esposito, Lisa (M.S. '08) Recently employed as a sports dietitian at the Gatorade Sports Science Institute (GSSI) in Barrington, II.

Hoffman, Ben Awarded an assistantship by the National Strength and Conditioning Association at Valdosta State University in Georgia. June 2011.

Forth, Katherine (Ph.D. '05), Fiedler, M. J., & Paloski, W. H. (2011) Estimating functional stability boundaries for bipedal stance. *Gait & Posture*, 33: 715–717.



Forth, Katherine (Ph.D. '05), Lieberman, E., Yang, Q., & Paloski, W.H. Is postural stability

controlled through punctuated equilibrium? Journal of Vestibular Research, 21:97-98, 2011 and 8thh Symposium on the Role of the Vestibular Organs in Space Exploration, Houston, Texas.

April 11–15, 2011.

Forth, Katherine (Ph.D. '05) Featured in "Program Helps Older Adults Avoid falls" article on Chron.com. http://tiny.cc/HHP-Balance. April 20, 2011.

Hutchison, Alexander T. (Ph.D. '07) (2011). Increased inherent intestinal granzyme B expression may be associated with SIV pathogenesis in Asian non-human primates. *Journal of Medical Primatology.* (Epub ahead of print). DOI: 10.1111/j.1600–0684.2011.00482.x.

Hutchison, Alexander T. (Ph.D. '07) "Lactate Threshold and V02 Max Explained." USA Triathlon Life and on Active.com: http://tinv.cc/HHP-Hutchison.

Alumni Accomplishments



Lee, R. E., Mama, S. K., McAlexander, Kristen (Ph.D. '10), Adamus, H., & Medina, A. (2011). Neighborhood and PA: Neighborhood Factors and Physical Activity in African American Public Housing Residents. Journal of Physical Activity & Health, 8 (Suppl 1), S83–90. PMID: 21350267.

Lee, R. E., McAlexander, Kristen (Ph.D. '10), & Banda, Jorge ('04, M. S. '07) (2011). "Reversing the Obesogenic Environment." Champaign, IL: Human Kinetics.

McAlexander, Kristen (Ph.D. '10), Mama, S. K., Medina, A. V., O'Connor, D. P., & Lee, R. E. (2011). The concordance of directly and indirectly measured built environment attributes and physical activity adoption. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 72. PMID: 21736740.

Pulliam, Kiara ('10) Recipient of a 2011 UH Cougars Athletic Alliance scholarship award at the Annual UH Black Alumni Association Gala. March 2011.

Phillips, Jason ('01) Recipient of the 2011 Distinguished Alumni Award from the UH Black Alumni Association. He just completed his eighth season at UH & his first season as the offensive coordinator. March 2011.

Raley, Christa ('09) Named head coach at Pasadena Memorial High School in Pasadena, Texas.

Scott-Pandorf, Melissa (Ph.D., '05) Was a featured alumni on the CLASS Web site. http://tiny.cc/HHP-Pandorf. March 2011.

Vanover Foreman, Lindsay (*05) Named assistant softball coach for Dartmouth College in Hanover, NH.

Articles

Lee, S. M. C., Clarke, M. S. F., O'Connor, D. P., Stroud, L., Ellerby, G., & Sollers, B. R. (2011). Near infrared spectroscopy-derived interstitial hydrogen ion concentration and tissue oxygen saturation during ambulation. *European Journal of Applied Physiology*. (Epub ahead of print).

Ross, R. M., Murthy, J. N., Wollak, I. D., & **Jackson, A. S.** (2010). The six-minute walk test accurately estimates mean peak oxygen uptake. BMC Pulmonary Medicine. Retrieved from http://www.biomedcentral.com/1471-2466/10/31.

James, E., **Layne, C. S.,** & Newell, K. M. (2010). Distributional properties of relative phase in bimanual coordination. *Motor Control, 14, 478–489.*

Turnock, M. J. E., & **Layne, C. S.** (2010). Variations in linear and nonlinear postural measurements under Achilles tendon vibration and unstable support-surface conditions. *Journal of Motor Behavior*, 42(1), 61–69.

Layne, C. S., Mama, S. K., Banda, J. A., & Lee, R. E. (2011). Development of an ecologically valid approach to assess moderate physical activity using accelerometry in community dwelling women of color: A cross-sectional study. International *Journal of Behavioral Nutrition and Physical Activity*, 8(1), 21. PMID: 21439052.

Ledoux, T. A., Watson, K., Baranowski, J., Tepper, B. J., & Baranowski, T. (2011). Overeating styles and adiposity among multiethnic youth. *Appetite*. 56(1), 71–77. doi:10.1016/j. appet.2010.11.145.



Ledoux,T. A., Hingle, M. D., & Baranowski, T.

(2011). Relationship of fruit and vegetable intake with adiposity: a systematic review. *Obesity Reviews*. 12(5), 143–150. PMID: 20633234.

Lee, R. E., Heinrich, K. M., Medina, A. V., Maddock, J. E., Regan, G. R., Reese-Smith, J. Y., & Jokura, Y. (2010). A picture of the healthful food environment in two diverse urban cities. *Environmental Health Insights*. 4, 49–60.

Eugeni, M. L., Baxter, M., & **Lee, R. E.** Disconnections of African American public housing residents: Connections to physical activity, dietary habits and obesity. *American Journal of Community Psychology, 47*(3-4), 264–76. PMID: 21181553.

Lee, R. E., Mama, S. K., Medina, A. V., Edwards, R. O., & McNeill, L. H. (2011). SAving Lives Staying Active: SALSA to promote physical activity and healthy eating. *Journal of Obesity*, 2011, 436509. PMID: 21234315.

Estabrooks, P. A., Glasgow, R. E., Xu, S., Dzewaltowski, D. A., **Lee, R. E.,** Thomas, D., Almeida, F. A., Thayer, A. N., & Smith-Ray, R. L. (2011). Building a multiple modality, theory-based physical activity intervention: The development of CardiACTION. *Psychology of Sport and Exercise*, *12*(1), 46–53.

Siddiqi, S., Mama, S. K., & **Lee, R. E.** (2011). Developing an Obesity Prevention Intervention in Virtual Worlds: The International Health Challenge in Second Life. *Journal of Virtual Worlds Research*, *3* (3), 3–26.

Lee, R. E., Mama, S. K., Medina, A. V., Reese-Smith, J. Y., Banda, J. A., Layne, C. S., Baxter, M, O'Connor, D. P., McNeill, L., & Estabrooks, P. A. (2011). Multiple measures of physical activity, dietary habits and weight status in African American and Hispanic or Latina Women. *Journal of Community Health* (Epub ahead of print), PMID:21519867.

Lee, R. E., Mama, S. K., McAlexander, K., Adamus, H., & Medina, A. (2011). Neighborhood and PA: Neighborhood Factors and Physical Activity in African American Public Housing Residents. *Journal of Physical Activity & Health*, 8(Suppl 1), S83–90. PMID: 21350267.

Michals, K. & Matalon, R. (2011) Canavan Disease. International Review of *Child Neurology Series: Leukodystrophies*. Ed. Raymond, G.V., Eichler, F., Fatemi, A., Naidu, S. Mac Keith Press, London, UK. pp. 156–169.

Navalta, J. W., Lyons, T. S., & McFarlin, B. K. (2010) Cognitive awareness of carbohydrate intake does not alter exercise-induced lymphocyte apoptosis. *Clinics* (Sao Paulo). 66(2):197–202.

Booth, S., Florida-James, G. D., McFarlin, B. K., Spielmann, G., O'Connor, D. P., & Simpson, R. J. (2010). The impact of acute strenuous exercise on TLR2, TLR4 and HLA.DR expression on human blood monocytes induced by autologous serum. *European Journal of Applied Physiology*, (6):1259–68. PMID: 20799043.

Breslin, W. L., Strohacker, K., Carpenter, K. C., & McFarlin, B. K. (2011). Mouse blood monocytes: Standardizing their identification and analysis using CD115. *Journal of Immunological Methods*. (Epub ahead of print), PMID: 21466808.

Navalta J., **McFarlin, B. K., Simpson R. J.,** Fedor E., Kell, H., Lyons, S., Arnett, S., & Schafer, M. (2011) Finger-stick blood sampling methodology for the determination of exercise-induced lymphocyte apoptosis. *Journal of Visualized Experiments*. 24:2595.

McFarlin, B. K., Weintraub, R. J., Breslin, W. L., Carpenter, K. C., & Strohacker, K. (2011). Designing online learning modules in kinesiology. *Educational Technology & Society, 14*(2):278–284.

Elkousy, H., Gartsman, G. M., Labriola, J., O'Connor, D. P., Edwards, T. B. (2010). Subscapularis function following the Laterjet coracoid transfer for recurrent anterior shoulder instability. *Orthopedics*, *33*(11), 802.

Knoblauch, M. A., **O'Connor, D. P., Clarke, M. S. F.** (2010). Capillary sampling for an indirect biomarker of muscle damage after exercise. *Journal of Strength and Conditioning Research, 24* (12), 3471–3475.

O'Connor, D. P., Bray, M. S., McFarlin, B. K., Sailors, M. H., Jackson, A. S. (2010). Equations for estimating DXA percent fat of ethnically diverse young men and women: The TIGER study (NIHMS198772). Medicine and Science in Sports and Exercise, 42 (10), 1959–1965.



O'Connor, D. P., Gugenheim, J. J. (2010). Comparison of measured and parents' reported height and weight in children and adolescents. *Obesity*. doi: 10.1038/oby.2010.278.

O'Connor, D. P., Bray, M. S., McFarlin, B. K., Ellis, K. J., Sailors, M. H., & Jackson, A. S. (2011) Ethnic bias in anthropometric estimates of DXA abdominal fat: The TIGER study. *Medicine & Science in Sports & Exercise*. (Epub ahead of print), doi: 10.1249/MSS.0b013e318216d90f.

McAlexander, K. M., Mama, S. K., Medina, A., O'Connor, D. P., & Lee, R. E. (2011). The concordance of directly and indirectly measured built environment attributes and physical activity adoption. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1):72. PMID:21736740.

Kaderka, J., Young, L. R., & **Paloski, W. H.** (2010). A critical benefits analysis of artificial gravity as a microgravity countermeasure. *Acta Astronautica*, 67(9-10), 1090–1102.

Moore, S. T., MacDougall, H. G., & Paloski, W. H. (2010). Effects of head-down bed rest and artificial gravity on spatial orientation. *Experimental Brain Research*, 204(4), 617–22.

Forth, K. E., Fiedler, M. J., & **Paloski, W. H.** (2011). Estimating functional stability boundaries for bipedal stance. *Gait & Posture, 33*: 715–717.

Stenger, M. B., Evans, J. M., Knapp, C. F., Lee, S. M. C., Phillips, T. R., Perez, S. A., Moore, A. D., Paloski, W. H., & Platts, S. H. (2011). Artificial Gravity Training Lessens Bed Rest-Induced Orthostatic Intolerance. *European Journal of Applied Physiology.* doi: 10.1007/s00421-011-2005-1.

Articles

Simpson, R. J. (2010). Aging, persistent viral infections and immunosenescence: Can exercise "make space"? *Exercise and Sport Sciences Reviews*, PMID: 21088603 (Invited Submission).

Simpson, R. J., Graham, S. M., Florida-James, G. D., Connaboy, C., Clement, R., & Jackson, A. S. (2010). Perceived exertion and heart rate models for estimating metabolic workload in elite British soldiers performing a backpack load-carriage task. *Applied Physiology, Nutrition, and Metabolism,* 35(5):650–6.PMID: 20962921.

Esposito, L. A., **Simpson, R. J.,** Strohacker, K., Carpenter, K. C., & **McFarlin, B. K.** (Epub: 2010). Defining a longitudinal survival model to examine forced treadmill running as a countermeasure for diet-induced weight gain. *Lab Animal*, *44*(4), 305–11.



Thrasher, T. A., Sin, V. W., Masani, K., Vette, A. H., Craven, B. C., & Popovic, M. R. (2010). Kinematic responses of the trunk to multidirectional perturbations during unsupported sitting. *Journal of Applied Biomechanics*, 26 (3), 332–40.

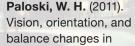
Vette, A. H., Yoshida, T., **Thrasher, T. A.,** Masani, K., & Popovic, M. R. (2010). A complete, non-lumped, and verifiable set of upper body segment parameters for three-dimensional dynamic modeling

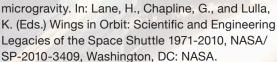
Medical Engineering & Physics. (Epub ahead of print), PMID: 20980190.

Fisher, S., Lucas, L., **Thrasher, T. A.** (2011). Robot-assisted gait training for patients with hemiparesis due to stroke. *Topics in Stroke Rehabilitation*. 18(3):269–276.

Book Chapters

Davison, G., &
Simpson, R. J. (2011).
Chapter 21: Immunity.
Sport and Exercise
Nutrition, The Nutrition
Society. London, UK:
Blackwell Publishing
Group.





Books

Lee, R. E., McAlexander, K., & Banda, J. (2011). "Reversing the Obesogenic Environment." Champaign, IL: Human Kinetics.

Funded Grant Proposals

Clarke, M. S. F. (PI) Generation and characterization of demineralized OsteoSphere material. Osteo-Sphere, Inc. 2010–2011. \$44,000.

Layne, C. S. Enhanced development of the Office of Scientific Date Review and Dissemination. \$947,239.29 (DC: \$634,247; IDC: \$317,124).

Layne, C. S. Supporting Space Life Sciences Curriculum. National Aeronautics and Space Administration. 1/1/2011–12/29/2011. \$5,007 (IDC included).

Layne, C. S., Ledoux, T. A., McFarlin, B. K., & Alastuey, L. Enhancing the Virtual Immersive Translational Applied Learning (VITAL) Project. Faculty Development Initiative Program (FDIP), May, 2011. \$30,000.

Ledoux, T. A. (PI), & Bordnick, P. UH New Faculty Grant to conduct a study to validate the use of virtual reality environments to induce food cravings. \$6,000.

Kwan, S., **Ledoux, T. A.**, & Gordon, A. Interdisciplinary perspectives on the overweight body: Research, methodologies and pedagogy. QEP Curriculum Development Grant Program. 2010–2011. \$10,000.

Lee, R. E. Small Grants Program 2010–2011, UH. Connecting Wii to SL technology to promote physical activity. \$3,000.

Lowder, T. Received travel grant from the conference organizers to attend the 2010 Pittsburgh International Lung Conference, Pittsburgh, PA. Dec. 10–11, 2010. \$500.

Lowder, T. W. Travel award to the American Association of Immunologists International Meeting, San Francisco, CA. May 13–17, 2011. \$1,250.

McFarlin, B. K. (PI). The Effect of supplementation with different forms of wellmune on post-marathon mood, general health, and perceived sickness. Funded by Biothera, The Immune Company. Submitted to Biothera. 12/1/10–11/30/11. (DC: \$42,031; IDC: \$7,945, 25%).

McFarlin, B. K. (PI). The Effect of under armour heat gear clothing on sweat rate, body temperature, and heat loss potential during exercise in a hot, humid environment. Funded by UnderArmor, Inc.10/1/10–9/30/11 (DC: \$17,427; IDC: \$2,092, 12%).

McFarlin, B. K. (PI) Accelerating the pace of the Wellmune human clinical trial. (Direct: \$20,500, IDC: \$1,875, 25%). Funded by Biothera, The Immune Health Company. 3/15/11–03/14/12.

McFarlin, B. K. (PI) Expansion of clinical laboratory study. (Direct: \$6,000; IDC: \$1,500). Biothera, The Immune Health Company. 4/01/11–8/31/11.

Iwase, S. (PI; Aichi Medical University, Nagoya, Japan), & **Paloski, W. H.** (Co-I). Artificial gravity with ergometric exercise on international space station as the countermeasure for space deconditioning in humans. Source: NASA. Performance Period: 1/1/11–TBD. Planned UH Budget: \$120,154 (IDC: \$40,051).

Paloski, W. H. (PI), Layne, C. S., Clarke, M. S. F., Thrasher, T. A., & O'Connor, D. P. Modulation of muscle function by lower limb loading during space flight. Source: NASA. Performance Period: 10/1/11–9/30/14. UH Budget: \$928,297 (IDC: \$294,409).

Pearson, D. W. (PI), & Lam, E. (CO-I). Faith-based physical activity and sport program initiatives: The reemergence of muscular Christianity or alternative obesity interventions II? Small Grants Program (SGP), UH Division of Research. Proposal submitted Nov. 2, 2010. Awarded: Dec. 2, 2010. Funding Period: Dec. 2, 2010–Aug. 31, 2011. \$3,000.00.

Simpson R. J. (PI), Lowder, T. W., Clarke, M. S., O'Connor, D. P., Paloski, W. H., Crucian, B. E. & Pierson, D. L. The effects of long-term exposure to microgravity on salivary markers of innate immunity. NASA Research Announcement NNJ10ZSA003N. (DC: \$910,793; IDC: \$289,012). (Final Budget: TBD).

Simpson R. J. Awarded junior faculty travel grant from the American Association of Immunologists (AAI) to attend the 98th AAI Meeting, San Francisco, CA. May 2011. \$1,250.

Thrasher ,T. A. (PI), & Simpson, R. J. (Co-I) Immune injury. The Texas Institute of Rehabilitation Research (TIRR) Foundation, Mission Connect. \$50,000.

Invited Presentations



Alastuey, L. Teaching using Second Life. UH-Effective Teaching Practices Showcase, University Center. April 15, 2011.

Alastuey, L.
Psychosocial issues
contributing to
childhood obesity.
Methodist Healthcare
Ministries, Wesley

Nurse Quarterly Conference, San Antonio, Texas. August 4, 2011.

Clarke, M. S. F. OsteoSpheres: Bone formation in free-fall? The Bone Club of Houston hosted by Baylor College of Medicine/Department of Molecular Biology, Houston, Texas. Oct. 2010.

Lee, R. E. Invited keynote speaker at Shape Up Sugar Land Fitness Council Launch. Sugar Land, Texas. Feb. 17, 2011.

Lee, R. E. Place and Health. National Cancer Institute (NIH) Workshop on Environment, Behavior and Obesity and Diabetes Management. HMO Research Network Conference. Boston, MA. March 25, 2011.

Lee, R. E. Multiple methods of physical activity in overweight and obese women: Correspondence, strengths and limitations. National Public Health Institute's 14th Congress on Public Health Research, Cuernavaca, Mexico. March 1–4, 2011.

Lee, R. E. Is the environment causing obesity? Taking action to reverse an epidemic. Webinar by HumanKinetics.com. April 21, 2011.

Lee, R. E. Striding toward social justice: the ecologic milieu of obesity. 9th Annual Disparities in Health in the Global Context Summer Workshop. Houston, Texas. June 20–25, 2011.

Lee, R. E. Neighborhood Environment and Increasing Accessibility for Disabled Populations. Centers for Disease Control and Prevention Disability and Health Partners Meeting. Chicago, IL. June 14–16, 2011.

McFarlin, B. K. Combating childhood obesity: Do diet & exercise really work? 2010 TAPHERD Academy Series in Galveston, Texas. Dec. 2010.

Paloski, W. H.
Sensory-motor adaptation to space flight.
PHOL 3009: Space
Medicine & Extreme
Environments Course.
Department of
Physiology, University
College London,
London, England
(via internet).
Nov. 30, 2010.



Paloski, W. H., & Wood, S. J. (Invited Chairs) Session on Countermeasures. 8th Symposium on the Role of the Vestibular System in Space Exploration. Sheraton Suites Galleria Hotel, Houston Texas. April 10, 2011.

Professional Presentations

Alastuey, L., & Holbert, J. Addressing health education domains through interactive activities for the classroom. TAHPERD convention, Galveston, Texas. Dec. 4, 2010.

Alastuey, L. Psychosocial issues related to child-hood and adolescent obesity. TAHPERD Summer Convention, San Marcos, Texas. July 11, 2011.

Clarke, M. S. F., Knoblauch, M. A., & O'Connor, D. P. Monitoring biomarkers of bone loss in human sweat. IAA 18th Humans in Space Symposium, Houston, Texas. April 11–15, 2011.

Dettmer, M., Pourmoghaddam, A., & **Layne, C. S.** Effects of healthy aging on motor lateralization: A functional Near-Infrared Spectroscopy (fNIRS) study. Annual meeting of Society of Neuroscience, San Diego, CA, Nov. 2010.

Layne, C. S., Paloski, W.H., Kitmacher, G. H., & Clarke, M.S.F. Workforce development for human space flight—The masters of science degree in human space exploration sciences at the University of Houston. 18th IAA Humans in Space Symposium, Houston, Texas. April 11–15, 2011.



Layne, C. S. & Weintraub Betts, R. Maintaining relevance while transitioning from a teacher preparation program to a comprehensive human performance program. American Kinesiology Association Lead. Jan. 2011.

Ogborn, A., & Layne, C. S. Avatar movement analysis: A new tool for understanding student behavior in self-paced interactive virtual learning experiences. 2011 Virtual Worlds Best Practices in Education. March 2011.

Ledoux, T., Lorenz, Baranowski, T., & Montague, R. Relationship of brain responses to palatable food with food addiction tendencies. 32nd Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Washington, DC. April 2011.

Lopez ,Y., Mama, S. K., Medina, A. V., & Lee, R. E. (2010). Is increased physical activity associated with decreased fat and alcohol consumption among overweight and obese African American and Hispanic-Latina women? Obesity, 18(Suppl 2):S132.

Lee, R. E., Wolfe, K. L., Reese-Smith, J. Y., Lopez, Y., Mama, S. K., & Medina, A. V. Recruitment and retention of minority women in the Health Is Power (HIP) study. Society of Behavioral Medicine Annual Meeting, Washington, D.C. April 2011.

Lee, R. E., Mama, S. K., Medina, A. V., & Ho, A. Neighborhood factors influence physical activity among community dwelling African American and Hispanic or Latina women. Active Living Research Conference, San Diego, CA. Feb. 2011.

Adamus, H. J., Mama, S. K., Medina, A. V., & Lee, R. E. Perceived neighborhood environment factors and physical activity in African American women. International Journal of Exercise Science and HHP Graduate Student Research Day, UH. Oct. 20, 2010.

Adamus, H. J., Mama, S. K., & **Lee, R. E.** Using the PARA to evaluate physical activity resource attributes. Houston and Austin, Texas. International Journal of Exercise Science, Vol. 2: Iss. 3, Article 21 and TACSM, Austin, Texas.

March 2011.

Adamus, H. J., Mama, S. K., & Lee, R. E. Items on a perceived environment measurement tool are grouped differently in low and high income African American Women. International Journal of Exercise Science, Vol. 6: Iss. 1, Article 27. http://digitalcommons.wku.edu/ijesab/vol6/iss1/27/ and TORC Conference, Houston, Texas. Nov. 2010.

Dinh, J. N., Sunseri, C. P., Mama, S. K., Lee, R. E., & McNeill, L. Internet-based intervention to improve dietary habits in women of color: SAving Lives Staying Active (SALSA). International Journal of Exercise Science, Vol. 6: Iss. 1, Article 25. http://digitalcommons.wku.edu/ijesab/vol6/iss1/25/ and TORC Conference, Houston, Texas. Nov. 2010.

Ho, A., Mama, S. K., Medina, A. V., & Lee, R. E. Neighborhood safety and attractiveness influence physical activity among African American and Hispanic or Latina women. International Journal of Exercise Science, Vol. 6: Iss. 1, Article 30. http://digitalcommons.wku.edu/ijesab/vol6/iss1/30/ and TORC Conference, Houston, Texas. Nov. 2010.

Lee, R. E., Smith-Ray, R., Mama, S. K., Medina, A.V., Reese-Smith, J. Y., O'Connor, D. P., & Estabrooks, P. A. Social cohesion increases fruit and vegetable consumption in obese ethnic minority women. International Journal of Behavioral Medicine. 17(Suppl 1):S212 and 11th International Congress of Behavioral Medicine, Washington, D.C. August 4–7, 2010.

Lopez, Y., Mama, S. K., Medina, A. V., & Lee, R. E. Association of fat and alcohol consumption with physical activity among obese women of color.

International Journal of Exercise Science, Vol. 6: Iss. 1, Article 24. http://digitalcommons.wku.edu/ijesab/vol6/iss1/24/ and TORC Conference, Houston, Texas. Nov. 2010.

Mama, S. K., Medina, A. V., Edwards, R. O., McNeill, L., & Lee, R. E. Improving psychological and physical health in women of color via salsa dancing. International Journal of Exercise Science, Vol. 6: Iss. 1, Article 18. http://digitalcommons.wku.edu/ijesab/vol6/iss1/18/ and TORC Conference, Houston, Texas. Nov. 2010.

Wolfe, K. L., Lopez, Y., Medina, A. V., Reese-Smith, J., & Lee, R. E. Evaluating 'reach' in the Health Is Power (HIP) Study. International Journal of Exercise Science, Vol. 6: Iss. 1, Article 19. http://digitalcom-mons.wku.edu/ijesab/vol6/iss1/19/ and TORC Conference, Houston, Texas. Nov. 2010.

Lowder, T. Moderate exercise training reduces



airway hyperresponsiveness and Th2 cytokine production while increasing regulatory t-cell production in a mouse model of asthma. The 2010 Pittsburgh International Lung Conference, Pittsburgh, PA. Dec. 10–11, 2010.

Lowder, T. W. The anti-viral and anti-inflammatory effects of exercise in influenza and asthma. M.D. Anderson 2011 Research Symposium. May 3, 2011.

Carpenter, K. C., Strohacker, K., Breslin, W. L., Lowder, T. W., & McFarlin, B. K. Voluntary wheel running during weight loss leads to differential changes in monocytes, compared to forced treadmill running. International Journal of Exercise

Science, Vol. 2: Iss. 3, Article 52. http://digitalcommons.wku.edu/ijesab/vol2/iss3/52 and annual meeting of the TACSM. March 2011.

Breslin, W. L., Johnston, C. A., Strohacker, K., Carpenter, K.C., Davidson, T., Moreno, J. P., Foreyt,

J. P., & McFarlin, B. K.
Childhood overweight
is associated with
increased Monocyte
concentration and
altered subset distribution. International
Journal of Exercise
Science, Vol. 2: Iss.
3, Article 17. http://
digitalcommons.wku.
edu/ijesab/vol2/iss3/17
and annual meeting of
the TACSM. March 2011.



Matalon, K., Grady, J., & Matalon, R. Isovaleric acidemia: A novel mutation with mild phenotype. Journal of Inherited Metabolic Disease, 33(Suppl 1), S39 and Society for the Study of Inborn Errors of Metabolism. Istanbul, Turkey. Aug. 31–Sept. 3, 2010.

McFarlin, B. K. The future of kinesiology education: Unlocking the potential of online instruction. Invited Speaker at TACSM Annual Meeting. 2011.

McFarlin, B. K. Designing engaging and effective online learning modules. UH Teaching Excellence Workshop (Teaching Table). April 2011.

McFarlin, B. K. (Invited Speaker). The antiinflammatory potential of exercise: Implications for health and disease. 10th ISEI Symposium, Oxford, England. July 11–13, 2011.

Gugenheim, J. J., & O'Connor, D. P. Comparison of measured and parent-reported height and weight in

children and adolescents. Obesity Society's 28th Annual Scientific Meeting, San Diego, California. Oct. 10, 2010.

Edwards, T. B., Trappey, G. J., Riley, C., **O'Connor, D.**, Elkousy, H. A., & Gartsman, G. M. Inferior tilt of the glenoid component does not decrease scapular notching in reverse shoulder arthroplasty: Results of a prospective randomized study. 11th International Congress of Shoulder and Elbow Surgery, Edinburgh, Scotland. Sept. 2010.

Stocks, G. W., O'Connor, D. P., Self, S., Thompson, B., & Marcek, G. Directed air flow reduces airborne contamination in the surgical field during total hip arthroplasty. Orthopedic Research Society Annual Meeting, Long Beach, CA. Jan. 13–16, 2011.

Trappey, G. J., Elkousy, H. A., & O'Connor, D. P., Gartsman, G. M. & Edwards, T. B. Glenosphere inferior tilt does not decrease scapular notching in reverse shoulder arthroplasty. American Academy of Orthopaedic Surgeons 78th Annual Meeting, San Diego, CA. Feb. 15–19, 2011.

Beard A. J. & **Paloski, W. H.** Automation of posturographic analysis with Matlab. National Center for Human Performance Annual Meeting. Houston, Texas. Nov. 12, 2010.

Ivkovic, V., Beard, A. J., Di Bello, T., Flemming, J., Gomez, J., Hipp, J., Jones, Z., Shah, S., Weinberg, J., & **Paloski, W. H.** Effects of lumbosacral braces on balance. HHP Graduate Student Research Day. Houston, Texas. Oct. 20, 2010.

Beard A. J. & **Paloski, W. H.** Novel objective measures to improve rehabilitation outcomes for chronic ankle instability. International e-conference on Kinesiology and Integrated Physiology. Oct. 4–22, 2010.

Professional Presentations

Iwase, S., Sugenoya, J., Nishimura, N., **Paloski, W. H.,** Young, L. R., van Loon, J., Wuyts, F., Clément, G., Rittweger, J., Gerzer, R., & Lackner, J. Artificial gravity with ergometric exercise on international space station as the countermeasure for space deconditioning in humans. 61st Annual International Astronautics Congress, Prague, Czech Republic. Sept. 27–Oct. 1, 2010.

Pourmoghaddam, A., Dettmer, M., Paloski, W. H., O'Connor, D. P., Patel, J., Khorram, A., Lopez-Tafurth, Y., & Layne, C. S. Synergos index: Identifying multiple muscle coactivation during isotonic exercise. Annual meeting of Society of Neuroscience, San Diego, Ca. Nov. 13–17, 2010.

Iwase, S., Sugenoya, J., Nishimura, N., **Paloski, W. H.,** Young, L. R. van Loon, J. W. A., Wuyts, F., Clement, G., Rittweger, J., Gerzer, R., & Lackner, J. Artificial gravity with ergometric exercise as the countermeasure for the spaceflight deconditioning in humans. 18th IAA Humans in Space Symposium, Houston, Texas. April 11–15, 2011.

Forth, K. E., Lieberman, E., Yang, Q., & Paloski, W.H. Is postural stability controlled through punctuated equilibrium? 8th Symposium on the Role of the Vestibular Organs in Space Exploration, Houston, Texas. April 11–15, 2011. Journal of Vestibular Research 21: 97–98, 2011.

Paloski, W. H. & Charles, J. B. Human health risks: Extended duration microgravity. Human Spaceflight Architecture Team Artificial Gravity Decision Technical Interchange Meeting, NASA Johnson Space Center, Houston, Texas. June 28, 2011. Wood, S., J., Fiedler, J., Taylor, L. C., Sayenko, D., Kozlovskaya, I. B., Black, F. O., & **Paloski, W.H.**Comparison of postural recovery after short and long duration spaceflights. 8th Symposium on the Role of the Vestibular Organs in Space Exploration, Houston, Texas. April 11–15, 2011. Abstract published in: Journal of Vestibular Research 21:103, 2011.

Pearson, D. W., Hurst, J., Cyrus, T., & Johnson, A. Ethical dilemmas and academic challenges: Developmental strategies for student-athletes. Texas Association for Health, Physical Education, Recreation and Dance. Galveston, Texas. Dec. 2010.

Zapalac, R. K., Zhang, J. J., **Pearson, D. W.,** Holland, S. M., & Fitzwater, P. L. An exploratory analysis of decision-making among sports bar consumers. Seventh Annual Sport Psychology Forum, Bowling, Green, KY. Feb. 2011.

Simpson, R. J. Development of a submaximal exercise protocol to identify the ventilatory threshold in astronauts. 18th IAA Humans in Space Symposium. Houston, Texas. April 2011.

Simpson, R. J., Ploutz-Snyder, L., O'Connor, D. P., Ivkovic, V., Wickwire, P. J., McFarlin, B. K., & Paloski, W. H. Development of a submaximal exercise protocol to identify the ventilatory threshold in astronauts. 18th IAA Humans in Space Symposium, Houston, Texas. April 11–15, 2011.

Simpson, R. J. Immunosenescence: The impact of aging, obesity and physical exercise. TORC Spring Symposium. April 2011.

Bigley, A. B. Spielmann, G. Rector, Jerrald L. & Simpson, R. J. The impact of latent CMV infection on NK-cell mobilization and expression of KLRG1 and CD57 in response to acute exercise. International Journal of Exercise Science, Vol. 2: Iss. 2,

Article 6. http://digitalcommons.wku.edu/ijesab/vol2/iss2/6 and TACSM. 2010.

Uzun, S., Pourmoghaddam, A., Hieronymous, M., Mathew, S., & **Thrasher, T. A.** Determination of neuromuscular fatigue in basketball players using recurrence quantification analysis of surface EMG. Annual Meeting of the Society for Neuroscience, San Diego, CA, Nov. 13–17, 2010.

Thrasher, T. A., Fisher, S., & Ward, J. S. Representations of central patterns in normal and pathological gait: an EMG analysis. Annual Meeting of the Society for Neuroscience, San Diego, CA, Nov. 13–17, 2010.

Ward, J. S., Qadeer, A., Uzun, S., **Simpson, R. J.,** & **Thrasher, T. A.** The impact of quadriplegia on immune response to acute arm crank exercise. National Center for Human Performance Annual Meeting, Houston, Texas, Nov. 11–12, 2010.



Wilson, P. Relationship of Fruit and Vegetables and Fat Consumption to Binge Eating Symptoms in African American and Hispanic or Latina Women. International Journal of Exercise Science, 2 and HHP Graduate Student Research Day, UH. Oct. 20, 2010.



Publicity

Alastuey, L. UH Moment: "Teaching Best Practices." http://app1.kuhf.org/houston_public_radiouh_moment.php. May 18, 2011.

Clarke, M. S. F. As UH faculty senate president, Clarke was featured in UH YouTube video "UH Celebrates Carnegie Tier One Research Ranking." Jan. 27, 2011.

Clarke, M. S. F. "Working with Administrators on Budget Challenges" published in UH News magazine and UH Today. Feb. 2011.

Clarke, M. S. F. Highlighted in Chron.com article, "Panel Shaping UH Future Excludes Liberal Arts Input." Feb. 2011.



CNBR UH News Digest's Photo of the Day. Jan. 2011.

CNBR Featured in "On the Move" article. UH home page. Jan. 2011.

HHP Ranking as No. 1 health and human performance program by Academic analytics' Faculty Scholarly Productivity Index (2008) listed in current UH "We are Tier One" and "UH Pride Points" brochures. Feb. 2011.

HHP City of Houston Councilwoman At-Large, Melissa Noriega presented a Certificate of Appreciation to HHP for its leadership and hosting of the annual Cystic Fibrosis Foundation's Great Strides walk on the UH campus. **Keenum, C.** "Keenum's Return Crucial to UH's Goals" article on Chron.com. Jan. 2011.

Keenum, C. "NCAA Grants Keenum One More Year to Play at UH After Injury Ended Season" article Chron.com. Jan. 2011.

Keenum, C. Interviewed on Houston AM sports radio station 1560-The Game. Jan. 2011.

Keenum, C. On the cover of the Houston Press News. Two articles: "Cover Story: Case Keenum's Comeback Attempt:" http://tiny.cc/HHP-Keenum-HPNews2. April 27, 2011.

Keenum, C. Two segment interview on Houston's KGOW 1560 The Game radio station. July 2011.

Keenum, C. Featured in "UH's Keenum Named to Maxwell Award Watch List" article for the nation's best offensive player. UH News Digest and the HoustonPress.com: http://tiny.cc/HHP-Keenum-HP. July 5, 2011.

Keenum, C. Interviewed on Houston's SportsTalk 790 AM radio station. July 20, 2011.

Layne, C. S., & Paloski, W. H. Quoted in the Congress recognizes National Center for Human Performance article announcing the NCHP's designation as an Institution of Excellence.
Oct. 15, 2010.

Layne, C. S. Featured in "New Research at the CNBR Will Focus on Children with ADHD" article on CLASS and UH home pages. Jan., Feb. 2011. http://www.uh.edu/class/news/archive/2011/january/hhp-cnbr/index.php.

Layne, C. S. "Split-belt Treadmill Locomotion" article in the NCHP newsletter featured researched conducted at CNBR. May and June 2011.

Layne, C. S. Interviewed for "Innovators" in-flight audio magazine series featuring HHP's programs and research. The series broadcasted on major US airlines including American Airlines, Delta and US Airways. http://hhp.uh.edu/news/11 layne-interview.php. Feb. 2011.

Layne, C. S. Featured in "Student-Developed Health Intervention Programs Presented in Virtual World." UH news release: April 4, 2011. UH Today News and UH News Digest: April 7, 2011. http://www.uh.edu/news-events/stories/2011articles/ April 2011/442011Second Life.php.

Ledoux, T. A. Research featured in "Researchers Use Virtual Reality to Investigate, Assess Food Addictions" in UH news release and on HealthCanal.com. June 23, 2011. Photo of the Week on UH Facebook: http://tiny.cc/HHP-Ledoux.

Ledoux, T. A. "Virtual Views for Obesity Research" article in the UH Daily Cougar: http://thedailycougar.com/2011/07/06/virtual-views-for-obesity-research/. July 6, 2011.

Ledoux, T. A. Quoted in "Obesity Weighing More on Texans" article on Chron.com: http://www.chron.com/disp/story.mpl/metropolitan/7644303.html. July 7, 2011.

Ledoux, T. A. Featured in KHOU Channel 11 News video: "Courtney Zubowski Takes Fattening Fare to Memorial Park for Calorie Quiz." Houston, Texas. July 20, 2010.

Ledoux, T. A. Featured on Canada's Global National News in "A Virtual Buffet" segment. http://www.globalnews.ca/video/index.html. Toronto, Canada. July 25, 2011.

Lee, R. E. Featured in Battling Obesity segment on KPRC Channel 2 News. Houston, Texas. July 13, 2010.

Publicity

Lee, R. E. The 2010 TORC conference was featured in the UH news release, "Researchers, Policy Makers Gather to Discuss Obesity in the New Decade." Nov. 15, 2010. Webnewswire.com. Nov. 18, 2010.

Lee, R. E. Featured in "More Veggies, More Fruit, More Exercise—More TORC" article in UH news release, UH and CLASS home pages, UH News Digest. http://www.uh.edu/class/news/archive/2011/february/hhp-veggies/index.php. Feb. 2011.

Lee, R. E. "Health Interest Increases, Obesity Still a Factor" <u>ImpactNews.com online at http://tiny.cc/Lee-Impact</u>. Jan. 21, 2011.

Lee, R. E. Featured in "Obesity Researcher Heads South of the Border to Examine Issue as a Fulbright Scholar" article in UH news release, UH and CLASS home pages, NewsWise.com, UH News Digest, UH Today and UH Points of Pride. http://www.uh.edu/class/news/spotlight/2011/hhp/rebecca-lee/index.php. Feb. 2011.

Lee, R. E. "Study Demonstrates Biking Investments Can Affect Health Care ad Fuel Costs." National Coalition for Promoting Physical Activity article: http://www.ncppa.org/home/news/38/. February 22, 2011.

Lee, R. E. Featured in "Obesity Battle Taken to Neighborhoods" article in The Daily Cougar. Feb. 2011.

Lee, R. E. Interviewed by Houston's KPFT 90.1 FM for the "Real Wellness Wednesday" segment about TORC's Science and Community events. May 2011.

Lee, R. E. Highlighted in CLASS newsletter article, "The College Congratulates its Fulbright Scholars." June 28, 2011.



Litterer, M. E. Featured in "Car Crash Changed UH Student's Direction" article: http://tiny.cc/HHP-Litterer Topix, Chron.com's Commons section, http://tiny.cc/HHP-Litterer-Chron and East End neighborhood section.

Liu, J. Highlighted in "Slips, Trips and Ways to Stay on Your Feet." New England Health Advisory. Nov. 16, 2010.

McFarlin, B. K. Quoted in WSOCTV.com's Exercise Extremes article. http://www.wsoctv.com/health/24929334/detail.html. Sept. 10, 2010.

McFarlin, B. K. Featured in "Running on Empty: Researcher Examines Exercise and Body's Immunity" article in UH news release, TheCypressTimes. com, HealthCanal.com, UH News Digest, UH home page and CLASS Web site. http://tiny.cc/McFarlin-Biothera. Jan. 2011.

McFarlin, B. K. Featured on Austin, Texas KXAN television, online video and article: "Marathon Runners' Health to be Studied." https://www.hhp.uh.edu/news/11 austin-marathon.php. Feb. 2011.

McFarlin, B. K. Keynote speaker at the 10th International Society for Exercise and Immunology (ISEI) Symposium at St Catherine's College, Oxford, United Kingdom. July 10–13, 2011.

McFarlin, B. K. HoustonPBS UH Moment: "Environmental Chamber Measures Heat Illness" was the featured video on UH News Digest. http://www.youtube.com/watch?v=7gxNoFsifxc. June 2, 2011.

McFarlin, B. K. "Wellmune WGP® Boosts Athletes' Immunity" article on NaturalProductsInsider. com: http://tiny.cc/McFarlin-NPI; "Wellmune WGP® Reduces Immune Suppression Associated with Strenuous Exercise" on BusinessWire.com: http://tiny.cc/McFarlin-BW, NutritionHorizon.com: http://tiny.cc/McFarlin-NH; and "University of Houston Releases Wellmune WGP Study Results" on PaharmaceuticalBusinessReview.com: http://tiny.cc/McFarlin-PBR. July 2011.

Moore, L. Shasta's Culinary Workshop featured in "Healthy Menu Ready, Class Taking Orders" article in The Daily Cougar.

http://thedailycougar.com/2011/03/02/healthy-menu-ready-class-orders/.
March 2011.

Moore, L. Shasta's Culinary Workshop featured in video by HoustonPBS UH Moment.



http://www.youtube.com/watch?v=z5CzO-TbKOY. April 28, 2011.

O'Connor, D. P. "Flawed Method May Underestimate Childhood Obesity." ACSM Sports Medicine Bulletin's Active Voice feature: http://www.multi-briefs.com/briefs/acsm/active9-14.htm. Sept. 14, 2010.

O'Connor, D. P. "Childhood Obesity May Be Underreported." PR Newswire: http://tiny.cc/
OConnor-PRNews and at Forbes.com: http://tiny.cc/OConnor-Forbes. Sept. 1, 2010.

O'Connor, D. P. Study featured in Comparison of measured and parents' reported height and weight in children and adolescents article on MDLinx at http://www.mdlinx.com/pediatrics/news-article.cfm/3400993.

Paloski, W. H. Quoted in "NASA, University of Houston to host Humans in Space Symposium" article on PRNewswire.com. Oct. 19, 2010. And online: http://fastnewstrack.co.cc/8787.html. Oct. 19, 2010.

Paloski, W. H. Featured in UH Moment: "Space Ed." KUHF Houston Public Radio Broadcast with Marisa Ramirez: http://tiny.cc/Paloski-SpaceEd. April 13, 2011.

Paloski, W. H. Appeared in "A Space Milestone." KUHF Houston Public Radio Broadcast with Pat Hernandez. Available at http://app1.kuhf.org/articles/1302645222-A-Space-Milestone.html. April 12, 2011.

Paloski, W. H. Quoted in "Symposium to Discuss Future of Space Exploration." The Daily Cougar. com. Available at http://tiny.cc/Paloski-HISS. April 11, 2011.

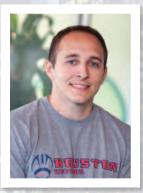
Paloski, W. H. Featured in UH Moment: "Center for Neuromotor & Biomechanics Research." KUHT Houston PBS with Marisa Ramirez: http://www.youtube.com/watch?v=qKD4kg C69k. February 17, 2011.

Paloski, W. H. Quoted in "Spring Event to Highlight Advances" article by Katie Rowald. The DailyCougar.com: http://tiny.cc/Paloski-Symposium. Feb. 8, 2011.

Paloski, W. H. NASA, "University of Houston to host Humans in Space Symposium." On Fresh-News.com, PRNewswire.com and Newscom.com. March 2011.

Paloski, W. H. "18th International Academy of Astronautics Humans in Space Symposium Comes to Houston." UH news release. April 4, 2011.

Paloski, W. H. Quoted in "Program Helps Older Adults Avoid falls" article on Chron.com. http://tiny.cc/HHP-Balance. April 20, 2011.



Sunseri, C. P. Featured in "The Marine Corps Changed this Graduate Student's Life" article online at http://tiny.cc/
HHP-Sunseri-Topix.
Also on Chron.com's River Oaks and East End neighborhood sections and the American Dietetic Association's newsletter.

Thrasher, A., & Simpson, R. J. "UH Study Focuses on Immunity, Infection, Exercise and Spinal Cord Injured Patients" article about TIRR Foundation grant in UH news release, TheCypressTimes.com, UH Today News and UH Digest. http://tiny.cc/Thrasher-TIRR. March 2011.

Thrasher, A., & Simpson, R. J. TIRR Foundation grant featured in UH Moment: "Spinal Cord." March 2011.

Thrasher, A., & Simpson, R. J. "Study Seeks to Learn How Immune and Central Nervous Systems Work Together" article on CLASS Web site. March 2011. http://www.uh.edu/class/news/ archive/2011/march/hhp-spinalcord/index.php.

Wilson, J. Highlighted in "Cougars at Work" article in UH News magazine and UH Today article featuring her husband, Jerry Wilson, a UH employee. Feb. 2011.



Student Achievements

Adams, A. (undergraduate) Selected to receive department research assistantship to pursue an M. S. in Exercise Science at Texas Christian University.

Adamus, H. J., Mama, S. K., Medina, A. V., & Lee, R. E. Perceived neighborhood environment factors and physical activity in African American women. International Journal of Exercise Science. 2 and HHP Graduate Student Research Day, UH. Oct. 20, 2010.

Adamus, H. J., Mama, S. K., & Lee, R. E. (2010). Items on a perceived environment measurement tool are grouped differently in low and high income African American Women. International Journal of Exercise Science, Vol. 6: Iss. 1, Article 27. http://digitalcommons.wku.edu/ijesab/vol6/iss1/27/ and TORC Conference, Houston, Texas. Nov. 2010.

Adamus, H. J., Mama, S. K., & Lee, R. E. Using the PARA to evaluate physical activity resource attributes in Houston and Austin, Texas. International Journal of Exercise Science, Vol. 2: Iss. 3, Article 21 and TACSM, Austin, Texas. March 2011.



Lee, R. E., Mama, S. K., McAlexander, K., Adamus, H., Medina, A. (2011). Neighborhood and PA: Neighborhood Factors and Physical Activity in African American Public Housing Residents. Journal of Physical Activity & Health, 8(Suppl 1), S83–90. PMID: 21350267.

Student Achievements

Anzures, C. (undergraduate) Participated in the STAR program at UH, which is designed to increase the number of underrepresented minorities who are engaging in research.

Beard A. J. & Paloski, W. H. Automation of posturographic analysis with Matlab. National Center for Human Performance Annual Meeting. Houston, Texas. Nov. 12, 2010.

Beard A. J. & Paloski, W. H. Novel objective measures to improve rehabilitation outcomes for chronic ankle instability. International e-conference on Kinesiology and Integrated Physiology. Oct. 4–22, 2010.

Benjamin, A. Received a scholarship award from the UH Black Alumni Association. She is a kinesiology major studying sports medicine.



Bigley, A. B., Spielmann, G. Rector,
Jerrald L. & Simpson,
R. J. The impact of
latent CMV infection
on NK-cell mobilization and expression
of KLRG1 and CD57
in response to acute
exercise. International
Journal of Exercise
Science, Vol. 2: Iss. 2,
Article 6.

http://digitalcommons.wku.edu/ijesab/vol2/iss2/6 and TACSM. 2010.

Bigley, A. B. Submitted an application to the National Science Foundation for a Graduate Research Fellowship (\$121,500).

Bigley, A. B. Received an honorable mention from the National Science Foundation for his application to the Graduate Research Fellowship program.

Bigley, A. B. Received Research Assistant Fellowship from the UH College of Liberal Arts and Social Sciences.

Breslin, W. L., Johnson, C. A., Strohacker, K., Davidson, T., Carpenter, K. C., Moreno, J. A., Foreyt, J. P., & McFarlin, B. K., (Poster). The effect of childhood weight status on monocyte and chemokine concentration. Project completed in collaboration with the Baylor College of Medicine. 10th ISEI Symposium, Oxford, England. July 11–13, 2011

Breslin, W. L. Selected to receive 2011 Student Research Grant from TACSM (Direct: \$800; IDC: \$0).

Breslin, W. L., Strohacker, K., Carpenter, K. C., & McFarlin, B. K. (2011). Mouse blood monocytes: Standardizing their identification and analysis using CD115. Journal of Immunological Methods. (Epub ahead of print), PMID: 21466808.

Breslin, W. L., Johnston, C. A., Strohacker, K., Carpenter, K. C., Davidson, T., Moreno, J. P., Foreyt, J. P., & McFarlin, B. K. Childhood overweight is associated with increased Monocyte concentration and altered subset distribution. International Journal of Exercise Science, Vol. 2: Iss. 3, Article 17. http://digitalcommons.wku.edu/ijesab/vol2/iss3/17 and TACSM. March 2011.

McFarlin, B. K., Weintraub, R. J., **Breslin, W. L., Carpenter, K. C., & Strohacker, K.** (2011). Designing online learning modules in kinesiology. Educational Technology & Society, 14(2):278–284.

Carpenter, K. C., Breslin, W. L., Davidson, T., Adams, A., & McFarlin, B. K. (Poster). The effects of yeast beta-glucan supplementation on monocytes and cytokines in response to exercise. 10th ISEI Symposium, Oxford, England. July 11–13, 2011.



Carpenter, K. C., Strohacker, K., Breslin, W. L., Lowder, T. W., & McFarlin, B. K. (2011). Voluntary wheel running during weight loss leads to differential changes in monocytes, compared to forced treadmill running. International Journal of Exercise Science, Vol. 2: Iss. 3, Article 52. http://digitalcommons.wku.edu/ijesab/vol2/iss3/52 and TACSM. 2011.

Carpenter, K. 2nd Place in Doctoral Student Poster Category, 2011 TACSM annual meeting. Feb. 2011.

Cheung, K. Recipient of TORC's Graduate Student Summer Learning Fellowship Award. June 2011.

Cook, E. Named as National Honor Student by the American Kinesiology Association. http://tiny.cc/HHP-Cook. 2011.

Deal, C. Received a Nkrumah Study Abroad Scholarship Award from the African American Awards Studies program. May 6, 2011.

Deramo, L. Named as National Honor Student by the American Kinesiology Association. http://tiny.cc/HHP-Deramo. 2011.

Dettmer, M., Pourmoghaddam, A., & Layne, C. S. Effects of healthy aging on motor lateralization: A functional near-infrared spectroscopy (fNIRS) study.

Annual meeting of Society of Neuroscience, San Diego, CA. Nov. 2010.

Eason, C. Selected to receive 1st year Doctoral Student assistantship from UH.

Eason, C. Recipient of TORC's Graduate Student Summer Learning Fellowship Award. June 2011. Forrest, A. Featured in "New Research at the CNBR Will Focus on Children with ADHD" article on CLASS and UH home page. Jan., Feb. 2011.

Hieronymus, M. Featured in "Program Helps Older Adults Avoid falls" article on Chron.com. http://tiny.cc/HHP-Balance. April 20, 2011.

Ivkovic, V., Beard, A. J., Di Bello, T., Flemming, J., Gomez, J., Hipp, J., Jones, Z., Shah, S., Weinberg, J., & Paloski, W. H. Effects of lumbosacral braces on balance. HHP Graduate Student Research Day. Houston, Texas. Oct. 20, 2010.

Simpson, R. J., Ploutz-Snyder, L., O'Connor, D. P., Ivkovic, V., Wickwire, P. J., McFarlin, B. K., & Paloski, W. H. Development of a submaximal exercise protocol to identify the ventilatory threshold in astronauts. 18th IAA Humans in Space Symposium, Houston, Texas. April 11–15, 2011.

Keenum, C. Named to the 75th Annual Maxwell Award Watch list, which honors the nation's best offensive player. UH News Digest. July 2011.

Klein, Y. Best poster at the 2010 UH Undergraduate Student Research Day.

Knoblauch, M. A., O'Connor, D. P., & Clarke, M. S. F. (2010). Capillary sampling for an indirect biomarker of muscle damage after exercise. Journal of Strength and Conditioning Research, 24(12), 3471-3475.

Clarke, M. S. F., **Knoblauch, M. A.,** & O'Connor, D. P. Monitoring biomarkers of bone loss in human

sweat." IAA 18th Humans in Space Symposium, Houston, Texas. April 11–15, 2011.

Kunz, H. Exercise prior to pregnancy enhances Treg-mediated suppression and reduces asthma severity in offspring in a mouse model of asthma (Poster). The 98th American Association of Immunologists International Meeting, San Francisco, CA. May 13–17, 2011.

Kunz, H. Received an HHP travel award to the 98th American Association of Immunologists International Meeting, San Francisco, CA. May 13-17, 2011. \$350.

Kunz, H. Exercise significantly enhances regulatory t-cell responses in a non-TGF-beta-dependent manner in a mouse model of asthma. The 2010 Pittsburgh International Lung Conference, Pittsburgh, PA. Dec. 10–11, 2010.

Kunz, H. Received travel grant from the conference organizers to attend the 2010 Pittsburgh International Lung Conference, Pittsburgh, PA. Dec. 10–11, 2010.

LaVoy, E. Awarded a research grant from the



Texas Chapter of the American College of Sports Medicine (TACSM). Project Title: The effect of latent CMV infection on cytokine profiles of T cell subsets acute following exercise. 2011.

LaVoy, E. Awarded the prize for best presentation (doctoral category)

from the TACSM. Presentation Title: Effect of HSV-1 infection on the exercise-induced mobilization of T-cell subsets. 2011.

Lee, S. M. C., Clarke, M. S. F., O'Connor, D. P., Stroud, L., Ellerby, G., & Sollers, B. R. (2011) Near infrared spectroscopy-derived interstitial hydrogen ion concentration and tissue oxygen saturation during ambulation. European Journal of Applied Physiology. (Epub ahead of print), PMID: 21212975.

Lopez, Y. University of California – San Francisco (UCSF) Post-Doctoral Bootcamp – Student Travel Award. Aug. 3, 2010.

Lopez, Y. Southern Regional Education Board (SREB) Diversity Conference – Student Travel Award. Aug. 25, 2010.

Lopez, Y., Mama, S. K., Medina, A. V., & Lee, R. E. Association of fat and alcohol consumption with physical activity among obese women of color. International Journal of Exercise Science, Vol. 6: Iss. 1, Article 24. http://digitalcommons.wku.edu/ijesab/vol6/iss1/24/ and TORC Conference, Houston, Texas. Nov. 2010.

Lopez, Y., Mama, S. K., Medina, A. V., & Lee, R. E. (2010). Is increased physical activity associated with decreased fat and alcohol consumption among overweight and obese African American and Hispanic or Latina women? Obesity, 18(Suppl 2):S132.

Wolfe, K. L., **Lopez, Y.,** Medina, A. V., Reese-Smith, J., & Lee, R. E. Evaluating 'reach' in the Health Is Power (HIP) Study. International Journal of Exercise Science, Vol. 6: Iss. 1, Article 19. http://digitalc-ommons.wku.edu/ijesab/vol6/iss1/19/ and TORC Conference, Houston, Texas. Nov. 2010.

Lee, R. E., Wolfe, K. L., Reese-Smith, J. Y., **Lopez, Y.**, Mama, S. K., & Medina, A. V. Recruitment and retention of minority women in the Health Is Power (HIP) study. Society of Behavioral Medicine Annual Meeting, Washington, D.C. April 2011.

Student Achievements



Madansingh, S.
The Canadian Space
Agency is sending
him to Deutsches
Zentrum für Luft-und
Raumfahrt (DLR),
which is the German
Aerospace Center in
Cologne, Germany
to collect data using
the European Space

Agency's (ESA) new short-arm centrifuge.

Momin, A. Recipient of TORC's Undergraduate Student Summer Learning Fellowship Award. June 2011.

Montes, L. Accepted into the Doctorate of Physical Therapy program at UTMB, Galveston, Texas.

Nguy, S. Named UH Tier One Scholar.

Ozdemir, A. Featured in "Program Helps Older Adults Avoid falls" article on Chron.com. http://tiny.cc/HHP-Balance. April 20, 2011.

Paek, J. Awarded UH Summer Undergraduate Research Fellowship (SURF). April 2011.

Pourmoghaddam, A., Dettmer, M., Paloski, W. H., O'Connor, D. P., Patel, J., Khorram, A., Lopez-Tafurth, Y., & Layne, C. S. Synergos index: Identifying multiple muscle coactivation during isotonic exercise. Annual meeting of Society of Neuroscience, San Diego, Ca.

Pourmoghaddam, A., Received a doctoral fellowship from the Houston Endowment gift for his "SYNERGOS in the Analysis of EMG Signals" dissertation. June 2011.

Robertson, A. Research at CNBR was featured in "Research Corner" article in the NCHP newsletter. April 2011.

Robertson, A. Wrote "Scientifically Seeking Religious Truth" article published on MormonTimes. com, DeseretNews.com: http://tiny.cc/Robertson and in UH News Digest. April 27, 2011.

Sahnoune, I. Awarded UH Summer Undergraduate Research Fellowship (SURF). April 2011.

Siddiqi, S., Mama, S. K., & Lee, R. E. (2011). Developing an Obesity Prevention Intervention in Virtual Worlds: The International Health Challenge in Second Life. Journal of Virtual Worlds Research. 3(3), 3-26.

Simon, K. Interviewed by Houston's KPFT 90.1 FM for the "Real Wellness Wednesday" segment about TORC's Science and Community events. May 2011.

Soltero, E. Recipient of TORC's Graduate Student Summer Learning Fellowship Award. June 2011.

Booth, S., Florida-James, G. D., McFarlin, B. K., **Spielmann, G.,** O'Connor, D. P., & Simpson, R. J. (2010). The impact of acute strenuous exercise on TLR2, TLR4 and HLA.DR expression on human blood monocytes induced by autologous serum. European Journal of Applied Physiology, (6):1259–68. PMID: 20799043.

Spielmann, G. 2010 Annual meeting of the French Society for Immunology, Marseille, France. Nov. 2010.

Strohacker, K. Selected to serve as a Post Doctoral Research Fellow at Brown University.

Esposito, L. A., Simpson, R. J., **Strohacker, K., Carpenter, K. C.,** & McFarlin, B. K. (Epub: 2010). Defining a longitudinal survival model to examine forced treadmill running as a countermeasure for diet-induced weight gain. Lab Animal, 44(4), 305–11.

McFarlin, B. K. (Co-Pl), & **Strohacker, K.** (Co-Pl). The metabolic effects of exercise on the fish and kangaroo machine. Funded by The Fish and Kangaroo Machine Company. 12/1/10–11/30/11. (DC: \$2,030; IDC: \$406, 20%).

Sunseri, C. P. Student Corner Interview. Sports, Cardiovascular, and Wellness Nutrition. http://www.scandpg.org/careers-and-students/students-and-scan/. Nov. 29, 2010.

Dinh, J. N., **Sunseri, C. P.,** Mama, S. K., Lee, R. E., & McNeill, L. Internet-based intervention to improve dietary habits in women of color: SAving Lives Staying Active (SALSA). International Journal of Exercise Science, Vol. 6: Iss. 1, Article 25. http://digitalc-ommons.wku.edu/ijesab/vol6/iss1/25/ and TORC Conference, Houston, Texas. Nov. 2010.

Pourmoghaddam, A., Uzun, S., Hieronymous, M., Mathew, S., & Thrasher, T. A. Determination of neuromuscular fatigue in basketball players using recurrence quantification analysis of surface EMG. Annual Meeting of the Society for Neuroscience, San Diego, CA, Nov. 13–17, 2010.

Thrasher, T. A., Fisher, S., & Ward, J. S. Representations of central patterns in normal and pathological gait: an EMG analysis. Annual Meeting of the Society for Neuroscience, San Diego, CA, Nov. 13–17, 2010.

Ward, J. S., Qadeer, A., Uzun, S., Simpson, R. J., & Thrasher, T. A. The impact of quadriplegia on immune response to acute arm crank exercise. National Center for Human Performance Annual Meeting, Houston, Texas, Nov. 11–12, 2010.

Recipients of the 2011 HHP Outstanding Undergraduate Student Awards. April 2010.

Arnold, S. Sport Administration

De La Garza, M. Fitness and Sports

Hollingsworth, A. Nutrition

Mbah, T. Sport Administration



Recipients of the 2011 HHP Outstanding Graduate Student Awards. April 2010.

Buckner, M. Sport Administration

Bush, S. Sport Administration





Students Accepted into Dietetic Internships

Barrett, S. Ona, P. Belleny, D. Pack, T.

Chu, A. Rancher, A.

Duane, L. Safaie, S.

Duby, H. Schwartz, M.

Harris, C. Sia, D.

Hollingsworth, A. Swaby, A. C.

Jiang, T. Taub, M.

Kabir, A. Vivchek, J.

Kahlil, M. Waheed, S.

McConnell, C. Wieland, R.

Miller, A. Williams, S.

Noriega, P.



Recipients of the 2011 HHP Graduate Student Excellence Awards. April 2010.

Adamus, H. Overall Graduate Student Excellence Award

Lopez, Y. Teaching Excellence Award

Strohacker, K. Tony Jackson Research Excellence Award

WELCOME NEW FACULTY



r. Tracey Ledoux joined the HHP faculty in the fall of 2010 as assistant professor and member of the Texas Obesity Research Center's executive committee.

She earned her Ph.D. in counseling psychology at Oklahoma State University in 2007, and her bachelor's in community counseling from the University of Memphis in 2003. Ledoux is also a Registered Dietitian.

Her research focus is in developing effective obesity prevention interventions that target psychosocial mediators to mitigate the impact of the obesogenic environment and the natural rewarding properties of food on the individual among families in the earliest years of development.

Prior to joining HHP, Ledoux was with the Children's Nutrition Research Center at Baylor College of Medicine in Houston.

his fall, HHP welcomes Dr. Stacey L. Gorniak as assistant professor of motor behavior. Her research focuses on understanding healthy and pathological neuromuscular control.

Before joining HHP, she was a postdoctoral research fellow in the department of biomedical engineering at the Cleveland Clinic Lerner Research Institute, and in the functional electrical stimulation group at the Cleveland Veterans Affairs Medical Center, both in Cleveland, Ohio. Gorniak earned her doctoral degree in kinesiology at Pennsylvania State University.



FACULTY

Charles Layne, Professor and Department Chair

Dr. Lisa Alastuey, Clinical Assistant Professor

Sharon Bode, Clinical Associate Professor

Mark Clarke. Associate Professor

Tracey Ledoux, Assistant Professor

Rebecca Lee, Associate Professor

Jian Liu, Assistant Professor

Thomas Lowder, Assistant Professor

Kimberlee Matalon, Associate Professor

Brian McFarlin, Associate Professor

Laura Moore, Visiting Assistant Professor

Daniel O'Connor, Assistant Professor

William Paloski, Professor

Demetrius Pearson, Associate Professor

Claudia Scott, Lecturer

Richard Simpson, Assistant Professor

Adam Thrasher, Assistant Professor

Rey Treviño, Clinical Assistant Professor

STAFF

Randi Weintraub Betts, Program Director

Amanda Butcher, Office Assistant 1

Academic Affairs

Todd Boutte, Admission Counselor 2

Anna Duron, Academic Advisor 1

Alma Gonzalez, Academic Advisor 1

Erin Prevett Major, Academic Advisor 2

Jessica Wheeler, Program Coordinator

Business Affairs

Angie Vazquez, Financial Coordinator 1

Media and Technology

Jo'Nathan Gwynn, Technical Services Specialist 2

Martha Hayes, Communications Coordinator

Prashant Mutgekar, Programmer Analyst 2

Joy Wilson, Graphic Designer 2

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