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I’m so pleased to present the 2012 Department of Health and Human Performance (HHP) annual report. It represents a very productive academic year for faculty and students! We continue to make great strides toward offering our students a Tier One education, and to prepare them for success as leaders in the exercise, health and fitness, sport administration and nutrition industries.

The strategic initiatives set forth by UH President Renu Khator and the Board of Regents continues to be the blueprint for our pursuit of research and academic excellence. Those goals and our accomplishment of them are seen in the annual report sections: Nationally Competitive Research, Student Success, Community Advancement, Local and National Recognition, Competitive Resources and Productivity.

“We will create a culture of giving so that students will understand how important their contributions are to the future success of the department.”

This year brought additional competitive resources to enhance and expand our academic programs. Learn about a grant from the Center for Disease Control that is providing multi-year opportunities for students to conduct research. Read about the unique partnership evolving between faculty, students and staff with the establishment of a new undergraduate scholarship from within the department.

Please feel free to contact me at claye2@uh.edu.

Go Coogs!

Dr. Charles Layne
Professor and Chair
NATIONALLY COMPETITIVE RESEARCH
Researchers Evaluate CDC Childhood Obesity Programs

The Centers for Disease Control and Prevention (CDC) awarded Dr. Daniel O’Connor, HHP professor and TORC executive committee member, $4.25 million over four years to create an innovative evaluation method that will examine and compare three comprehensive childhood obesity programs underway in California, Massachusetts and Texas. The team includes a group of health researchers from the TORC and the Texas Institute for Measurement, Evaluation and Statistics (TIMES). The Best Evaluation Tools and Techniques for Effective Recommendations for Polices (BETTER Policies) project seeks to provide evidence-based recommendations to policy makers as part of the Affordable Care Act (ACA): Childhood Obesity Research Demonstration Initiative to support childhood obesity health initiatives.

“Resolving this critical issue will require efforts that target multiple sectors and layers of society, as well as changes in public policy,” said O’Connor.

These programs will target underserved children between the ages of 2 and 12 years old. Programs will be available not only through families and schools, but also through health care providers, community and faith-based organizations and the private sector, as well as incorporating changes in public and institutional policies.

The first year of the project has been devoted to working with sites on their project designs and developing an evaluation plan to measure the various aspects of each program’s delivery, effectiveness, feasibility and sustainability.
A Multi National Strategy Against Obesity

The obesity epidemic is a multicultural challenge. Dr. Rebecca Lee, TORC Director, received a $100,000 grant from the National Institutes of Health (NIH) to support research between UH and the Universidad de Guadalajara to establish a multinational strategy to combat physical inactivity—a breeding ground for obesity.

During the past year, the Multinational Collaboration to Increase Physical Activity in Hispanics project has made great strides toward identifying behavioral and social science research priorities. It held its first scientific meeting in Guadalajara, Jalisco, Mexico, March 26-27, 2012.

Professors Rebecca Lee, Charles Layne and Daniel O’Connor, TORC lab manager, Scher Mama, and a group of HHP graduate and undergraduate students attended the meeting.

The coming year includes additional scientific meetings to be held in both the U.S. and Mexico. A scientific symposium will be held at TORC’s biennial conference. The research conference, titled “Time for a Transcultural, Transdisciplinary, Transformational Approach to End Obesity” will be held November 5-6, 2012, on the UH campus at the Elizabeth D. Rockwell Pavilion in the M.D. Anderson Library.
Virtual Investigation of Food Addiction

Assistant Professor Tracey Ledoux is using virtual environments to try to induce food cravings in hopes of finding strategies to assess and treat them. “There is a growing body of research that shows that consumption of palatable food stimulates the same reward and motivation centers of the brain that recognized addictive drugs do,” Ledoux said.

In the collaborative investigation with Dr. Patrick Bordnick from the UH Graduate College of Social Work, participants wear a virtual reality helmet to enter a “real -world” restaurant, complete with all the sights, sounds and smells. A joystick will allow them to walk to a buffet, encounter wait staff and other patrons. The innovative approach provides a very effective, cost-efficient tool that can be used to increase the understanding of food cravings.

Texas Obesity Research Center

The Texas Obesity Research Center (TORC) secured new federal research funding, made significant progress on existing research projects, and continued its participation in local health fairs and health-related events. TORC faculty and students showcased their research in the 2011-12 academic year by presenting at national and international scientific conferences and meetings. TORC director, Dr. Rebecca Lee, was awarded the prestigious Fulbright Scholar Award and spent the 2011-2012 academic year in Guadalajara, Jalisco, Mexico researching contributing factors to obesity. Read more about her work on page 21.

Science and Community Project

The Science and Community: Ending Obesity Improving Health project is in its final year and has made significant progress toward engaging community members in the research process. During the 2011-12 academic year, the Science and Community partnership created and submitted a research proposal to develop and evaluate a physical activity and dietary habits intervention delivered by mentored high school students to preschoolers in day care facilities.

The partnership plans to hold a final symposium in October 2012, where they will recruit high schools and day care centers to participate in the project. Although funding for this project ends in December 2012, the partnership will continue to work toward sustainable health outcomes.
Biomechanics and the Arts

Performing artists, like dancers, actors, vocalists and instrumentalists, are at risk of repetitive use injuries that limit their ability to perform, and, in the case of professionals, cause serious economic hardship.

CNBR Postdoctoral Fellow Angela Robertson has been leading a team of investigators, including Dr. William Paloski and Dr. Norman Fischer of the Shepherd School of Music at Rice University, in studying a group of elite cellists, who are particularly prone to back injuries.

This study seeks to determine what combinations of chair height and incline can reduce back muscle activity in cellists (potentially reducing back injury), and how such playing positions vary with individual anthropometrics.

Robertson is testing these hypotheses by recording the back muscle activation patterns (EMG), back angle kinematics, and ground reaction forces from cellists playing short pieces while seated in different positions achieved with a specialized chair and wedge shaped cushions.

This data will be compared with the cellists’ records of back pain experienced over the course of several months in order to determine which playing positions might result in broader force distribution, reduced muscle activity and reduced risk of injury.

Thought Control

Recent advances in robotics technologies have led to new hope for mobility restoration through robot-assisted rehabilitation and/or robotic exoskeleton prosthetics for millions of people around the world who suffer from impaired mobility caused by stroke, spinal cord injury, neuromotor disease and other disorders.

CNBR Director William Paloski is collaborating with a team led by Professor Jose Luis Contreras-Vidal of the UH electrical and computer engineering department on an NIH-sponsored project to further
advance these technologies by creating brain-machine interfaces (BMI) that could use an individual’s natural thoughts to control locomotor activities provided by an exoskeleton prosthetic device.

The team is investigating the extent to which it might be possible to reverse engineer human gait and movement control signals. They are correlating non-invasive brain activity signals (EEG activity) with neuromotor activation signals (EMG activity) and kinematic motion signals obtained from normal subjects performing rudimentary locomotor tasks. Accurate decoding of these signal patterns is essential for extracting useful signals for use in controlling neuro-prosthetic devices.

If successful, this work could facilitate independent mobility and enhance the health of disabled persons with neurological disability conditions and provide unprecedented opportunity to enhance their functional independence and quality of life.

**Muscle Function During Space Flight**

Despite spending hours exercising each day aboard the International Space Station (ISS), astronauts continue to lose muscle mass, strength and endurance during their missions. NASA’s Human Research Program (HRP) has identified these muscle function changes as a significant risk to astronaut performance during long space flight missions, and has recently awarded a grant to a group of HHP faculty to study the role of sensory mechanisms in these functional changes.

Professors William Paloski, Mark Clarke, Charles Layne, Daniel O’Connor and Adam Thrasher will use the newly available Muscle Atrophy Research Exercise System (MARES) aboard the ISS to examine systematically the relationships among lower limb loading and antigravity muscle activation, motor coordination, motor control and muscle homeostasis.

By separating the contributions of pressure receptors on the feet from other load receptors embedded in the muscles and joints, they will be able to answer a fundamental physiological question regarding the independent roles of these two sources of loading information. They will also be able to develop physiological evidence related to the potential future use of passive foot stimulation as a countermeasure. If successful, the results should lead to improved crew safety and performance in future long-duration space flight missions.
Long-Term Exposure to Microgravity

Dr. Richard Simpson is the principal investigator of a NASA grant that will research the effects of long-term exposure to microgravity on salivary markers of innate immunity. Professors Mark Clarke, Dan O’Connor, William Paloski and Thomas Lowder make up the research team.

Immune system dysregulation has been documented during and after space flight, but it is not known if these changes increase infection susceptibility or pose a significant health risk to crewmembers. Nor is it known if changes in immunity are due to the microgravity environment per se, or to the stressors associated with landing and re-adaptation to the 1G environment.

Simpson’s Flight Definition investigation aims to determine the effects 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 in astronauts. Saliva, urine and blood samples will be collected from crewmembers of the ISS mission and ground-based controls at various times before, during and after their flight.

This project will help to establish if space flight alters innate immune function, which is important to determine if altered immunity poses a significant risk of an adverse health event among crewmembers.

Exercise Intervention and Lung Function

A major focus of Dr. Thomas Lowder’s research concerns how exercise, aging, and stress affect immunity, particularly lung function. Currently, his research is working with a transgenic mouse model to determine if chronic moderate exercise can decrease tumorigenesis prior to and during tumor development, and whether a mental stressor during pregnancy exacerbates tumor development in offspring. He is also investigating if exercise during pregnancy can reduce tumor development in offspring.
“We have demonstrated that moderate exercise significantly reduces mortality and inflammation during influenza viral infections in both young and aged mouse models,” Lowder said.

His team is also collaborating with several investigators nationwide to determine how lifestyle and behavior affect a rare lung disease that affects women almost exclusively, lymphangioleiomyomatosis (LAM). This research will be a two-phase project, with the first phase examining if an exercise intervention can enhance lung function (FEV1 and other measures of pulmonary function) in LAM patients, while the second phase will examine if an exercise intervention can increase quality of life in LAM patients following lung transplant.

Preventing Muscle and Bone Loss

Professor Mark Clarke, a NASA veteran, is directing a current investigation that aims to assess the behavior of particular proteins known to contribute to muscle wasting, a large concern for astronauts on long-term space flights. He and his investigators are primarily conducting their research in the LIP, with support from the CNBR facilities.

“This type of research has applications not only for understanding muscle atrophy in astronauts, but to many clinical populations here on Earth where muscle wasting is part of the disease, such as spinal cord injury, cancer cachexia and muscular dystrophy,” Clarke said.

Research continued on the OsteoSphere project with NASA where investigators created a process that grows real human bone in tissue culture, which can be used to investigate how bones form and grow. Clarke and his collaborators are investigating the technology’s potential use in clinical orthopedic applications by confirming that the Osteo-Spheres and a variety of OsteoSphere-derived products were capable of inducing new bone formation in an animal model.
**NASA Awards Graduate Student Researcher**

In the fall of 2011, NASA provided a $60,000 scholarship for research to be awarded to an HHP student to investigate how the muscles of astronauts respond to microgravity. The issue of muscle wasting has been a longtime challenge for astronauts.

Doctoral candidate, Lyle Babcock, was the first recipient of this award, and the program is expected to expand to two student research recipients in the near future. The funds are distributed over three years.

“I came to Houston and UH because of HHP’s ongoing research in the area of space life sciences,” Babcock said. “The scholarship and the possibility of working with NASA made the move much more attractive. I am very grateful to NASA and the department of health and human performance.”

UH and NASA are partners through a Space Act Agreement that allows UH students, faculty and NASA scientists to share information and resources. The NASA student fellowships are funded by a grant obtained by Dr. Layne.

**Space Life Sciences**

HHP’s Space Life Science program includes a master’s degree in human space exploration sciences, and a doctoral curriculum in space life sciences (SLS).

The department has a grant relationship with Wyle Integrated Science and Engineering Group that provides instructors in the SLS classes who are scientists from NASA’s Human Research Program Space Life Sciences group.

The program 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.

The partnership with NASA provides opportunities for graduate students to conduct research of importance to the future of exploration class manned space flight. Additionally, many of the HHP faculty are former NASA researchers. Opportunities to pursue valuable internships with NASA-Johnson Space Center are also available to many students.
STUDENT SUCCESS
The department launched its Inaugural Student Honors and Awards Gala May 3, 2012 in the Rockwell Pavilion of the M. D. Anderson Library. Faculty, students and staff gathered to celebrate the achievements of its students and to announce two new scholarships to a full house of 125 guests. See the list of award recipients on page 48.

The Princess Chinwendu Eke Memorial Foundation was named the HHP Patron of the Year. Sr. Development Officer Margo Wolanin presented the award to Mr. and Mrs. Henry Eke of the foundation. Fort Bend County Commissioner, James Patterson, received the HHP Distinguished Alumnus of the Year award, presented by HHP Department Chair Charles Layne.

During the dinner, Dr. Layne presented an overview of the department, and Commissioner Patterson and College of Liberal Arts and Social Sciences Dean John Roberts addressed the gathering.

The Princess Chinwendu Eke Memorial Scholarship and the Dr. Andrew Jackson Scholarship were announced as the newest scholarships available to HHP students. Read more about them on page 25.
**HHP Launches Educational Showcase**

The department added an additional opportunity to its pursuit of student success by establishing a Summer Curriculum Development Program award for their undergraduates, which began during the 2011 summer.

The students and their professors presented the results of their projects in a poster format during the department’s inaugural Educational Showcase in October 2011. The event was organized with the help of the HHP Honor Society (HPHS) and the Student Nutrition Association (SNA).

**New Degree Offering**

This fall, HHP will begin offering the Master of Arts in Sport and Fitness Administration degree. This new degree is for those students interested in the administration of physical activity programs. The degree change is due, in part, to the growth of the sport and fitness industry as well as the need for professionally trained physical activity administrators. The Master’s in sport and fitness administration is designed for sport administrators and managers, exercise and recreational specialists working with fitness programs in corporate and medical settings, as well as physical education teachers and coaches, and business personnel in the sports industry.

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**Social Media**

Facebook and Twitter combined, report that they have more than 1 billion users. For some time HHP has used social media to communicate with students, potential students and alumni. Dr. Lisa Alastuey received a UH grant to use social media to enhance the graduate course “Gender and Cultural Issues in Physical Activity and Fitness.”

2012 was the second year for the department to host the Virtual Immersive Translational Applied Learning (VITAL) Showcase. This is a cross-course project created in the virtual environment of SecondLife. There was an open invitation on the Internet for individuals to participate in 45 presentations over three days that showcased the HHP students’ collaborative work.

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**Degrees Conferred**

- Ph.D: 21
- M.Ed.: 26
- M.S.: 6
- Kinesiology — Exercise Science: 84
- Kinesiology — Sport Administration: 26
- Kinesiology — Fitness and Sports: 84
- Nutrition: 124

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*Student Nutrition Association officers*
We did it... go Coogs!
Houston Wellness Challenge

HHP dietetic interns provided nutritional input for the Greater Houston Women’s Chamber of Commerce’s Wellness Challenge in 2011. During the 90-day program from September 12 to December 10, the Chamber challenged Houston residents to live healthier lifestyles to prevent absenteeism, rising insurance and medical costs, while increasing productivity in the workplace and setting a positive example for the next generation.

Houston Mayor Annise Parker launched the challenge in a ceremony held at city hall. A group of HHP’s interns and Dr. Sharon Bode, HHP professor and director of the Dietetic Internship Program also attended the event. The mayor, Houston city council members and 15 Houston corporate executives were invited to participate as role models. During the challenge, the interns gave each participant a complete assessment, created customized menus and monitored their progress regularly.

Dietetic Intern, Sarah Seppa helps mayor Annise Parker plan her nutrition strategy for the Wellness Challenge
Taking Steps to Cure Cystic Fibrosis

HHP celebrated its sixth year of hosting the annual Cystic Fibrosis Foundation’s (CFF) “Great Strides — Taking Steps to Cure Cystic Fibrosis” walk on Saturday, May 19, 2012. This year 800 participated in the fundraiser on the UH main campus and a record $900,000 was raised.

“The CFF is increasingly confident that we are on the right path to cure cystic fibrosis, and it is through the help of hosting organizations like UH’s health and human performance department and events like Great Strides that will help us cross the finish line,” said Kim Organ, CFF Sr. Development Director. “This past year has been a time of great progress and promise for the Cystic Fibrosis Foundation. Not only are we developing drugs to treat the basic defect of CF, but the investments we are making continue to improve the length and quality of life for those with the disease.”

Great Strides is the Foundation’s largest national fundraising event. Around the country, 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. In 2011, nearly $38 million was raised nationally to support vital CF programs.

Cystic Fibrosis is a debilitating disease that attacks the lungs and digestive system of children and adults. To learn more and to find a walk, visit their website at www.cff.org.

Participants warming up before the CFF walk
**Communitly-wide Health Fairs and Related Events**

TORC is very active in the community by providing continued support to the Greater Houston area through its participation in monthly community-wide health fairs and health-related events, including health awareness and mini health fairs at the Consulate General of Mexico, Children’s Health Day, the City of Houston Employee and Family Wellness Day and many others. This is another opportunity that serves our neighbors with valuable information on obesity prevention, treatment and control for children and adults, while providing graduate and undergraduate students with the experience of applying their academics and research for the benefit of others during the course of their education.

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**Student Associations Meet Local Community Needs**

The Student Nutrition Association (SNA) and the HHP Honor Society (HHPHS) along with the entire department join forces throughout the year in organizing and conducting activities that assist with local community needs. Some projects are the Houston Food Bank, the UH Sock and Blanket Drive, Star of Hope Mission, the Harris County Protective Services Guardianship Program and the UH Operation School Supplies campaign.

Various HHP degree programs provide students the opportunity to apply their academic and research skills through community-based collaborations and learning experiences. Students gain substantive knowledge in real-world situations by enhancing the condition of others in the community or by contributing to a host organization. Some of these experiences are provided through internships in kinesiology, the Dietetic Internship Program, and volunteering in sport administration service-learning projects.
**HHP Professor Completes Fulbright**

Dr. Rebecca Lee was awarded the prestigious Fulbright Scholar Award and spent the 2011–2012 academic year in Guadalajara, Jalisco, Mexico, working with researchers at the Instituto de Ciencias Aplicada a la Actividad Fisica y al Deporte. Their goal was 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 obesity.

As part of the Fulbright Scholars program, Dr. Lee and the team in Mexico worked to define, determine and document relationships linking neighborhood environmental factors (street features, goods and services and physical activity resources) to dietary habits, physical activities and body composition in a school-based sample. The project aimed to (1) measure neighborhood factors surrounding 40 schools in Guadalajara, Puerto Vallarta and Mexico City, Mexico, (2) measure child dietary habits, physical activity and body composition in 2,400 students from grades 3 to 5, and (3) document associations between neighborhood factors and dietary habits, physical activity and obesity, using state of the art analytic techniques.
EDUCATOR OF THE YEAR

Ledoux Garners Awards

In 2011, Assistant Professor Tracey Ledoux received the Houston Area Dietetic Association’s (HADA) Outstanding Dietetic Educator award. This January, the Texas Dietetic Association named her the Texas Dietetic Educator of the Year.

In April, she was selected as a 2012 recipient of the Educator of the Year Award from the Academy of Nutrition and Dietetics (Formerly the American Dietetic Association). The academy is the world’s largest organization of food and nutrition professionals.

Ledoux joined the HHP faculty in 2010 with a focus on child obesity and the future goal of conducting research with pregnant women to investigate maternal and child obesity risk. Ledoux uses her background as a clinician, psychologist and dietitian to investigate evidence-based practices to mitigate excess weight gain in pregnant women.

Recently received UH grants from the HHP Summer Curriculum Development, UH/CLASS Grants-in-Aid, and the UH Division of Research Small Grants programs allow her and her collaborators to identify psychosocial predictors of weight gain, which will be the target that future interventions will aim to change.

The timely research and accomplishments of Ledoux has made her a highly regarded resource for the media. She has been featured in many UH publications and videos, and is frequently called upon about her research and expertise by the local newspaper and television stations, as well as national networks and news outlets. Numerous times as a psychologist and nutritionist, the Houston Chronicle and local ABC and Fox News have called upon Ledoux to provide insight concerning the obesity epidemic and possible solutions. UH Moment videos, news releases and UH News Digest have featured her research of new ways to use technology to address social behavior, addictions and mental health, which have been picked up by national media for reporting and inquiries.
On the Airways

Dr. Layne was invited to be interviewed about the department’s success on an in-flight radio program for American and US Airways, which ran during the summer of 2011. The interview was re-broadcast during the spring of 2012 for Delta and US Airways at the same time as an HHP commercial, created in-house, was aired on the CNN Airport Network. The combined radio broadcasts reached approximately 10 million listeners on more than 40,000 flights, while the commercial aired on 2,000 airport monitors with more than 40,000 viewers. The interview and the commercial continue to be used in various media to promote the department’s programs.

Expertise and Insight

The diverse and outstanding academic and research work of the HHP faculty is widely published and known not only locally, but nationally and internationally. From UH Moment videos and news releases to The New York Times and industry leading publications, the faculty is sought by the media for their expertise and insight on current, national and global issues.
The Princess Chinwendu Eke Memorial Endowed Scholarship
Mr. and Mrs. Henry Eke established the scholarship in memory of their daughter, Princess. In HHP, she earned her bachelor’s in kinesiology in 2008 and her master’s in physical education in 2010.

New Undergraduate Student Scholarship
This spring semester, the department announced its new Undergraduate Student Scholarship Endowment. The faculty and staff established the fund with their generous donations to provide a scholarship to an HHP undergraduate student.

The goal is for faculty, staff and HHP students to work together in a partnership to fully fund the scholarship so that money can be distributed as soon as possible to a deserving student. In exchange for a $1 donation to the fund, donors receive a UH/HHP window decal.

Dr. Andrew Jackson Scholarship Endowment
HHP Professor Emeritus Jackson established the scholarship bearing his name to support outstanding student researchers. He is a Fellow in the American College of Sports Medicine and director of the Udde Research Institute and Rowing Club. His research has been in the area of measurement of human performance, focusing on body composition, aerobic capacity, muscular strength and validation studies for physically demanding jobs.

Mary Louise White Scholarship
Full-time students pursuing a degree in health and human performance or studying special education with an emphasis on mental retardation are encouraged to apply for this scholarship.

Margie Sterr Scholarship
This scholarship is dedicated to the memory of one of our former students, and is available to an undergraduate or a graduate student who has demonstrated interest and aptitude in the area of exercise science. The recipient will have the opportunity to participate in scientific research in the CNBR, which will give the student hands-on experience with project conception, data collection, analysis and public presentation of scientific results.

For scholarship information, visit http://tiny.cc/HHP-Scholarships
Nick Yonko explains the use of technology to meet learning objectives in the Community Nutrition course.

**Summer Curriculum Development Program**

HHP undergraduate students apply with a faculty sponsor for a grant to investigate various approaches to improve and assess learning and retention in HHP undergraduate students. Each student along with their professor spends the summer developing curriculum and various methodologies for assessing scholastic improvement and understanding, and how these methods might be applied to other courses in order to improve upon the department’s nationally ranked programs. During the fall semester, the student and faculty member present their summer work at the department’s Educational Showcase event.

**HHP Summer Research Program**

This program promotes research-related scholarships for graduate and undergraduate students who partner together under the direction of an HHP professor. Student researchers collect and analyze data, and present their results to faculty and students. This program provides opportunities for graduate students to serve as mentors to our talented undergraduate students who gain the experience to actively participate in all aspects of a research project.

**Bode FDIP**

Dr. Sharon Bode, clinical associate professor and director of the Dietetic Internship Program, and Claudia Scott, clinical assistant professor, received a Faculty Development Initiative Program (FDIP) grant for post-baccalaureate distance learning course development. The grant will increase the number of online classes available to five and update existing online distance learning materials. The department’s goal is to offer the entire upper-level curriculum online for the flexibility and convenience of students within the course schedule, while promoting an optimal learning environment and increasing class enrollment. Some labs require hands-on practical applications that cannot be conducted online.

**Strength and Conditioning Curriculum**

A grant from the FDIP was awarded to Dr. Thomas Lowder to develop a new graduate strength and conditioning course, Mobility and Functional Training for Sports Performance and Fitness. Lowder and HHP Adjunct Lecturer Dale Jones will create the course, which will be the fourth in a series that will be offered as a stand-alone post-baccalaureate certificate for strength and conditioning coaches and personal trainers. By offering a certificate in this specialized area, UH will be the first university in the country to offer such courses to specialists working in the field who wish to update their knowledge.
Mr. and Mrs. John McGowan, on behalf of the D. Lynd and Terri K. McGowan Foundation, donated funds that will enable two HHP students to attend Edinburgh Napier University in Edinburgh, Scotland during the fall 2012 semester. The first recipients of the study abroad program, Christiana Gentry and Brett Siders will expand their educational experience, learn different cultures and raise awareness of the research carried out in HHP. “We hope to create a sustainable student exchange program with the generous support of the McGowan Foundation,” said Dr. Layne.
PRODUCTIVITY
**Articles**


Articles (continued)


**Book Chapters**


**Other Publications**


**Professional Presentations**


**Clarke, M. S. F.** Sweat: a potential means of monitoring bone loss. HHP Faculty Research Day. 2011.

**Clarke, M. S. F., Babcock, L. W., Diak, D. & O’Connor, D. P.** Sweat analysis for assessment of bone loss biomarkers. NASA Investigators Workshop. Houston. April 2012.


Bush, K., & Lowder, T. W. Effectiveness of utilizing a peer-matched tutoring program to increase examination scores in a university science course (KIN 3304). UH/HHP Undergraduate Research Showcase. October 2, 2011.
Professional Presentations (continued)


Professional Presentations (continued)


Pearson, D. W., & Lam, E. T. C. Prole sport social consciousness during an era of sport greed. Faculty Research Day. HHP Department, University of Houston. April 3, 2012.


Invited Presentations

Clarke, M. S. F. Different approaches for investigating bone loss during space flight. Graduate Seminar Program, Department of Exercise Science, Oklahoma University, Norman, OK. November 2011.

Clarke, M. S. F. Skeletal muscle function in space flight-cellular and molecular adaptations to unloading. Graduate Seminar Program, Department of Exercise Science, Oklahoma University. Norman, OK. April 2012.


Ledoux, T. Preventing obesity among members of the early family unit. Harris County WIC Quarterly Staff Meeting. Houston. June 2012.


Simpson, R. J. Exercise, persistent viral infections, and the aging immune system. Edinburgh Napier University, Scotland, UK. September 2011.

Simpson, R. J. T-cell responses to acute exercise: Implications for adoptive transfer immunotherapy? Texas Children’s Hospital, Baylor College of Medicine, Houston. November 2011.


**Funded Grant Proposals**

**Alastuey, L.** Using social media to enhance an HHP graduate course. Faculty Development Initiative Program (FDIP A Program), University of Houston, 2012–2013. $4,000.

**Bode, S. & Scott, C.** Post-Baccalaureate distance learning course development. FDIP grant. $11,800.

**Gorniak, S. L.** (PI) Effects of duration & severity of Type II diabetes on upper extremity function. UH New Faculty Grant Program. $6,000.

**Gorniak, S. L.** (PI) Cortical and cognitive-motor function in Type II Diabetes. HHP Summer Research Program. $10,000.


**Ledoux, T.,** Using technology to meet learning objectives of CADE and the demands of increasing student enrollment in Community Nutrition (NUTR4334). Faculty advisor, HHP Summer Curriculum Development Program. $3,500 faculty salary and $1,500 student stipend. 2011.


**Ledoux, T.** UH Division of Research Small Grant Program. Identifying psychosocial predictors of excess gestational weight gain. 2012. $3,000.

**Ledoux, T.** UH Provost Faculty Travel Award. $750.


**Lee, R. E.** Understanding health habits in Mexican children. College of Liberal Arts and Social Sciences Grant-in-Aid. 2012. $5,474.

**Lee, R. E.** Kinect-ing in Second Life to increase physical activity. HHP Summer Research Program. 2012. $10,000.

**Mama, S. K.** (PI) & **Lee, R. E.** (Sponsor). Predicting PA adoption among minority women using SEM and participatory research (1F31NR013349-01A1). National Institutes of Health, National Institute of Nursing Research. 6/1/2012 – 8/31/2013. $35,940 (IDC: $0).

**Lee, R. E.** (PI) & **Ledoux, T. A.** Interactive garden nutrition education in preschools. University of Houston, Grants to Enhance and Advance Research (GEAR). 2012. $30,000 (IDC: $0).


**Lowder, T. W.** UH Provost’s Faculty Travel Award to the 2011 Pittsburgh International Lung Conference. October 28–29, 2011. $750.


**Lowder, T. W.** HHP Summer Curriculum Grant to redesign KIN 4370 (Exercise Testing and Prescription). $5,000.

**Lowder, T. W.** Investigating exercise, stress and pregnancy in a mouse model of cancer. UH/HHP Summer Research Grant. $10,000.

**Lowder, T. W., & Jones, R. D.,** Enhancing post-baccalaureate education for strength and conditioning professionals. UH FDIP grant. $15,000.

**McFarlin, B. K.** (PI) Do individuals with below average fitness respond differently to Wellmune WGP Supplementation prior to exercise in a hot, humid environment? Biothera, The Immune Health Company. 11/15/11–12/31/12 (Direct: $157,871; Indirect: $25,124, 20%).

**McFarlin, B. K.** (PI). The metabolic effects of exercise on the fish and kangaroo machine. Funded by The Fish and Kangaroo Machine Company. 11/1/11–10/31/12 (Direct: $2,030, IDC: $406, 20%).


Pearson, D. W. UH Provost’s Travel Fund award to present paper at North American Society for Sport Management Annual Conference. Seattle, WA. May 2012. $750.00.

Simpson, R. J. (PI) Using acute exercise to increase numbers and function of viral specific T-cells for immunotherapy. UH Small Research Grant. $3,000.


Achievements and Milestones


Butcher, A. Received a 2012 UH Staff Excellence award. June 7, 2012.

Clarke, M. S. F. Elected full member of the University of Houston Chapter of the National Honor Society of Phi Kappa Phi. 2011.

Clarke, M. S. F. Awarded the University of Houston President's Leadership Award by President Khator for outstanding leadership of the UH Faculty Senate. 2011.


Clarke, M. S. F. Appointed interim Associate Vice Chancellor/Associate Vice President for Technology Transfer for the University of Houston. 2012.

Guined, J. Received BRAVO award from Wyle Life Sciences Houston. September 23, 2011.

Layne, C. S. Named to the Academic Advisory Panel for the Master of Science in Orthotics and Prosthetics Program at Baylor College of Medicine. Houston.
Achievements and Milestones (continued)

Ledoux, T. Named 2011 Houston Area Dietetic Association’s (HADA) Outstanding Dietetics Educator.

Ledoux, T. Named 2012 Outstanding Dietetics Educator of the Year by the Texas Dietetic Association.

Ledoux, T. Named 2012 Outstanding Dietetics Educator of the Year from the national Academy of Nutrition and Dietetics. March 2012.


Lee, R. E. Promoted to Professor in the Department of Health and Human Performance, College of Liberal Arts and Social Sciences, University of Houston. 2012.

McFarlin, B. Named member of Research Awards committee American College of Sports Medicine (3 year term).


McFarlin, B. Appointed as an ad hoc member to NIH”s National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) study section.

McFarlin, B. Appointed to the editorial board for the Journal of Child Health and Nutrition.


Pearson, D. W. Re-appointed by Dr. Elizabeth Gregory (via Dean Roberts) to CLASS Ad-Hoc Committee on Diversity. September 2011.


Pearson, D. W. Elected Chair, Sport Management Section. Texas Association for Health, Physical Education, Recreation and Dance. Dallas.


Scott, C. Received Certified Diabetes Educator Certification from the National Certification Board for Diabetes Educators. 2011.


Simpson, R. J. Appointed to CLASS selection committee for graduate research assistantships. January 2012.

Simpson, R. J. Invited to serve as guest editor of Brain, Behavior and Immunity for a special issue titled: “Exercise, Immunity and Health.”

Simpson, R. J. Appointed to the editorial board of Frontiers in Physiology.

Simpson, R. J. Invited to chair a thematic poster session titled “Exercise and Inflammation” at the ACSM annual meeting, San Francisco. June 1, 2012.

Simpson, R. J. Awarded one of two slots allocated to the University of Houston by the Cancer Prevention and Research Institute of Texas (CPRIT) for applications to the High-Risk/High-Impact research awards program.

Treviño, R. Named Chair of the Mentoring Committee of USA Cycling’s Mountain Regional Technical Commission.

Treviño, R. Named to the advisory board of My Fit Future.

Publicity


Publicity (continued)


Ledoux, T. A. Featured on CLASS website home page as the recipient of the Houston Area Dietetic Association’s (HADA) Outstanding Dietetics Educator award, Outstanding Dietetics Educator of the Year by the Texas Dietetic Association and 2012 Outstanding Dietetic Educator by the Academy of Nutrition and Dietetics. February 8, 2012.


O’Connor, D. P. “Weighing the Benefits: Researchers Tapped to Evaluate CDC Childhood Obesity Programs.”
  - CLASS News Update. October 31, 2011


O’Connor, D. P. “Taxpayers Increasingly Foot Bill for Bariatric Surgery.”


**Shasta's** Featured on the UH home page. March 2012.


**Student Achievements**


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**Student Achievements (continued)**


**Bigley, A.** Passed Ph.D. comprehensive examination. April 2012.


**CLASS Scholarships Received by HHP Students**

- Lee, C. H., Leonard Rauch Scholarship
- Mensah, K., CLASS Scholarship
- Randle, D. E., Virginia Barnett Scholarship
- Shuttlesworth, H., GMM Scholarship
- Sadiwala, K., India Studies Scholarship


Cross, M. B. Received 2012 Hydro Angel Award from the Hydro Angels Over America (Previously known as Hydro Angels Over Texas: [http://www.hydroangelsovertexas.org](http://www.hydroangelsovertexas.org)).

Cross, M. B. Featured in March and May 2012 Hydro Angels Over Texas E-News in conjunction with being a nominee for and recipient of the 2012 Hydro Angel Award.

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**Bush, K., & Lowder, T. W.** Effectiveness of utilizing a peer‐matched tutoring program to increase examination scores in a university science course (KIN 3304). UH HHP Undergraduate Research Showcase. October 2, 2011.


**Student Achievements (continued)**


Keenum, C.


Madansingh, S. Chosen by the Canadian Space Agency to collect data using the European Space Agency’s new short-arm centrifuge at the German Aerospace Center in Cologne.


Morrison, M. Successfully defended his thesis titled: Changes in regulatory T-cell expression following acute exercise in young and middle-aged subjects.

Ochoa, N. Recipient of 2012 UH SURF Award. $3,500.


2012 HHP Outstanding Student Awards:

Excellence in Undergraduate Studies
- **Randall Williams** Exercise Science
- **Rosie Ford** Fitness/Sports
- **Jesika Orellana** Nutrition
- **Ina Javier** Sport Administration

Scholarship Recipients
- **Paul Espinoza** Margie Sterr Scholarship
- **Jose Soria** Mary Louise White Scholarship

American Kinesiology Association’s 2012 National Undergraduate Scholars
- **Rosie Ford**
- **Paul Stuart**

Excellence in M.Ed. Studies
- **Erik Andrews** Sport Administration
- **Andrew Crane** Physical Education

Graduate Awards in Other Categories
- **Recep Özdemir** Teaching Excellence
- **Whitney Breslin** Overall Graduate Student Excellence
- **Heather Adamus-Leach** Dr. Andrew “Tony” Jackson Research Excellence

2012 NASA Human Research Program Investigators’ Workshop, February 2012:

Hackney, K. J., **Everett, M.**, & Ploutz-Snyder, L. L., Nutrition coupled with high-load or low-load blood flow restricted exercise during human limb suspension.


University of Houston Cougars 2012 Athletic Alliance (UHCAA) Academic Scholarship Recipients:

- Chambiss, W. Sport Administration (Undergraduate)
- Thompson, A. Kinesiology (Undergraduate)
- Davis, J. Sport Administration (Graduate)
- Pulliam, K. Strength & Conditioning (Graduate)

Alumni Accomplishments

Abercromby, Andrew F. (Ph.D. ’06) Received the Rotary National Award for Space Achievement’s (RNASA) 2012 Early Career Stellar Award for technical excellence and innovation in advancing the Lunar Electric Rover/Multi-Mission Space Exploration Vehicle from concept to functional prototype.

Banda, Jorge (’04, M.S. ’07) John Luehrs Annual Fellowship Award, Arnold School of Public Health, University of South Carolina. August 2011.


Houser, Jeremy (Ph.D. ’07) Named associate professor at Kirkville College of Osteopathic Medicine, Kirkville, MO.


Patterson, James (’72) Fort Bend County Commissioner awarded the 2012 HHP Alumnus of the Year Award.


Alumni Accomplishments (continued)

**Spielmann, Guillaume** (M.S. ’11) Appointed postdoctoral research fellow in HHP. He will investigate the effects of space flight on astronaut immunity. This is a 4-year grant awarded by NASA to Dr. Richard Simpson.


2012 NASA Human Research Program Investigators’ Workshop, February 2012:

- Ploutz-Snyder, L., Ryder, J., Buxton, Roxanne, E. (M.Ed. ’12), Redd, E., Scott-Pandorf, M. M. (Ph.D. ’05), Hackney, K., Fiedler, J., Ploutz-Snyder, R., & Bloomberg, J. Thresholds of muscle strength below which function is impaired.

New Dietetic Interns
The Nutrition program had several graduates accepted into the Dietetic Internship this year including:

- Camille Booker
- Simica Deel
- Rachel Huisman
- Kristen Kabay
- Lai (Jamie) Lee
- Megan Litterer
- Afchan Mohammed
- Fatima Tai
- Bernadette Valdez
- Natalia Yanez
- Nicholas Yonko
Dr. Michael Cottingham will serve as an assistant professor of sport administration. He is a recent doctoral graduate in human performance from the University of Southern Mississippi. Cottingham received his master’s in recreation administration from the University of Southern Mississippi, and he earned his bachelor’s in political science from the University of Arizona. His research interests focus on consumer behavior in non-traditional sports and promotional strategy of disability sport. Cottingham’s work has been published in journals including the International Journal of Sport Management and the International Journal of Sports Marketing and Sponsorship. In addition, he serves on committees with the United States Tennis Association and the International Wheelchair Rugby Federation.

Dr. Brian McFarlin has accepted a position as tenured assistant professor at the University of North Texas in Denton, Texas beginning this fall. He served as an HHP assistant professor in exercise physiology and nutrition since 2005.

Dr. Daphne Hernandez joins the HHP faculty as an assistant professor of nutrition and obesity studies. She comes to Houston from Pennsylvania State University where she served as assistant professor in the human development and family studies department. Hernandez earned her doctorate in developmental and educational psychology from Boston College, her master’s in psychological services from the University of Pennsylvania and her bachelor’s in psychology from Princeton University. Her research includes how family-related factors, such as poverty and family structure, as well as food insecurity and participation in public assistance programs influence child and adult health outcomes.

Erin Prevette-Major was an academic advisor in the department for eight years. She and her husband recently moved to Owasso, OK.
**FACULTY**

Dr. Lisa Alastuey, Clinical Assistant Professor  
Dr. Sharon Bode, Clinical Associate Professor  
Dr. Mark Clarke, Associate Professor  
Dr. Stacey Gorniak, Assistant Professor  
Ms. Audra Hollingsworth, Visiting Assistant Professor  
Dr. Charles Layne, Department Chair, Professor  
Dr. Tracey Ledoux, Assistant Professor  
Dr. Rebecca Lee, Associate Professor  
Dr. Jian Liu, Assistant Professor  
Dr. Thomas Lowder, Assistant Professor  
Dr. Kimberlee Matalon, Associate Professor  
Dr. Daniel O’Connor, Associate Professor  
Dr. William Paloski, Professor  
Dr. Demetrius Pearson, Associate Professor, Associate Department Chair  
Ms. Claudia Scott, Clinical Assistant Professor  
Dr. Richard Simpson, Assistant Professor  
Dr. Adam Thrasher, Assistant Professor  
Dr. Rey Treviño, Clinical Assistant Professor

**STAFF**

Mr. Todd Boutte, Admissions Counselor 2  
Ms. Amanda Butcher, Office Assistant 1  
Mr. Paul Calhoun, Academic Advisor II  
Mr. Brian Drake, Assistant Business Administrator  
Ms. Laurel Flores, Academic Advisor 2  
Ms. Alma Gonzalez, Academic Advisor 1  
Mr. Jo’Nathan Gwynn, Technical Services Specialist 2  
Ms. Martha Hayes, Communications Manager  
Mr. Prashant Mutgekar, Programmer Analyst 2  
Ms. Angie Vazquez, Financial Coordinator 1  
Ms. Randi Weintraub Betts, Director, Administration & Academic Affairs  
Ms. Jessica Wheeler, Program Coordinator  
Ms. Christina Williams, Academic Advisor 1  
Ms. Joy Wilson, Graphic Designer 2/Photographer
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