

# Physical Therapy

SPRING 2018



## LETTER FROM THE CHAIR

Friends and Colleagues,

Spring is again upon us with the blooming of the Bradford Pears and Cherry trees.

Our students are finishing semester three which is also the end of year one. As of this writing, they are in their split cohort which allows half of the students to be out on their first clinical experience (Thank you High Point Regional Hospital!) while the other half are completing their third semester of didactic work. They are also taking selectives which include Dry Needling, Geriatrics, Physical Therapy Start-up, Performing Arts Physical Therapy, and Research. Pretty cool stuff. Also, we have just about finished filling our second cohort but as you may recall, this is the time of year where there is a lot of last minute changing of schools. We continue to recruit bright students who believe in our vision here, including a dedication to the community.

Speaking of community, the Pro Bono Clinic is running at maximum capacity and is a source of great pride for the Department and is a wonderful learning lab for our students. We have developed and are now recruiting for the **RAISE (Raising others through equal Access to health care, Impactful physical therapy, Systems-based advocacy, & Engaging in socio-political discourse)**. The RAISE Fellowship will have all of the components that promote advanced practice, teaching, and learning but with the added opportunity for leadership and advocacy through civic engagement.

**If you would like to be involved with our clinic or RAISE, please contact Dr. Alicia Emerson, [aemerson1@highpoint.edu](mailto:aemerson1@highpoint.edu).**

Our faculty continue to amaze. They are happy, productive, engaged and a joy to work for. Our scholarship continues to grow and our Esaote weightbearing MRI is up and running allowing the exploration of a whole new area of research. We are recruiting for one more faculty member with a neuro/geriatrics leaning and we are also excited to welcome Dr. Dave Sinacore to our ranks after his distinguished career at Washington University in St Louis. Despite his considerable academic achievements, he is even a nicer person than he is a productive scholar- quite a feat!

Our Advisory Board recently returned to campus and again provided thoughtful insight as to how to continue to innovate and produce the best students.

Whether for research collaboration, taking our students for a clinical rotation, offering to teach a selective, provide feedback, or just to say hello, we'd love to hear from you- you are part of this family.

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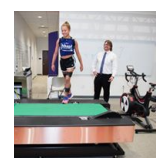
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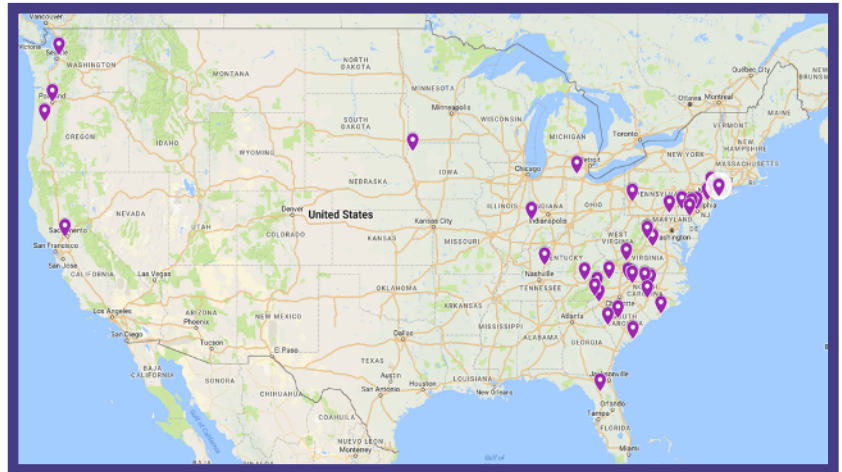


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Find us on 



# CLASS UPDATES



## *Class of 2020*

Our inaugural class of PT students are wrapping up their first year having completed Musculoskeletal Practice Management and their first part-time, 7 week clinical rotations! The students are ecstatic to finally integrate their classroom knowledge with live clinical experiences and put their knowledge to work. The students will be completing their first end of year exam here soon with the intent of exposing them to a testing format similar to what they will experience on their PT board exams.

Overall, the students seem pleased with their experience and as faculty it has brought great joy in watching their exponential growth over the past year.



## *Class of 2021*

Additionally, our Class of 2021 has shaped up nicely and we are excited to welcome another group of 60 students from across the country ranging from California to Michigan to Pennsylvania and Florida! We are finalizing their welcoming orientation and looking forward to them joining the family very soon!

# FACULTY NEWS

Associate Professor, Dr. Diana Peterson, will be attending the Experimental Biology Conference in April, the main conference for the American Association of Anatomists. Dr. Peterson will be presenting on two topics, in which both abstracts are peer-reviewed and will be published in the FASEB Journal.

Assistant Professor, Dr. Renee Hamel, is also an author on the education study.

**Peterson, D.C.** (2018) Signals from the Gut Influence Mouse Behavior: Examination of Mechanisms.

**Peterson, D.C.,** Hamel, R., Carriker, C. (2018) Analysis of Student Growth in Both Spatial Ability and Study Skills in Gross Anatomy. Experimental Biology, San Diego, CA.



Professor and Founding Chair, Dr. Eric J. Hegedus, has been asked to be an Advisory Board Member for CHARR (Center for Health, Activity, and Rehabilitation Research) at the University of Otago.

Assistant Professor, Dr. Lisa Zukowski, is a Principal Investigator (PI) on a HPU Explorer University Research Grant; Dr. Renee Hamel is the co-PI on the project. The project is geared to determine the acute cognitive and gait benefits of a single session of immersive virtual reality treadmill training relative to a single session of conventional treadmill.



Over 12,000 innovative and dedicated professionals attended the largest conference on physical therapy in the country.

Combined Sections Meeting (CSM) was hosted this year in New Orleans with opportunities for physical therapy professionals to network, attend educational sessions, earn CEU's, present posters, and to learn about new products, services, and technologies.

Collaboratively, the University of Otago and High Point University's Department of Physical Therapy host a reception each year at CSM. HPU values our relationship greatly with Otago through which we have had faculty from each school visit the other and our combined reception at the APTA's (CSM) continues to be a wonderful opportunity to exchange ideas and network with some of the biggest names in physical therapy.

Pictured are HPU DPT Faculty:

Drs. Eric Hegedus, Dora Gosselin, Alicia Emerson, and Alexis Wright as well as Dr. David Baxter from the University of Otago.

# AN INTRODUCTION TO OUR NEW FACULTY

**Dr. Lance Mabry joined the Congdon School of Health Sciences at HPU as assistant professor of physical**



**therapy.** He teaches Primary Care in Physical Therapy and Physical Therapy Professionalism and Ethics. He comes to HPU having completed a 20-year career with the U.S. Air Force during which he served as the Chief of Physical Therapy at Craig Joint Theater Hospital in Bagram, Afghanistan, in support of Operation Enduring Freedom. During that time, he was named Air Mobility Command Physical Therapist of the Year and Air Force District of Washington Biomedical Clinician of the Year. His research focus is differential diagnosis, direct access physical therapy, integrating diagnostic imaging into clinical practice, and advancing physical therapy health care policy. Mabry has a Doctor of Physical Therapy and a Bachelor of Science in biology. He is a board certified orthopedic specialist and a fellow of the American Academy of Orthopedic Manual Physical Therapists.

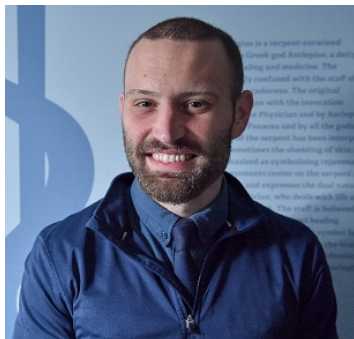
**Dr. Angela Spontelli Gisselman joined the Congdon School of Health Sciences at HPU as assistant professor of physical therapy.**

Gisselman teaches musculoskeletal practice and serves as associate director of clinical education. She relocated to High Point from Dunedin, New Zealand, where she completed her Ph.D. in physiotherapy at the University of Otago. She graduated summa cum laude with a bachelor's degree in kinesiology from Miami University. She earned her Doctor of Physical Therapy from Duke University and an Orthopedic Clinical Specialist certification from the University of North Carolina at Chapel Hill. Gisselman studies overuse injuries such as hamstring strain or achilles tendinopathy and is currently looking at the autonomic nervous system's role in these types of injuries. She is also active in professional outreach, serving as an associate editor for the British Journal of Sports Medicine. She is an APTA-certified advanced clinical instructor.



**Dr. Garrett Naze joined the Congdon School of Health Sciences at HPU as assistant clinical professor of physical therapy.**

Having earned a Doctor of Physical Therapy from Marquette University, Dr. Naze went on to complete an orthopedic physical therapy residency program with UW-Health and Merriter Hospitals. Following residency, Dr. Naze completed the orthopedic manual physical therapy fellowship program at the University of Illinois at Chicago. He is board certified in orthopedics and is a Fellow of the American Academy of Orthopedic Manual Physical Therapists. Dr. Naze has unique training, having served as the physical therapist in the interdisciplinary Orofacial Pain Clinic at the University of Kentucky, working with dentistry and clinical psychology to manage patients with complex, chronic pain conditions. He is also currently completing his PhD through the University of Kentucky.



Dr. Naze works with patients with pain conditions in the Department of Physical Therapy's Pro Bono Clinic. His clinical approach and research interests incorporate health and wellness measures, health behavior skills training, and motivational strategies to address multiple body systems in this patient population. His goal is to help build the Pro Bono clinic into an asset for the community and a resource for clinical training.

# 9 PHYSICAL THERAPIST TIPS TO HELP YOU

## #AgeWell

We can't stop time. Or *can* we? The right type and amount of physical activity can help stave off many age-related health conditions. Physical therapists, who are movement experts, prescribe physical activity that can help you overcome pain, gain and maintain movement, and preserve your independence—often helping you avoid the need for surgery or long-term use of prescription drugs. Here are 9 things physical therapists want you to know to #AgeWell.

### 1 Chronic Pain Doesn't Have To Be The Boss Of You

Each year 116 million Americans experience chronic pain from arthritis or other conditions, costing billions of dollars in medical treatment, lost work time, and lost wages. Proper exercise, mobility and pain management techniques can ease pain while moving and at rest, improving your overall quality of life.

### 2 You Can Get Stronger When You're Older

Research shows that improvements in strength and physical function are possible in your 60s, 70s, and even 80s and older with an appropriate exercise program. Progressive resistance training, in which muscles are exercised against resistance that gets more difficult as strength improves, has been shown to prevent frailty.

### 3 You May Not Need Surgery Or Drugs For Low Back Pain

Low back pain is often over-treated with surgery and drugs despite a wealth of scientific evidence demonstrating that physical therapy can be an effective alternative—and with much less risk than surgery and long-term use of prescription medications.

### 4 You Can Lower Your Risk Of Diabetes With Exercise

One in four Americans over the age of 60 has diabetes. Obesity and physical inactivity can put you at risk for this disease. But a regular, appropriate physical activity routine is one of the best ways to prevent—and manage—type 1 and type 2 diabetes.

### 5 Exercise Can Help You Avoid Falls—And Keep Your Independence

About one in three U.S. adults age 65 or older falls each year. More than half of adults over 65 report problems with movement, including walking ¼ mile, stooping and standing. Exercise can improve movement and balance and reduce your risk of falls. It can also reduce your risk of hip fractures (95 percent of which are caused by falls).

### 6 Your Bones Want You To Exercise

Osteoporosis or weak bones affects more than half of Americans over the age of 54. Exercises that keep you on your feet, like walking, jogging, or dancing, and exercises using resistance, such as weightlifting, can improve bone strength or reduce bone loss.

### 7 Your Heart Wants You To Exercise

Heart disease is the No. 1 cause of death in the U.S. One of the top ways of preventing it and other cardiovascular diseases is exercise! Research shows that if you already have heart disease, appropriate exercise can improve your health.

### 8 Your Brain Wants You To Exercise

People who are physically active—even later in life—are less likely to develop memory problems or Alzheimer's disease, a condition that affects more than 40 percent of people over the age of 85.

### 9 You Don't "Just Have To Live With" Bladder Leakage

More than 13 million women and men in the U.S. have bladder leakage. Don't spend years relying on pads or rushing to the bathroom. Seek help from a physical therapist.

Physical therapists can help you #AgeWell. To learn more about how a physical therapist can help transform your life, or to find a physical therapist near you, visit [www.MoveForwardPT.com](http://www.MoveForwardPT.com).

## #AgeWell

WITH THE HELP OF A  
PHYSICAL THERAPIST

[www.MoveForwardPT.com](http://www.MoveForwardPT.com)

 **APTA**  
American Physical Therapy Association.

# RESEARCH HIGHLIGHT:

## Wearable Technology in Sports Physical Therapy

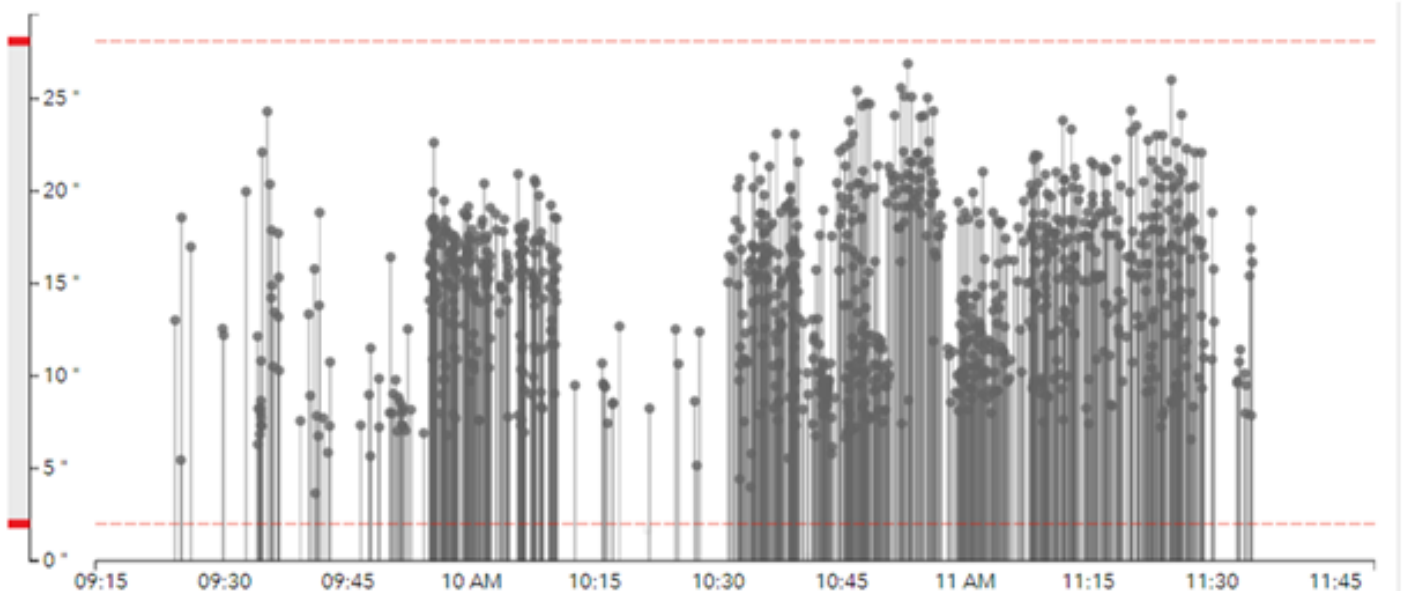
Dr. Jeffrey B. Taylor, PT, PhD, DPT, OCS, SCS, CSCS

The use of wearable technology is growing rampantly. Seemingly everyone now has some sort of activity tracker that they use on a daily basis, whether it be for physical or psychological gain. The wearable technology movement has also taken off in athletics. Football, basketball, soccer, and lacrosse athletes (especially at the professional levels) often wear global positioning system tracking units and/or heart rate monitors to surveil the biomechanical and physiological requirements of the sport and individual responses to these demands. Despite the widespread use of these devices, there is currently very little evidence to support modifying participation or introducing interventions to modify these loading parameters in an athletic population.

Led by Dr. Jeff Taylor, Assistant Professor and Director of Curriculum and Outcomes, the Department of Physical Therapy is playing a key role in establishing guidelines to analyze and interpret these data. Specifically, the research team that encompasses multiple physical therapy faculty, DPT students, and collaborators from the Departments of Athletics, Athletic Training, and Exercise Science, is monitoring in-season load in Division-1 collegiate athletes.

Much of the team's early work has focused on load monitoring in volleyball. Over the course of a season, volleyball players wore an accelerometer around their waist that quantified the frequency (count) and intensity (height) of jumping throughout the season. An example of data from a typical training session can be seen below. Preliminary analysis of the longitudinal dataset has been exciting, as it may indicate that jump load (the product of count and height) can predict an athlete's perceived injury status. These results may better inform coaches and sports medicine clinicians in training session design and during return to play decisions.

Other work is ongoing with movement and physiologic demand data from women's soccer, men's and women's lacrosse, and men's basketball. Monitoring load, especially with wearable technology, is a hot topic in the sports medicine field. Stay tuned as the HPU Department of Physical Therapy continues to break ground in this exciting new area of research!





# CLINICAL EDUCATION

Greetings from the Clinical Education Team!

The halls of HPU DPT have a new type of chatter – students popping into faculty offices to share an experience they had in clinic or students talking amongst themselves about their day in clinic. The Clinical Education Team has also taken to the road, becoming frequent visitors to the five High Point Regional Clinics where our students learning. It is such a pleasure to observe our students taking what they have learned in the classroom and putting it into practice with real patients, all during the first year of the Program. This opportunity that would not be possible without the dedication and effort of our clinical instructors, for whom we are very grateful.

“Let me tell you what I think of these students...I love them!” Those were the words shared with me by a patient working with our students. Patients really do have some of the most valuable feedback for students and this statement affirms that our students are already making a difference in the lives of the patients that they are working with during their clinical experiences.

In addition to supporting our students and clinical instructors during Clinical Experience I, this semester the Clinical Education Team has been busy preparing and sending the March Mailing which is the formal request for clinical sites for 2019 and participating in the onboarding of the HPU DPT Class of 2021.

HPU DPT has a partnership with the University of Otago School of Physiotherapy in Dunedin, New Zealand and, through this relationship, we have established our first international internship. International internships are an important part of a holistic clinical education program and we are appreciative to our colleagues at Otago who have worked with us to provide this opportunity to our students. Dr. Gisselman has taken the lead on developing international internship opportunities and is working

hard with the HPU Office of Global Education to establish other internships but also to investigate the possibility of bringing international students to HPU DPT for a portion of their clinical education.

Looking forward, we will be busy preparing for the fall and Clinical Experience II but not before we show our appreciation for our current clinical instructors by having them all to campus in early May for a social gathering and networking session with our faculty.

Happy spring to everyone!

Dora Gosselin, PT, DPT, PCS, cNDT  
Director of Clinical Education

Angela Gisselman, PT, DPT, OCS  
Associate Director of Clinical Education

Tiffany Hughes, MS  
Clinical Education Specialist





# BY THE NUMBERS

72%

reduced costs for patients who seek physical therapy as a first treatment strategy.

62%

Students Enrolled in physical therapist education programs in 2015 who are women.

200,000

Physical therapists employed in the U.S. with an additional 60,000 projected to be added to the workforce in coming years.

1921

Year the first professional association of physical therapy was founded by women; in 1922, men were admitted.



*"My physical therapist says this is the worst possible position you can lie in."*

# PRO BONO CLINIC TECHNOLOGY



The High Point University Department of Physical Therapy recently acquired a G Scan Brio Magnetic Resonance Imaging (MRI) unit. The G-scan Brio is a tomographic MRI system specifically designed for musculoskeletal applications, allowing the study of all joints as well as the spine, either in a clinostatic (supine) or orthostatic (weight-bearing) position. The innovative open design and tilting capability allow both the magnet and patient to rotate from 0 to 90 degrees, adding the weight-bearing position to the protocol and facilitating the diagnosis of pathologies that are subject to change due to body positioning, like lower back pain.

G-scan Brio provides great patient comfort thanks to its open-magnet design, outstanding image quality and a complete set of dedicated coils for a comprehensive MSK study.

The MRI services are provided on Mall Loop road within the Pro Bono clinic. The addition of MRI capability to the PT Department will allow for cutting-edge research in diagnostic accuracy as well as serial imaging over time detailing how repetitive stress injuries occur and subsequently heal. As HPU's research aims expand, we envision the ability to offer no-cost imaging to low-income patients whom are without healthcare insurance. Once again, HPU has demonstrated how Innovation is in our DNA!

# CLASS OF 2020: STUDENT CONCLAVE

Sixteen of our DPT students attended the inaugural North Carolina Physical Therapy Association (NCPTA) Student Conclave at Duke University. We had the opportunity to listen to speakers from many different backgrounds. Some of the topics that were covered were unique careers in physical therapy, advocacy, and a closing Oxford debate between generalists and specialists.

A major theme of the conference was the importance of communication between both our peers and patients, as well as the journey to becoming a leader both locally and globally within our profession. This event was a great opportunity to network with other SPTs and SPTAs from the state of North Carolina as well as many practicing clinicians with a variety of specializations. All 16 students represented High Point University DPT with pride, and I urge all students to attend upcoming APTA and NCPTA events!

- Jesse Perry, Class of 2020 Student Council President



# The RAISE Fellowship at High Point University

*Empowering the community through equal access to healthcare, optimized self-efficacy, and maximized functional ability.*

Raising others through equal  
Access to healthcare  
Impactful physical therapy  
Systems-based advocacy &  
Engaging in sociopolitical discourse



Interested in a bold new vision in physical therapy? Craving creative autonomy and equitable practice setting? Seeking opportunities for making sustained system changes? We have an innovative fellowship program for you!

High Point University's Department of Physical Therapy is currently accepting applications for **The HPU RAISE Fellowship** set to start on June 1, 2018.

Our mission: Empowering the community through equal access to health care, optimized self-efficacy, and maximized functional ability.

**RAISE** stands for: **R**aising others through equal **A**ccess to health care **I**mpactful physical therapy **S**ystems-based advocacy & **E**ngaging in socio-political discourse

The HPU Pro Bono Clinic provides equitable care to the uninsured, underinsured, and underserved patients 40-hours per week. Clinicians in The RAISE Fellowship program will engage with, and uplift, marginalized populations through the practice of physical therapy in the Pro Bono Clinic setting. We seek to educate other clinicians so that collectively we can elevate the standard of care in patients who are traditionally undertreated. The RAISE Fellowship will integrate cutting-edge research in pain, sociology, and physical therapy to optimize patient outcomes, improve patients' self-efficacy and sense of self-worth by maximizing their functional independence. Emphasis is placed on mentored clinical practice designed to develop advanced clinical reasoning and orthopaedic manual physical therapy skills. Didactic learning modules and teaching opportunities will be integrated throughout the year. Clinical research opportunities will be available.

Graduates of The RAISE Fellowship will better understand how the societal, political, and historical forces are impacting access to health care. They will be clinical experts, as well as innovative and progressive leaders adept at championing change in current health care inequities.

For further details, contact Dr. Alicia Emerson, [aemerson1@highpoint.edu](mailto:aemerson1@highpoint.edu), for further information. Applications are being accepted here.



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