Fall Kinesiology Updates

As Summer turns into Fall, the energy of a new school year is upon us. There is much to be excited about this year in the Kinesiology Department at UW Oshkosh. As the Department co-chair and Director of the Athletic Training Program, I am invigorated by several of the developments the start of this academic year brings. Please be sure to follow along with us through our department website and social media platforms.

To jump start the new year, renovations are beginning for the new Human Biomechanics Laboratory that will allow both of our new faculty members - Dr. Lace Luedke and Dr. Brian Wallace - to develop even more research projects and engage more students in the high-impact practice of undergraduate research. Hopefully you will be able to see stories and pictures of the progress this fall.

The other major development is that the new Masters of Science in Athletic Training is pending final approval from the HLC and is scheduled to begin in the Summer of 2019. The traditionally strong undergraduate program is transitioning to the graduate level to meet accreditation standards and the new program will allow for two years of fully dedicated classroom and clinical education.

With the start of the new year for our undergraduates, we also are excited to celebrate our recent graduates who are beginning their careers. I know that one of our greatest sources of current and future students is based upon referral from our excellent alumni. Please continue to represent our university and department well and keep on spreading the name of UW Oshkosh Kinesiology and Athletic Training wherever you go.

Sincerely,

Dr. Robert C. Sipes
Co-Chair, Kinesiology Department
Director, Athletic Training Program

Please feel free to contact us at kin@uwosh.edu or visit our website http://www.uwosh.edu/kinesiology to find out more about Kinesiology at UW Oshkosh.
We have an amazing team in the Kinesiology Department at UW Oshkosh. Over the next few newsletters we will be highlighting research from our faculty. This newsletter we feature Dr. Brian Wallace.

Dr. Wallace’s research focuses on: biomechanical risk factors and mechanisms of lower extremity injury, kinetic quantification of plyometric and other resistance exercise, neuromuscular responses and adaptations to resistance training, biomechanics teaching pedagogy, and biomechanical monitoring of training.

Current in-progress study areas include:
1) Creating regression equations to predict 1RM squat strength in DIII athletes based on parameters such as lower extremity circumference, leg length, and body composition. Dr. Wallace is working with strength coach Steve Brown and several athletic teams and students.
2) Examining the effect of different low-tech active learning techniques on learning as assessed by the Biomechanics Concept Inventory (BCI), a questionnaire designed to assess learning in undergrad biomechanics courses. Preliminary results were presented at the American Society of Biomechanics meeting at Mayo. Another project involving an item analysis of BCI versions 1 & 3 will begin soon. Projects are in collaboration with Dr. Duane Knudson at TX State Univ (creator of the BCI).
3) Studying the effect of caffeine containing ergogenic aids on performance measures like fatigue & power maintenance.
4) Studying the effect of caffeine containing ergogenic aids on the time course of the nervous system & muscle contributions to post activation potentiation. This, as well as #3, are being done with Dr. Haley Bergstrom at University of Kentucky.
5) Quantifying the intensity of various plyometric exercises in different populations to assess training stimulus. These projects are collaborations with Dr. Tom Kernozek at UW-L, Dr. Hsien-Te Peng at Taiwan National University, and Ethan Stewart at Mississippi State Univ (Ethan was a student of mine at UK and is now doing his PhD in biomechanics).

What does the future hold?

Biomechanics students currently are subjects in the Scholarship of Teaching and Learning (SOTL) research. Kinesiology students are also helping with item #1 above and assist in data collection and organization and the most-involved students may be presenting data as poster presentations at professional conferences next year.

The Kinesiology department will also be adding a motion lab capable of performing full 3D motion analysis, integrated with a force plate mounted flush with the floor. This equipment will allow Dr. Wallace to track body position during activity and compute net joint forces at the ankle, knee, and hip during any closed chain movement. He can also measure force-related variables during closed chain movements using just the force plate. It will be the only research lab of its kind in Northeast Wisconsin, and one of only a handful in the state.

In the future Dr. Wallace hopes to get back into traditional biomechanics research once the laboratory is complete. This includes studying how joints and muscles are loaded during different movements and exercise, and the effect that has on injury and performance. He plans to continue biomechanics teaching research as well.

Interested in finding out more? Contact Dr. Wallace at wallaceb@uwosh.edu
Dr. Lace Luedke and Maya Puleo presented a research poster at ACSM’s Annual Meeting in Minneapolis this past June. The poster was titled: “Perfectionist Concerns Predict Injury Risk In Collegiate Distance Runners - Preliminary Findings From A Prospective Study” by Lace Luedke, Maya Puleo, Brian Wallace and Mitch Rauh. This research was also highlighted in the Outside Online Sweat Science column by Alex Hutchinson. Maya was also recently accepted into the Physical Therapy program at UW Madison!

Kinesiology 443 Students to Lead Community Fitness Classes
Kinesiology 443 students will be leading two weekly classes for city and county employees this semester in partnership with City of Oshkosh, Winnebago County and Oshkosh Area School District. Classes will be held at South Park Middle School Tuesday and Thursday mornings. The 443 students also offer FREE classes on campus for University faculty and staff. “This is a great way for the students to get involved in the community and gain real life experience learning a new skill set in leading group fitness. This is going to be a great opportunity for students as well as City and County employees.” 443 Lab Instructor Kate Harrell

Kinesiology student & Titan punter Turner Geisthardt has been named a semifinalist for the National Football Foundation’s (NFF) 2018 William V. Campbell Trophy, an award recognizing the best football scholar-athlete in the nation.

Oh the Places They Will Go!
Here are a few highlights from our most recent graduating class.

1. PAUL PETRUSCZAK
   Strength & Conditioning
   Completed his internship with the Air Force Football team and will be going into the United States Air Force this Fall.

2. VALERIE SCHIEBEL
   Exercise & Fitness
   Human Factors Engineering designing medical devices: infusion pumps, IVs, tracheostomy tubes & more.

3. NEAL ORI
   Athletic Training
   Completed internships with the Packers and Timber Rattlers and is pursuing a graduate degree at the University of South Carolina.

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