
KIN INSIDER

17 Years of Chairmanship...

After 17 years of service, I will be stepping down as Chair of the Kinesiology and Sport Sciences (KIN) department.

It has been quite a ride since accepting the position in 2000. Having worked on the curriculum content in 7 out of 8 programs, assisted in the development of 2 new tracks in Strength and Conditioning and Nutrition for Health and Human Performance, and hired 15 of our 17 KIN faculty, I often marvel at how far we've come. I can actually remember sitting down with the Academy guidelines and writing the courses needed for our undergraduate and graduate programs in Exercise Physiology. I remember starting with one lone stationary bicycle ergometer before helping to build our kinesiology laboratories from scratch. I remember heading to Faculty Senate 7 different times requesting approval for all KIN undergraduate programs, graduate tracks, department title, and programmatic changes. I'm proud that we have had over 250 students accepted into our first online Sport Administration program and particularly proud of the exciting research, scholarship, and programs coming out of the Max Orovitz Laboratories. Thanks to a talented group of faculty and eager students, our undergraduate programs are flourishing, our revenue generating programs are prospering, and our doctoral programs are conducting groundbreaking research. We continue to present numerous abstracts at conferences, and our research production exceeds many universities triple our size.

I firmly believe this started with a unique group of talented faculty who came together, had the passion, and built an outstanding department. There is still a great more work that needs to be accomplished but I know we will move forward in the right direction. The department will remain in good hands as Dr. Warren Whisenant and Dr. Kevin Jacobs take over as Chair and Assistant Chair.

In the next few months, I hope to lead the charge to acquire 5 new faculty positions urgently needed given our phenomenal departmental growth. I am also most excited about receiving generous support in the way of equipment for the Laboratory of Clinical and Applied Physiology.

As a faculty member, I will continue to serve as Director of the Laboratory of Clinical and Applied Physiology and will work hard to solicit more support for graduate student scholarships and space. I also hope to move our Women's Health Certificate to an online program and obtain federal funding for our Translational Health in Nutrition and Kinesiology (THINK) program that interfaces so nicely with our public schools.

Although stepping down, I will always be there for my faculty and staff. It's been an absolute pleasure working with you and for you. I truly appreciate your resounding support and remember "Keep the Passion!"

"Go Canes!"

Dr. Arlette Perry, Chair

HIGHLIGHTS INSIDE THIS ISSUE:

- 6-7 Sport Industry Conference Hosts 305 Attendees
- 8-10 Athletic Training Program
- 14 Students in the Field



Provost's Award: Innovative Parkinson's Disease Home-Based Rehabilitation Using Microsoft Xbox Kinect

Dr. Moataz Eltoukhy was awarded a second Provost's Award in collaboration with Dr. Signorile on their research of marker-less motion analysis using an Xbox accessory called the Kinect. This research with the Kinect allowed them to perform a full biomechanics gait analysis for \$100 opposed to the typical \$100,000 price tag of a laboratory-based motion analysis system. Below is the abstract on their research.

Parkinson's disease (PD) is the second most common neurodegenerative disorder, affecting 10 million people worldwide. The reduction in mobility experienced by patients with PD is characterized by rigidity and gait impairment, which causes increased incidences of falls.

The end-of-dose deteriorations associated with the symptomatic dopamine-replacement therapies, is characterized by ON and OFF periods. Gait is specifically sensitive to these changes of the Parkinsonian state. Analysis of gait parameters may therefore constitute a reliable paradigm to assess global motor function over time in patients with PD; thus, accurate and frequent gait analysis is crucial.

Currently, gait complications associated with the disease are assessed by subjective tools only. Additionally, alternative motion analysis technology is expensive, time consuming, and require high tester expertise, which makes it unsuitable for frequent gait assessment in home-based setting.

In this project, the Microsoft Xbox Kinect is proposed as a cost-effective gait assessment tool for PD population. This will enable us to learn more about the temporal evolution of the complications associated with dopamine replacement medications and their characteristics and severity. And will make it possible to implement this simple and affordable technology in more effective rehabilitation programs for patients with a variety of neurodegenerative disorders, including PD.



Additionally, Dr. Eltoukhy was invited to represent the SEHD in the grand opening of the Cambridge Innovation Center, a huge research institute that partnered with UM and is now located downtown in the UM's Life Science building. Below is a picture of the event showing the robots, Kinect, and modeling. Dr. Daniel Ferris has been hired under the University of Florida's, "UF Rising to National Preeminence" initiative and will join the J. Crayton Pruitt Family Department of Biomedical Engineering.

Alumni Update: Daniel Ferris

Daniel Ferris graduated from University of Miami in 1994 with a M.S. Education in Exercise Physiology.

Ferris will be moving to Gainesville with his wife, Dr. Rachael D. Seidler who will join the department of Applied Physiology & Kinesiology at the UF College of Health & Human Performance, and his two children summer 2017.

Ferris has been a faculty member and the director of the Human Neuromechanics Laboratory at the University of Michigan since 2001 in biomedical engineering and kinesiology. He has a broad educational background in mathematics, neuroscience, physiology and biomechanics, with specific training and expertise in human locomotion, gait rehabilitation and rehabilitation robotics. He completed his doctoral degree at UC Berkeley in 1998, before working as a postdoctoral scholar at the UCLA Department of Neurology and the University of Washington Department of Electrical Engineering.



Ferris' research focuses on the neural control of human locomotion. Specifically, he uses mobile brain imaging, robotic lower limb exoskeletons, and bionic lower limb prostheses to investigate how humans control walking and running and adapt to robotic assistance.



Ferris has developed a collection of robotic lower limb exoskeletons to perturb and assist human movement. He has built exoskeletons for ankle, knee and hip joints, as well as for the whole limb. By perturbing the relationship between neural commands to the muscles and the resulting mechanics, Ferris can identify general strategies that humans use to control their movement.

"Dr. Ferris is an accomplished researcher and outstanding academic. He also brings to the department a unique expertise that is currently not represented. Ferris will collaborate broadly across campus, with mechanical and electric engineering, department of physical therapy and the Center for Movement Disorders and Neurorestoration, to name a few," said Pruitt Family Professor and Chair, Dr. Christine E. Schmidt.

Strength and Conditioning Grad Becomes Miami Heat's 1st Director of Sports Performance



Michael Williams was a standout student and graduate strength coach for the University of Miami. He served as a strength and conditioning assistant to basketball in 2010-2011. When the strength and conditioning coach for Women's Basketball left midseason to take another job, Michael stepped in to fill the role. At graduation Michael was recognized as the S&C graduate student of the year among other honors.

Upon graduation Michael was one of two individuals selected among 50 applicants for Officer Candidate School with the United States Marines. He served six years in special forces, eventually earning the position as Incumbent Executive Director for the Marine Training Base in San Diego. But as fate would have it, strength and conditioning was in his future once again. Michael was offered the position as Director of Sports Performance by the Miami Heat. He is currently serving in a transition role before assuming full responsibilities for the 2017-2018 season.

Congratulations Michael!



SPAD Grads Evaluate Miami Open Sponsorships

This year's Sport Administration Graduate class had the opportunity to attend Day 1 of the 2017 Miami Open tennis tournament as part of an assignment for their Sponsorship class with Dr. Windy Dees. We pride ourselves on providing students hands-on experiences, and this assignment required the SPAD Grads to immerse themselves in on-site sponsor activations and then report on their effectiveness. They learned how different brands have different objectives and strategies when sponsoring a property, whether it is creating an unforgettable experience for fans outside the stadium or signage within the stadium to gain awareness for their brand via TV broadcasts and online streaming. Big thanks goes out to IMG Tickets for their support of our Sport Admin. Graduate Students.

Guardrails Firefighter Initiative

The University of Miami's Exercise Physiology Guardrails Prevention Program has pre-med exercise physiology students, along with graduate Nutrition Students working with the Sylvester Comprehensive Cancer Center to prevent cancer. Sylvester is working with fire departments throughout the state of Florida to better understand the risks firefighters are exposed to and how those risks can be reduced.

On March 30th, and 31st, a team of students traveled to West Palm Beach to test the Palm Beach County Firefighters using the Guardrails Program.

Nearly 100 firefighters were tested in the intense two-days of assessments. Each firefighter had an estimated Vo2 max, Body Fat Percentage, Anthropometrics, Nutrition Behaviors, and blood markers tested, and were provided with 6 week wellness programs, which included a target body weight, specific nutritional guidelines, strength training exercises, and a cardiovascular program.

We hope to see improvements in blood markers and other parameters after the 6-week intervention.



2017 Sport Industry Conference Welcomes 305 Attendees, Alex Rodriguez, Greg Norman, and More to UM

The 2017 University of Miami Sport Industry Conference was held on March 23-24 at the Watsco Center Field House.

The second iteration of the conference welcomed 305 guests across two days of panel sessions aimed at helping rising sport industry leaders engage, network and learn about their desired profession.

Day one of the conference featured a company showcase wherein 17 sport-related companies promoted their offerings and recruited potential interns and new hires. Participating companies included, ESPN, the Miami Heat, Orange Bowl, Orlando Magic and more.

After the company showcase, attendees enjoyed a keynote speech by former MLB player and University of Miami Trustee, Alex Rodriguez. In a discussion moderated by ESPN radio host, Jorge Sedano, Rodriguez discussed the highs and lows of his professional baseball career and his current business endeavors.

Throughout both days of the conference, attendees enjoyed nine different panel sessions on topics ranging from community engagement in sport, improving the fan experience, managing college sports in a changing NCAA landscape and how technology is improving professional athletes' performance. Speakers from the NFL, NBA, NASCAR, the PGA Tour, ESPN and more came from across North America to highlight and share their expertise. Notably, University of Miami Director of Athletics, Blake James, and former University of Miami football standout, Duke Johnson, participated as speakers on panels.

This year's conference marked the first-ever *Greg Norman's Search for the Next Great Sports Entrepreneur*. Launched by Norman and University of Miami Sport Administration professor, Alicia Jessop, the competition began with a worldwide search to identify top entrepreneurs in the sport space. After receiving hundreds of applications from entrepreneurs in eight countries on five continents, four finalists were selected to pitch their ideas and products to Norman and his team of investors at the University of Miami Sport Industry Conference for the possibility to receive the funding and investment needed to jumpstart their endeavors.

After the conclusion of *Greg Norman's Search for the Next Great Sports Entrepreneur*, Norman wowed conference attendees on March 24 with a keynote speech that highlighted his unprecedented entry into and success in the golf industry and how the creation of a 200-year vision has helped the Greg Norman Company reach unparalleled heights.

USPORT, the Sport Administration program's undergraduate student association, and Professor Alicia Jessop produced the 2017 University of Miami Sport Industry Conference. Thanks to the following sponsors who made the 2017 University of Miami Sport Industry Conference possible: UOnline, Delaware North, Experience, United Capital Financial Advisors, the University of Miami School of Education and Human Development and the University of Miami Sport Administration program.

Pictures from the 2017 UM Sport Industry Conference



Athletic Training Professor Wins Toppel Award

Justin Tatman, the Clinical Education Coordinator for the Athletic Training Program received this year's Excellence in Career Education Award for enlisting the Toppel Center's help in preparing students for his Athletic Training course.

Justin goes above and beyond to give Athletic Training students the needed skills to apply for graduate school and jobs in the field. In addition to utilizing Toppel as a resume and interviewing skills resource, Justin personally reviews and critiques every Athletic Training student's resume and cover letter. Under his guidance, the Athletic Training students have been successful in landing internships in the NFL, MLB, and the WNBA to name a few.

Athletic Training Program Celebrates Athletic Training Month

National Athletic Training Month (NATM) is held every March to spread awareness about the important work of athletic trainers. The Athletic Training students and faculty celebrated all month long by hosting numerous events, and more importantly, promoting the profession of Athletic Training.



This year's slogan was "Your protection is our priority." The University of Miami Athletic Training Program competed in a PR Contest, a NATM Social Media Contest, and a Student Leadership Committee NATM Video Contest, all sponsored by the National Athletic Trainers' Association (NATA). As part of these contests, students and faculty made promotional videos and engaged in an aggressive social media campaign where we posted pictures, educational tidbits, and advocacy information for the public to see.

Also, the AT program consistently promoted the definition and description of Athletic Trainers and to make sure people use correct terminology and understand that Athletic Training is a healthcare profession. One of our key messages was, "Athletic trainers are experts!! Working to prevent and treat musculoskeletal injuries and sports-related illnesses, athletic trainers offer an unparalleled continuum of care."

Athletic Training Program Celebrates Athletic Training Month Continued

ATs are part of a team of health care professionals; they practice under the direction of and in collaboration with physicians. ATs work with individuals who are physically active or involved in sports participation through all stages of life to prevent, treat and rehabilitate injuries and medical conditions. Athletic trainers should not be confused with personal trainers or “trainers” who focus solely on fitness and conditioning. Always refer to an “athletic trainer” or “AT” to ensure clarity of profession and quality of care (NATA, 2017)."

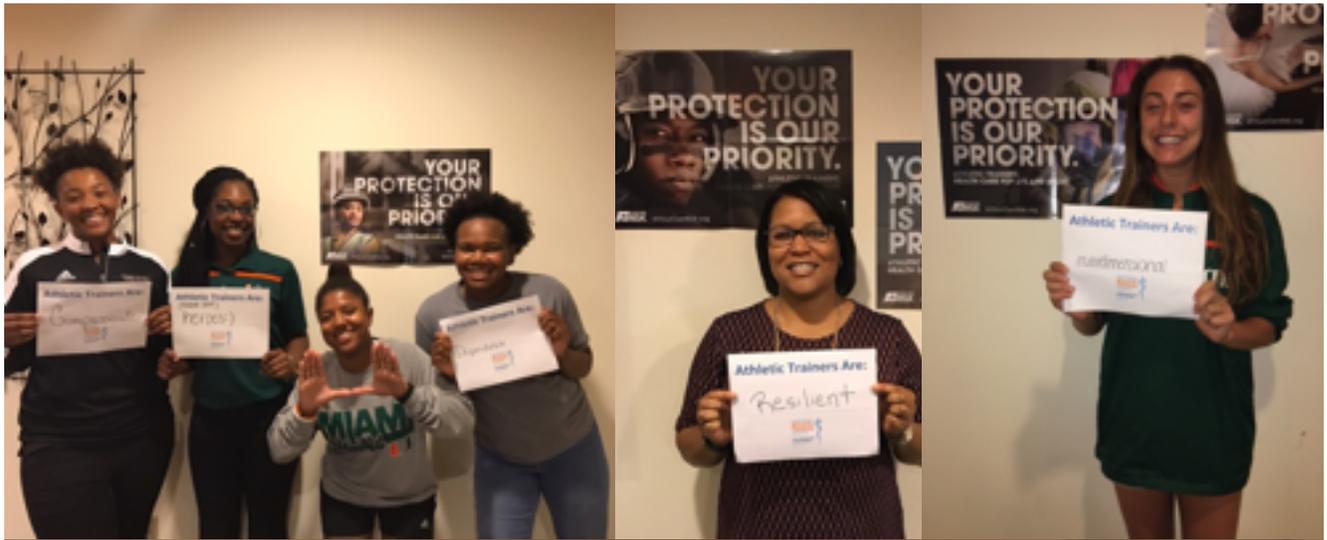
The AT program was also featured in the Miami Hurricane and they hosted an AT Month celebration breakfast, where they made signs that described the many positive characteristics of Athletic Trainers.

FYI...The Athletic Training Program is patiently awaiting the contest results to see if we were the Champions of Promoting Athletic Training! In any event, students and faculty were proud to share information related to the major and the profession we love.

Remember, your protection is our priority!



Athletic Training Pictures



Publications

JURIED OR REFEREED MANUSCRIPTS (2017 to date):

1. Kuenze, C., Eltoukhy, M., Chang-Young, K., & Kelly, A. Impact of quadriceps strengthening response to fatiguing exercise following ACL reconstruction: a pilot study. Journal of Science and Medicine in Sport, 2017, 20(1), 6-11. Impact factor: 3.756.
2. Kuenze, C., Kelly, A., Jun, H., & Eltoukhy, M. Effects of unilateral quadriceps strengthening with disinhibitory cryotherapy on quadriceps symmetry following acl Reconstruction. Journal of Athletic Training. 2017, Impact factor: 2.478
3. Chen, G., Shen, J., Barth-Cohen, L., Jiang, S., Huang, X., & Eltoukhy, M. Assessing Elementary students' computational thinking in everyday reasoning and robotics programming. Computers & Education. 2017, 191, 162-175. Impact factor: 5.600
4. Eltoukhy M, Kuenze C, Oh J, Jacopetti M, Wooten S, Signorile JF. Microsoft Kinect can distinguish differences in over-ground gait between older persons with and without Parkinson's disease. Medical Engineering and Physics. (epublished ahead of print) Impact factor: 1.619
5. Eltoukhy M, Kuenze C, Oh J, Signorile JF. Validation of static and dynamic balance assessment using Microsoft Kinect for young and elderly populations. IEEE Journal of Biomedical and Health Informatics. Mar 22. doi: 10.1109/JBHI.2017.2686330. (epublished ahead of print). Impact factor: 2.093
6. Roberson K, Jacobs KA, White M, Signorile JF. Loads and movement speed affect energy expenditure during circuit resistance exercise. Applied Physiology, Nutrition, & Metabolism, 2017 doi: 10.1139/apnm-2016-0552. (epublished ahead of print) Impact factor: 2.094
7. Signorile JF, Rendos N, Heredia-Vargas H, Alipio TC, Cota Regis R, Eltoukhy M, Romero M. Differences in muscle activation between cable-based and selectorized weight-training. Journal of Strength and Conditioning Research. 2016, 30(10): 2703-2712. Impact factor: 2.275
8. Leyva-Pizano A, Britton JC, Eltoukhy M, Kuenze C, Myers ND, Signorile JF. The development and examination of a new walking executive function test for people over 50 years of age. Physiology & Behavior, 2017, 171(1):100-109. Impact Factor 2.976
9. Ni M, Signorile JF. High-velocity resistance training modifies force-velocity and power-velocity relationships in older persons with Parkinson's disease. Journal of Strength and Conditioning Research, 2017 (epublished ahead of print) Impact factor: 2.275

Publications

10. Roberson K, Jacobs KA, White M, Signorile JF. Loads and movement speeds dictate differences in power output during circuit training. Journal of Strength and Conditioning Research, 2017 (epublished ahead of print) Impact factor: 2.275
11. Potiaumpai M, Martins MCM, Rodriguez R, Mooney K, Signorile JF. Difference in muscle activation patterns during high-speed versus standard-speed yoga: A randomized controlled study. Complementary Therapies in Medicine. 2017, 30(1):24-29 Impact factor: 2.353
12. Eltoukhy M, Oh J, Kuenze C, Signorile JF. Improved Kinect-based spatiotemporal and kinematic treadmill gait assessment. Gait & Posture. 2017, 51(1):77-83. Impact factor: 2.752

SCIENTIFIC PRESENTATIONS

1. Barth-Cohen, L., Shen, J., Chen, G, Jiang, S., & Eltoukhy, M. *Elementary School Students' Computational Thinking Practices in a Robotics-Programming Environment*. Poster session presented at the American Educational Research Association (AERA) Annual Meeting. San Antonio, TX. April 2017.
2. Signorile JF, Roberson KB, Potiaumpai, Wooten SV. Patterns of change for parameters of power output in adults with Parkinson's disease and sarcopenic obesity. First Pan America Parkinson's Disease Congress, Feb 25-28, 2017.
3. Signorile JF. High-speed training: The application of scientific principles to targeted training. Foote Scholars, Feb 25-28, 2017.

Late Breaking Doctoral Research Opportunity

The University of Miami Department of Kinesiology and Sports Sciences has an opening for a doctoral research assistant.

Responsibilities: Conduct neuromuscular training interventions to improve independence and reduce falls in older individuals; continue the evolution of our research program in modifying classic yoga programs to meet the specific diagnosed needs of special populations; manage training interventions to address the needs of Parkinson's patients; and collaborate with researchers in our biomechanics laboratory and the School of Medicine. Routine tasks will include collaboration with our research team on conceptualization of research questions and development of associated research designs, implementation of research procedures from choosing appropriate assessments through understanding and implementing equipment use specific to the research question, development and care of data spreadsheets, statistical analysis, and preparation of manuscripts or presentations. Additionally, the recipient will help with IRB protocol submission, recruitment and scheduling of subjects for specific projects, overseeing training protocols, testing and data collection procedures. The laboratory complex is a highly productive facility with 14 refereed articles, numerous national and international presentations last year alone.

Compensation: Tuition remission and stipend are competitive with other Division I research institutions. Interested applicants should send a curriculum vita, copies of any papers in which the applicant has had an authorship role, and three letters of recommendation to Joseph Signorile, PhD, Max Orovitz Laboratories, 1507 Levante Ave, Coral Gables, FL 33146 or via e-mail to jsignorile@miami.edu.

Students in the Field



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Send it to:
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***Be sure to include
major & graduation year.**