





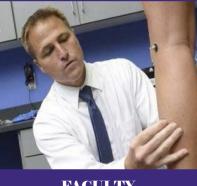


DPT NEWS

Fall 2016

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FACULTY



RESEARCH



A Message from the Chair

As the Chair of the Department of Physical Therapy, I would like to thank you for your contribution to the Doctorate of Physical Therapy Degree Program here at High Point University! We feel honored that you are interested in the success of our Department, including the newly approved DPT educational program.

The Department is a multi-faceted organization dedicated to changing lives through innovative education, cutting edge clinical care, and impactful research. In the spring of 2017, we will move into the new Congdon School of Health Sciences and open our pro bono clinic, two milestones that will help prepare our students for physical therapist practice of the future both in our community and around the world.

As a stakeholder in our program, you are key in supporting an elite group of students who will differentiate themselves through their professionalism, clinical skills, empathy, creativity, and entrepreneurial spirit. Our University and our Department are committed to offering an extraordinary education in an inspiring environment with caring people! Your role in helping us to deliver on this commitment is key.



As one of our valued stakeholders, you are a critical and valued contributor to our team.

Your input is VITAL in helping our Department remain current, relevant, and impactful in our community. We cannot thank you enough for your efforts on our behalf.

> Dr. Eric J Hegedus Professor and Founding Chair Department of Physical Therapy

EDUCATION UPDATE



HPU DPT Granted Candidate Status for Accreditation

In July, the High Point University Department of Physical Therapy was granted "Candidate Status for Accreditation" by the Commission on Accreditation in Physical Therapy Education (CAPTE) for the Doctor of Physical Therapy Degree. This allows the Department to begin the Admissions Process for our first class that will start in 2017. Although the DPT Degree Program is not all that we are, it is the educational impetus behind our existence and we are dedicated to creating one of the top educational programs in the world. The education of future physical therapists must allow the autonomous practitioner to practice along the entire continuum of care and across the lifespan, but the need of that autonomous practitioner to be part of a healthcare team cannot be lost along the way.

Thus, as we deliver the curriculum, the following *foundational beliefs* are encouraged to be infused, both formally and informally, into the curriculum:

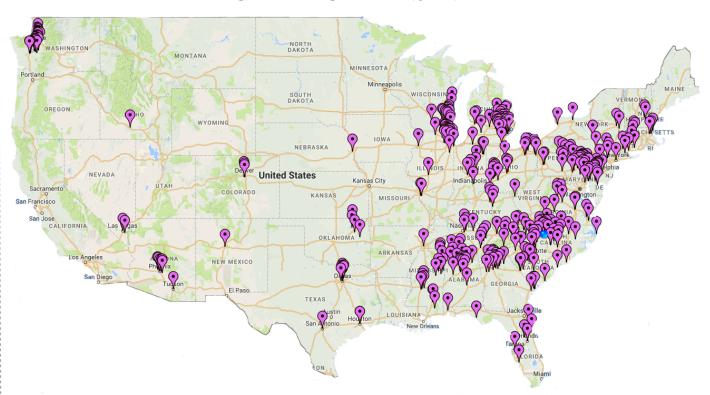
- 1. Professionalism is a fundamental component of physical therapy practice
- 2. Significant learning takes place in mentored clinical practice, which cannot be replicated in a classroom setting
- 3. Evidence-based practice is a priority
- 4. Our students will differentiate themselves by their skill in the interventions of exercise prescription, manual therapy, and building self-efficacy
- 5. Innovation and creativity are valuable skills that transcend time periods and market forces
- 6. Physical therapists are experts in comprehensively analyzing human movement across the lifespan
- 7. Physical therapists must be skillful in interprofessional practice along the continuum of care including roles as first responder, primary care practitioner, and wellness consultant.

FIRST YEAR			SECOND YEAR			THIRD YEAR		
SUMMER SEMESTER	FALL SEMESTER	SPRING SEMESTER	SUMMER SEMESTER	FALL SEMESTER	SPRING SEMESTER	SUMMER SEMESTER	FALL SEMESTER	SPRING SEMESTER
PT 7000 Anatomy	PT 7600 Musculoskeletal PT I	PT 7610 Musculoskeletal PT II	PT 8020 Cardiovascular Pulmonary III	PT 8385 Pediatrics	PT 8070 Interventions III	PT 8110 Integumentary & Specialty Practice	PT 8900 Clinical Internship I	PT 8910 Clinical Internship II
PT 7010 Movement Science I	PT 7170 Interventions I	PT 7380 Neuroscience	PT 7590 Professionalism & Leadership II	PT 8075 Orthotics & Prosthetics	PT 8160 Primary Care	PT 8610 Clinical Reasoning		
PT 7020 Cardiovascular Pulmonary I	PT 7520 Cardiovascular Pulmonary II	PT 7680 Evidence Based Practice II	PT 8080 Evidence Based Practice III	PT 7560 Community Outreach II	PT 8060 Community Outreach III	PT 8090 Professionalism & Leadership III		
PT 7040 Foundational Clinical Skills	PT 7810 Clinical Pathology I	PT 8400 Elective I	PT 8380 Adult Neuro Rehab	PT 8410 Elective II	PT 8490 Medically Complex Patients	PT 8420 Elective III		
PT 7090 Professionalism & Leadership I	PT 7280 Evidence Based Practice I PT 7510 Movement	1	PT 7770 Interventions II	1	PT 7690 Interdisciplinary Care	1		
		1	PT 7060 Community Outreach I	Ţ	Care	1		
	Science II	PT 7050 Cl i nical I		PT 7550 Clinical II		PT 8050 Clinical III	PT 8590 Professionalism & Leadership IV	NPTE Exam

CLINICAL EDUCATION



Current Clinical Sites



At HPU, we believe that clinical education experiences provide impactful learning opportunities for our students making clinical facilities and their instructors a fundamental component of our Program. The clinical education curriculum was designed to allow students to participate in clinical education experiences in the form of integrated, part-time clinical experiences in the first and second year, and three full-time clinical internships in the third year. The clinical education curriculum will require students to apply their didactic knowledge, refine their professional behaviors, cultivate evidence-based clinical decision-making, and practice their hands-on skills. Our goal is to encourage breadth of experience while allowing students to experience depth in their preferred practice settings, making them more valuable to the facilities in which they are working and more marketable upon graduation.

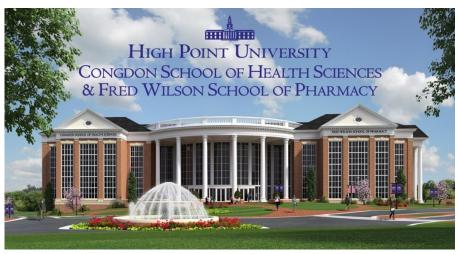
With the help of an exceptional network of physical therapy providers and committed clinical instructors, the students in HPU DPT Program will have access to a variety of clinical education experiences across the lifespan and throughout the continuum of care in a wide array of geographic locations. Our DPT Program is fortunate to have clinical affiliation agreements with 60+ outstanding clinical facilities who offer potential clinical sites in 30+ states. It is important that the clinical education relationship be a partnership that benefits both the DPT Program and the clinical facility.

This clinical education update comes with immense gratitude to the many individuals who have supported the HPU DPT Program through CAPTE accreditation and with great pride regarding the incredible quality and diversity of clinical education offerings YOU have made available to our students. THANK YOU!

FACILITIES UPDATE



HPU BREAKS GROUND ON CONGDON SCHOOL OF HEALTH SCIENCES





Last fall, HPU moved forward with a \$120 million Biomechanics investment for the School of Health Sciences and the School of Pharmacy - the single largest invest- dedicated to motion analysis and exercise physiment in the school's 91- year history. The new building, slated to open in March of 2017, will house students, faculty and staff in the Department of Physical Therapy, Department of Physician's Assistant Studies, and the School of Pharmacy.

This building is a critical component of the DPT Program, as it houses both academic and research laboratory facilities that make HPU DPT destined for greatness. Three large classrooms will be purely dedicated to DPT students, with both a musculoskeletal and neurological-specific teaching space that contain didactic areas for a creative blend of lecture, team-based, small group, and case- based learning experiences. These classrooms also hold laboratory areas filled with plinths and exercise equipment, movement analysis technology, and clinical equipment that allow for the easy transition from hands-off to hands-on learning experiences without changing locations.

The new building will also house four innovative and inspiring research laboratories. The Human

and Physiology Laboratory (HBAPL) is a 16,000 square foot lab like no other ology in active people.

The technology enclosed in the HBAPL (including three-dimensional motion analysis cameras, triaxial force plates, an environmental chamber, golf simulator, DXA scanner, and anti-gravity treadmill), make it one of the most unique and impactful research facilities in the country.

The state-of-the-art Human Anatomy laboratory is dedicated to the understanding of anatomy and neuroscience with dedicated space for work with fresh tissue, and the Brain Circuit and Function lab promotes the study of the structure and function of brain circuits in both normal and pathological conditions. Finally, the Virtual Reality lab is an innovative and advanced space dedicated to the understanding of movement in adults and children overcoming disabilities.

This cutting edge facility will allow faculty to provide DPT students with the experiences necessary to ensure they are best prepared to become successful physical therapists who truly embody the vision and values of our Program.

FACULTY NEWS



Dr. Kevin Ford Receives Multiple Awards

Dr. Kevin Ford, associate professor of physical therapy, received the Ruth Ridenhour Scholarly and Professional Achievement Award during the 2016 Commencement ceremony. The award recognizes a full-time faculty member for exemplary accomplishments in their research and creative endeavors.

Ford is director of the Human Biomechanics and Physiology Laboratory and associate professor Departthe ment of Physical Therapy in the Congdon School of Health Scienc-In these roles, he has collaborated in research with faculty across

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campus and mentored undergraduates from many departments, including exercise science, athletic training, biology and biochemistry. He has coauthored manuscripts with more than 25 students that have presented their collective work at international-level conferences.

"I am extremely honored to receive this prestigious award based on our research in physical therapy and sports medicine," says Ford. "Working along-side the talented and passionate students and faculty at High Point University has been an extraordinarily rewarding experience. I am grateful for the support the Human Biomechanics and Physiology Laboratory has received across the entire campus and look forward to working with hundreds of future undergraduate and graduate students."

HPU provost Dr. Dennis Carroll presented the award at HPU's Commencement ceremony. He

says Ford is greatly admired and appreciated for his scholarship, leadership and commitment to his profession.

"Kevin Ford is one of the most gifted faculty members I have ever met," says Carroll. "His contributions to his profession, his humble willingness to

work with all students. and his driving desire to make High Point University a destination point for the health sciences are evident to every individual our community. He is truly the best of the best."

Dr. Ford is also the recipient of two prestigious

awards for manuscripts he co- authored, including the 2016 Orthopaedic Research and Education Foundation (OREF) Clinical Research Award and the 2015 O'Donoghue Sports Injury Research Award for his work in the prevention and rehabilitation of ACL injuries.

"These are two exceptional honors for our research team at High Point University to receive," Ford says. "I am especially grateful to have the opportunity to continue to work alongside innovative and well-respected experts from research institutes in North America and Europe."

He has published more than 115 peer-reviewed articles, which have been referenced thousands of times in leading medical journals such as New England Journal of Medicine, British Medical Journal and American Journal of Sports Medicine.

(*modified from original version on www.highpoint.edu)

MEET OUR FACULTY





Steven Dischiavi, PT, DPT, SCS, ATC, COMT brings over 20 years of experience in sports physical therapy including 10 years with a professional sports team. Dr. Dischiavi served as team physical therapist and assistant certified athletic trainer for the Florida Panthers of the National Hockey League from 2004 to 2014. He is a current Sports Certified Specialist and is a Certified Orthopedic Manual Therapist through the Ola Grimsby Institute. He is licensed and practicing in North Carolina as both a physical therapist and a certified athletic trainer. Dr. Dischiavi will serve as the course coordinator and primary instructor for PT 8400 Sport Elective I, PT 8410 Sport Elective II, and PT 8420 Sport Elective III. Dr. Dischiavi is currently pursuing his PhD at the University of Ulster in Ireland under the direction of Dr. Chris Bleakley. His current research focus is on the application of a specific exercise system and its effectiveness at preventing lower extremity injuries and enhancing performance in athletes. Dr. Dischiavi has been a presenter at state and national meetings, and provides annual continuing education courses in the area of orthopedics and sports physical therapy for a nationally recognized continuing education company.

Kevin R Ford PhD, FACSM earned a Master of Science in Biomechanics in 1997 and a PhD in Exercise Science and Biomechanics from the University of Kentucky in 2009. Dr. Ford is the Director of the Department of Physical Therapy's Human Biomechanics and Physiology Laboratory. Dr. Ford will help teach PT 7010 Movement Science 1: Foundation for Physical Therapy and PT 7510 Movement Science II: Biomechanics Instrumentation. Dr. Ford has over 120 peer-reviewed manuscripts specializing in the area of orthopedics and biomechanics. He is a world-renowned expert in biomechanics and has served as Principal Investigator or Co-Investigator on multiple NIH funded grants in addition to consistent industry support. Dr. Ford was the previous Chair of the Biomechanics Interest group of the American College of Sports Medicine and the recipient of several research awards highlighting his contributions to the scientific literature. He was awarded the Nicolas Andry Award (2012) from the Association of Bone and Joint Surgeons for a body of work conducted and published over an extended period of time that deals with the musculoskeletal system and has significantly contributed to orthopaedic knowledge and practice. Additionally his research has received the prestigious O'Donoghue Award twice (2005, 2015) from the American Society for Sports Medicine, awarded to the best overall paper which deals with clinical based research or human in-vivo research.





Dora Gosselin, PT, DPT, PCS, NDTc holds a bachelor's degree in kinesiology from California State University Sacramento and a doctorate in physical therapy from Duke University School of Medicine. Dr. Gosselin earned the designation of Pediatric Certified Specialist from the American Board of Physical Therapy in 2011. Since 2010, Dr. Gosselin has held a certification in pediatric neurodevelopmental therapy awarded by the Neurodevelopmental Treatment Association (NDTA). She has also completed the advanced baby treatment course through the NDTA. In 2010, Dr. Gosselin's effectiveness in the classroom was recognized when she received the Duke DPT Excellence in Teaching Award. She will serve as the Director of Clinical Education for the DPT Program here at High Point University. Dr. Gosselin has over eight years of experience directing courses covering professionalism, lifespan, pediatric practice management and integumentary practice management. Dr. Gosselin has assisted in many other courses across entry-level doctor of physical therapy curricula and has also assisted in the lab portions of anatomy for a physician assistant program. Dr. Gosselin has completed many local and national presentations, written a book chapter, and frequently contributes to her profession with non-peer reviewed articles. She is serving her sixth year as the North Carolina State Representative to the Academy of Pediatric Physical Therapy and on their Practice Committee, and she has served on the Publications Committee of the NDTA. Dr. Gosselin is the secretary for the Pediatric Special Interest Group of the North Carolina Physical Therapy Association and has served on numerous university committees including the faculty senate. Dr. Gosselin ran a pediatric health and wellness screening program on a mobile clinic and, with her physical therapy students, screened over 700 children in underserved neighborhoods.





Renee N. Hamel, PT, DPT, CBIS earned a BS in the Science of Human Nutrition, Foods, and Exercise and a BS in Psychology from Virginia Tech in 2005 and a DPT from Elon University in 2008. She has 8 years of experience in adult neurological physical therapy, 3 years of experience in pediatric physical therapy, 3 years of experience as adjunct faculty in a graduate level physical therapy education program, and 2 years of experience as a clinician volunteer and student mentor at a university's DPT student run pro bono physical therapy clinic. In 2009 Dr. Hamel became a credentialed Clinical Instructor through the American Physical Therapy Association, and she served as a clinical instructor from 2009-2016 and has been nominated for clinical instructor of the year three times. Through the American Academy of Brain Injury Specialists, Dr. Hamel is a Certified Brain Injury Specialist and practices as a licensed physical therapist in the state of North Carolina. Dr. Hamel will serve at the course coordinator for PT 8380 Adult Neuro Rehab and PT 8490 Medically Complex Patients.

Dr. Hamel's scholarship focuses on improving the quality of life and functional outcomes of those individuals with neurological impairments, with emphasis on patients with acquired and traumatic brain injury. Her current research interests revolve primarily around the causes and impact of chronic fatigue with associated treatment implications for patients with traumatic brain injury and functional gait parameters for patients with lower extremity hypertonia.



Eric J Hegedus PT, DPT, MHSc, OCS is a Professor and the Founding Chair of High Point University's Department of Physical Therapy. He has a bachelor's degree in business administration from Bucknell University, a masters in clinical research from Duke University and a doctorate in physical therapy from Slippery Rock University. Dr. Hegedus is currently enrolled in a PhD program in Sport and Exercise Science at the University of Ulster with anticipated graduation in December of 2016. He will be directly responsible for teaching PT8610 Clinical Reasoning, and he is also likely to teach segments of PT 7600 Musculoskeletal Practice Management I and PT 7610 Musculoskeletal Practice Management II. As an author, Dr. Hegedus has authored over 60 peerreviewed publications in the musculoskeletal and sports content areas, a textbook on diagnostic accuracy of the clinical examination, and 4 book chapters. His article detailing the accuracy of orthopedic special tests of the shoulder is in the British Journal of Sports Medicine's top 50 articles of all time. As a teacher, Dr. Hegedus has earned distinction winning the American Physical Therapy Association's James a Gould Excellence in Orthopaedic Teaching Award. Dr. Hegedus still practices daily and is founder and director of Targeted Enhanced Athletic Movement (TEAM). He works with High Point University's student-athletes and visits China to work with their Olympic athletes.

Dr. Alicia Emerson Kavchak PT, DPT, MS, OCS, FAA-**OMPT** is an Assistant Professor in the Department of Physical Therapy at HPU. She received a BA in Biology from Illinois Wesleyan University in 1997, an MS in Physical Therapy from University of Indianapolis in 2000, an MS in Rehabilitation Science from the University of Illinois at Chicago in 2011, and her DPT (transitional) from Governor's State University in 2014. Dr. Emerson Kavchak brings in over 15 years of clinical experience. She is a Board Certified Specialist in Orthopaedics by the American Physical Therapy Association. She also has the distinction of being a Fellow of the American Academy of Orthopaedic Manual Physical Therapists. Dr. Emerson Kavchak possesses unique insight to advance the students' clinical reasoning with the outpatient population her extensive clinical experience working with an underserved patient population coping with chronic musculoskeletal pain. Dr. Emerson Kavchak is responsible for the Intervention series of courses in the curriculum. In addition, she is coordinating the Community Outreach series, giving the students an opportunity to work in the Pro Bono Clinic, projected to open in the summer of 2017.

Dr. Emerson Kavchak has mentored numerous fellows-intraining and physical therapy students in her clinical experience, during which she was twice named one of the Chicagoland Clinical Instructors of the Year. She is currently the Chair of the Research Committee for American Academy of Orthopaedic Manual Physical Therapists.

Dr. Emerson Kavchak's research interests include the functional implications of pain processing in the management of musculoskeletal conditions, clinical reasoning and clinical management in patients with chronic and/or complex presentations, and working with the underserved patient population. Dr. Emerson Kavchak has provided both national and international professional presentations and authored many professional scholarly articles.





Diana C. Peterson, PhD earned her BS in Biology with a minor in Math from Indiana University in 1997. She earned her PhD in Anatomical Sciences and Neurobiology in 2004 from the University of Louisville School of Medicine. Her graduate research provided the seminal studies on descending auditory circuitry within the brain. She expanded this research by examining the electrical activity of brain processing as a postdoctoral associate at the Northeastern Ohio Medical University from 2004-2008, and continued there as a Research Associate in 2008. In 2009, Dr. Peterson accepted a position at Iowa State University as an Assistant Professor. During her tenure at ISU, Dr. Peterson expanded her research focus to include traumatic brain injury, psychiatric illness, and the influence of the intestinal microbiotia on brain processing. She also spearheaded a large research group to develop a functional interactive virtual surgery to assist with the training of medical students and surgical residents. Over her career, Dr. Peterson has been highly successful in obtaining significant grant funding from the National Institute of Health as well as other sources. She hopes to continue this success as a new Associate Professor at High Point University. Dr. Peterson has taught Gross Anatomy and Neuroscience since 2000. She will continue to teach these subjects within the Department of Physical Therapy at High Point University.





nary Medicine degree from Cornell University in 2003 and a PhD in Sports Medicine and Nutrition from the University of Pittsburgh in 2007. Dr. Smoliga is the Associate Director of the High Point University Human Biomechanics and Physiology Laboratory. Dr. Smoliga began his academic career as a faculty member as an Assistant Professor of Exercise Physiology at Marywood University (Scranton, PA) in 2007, where he was promoted to Associate Professor in 2011, before moving to High Point University in 2012. Prior to teaching in the DPT Program, Dr. Smoliga taught undergraduate and graduate courses in human anatomy and physiology, animal physiology, exercise physiology, and chronic disease, and also taught exercise physiology courses for primary care sports medicine fellows at Geisinger Medical Center (Danville, PA). Additionally, Dr. Smoliga has served as a research advisor for over a dozen undergraduate students, and has served as a committee member or chair for multiple graduate theses. Dr. Smoliga will be responsible for delivering the course content of CVP I, CVPII, and Clinical Pathology. Dr. Smoliga continues to be an active scholar, and currently has over 30 peer-review publications in the area of human physiology, sports medicine, and translational medicine. Dr. Smoliga has over a decade of experience presenting his research at national and international conferences and continues to formally mentor students for conference research presentations every year. Dr. Smoliga is currently the Co-Chair of the Endurance Athlete Medicine and Science Interest Group of the American College of Sports Medicine. Dr. Smoliga continues to serve as a peer reviewer for over 40 scientific journals.



Jeffrey B Taylor PT, PhD, DPT, OCS, SCS, CSCS earned a BA in Biological Sciences in 2002 from the University of Delaware, a DPT in 2005 from Duke University, and a PhD in Kinesiology with a concentration in Applied Neuromechanics from the University of North Carolina at Greensboro in 2016. Prior to arriving at HPU in 2012, Dr. Taylor practiced clinically in general and sports medicine outpatient clinics in upstate New York and Northeast Pennsylvania for 8 years. Clinically, he is a dually-certified ABPTS Orthopaedic and Sports Physical Therapist and serves as an item writer for the Sports Clinical Specialist examination. His research interests include the prevention of lower extremity athletic injuries and the specificity of current prevention programs, rehabilitation procedures, and injury screening protocols. Over the past 3 years, he has authored 15+ publications in sports medicine journals, presented nationally and internationally on lower extremity injury prevention and athletic footwear, served as a reviewer for multiple international journals, and has mentored a number of undergraduate research students that have gone on to present their findings at the American College of Sports Medicine Annual Meeting. Dr. Taylor has been at HPU since 2012, initially serving as the Director of Clinical Education prior to taking his current role as the Director of Curriculum and Outcomes (DCO). As the DCO, he monitors the Program's comprehensive assessment plan and recommends changes to the curriculum based on student-driven data. In the curriculum, Dr. Taylor will serve as the course director for Movement Science I, Movement Science II, and Professionalism & Leadership IV.

Alexis A Wright PT, PhD, DPT, OCS, FAAOMPT earned a DPT in 2006 from Duke University. She received her PhD in Clinical Research from the University of Otago, New Zealand in 2010. She is a current Orthopedic Certified Specialist and Fellow of the American Academy of Orthopaedic Manual Physical Therapists. She is a licensed and practicing physical therapist in North Carolina and has been a core faculty member since 2011. Dr. Wright currently serves as Assistant Chair and primary instructor for PT 7610 Musculoskeletal II and codirector of PT 7600 Musculoskeletal I. In her primary role as Assistant Chair, Dr. Wright will be responsible for student related issues as well as serve as Chair of the Admissions Committee. Dr. Wright currently serves on two journal editorial boards and acts as a reviewer for a number of other international and national peerreviewed journals. She currently serves on both the Nominating Committee and Research Committee for the American Academy of Orthopaedic Manual Physical Therapists. Dr. Wright is a 2012 recipient of the Dorothy Briggs Memorial Scientific Inquiry Award for the American Physical Therapy Association. Dr. Wright has over 35 peer-reviewed publications in the area of orthopedics, is a frequent research presenter at state and national meetings, and provides annual continuing education courses in the area of orthopedics to Orthopedic Residents.



RESEARCH UPDATE



HPU SECURES LARGEST NATIONAL INSTITUTES OF HEALTH GRANT IN ITS HISTORY



High Point University has secured a \$528,107 National Institutes ence," Ford says. of Health grant, the largest in HPU's history. The grant, titled "Real-time Optimized Biofeedback Utilizing Sport Techniques," will fund HPU students and faculty looking at innovative biofeedback techniques in middle school and high school-aged female soccer players.

Dr. Kevin Ford, director of the HPU Human Biomechanics and Physiology Laboratory and associate professor of physical therapy, in conjunction with Dr. Jeff Taylor, assistant professor of physical therapy at HPU; Dr. Yum Nguyen, associate professor of athletic training at HPU; and Dr. Mark Paterno and Dr. Bin Huang from Cincinnati Children's Hospital will research over the course of three years how different training programs impact ACL injury risk in females.

Their goal is to reduce risk of ACL injuries in females. Females are four to six times more likely to tear their ACL -than males in non- contact injuries, which are common in sports like soccer and basketball.

There's a great deal of interest in the research on both the local and national levels.

"Working alongside the talented and passionate students and faculty at High Point University has been a rewarding experi-

HPU has connected with the Piedmont Triad Football Club for the first round of research this summer and looks to involve other clubs and schools in the future, including 150 middle and high school female athletes from here in the Piedmont Triad.

"The opportunity for students to collaborate on a federally funded project is invaluable," says Nguyen. "This project provides our students with a hands-on, clinical research experience that will enhance their learning and set them apart as they pursue graduate programs in Health Sciences.

This also allows us to continue quality research in the Human Biomechanics and Physiology Laboratory, but will also help us reduce the risk of ACL injury in youth athletes in the High Point community."

Research reported in this press release was supported by the National Institute of Arthritis and Musculoskeletal and Skin Diseases of the National Institutes of Health under Award Number R21AR069873. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

(modified from version found at www.highpoint.edu)

FEATURED PUBLICATION



Physical performance tests predict injury in National Collegiate Athletic Association athletes: a three-season prospective cohort study

A three-year research study at High Point University has revealed that certain physical performance tests developed by the university can be used to predict athletic injuries before they occur. The results are helping HPU identify injury potential in student-athletes and develop training programs to prevent those injuries from happening.

Dr. Eric Hegedus, professor and founding chair of the physical therapy department, recently published the findings in the British Journal of Sports Medicine in an article titled "Physical performance tests predict injury in National Collegiate Athletic Association athletes: a three-season prospective cohort study."

Working with exercise science and athletic training faculty and students as well as the Department of Athletics, Hegedus gave screening tests to HPU athletes in the pre-season and followed them closely, recording any injuries. Though previous studies had shown tests by various sports medicine professionals not to be predictive, tests developed by HPU were found to be successful in predicting injury.

"Identifying which athletes will be injured before injuries occur would save them pain, suffering, lost playing time and expenses associated with x-rays, imaging and surgery," says Hegedus. "If we could do a few simple screening tests and see which athletes perform poorly on those

A three-year research study at High Point University has tests, we could change their training program to correct revealed that certain physical performance tests develthe deficiencies and prevent them from being injured."

Josh Geruso, HPU's assistant athletic director for sports medicine, and Ryan Billings, head coach of strength and conditioning, are beginning to use the results of this research to examine which HPU athletes might benefit from additional training with the aim of decreasing injury rates.

"I am very excited to utilize a homegrown screening tool to help prevent injury and minimize time loss for our student- athletes," says Geruso. "Dr. Hegedus' research sheds light on areas of injury prevention that were previously unidentified. Our student-athletes will undoubtedly benefit from his work and we look forward to more opportunities to work together in the future."

Hegedus hopes the research will benefit HPU studentathletes, as well as college athletes everywhere.

"This type of study takes great cross- departmental cooperation," Hegedus says. "I am extremely proud that the HPU family and the departments of Physical Therapy and Athletics were able to work collaboratively for the betterment of our student-athletes."

(modified from version found on www.highpoint.edu)



RESEARCH



RECENT HPU PUBLICATIONS

- 1. **Wright AA**, **Dischiavi SL**, **Smoliga JM**, **Taylor JB**, **Hegedus EJ**. Ability of the Lower Quarter Y-Balance Test to predict lower extremity injury in Division 1 athletes. *Physiotherapy* [Epub ahead of print]
- 2. Farina KA, **Wright AA, Ford KR,** Wirfel LA, **Smoliga JM**. Physiological and biomechanical responses to running on lower body positive pressure treadmills in healthy populations. *Sports Medicine*, 2016 Jul 5. [Epub ahead of print]
- 3. Hewett TE, **Ford KR**, Xu YY, Khoury J, Myer GD. Utilization of ACL injury biomechanical and neuromuscular risk profile analysis to determine the effectiveness of neuromuscular training. *American Journal of Sports Medicine*. 2016 Jul 29. pii: 0363546516656373.
- 4. Schneider DK, Gokeler A, Otten B, **Ford KR**, Hewett TE, Divine J, Colosimo AJ, Heidt MS, Myer GD. A novel mass-spring-damper model analysis to identify landing deficits in athletes returning to sport after ACL reconstruction. *Journal of Strength and Conditioning Research.*. 645^o Jul 5³. [Epub ahead of print]
- 5. **Smoliga JM,** Mohseni ZS, Berwager JD, **Hegedus EJ.** Common causes of dyspnea in athletes: A practical approach for diagnosis and management. *Breathe*. 2016 Jun;12(2):e22-37. doi: 10.1183/20734735.006416.
- 6. Mohaved A, Ostovar A, Thandapilly SJ, Raj P, Louis XL, **Smoliga JM**, Netticadan T. The efficacy of resveratrol in controlling hypertension: study protocol for a randomized, crossover, double-blinded, placebo-controlled trial. *Trials*. 2016 Jun 23;17(1):296. doi: 10.1186/s13063-016-1426-x.
- 7. **Taylor JB, Ford KR**, Nguyen AD, Shultz SJ. Biomechanical comparison of single- and double-leg jump landings in the sagittal and frontal plane. *Orthopaedic Journal of Sports Medicine*, 2016 Jun 28;4(6):2325967116655158. doi: 10.1177/2325967116655158.
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- 9. **Peterson DC**, Mlynarczyk GS. Analysis of traditional versus three-dimensional augmented curriculum on anatomical learning outcome measures. *Anat Sci Educ*. 2016 Apr 14. doi: 10.1002/ase.1612.
- 10. **Ford KR**, **Taylor JB**, Baellow AL, Arpante AE, Wright KE, Nguyen AD. Effects of plate stiffness on first metatar-sophalyngeal joint motion during unanticipated cutting and resisted sled pushing in football players. *Footwear Science*. 8 (2):75-82, 2016. doi: 10.1080/19424280.2016.1175518.
- 11. **Wright AA**, Stern B, **Hegedus EJ**, Tarara DT, **Taylor JB**, **Dischiavi SL**. Potential limitations of the Functional Movement Screen- A clinical commentary. *British Journal of Sports Medicine*. 2016 Mar 31. doi: 10.1136/bjsports-2015-095796.
- 12. Vidt ME, Santago AC 2nd, Marsh AP, **Hegedus EJ**, Tuohy CJ, Poehling GG, Freehill MT, Miller ME, Saul KR. The effects of a rotator cuff tear on activities of daily living in older adults: A kinematic analysis. *Journal of Biomechanics*. 2016 Feb 29;49 (4):611-7. doi: 10.1016/j.jbiomech.2016.01.029.
- 13. **Wright AA, Hegedus EJ**, Lenchik, Kuhn JK, Santiago L, **Smoliga JM**. Diagnostic accuracy of various imaging modalities for suspected lower extremity stress fractures: A systematic review with evidence-based recommendations for clinical practice. *American Journal of Sports Medicine*. 2016 Jan;44(1):255-63. doi: 10.1177/0363546515574066.
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HPU GIVES BACK

Physical therapy is a quickly growing profession, and the Department of Physical Therapy at High Point University understands the need to generate curiosity in the field in order to ensure that the children of today are interested in becoming the physical therapists of tomorrow.

To aid in doing this, we as a department regularly coordinate and host visits from students as a means of exposing them to various aspects of the fields of health sciences. These visits not only allow youth the ability to broaden their horizons, but they also allow our faculty and staff the opportunity to interact with future scientists in a meaningful and rewarding way.

These occasions generally consist of a tour of the Human Biomechanics and Physiology Lab, which includes all of the state of the art equipment that is housed within the facility, and various stations and activities at which students are required to utilize a "hands on" problem solving approach. We frequently work with HPU's Physician's Assistant and Pharmacy Departments to create an experience that is interdisciplinary and one which exposes participants to multiple fields of potential study or employment.

In the past, the Department of Physical Therapy has welcomed students from Florence Elementary School, Greensboro Day School, Guilford County Academic All-Star Camp, High Point Christian Academy, High Point University STEM Camp, Southwest Guilford High School, Washington Street Camp, Wesleyan Christian Academy, and Westchester Country Day School.

It is our hope that by organizing these experiences we not only give back to the community that supports us, but that each of us learns a little something in return.

ADMISSIONS

As a result of our provisional accreditation from CAPTE, the Department of Physical Therapy is now live on PTCAS. We are now accepting applications and screening candidates for interviews. The HPU DPT Program will be hosting interviews throughout the fall term to fill our inaugural class of 60 students, which will begin matriculation in May of 2017. The following interview dates have been confirmed:

Interview Dates:

Friday, October 14, 2016 Friday, October 21, 2016 Wednesday, November 9, 2016 Thursday, November 17, 2016 Wednesday, November 30th, 2016 Tuesday, December 6, 2016

Students undergo a rigorous screening process and once invited for an interview, we are hoping for a good match of students who not only demonstrate academic excellence, but embrace our core values of helping others through community outreach, collegiality, lifetime learning, and excellence. Interviews consist of a morning welcome session, individual interviews with two faculty members, followed by a campus tour including our Biomechanics and Physiology lab.

We look forward to welcoming our inaugural class of 2020 and hope you will join us in welcoming them to High Point University!

CONTINUING EDUCATION



HPU DEPARTMENT OF PHYSICAL THERAPY, IN CONJUNCTION WITH MYOPAIN SEMINARS, PRESENTS DRY NEEDLING COURSE 1: NOVEMBER 11-13, 2016

DN-1 Foundations I course features a brief introduction to the history of dry needling, trigger points and myofascial pain, the OSHA Blood Borne Pathogen Standards within the context of dry needling, and an introduction to relevant pain sciences.

Many muscles commonly addressed in clinical practice are included, such as the infraspinatus, upper trapezius, deltoid, sternocleidomastoid, triceps, biceps, brachialis, levator scapulae (partially), the latissimus dorsi (partially), the subscapularis (partially), brachioradialis, the wrist extensors, the supinator and anconeus, the quadratus lumborum, psoas major lumbar iliocostalis, the gluteal muscles (minimus, medius, and maximus), the hip adductor muscles, the quadriceps and hamstrings, and gastrocnemius and soleus muscles.

Students will review the anatomy, function, and dry needling techniques for each muscle.

Eliigibility Requirements

The workshops are designed for licensed healthcare practitioners, who are allowed to use dry needling in their practice and jurisdiction, including physicians and physician assistants, dentists, physical therapists, occupational therapists, chiropractors, acupuncturists, nurses, and nurse practitioners. Entry-level students are not eligible for the dry needling courses, but medical residents and physical therapy residents are welcome to attend.

All participants are expected to participate in the hands-on portion of the course. By registering for this course, participants agree to practice the various manual and needling techniques on each other. Prior to the course, all participants must sign a waiver absolving Myopain Seminars, the program directors, and the instructors of any liability in the event of injury.

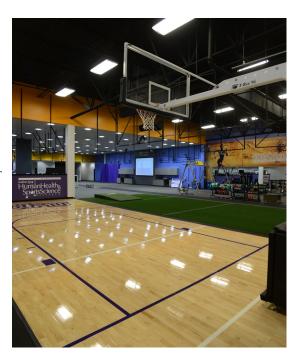
Course Objectives

Upon completion of the course, participants will be able to:

- Understand the basic principles of applied pain sciences
- Identify select muscles of the body by surface anatomy and by function
- Identify the features of the trigger point by physical examination and apply this knowledge to individual muscles in different regions of the body
- Understand common precipitating and perpetuating factors of trigger points.
- Perform muscle and region-specific manual therapy treatments to inactivate myofascial trigger points and restore movement patterns and posture, integrating various treatment techniques including dry needling and manual trigger point therapy
- Understand the basic principles of dry needling and trigger point injections

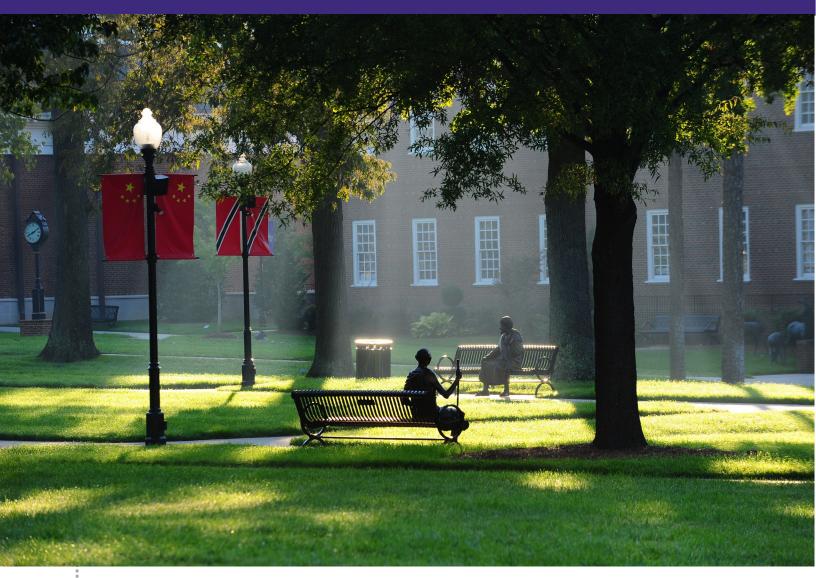
For more information please visit our website at:

https://www.highpoint.edu/physicaltherapy



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