

WINTER 2019

Physical Therapy



LETTER FROM THE CHAIR

DR. ERIC J. HEGEDUS PT, PHD, DPT, OCS

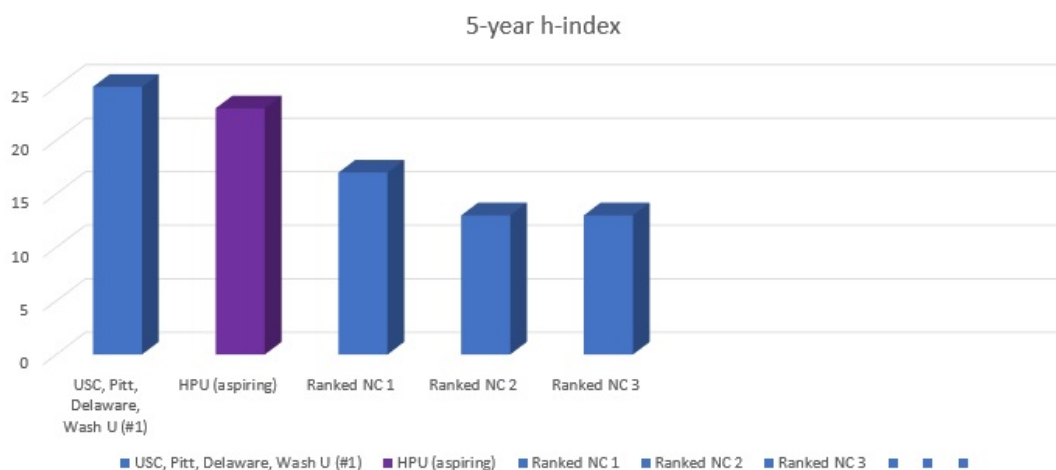
Friends and Colleagues ,

Happy Holidays to you and yours! We in the Department of Physical Therapy at HPU have so much for which to be thankful: students, faculty, staff, and you, our stakeholders and donors.

I continue to be impressed with our students. They have thoroughly embraced our love for this community and changing the health and well-being of those who share it with us! They continuously volunteer their precious time to work with those in need. They are hard-working, collaborative and good to each other.

Our clinical partners are also amazing. As Medicare tightens restrictions on students working with their patients, our clinical instructors continue to handle the stress of daily clinical practice plus find time to mentor our students. We are indebted and send them a huge thank you!

Clinically, we have developed a great relationship with Richard Childress racing, Targeted Enhanced Athletic Movement (TEAM) continues to donate money to our student scholarship fund, and the **Pro Bono Clinic** has given away well over \$100,000 in free care in its first year of operation. Speaking of which, **thank you to Ms. Emily Millis-Hiatt who has endowed our first position** for our full time clinician at the Pro Bono Clinic, currently occupied by Dr Garrett Naze. Also, thank you to our **anonymous donor who has allowed us to begin development of our own community garden adjacent to the Pro Bono Clinic!** We look forward to the bounty of the garden and the contribution of even more healthy food to our **Food Pantry inside the Pro Bono Clinic.**



Faculty continue to be stellar! In the presence of teaching, administration, service and clinical practice, we remain dedicated to producing impactful scholarship. One measure of productivity and impact of that productivity is the h-index. An h-index of 10 means that the department has 10 publications cited at least 10 times. **Over the last 5 years, the 4 #1 rated programs in the nation have an h-index of 25. HPU PT has an h-index of 23 which is #1 in North Carolina!!** Amazing considering the strong programs located here.

Please join me in welcoming Dr. Elizabeth Wonstetler as our newest faculty member and Lauren Angel as our newest staff member. Greater details about both of these fine women is available in the newsletter. They fit our culture beautifully.

We have had some distinguished visitors to campus. First, Dr. Chad Cook of Duke was the Congdon School of Health Sciences Distinguished lecturer. Not only did he present for an hour to the school but he also was gracious enough to spend an hour with our students being interviewed by me and answering their questions. It was a lot of fun. We also were pleased to host Dr. David Baxter and Dr. Steve Tumilty from University of Otago in Dunedin, NZ. They are outstanding scholars and teachers. We were fortunate enough to have them spend the week and speak with our students in an afternoon seminar.

Please don't wait for a special occasion to visit or contact us. If you are receiving this newsletter, you are part of this family. Let us know of others who might want to receive our quarterly update. **Also, if you are going to attend the APTA's Combined Sections Meeting in Washington, D.C., please join us at our Thursday evening reception. Good drink, good food, good friends!**

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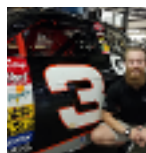
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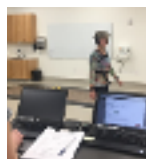
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HPU Physical Therapy @hpu_dpt · 2d
HPU DPT students attend National Multiple Sclerosis Society Event: Multiple Sclerosis: A Clinical Perspective Interprofessional Program for Students
[@mssociety](#) [@wakehealth](#)
•
[#hpudpt](#) [#mssociety](#) [#pt](#) [#dpt](#) [#wakeforest](#)



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HPU Physical Therapy @hpu_dpt · 20h
Physical therapists are experts in human movement. Even little people are humans, so some of the best teachers in Pediatrics are the children; infants through teenagers, who help our students learn about typical motor development. [#pedpt](#) [#therapyisplay](#) [#hpudpt](#)



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INTERNATIONAL COLLABORATION WITH THE UNIVERSITY OF OTAGO

In November, we welcomed Professor David Baxter and Associate Professor Steve Tumilty from the University of Otago in Dunedin, New Zealand! This visit represents our department's growing alliance and continued collaboration with the School of Physiotherapy at Otago. During their time with us, Professor Baxter and Associate Professor Tumilty met with and advised HPU DPT faculty who are enrolled as PhD candidates through the University of Otago. They also joined our faculty in the classroom to guest lecture on laser therapy to the class of 2021 and brainstormed alongside faculty on future research projects. Both professors have visited HPU previously, this was their first time touring our new home in Congdon School of Health Sciences. While the weather was cold and rainy it did not dampen our Holiday spirit. HPU provided early holiday cheer with the arrival of the Christmas nutcrackers, who did not disappoint! We look forward to continued professional partnership with our colleagues at University of Otago.



WELCOME TO OUR TEAM



Lauren Angel
Administrative Assistant
Human Biomechanics
& Physiology Lab



Elizabeth (Betsy) C. Wonsetler
PT, PhD, DPT
Assistant Professor

CLINICAL EDUCATION

Warm greetings from the Clinical Education Team!

The world of clinical education is bustling as 2019 rushes towards us. The class of 2021 is gearing up for their first clinical experience in January (PT 7050), and the class of 2020 has just completed their second, part-time clinical experience (PT 7550). While both clinical experiences take place in local outpatient clinics, PT 7550 also introduces students to physical therapy in the inpatient rehabilitation and acute care settings. In the inpatient setting, students are exposed to a new world of patient diagnoses, examination techniques, and physical therapy interventions.

These experiences are integral to our clinical education partnership with the local healthcare system, High Point Regional. High Point Regional, previously a part of UNC Healthcare, was recently acquired by Wake Forest Baptist Health (WFBH) and is now called WFBH High Point Medical Center. Students started PT 7550 on the heels of this significant transition with no disruption in the timing of their clinical experience. We are grateful to High Point Medical Center's staff and clinicians, and to our students, for their flexibility during the transition over to WFBH. We look forward to further developing our relationship and clinical ties with WFBH.

Outside of the curriculum's clinical experiences,

several of our second-year students spent additional time in a unique clinic environment at Richard Childress Racing (RCR) and Richard Petty Motorsports in nearby Welcome, North Carolina. RCR is a professional stock car racing organization with a storied history competing in the Monster Energy NASCAR Cup Series and NASCAR XFINITY Series. One of their most notable drivers includes Dale Earnhardt. Under the direction of Assistant Professor Dr. Lance Mabry, students applied their clinical reasoning and manual therapy skills to treat the pit crews and staff of RCR. RCR has expressed praise for the professionalism and positive impact that our students and Dr. Mabry have had on the pit crew and staff. We are proud to know how well our students have represented HPU and are excited to offer this extraordinary opportunity for future cohorts!

May the peace and the joy of the holiday season be with you throughout the coming year,

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

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

Tiffany Hughes, MS
Clinical Education Specialist

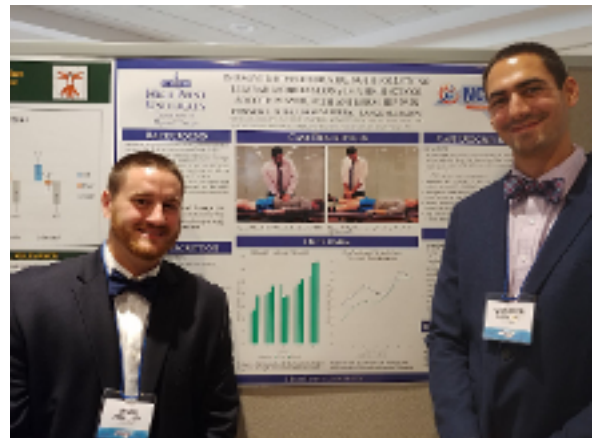
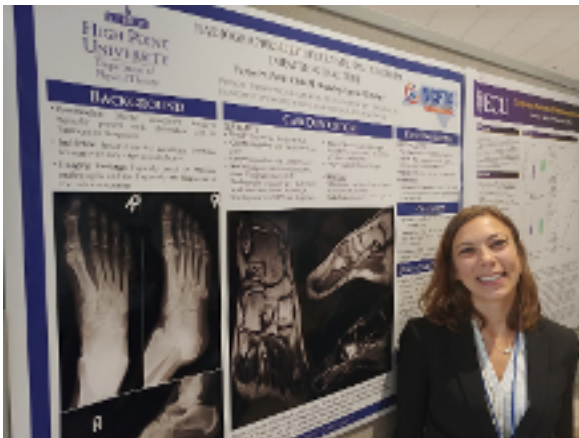
DEPARTMENT NEWS

Much excitement for Dr. Diana Peterson, Associate Professor, and Dr. Renee Hamel, Assistant Professor, as they have been awarded the Growth Mindset Pedagogy Grant "Integration of Basic Science with Clinical Curriculums: Student Growth in Clinical Reasoning and Communication through Practice".

Drs. Hamel and Peterson authored the published chapter "Neuroanatomy, Auditory Pathway" (Pubmed 30335344). Dr. Peterson is also the Editor in Chief and published the book *Neuroscience Medical Student* and in addition has a new peer-reviewed abstract and presentation: The influence of amygdalo-auditory cortex direct projections in audition and tinnitus: An optogenetic reversible deactivation study. Association for Research in Otolaryngology. Feb. 2019.



Taylor Patti, Connor Burk and Jesse Perry, students in the Doctor of Physical Therapy program at HPU, presented research at the North Carolina Physical Therapy Association Annual Conference. Patti presented a poster on her case study, "Radiographically Occult Medial Cuneiform Impaction Fracture," work she completed with professors Dr. Lance Mabry and Dr. Chris Bleakley. Burke and Perry presented a poster on their case study, "Improved Hip Flexor Strength Following Lumber Mobilizations in a High School Soccer Player with Anterior Hip Pain," work they completed with Mabry.



"Taylor, Connor and Jesse have embraced the growth mindset instilled by High Point University and have gone above and beyond what is required for classroom credit to maximize their learning experience," says Mabry. "Their presentations were selected above those of practicing physical therapists, evidence of their excellence and potential to be future leaders of the physical therapy profession. I can think of no one better suited to be HPU ambassadors at the NCPTA Annual Conference."

DEPARTMENT NEWS

Lance Mabry, assistant professor of physical therapy, was selected to present a poster at the annual conference of the American Academy of Orthopaedic Manual Physical Therapists. The poster provides a case study for treatment of a patient with a rare aplasia, or developmental defect, of the atlas, the bone at the point where the head and neck meet. His poster includes recommendations for physical therapists and patients to be cautious in using prolonged or repeated extension, which could cause further damage.

In addition, Mabry was selected to do a platform presentation at the conference along with HPU physical therapy professor Dr. James Smoliga, which was awarded first place in the Hypotheses and Emerging Topics category. The professors shared research about which nations allow physical therapists to order diagnostic imaging, such as x-rays. Physical therapists in the U.S. largely are unable to order diagnostic imaging, however they are able to do so in some other countries.

“Past research has found that when physical therapists are authorized to order imaging, they do so appropriately and in ways that improve patient outcomes,” says Mabry. “We sought to explore which nations give PTs the authority and found that 39 percent of nations in the World Confederation for Physical Therapy can order imaging. As this is the first study to pursue diagnostic imaging authority, we have only scratched the surface. In the future we should look at how PT imaging has evolved in these nations and how practice limitations manifest if any exist. We should additionally examine if PT imaging authority assists in cost containment.”



On Sunday, October 28, 2018 the Department of Physical Therapy hosted its 2nd Annual Halloween Family 5K Fun Run & Walk.

The event supports the DPT Student Scholarship Fund and successfully raised over \$1800 this year for future HPU DPT students.

We welcomed over 50 participants, doubling last year's, as well as had numerous sponsors such as American Family Care and Beamer Tire & Auto. In addition to the run, we host a Halloween Party for families and children that is FREE to the community!

CLASS OF 2021: INTRODUCES STUDENT COUNCIL



*President
Mary Mahon*



*Vice President
Emma Alfred*



*Secretary
Greer Guncheon*



*Treasurer
Jessie Fletcher*



*SGA Representative
Gaby Harris*

NEWS RELEASE:

HPU Alumna Establishes Endowment for Pro Bono Physical Therapy Clinic

HIGH POINT, N.C., Nov. 28, 2018 – Emily Millis-Hiatt, a resident of High Point and alumna of High Point University, has established an endowment for HPU’s Pro Bono Physical Therapy Clinic.

The \$250,000 gift created the Pro Bono Physical Therapy Clinic Support Endowment, which will support salary, benefits and professional development for physical therapists in the clinic.

Located at 1030 Mall Loop Road in the High Point, the state-of-the-art clinic serves members of the community of High Point who have unmet physical therapy needs. It aims to improve the health and quality of life of the underserved by providing exceptional, free physical therapy services to people who are underinsured or not insured.

Dr. Garrett Naze, an assistant clinical professor in HPU’s Department of Physical Therapy in the Congdon School of Health Sciences, serves as a full-time clinician. He treats patients with pain conditions and involves physical therapy students in gaining experience working in a clinical setting.

“The Pro Bono Physical Therapy Clinic at High Point University is an important asset to High Point and a valuable partnership between the university and health professionals in our city,” says Millis-Hiatt. “The clinic is doing great work helping the underserved and contributing to the overall health and wellness of our community.”

Millis-Hiatt graduated from HPU in 1973. She has been a major benefactor of the university supporting scholarships, facilities and programs.



“Emily and her family have supported many endeavors at HPU,” says Dr. Nido Qubein, HPU president. “Their gifts are making a perpetual impact for both students of the university, including those who will be the future of health care, and members of the High Point community.”

Editor’s Note: 1) The Pro Bono Physical Therapy Clinic at High Point University serves members of the community of High Point who have unmet physical therapy needs. It aims to improve the health and quality of life of the underserved by

providing exceptional, free physical therapy services to people who are underinsured or not insured.

STUDENT EXPERIENCE: 2018 NATIONAL STUDENT CONCLAVE BY LAURENCHANDLER, CLASS OF 2021

This fall, I had the opportunity to attend the National Student Concave (NSC) in Providence, RI. My top reasons for going to NSC were to help kickstart my DPT interests, get involved in the APTA, and meet other DPT students from around the country. The NSC is a student run entity of the APTA and is designed and programmed for and by physical therapy students. It is set up to fulfill all SPT needs: gain knowledge from experts, create connections, and become an expert in packing all of the baby goniometers and tape measures you can in your goodie bag. Here is a quick summary of my experience.

The NSC does a great job at creating information sessions on topics that pertain to SPT students and new graduates on specialties that build on most DPT curricula. Topics included DPT residency programs, bridging the gap between orthopedic & neurological rehabilitation, nutrition, and travel PT 101 to name a few. I attended travel PT, orthopedic neurological rehab, and nutrition sessions, all of which helped expand my view on future care to patients, and potential practice settings.

There was also a chance to get involved in the community by attending the PT day of service session. This year, I helped build a prosthetic hand with a small group of other SPTs and PTAs. Run by ATI Physical Therapy, the Build-a-Hand project then donated the prosthetic hands to developing countries for amputees who were affected by land mines amongst other hazards. This was a great way to interact with other DPTs while doing a small part to improve one's function and learn about ways in which we can have a more global impact.

Between information sessions, the action took place in the exhibit hall. This provided the chance to mingle with various companies and interest groups to understand what they do, how to get involved, and what products they have to offer. The exhibit hall also gave you the chance to use your Pac Man abilities to stock up on all of the pens, stress balls, and goniometer giveaways while learning about the different aspects of PT.

STUDENT EXPERIENCE

There were other notable events during the weekend, including a Town Hall session with APTA president, Sharon Dunn, resume reviews with experienced DPTs, Student Assembly Board elections, and socializing events like PT pub night.

My experience was invaluable, and I really enjoyed the learning and networking that went on at NSC. I was inspired by fellow students across the nation who share my enthusiasm for the profession. No matter what year you are in DPT school, I highly recommend attending conferences to anyone who may be interested.

How to get involved-

APTA <http://www.apta.org/>

NSC: <http://www.apta.org/NSC/Programming/>

Learn more about Build a Hand:



<https://www.atipt.com/blog/ati-celebrates-pt-day-of-servicewith->

[service-event-special-foundation-presentation: https://odysseyteams.com/programs/helping-hands/](https://odysseyteams.com/programs/helping-hands/)



THE RESEARCH BLOG

Welcome to our first ever research blog for our Department's Newsletter! My name is Kevin Ford and I'm a Professor of Physical Therapy and Director of the Human Biomechanics and Physiology Laboratory. The purpose of our blog is to give you each a more personal glimpse into the research activities of our faculty, staff, and students. I'll pick a different topic or exciting event to highlight each newsletter that our labs are involved in.

To start us off, I will highlight my crazy travel adventures from this Fall semester! I am writing this while sipping green tea, I couldn't find good coffee, in historic Nanjing, China at 3:00AM while 12 inches of snow falls in High Point, NC. A few days ago, I boarded a plane from Detroit that would land 15 hours later in Shanghai, China. With an additional 3-hour adventurous van ride, I eventually ended up at a beautiful hotel in Changzhou, China that was hosting the International Conference of Exercise and Rehabilitation. I was invited to give two keynote addresses to the audience of about 1000 sports medicine professionals from each province in China. My two lectures related to the latest trends in physical therapy in the US and the focused injury prevention work that our lab is involved in. The lectures lasted a total of 3 hours on the first day of the conference and I was fortunate to have an extremely well-spoken physical therapist from Shanghai that translated after each sentence I spoke [*this was quite an experience...*]. I was invited to China by Professor Yuan and hosted by Assistant Professor Xu. They are each from the Jiangsu Research Institute of Sports Science in Nanjing, China.





During the conference, the highly popular women's professional volleyball league was in town for a match. I was invited to attend practice and the match the next night. I was specifically requested to observe two high level Olympic Gold medalists from the Chinese National Team that were playing. One had a previous ACL injury and the other recurrent knee pain. We analyzed high speed video with the strength and conditioning coach and discussed different loading strategies that the players are exposed to during practice and games. Following the conference, I spent two days at the Nanjing at the Jiangsu Research Institute of Sports Science discussing a variety of projects with faculty and students.

One month prior to my trip to China, I spent a week in Prague, Czech Republic as a visiting professor at Charles University. I was the guest of Professors František Zahálka and Tomáš Malý. The purpose of this trip was to establish research collaborations and explore opportunities for our students in Prague. I was blown away with the history, culture, and beauty of Prague. Between the planned lectures and research discussions with faculty and students, I was guided around the city and even shown a castle! Charles University, interestingly known in Latin as *Universitas Carolina*, is the oldest university in Central Europe (founded 1348) and ranks in the upper 1.5% of the world's best universities. A highlight was having the opportunity to exclusively view the academic regalia and mace which are stored in a locked vault near the Rector's Office, executive head of Charles University.

Additionally, one day was spent observing a training session of the professional soccer team, AC Sparta Prague. Tomáš Malý is the club's performance coach and provided me with a behind the scene view of the team. We have developed a research collaboration with planned injury prevention and performance enhancement projects in the near future. Additionally, we have already submitted a manuscript and several research abstracts as a result of the visit. We hope to continue to identify innovative areas to focus our research with both Charles University and AC Sparta Prague.

I better get back to finishing up this grant report that is due very soon! I hope the blog was informative, if anyone has suggestions for topics, please let me know.

Kevin R. Ford, PhD, FACSM
Professor & Biomechanics Laboratory Director

GRADUATE STUDENTS COMPLETE CLINICAL EXPERIENCE WITH NASCAR TEAMS

CJ Coursey and Brianna Mandry, graduate students in the Department of Physical Therapy at HPU, recently completed a six-week clinical experience providing orthopedic physical therapy care to the pit crews and staff of Richard Childress Racing and Richard Petty Motorsports. Throughout this period, they put their manual intervention skills and clinical decision-making abilities to the test while supporting four different racing teams.

"The students did an excellent job. The RCR and ECR employees looked forward to their arrival every week. They were professional and were great representatives of the university," says the Rev. Richard Payne, RCR chaplain.



Coursey hopes this experience will propel him to become a sports certified specialist, landing a position as a physical therapist in the U.S. Air Force.

"The Richard Childress Racing immersion provided a unique opportunity for hands-on experience that enhanced my manual therapy skills, patient interactions and time management," said Coursey. "The ability to treat the RCR crew has facilitated my integration into a sport or military physical therapy career."

Mandry says the opportunity solidified her desire to work in sports physical therapy.

"My time spent at RCR will be unforgettable as it advanced my manual therapy skills, expanded my portfolio of treatment interventions, and took my clinical reasoning to new levels," says Mandry. "Because of this experience, my confidence has grown at an astounding rate. I am beyond grateful for this opportunity as it serves as a wonderful stepping stone along my professional journey to becoming a sports physical therapist."

VIRTUAL REALITY & CLINICAL GAIT ANALYSIS LAB RESEARCH HIGHLIGHT: ACUTE EFFECTS OF TWO NOVEL SINGLE-SESSION TREADMILL TRAINING PROGRAMS ON GAIT AND COGNITION

LISA A. ZUKOWSKI, PHD AND RENEE HAMEL, PT, DPT, CBIS

The majority of falls experienced by older adults occur as missteps or tripping over objects while walking, especially when engaged in performance of ongoing cognitive tasks at the same time. Walking in everyday life typically involves this simultaneous performance of cognitive tasks, including talking to a friend or contemplating thoughts, which divides our attention and increases the likelihood of losing balance and falling. Due to the highly integrated nature of everyday walking while our minds are cognitively engaged in thought, fall prevention exercises should also include addressing the cognitive demands of everyday walking. However, to date, very few fall prevention exercise interventions include these important cognitive training elements.

Drs. Lisa Zukowski and Renee Hamel are addressing this shortcoming of some fall prevention exercise interventions with a new study performed in the Virtual Reality and Clinical Gait Analysis Lab that aims to determine the acute cognitive and gait benefits of a single session of a novel treadmill training program, which mimics the distractions and demands of real-world walking. They are comparing this integrated training to a single session of conventional treadmill training currently being performed as part of fall prevention programs. They will use the results of this study to inform the development of a cognitively-demanding exercise protocol that improves the ability of older adults to perform activities of daily living and decreases their risk of falling.

Their innovative study uses wireless technology to test for acute cognitive and gait benefits. The use of wireless technology allows study participants to perform tasks in an unconstrained environment, capturing more real-world walking performances. Specifically, they use a wireless gait system that allows study participants to walk freely throughout the lab and a wireless headset that records cognitive performance while participants are walking. Additionally, wireless eye-tracking glasses allow these researchers to record what participants are visually attending to while they perform an obstacle crossing task.

This study will be ongoing for the next 6 months or so. **If you're over the age of 60, have not experienced a fall in the last 12 months, and are interested in participating, please contact Dr. Lisa Zukowski at lzukowsk@highpoint.edu for more information.** Stay tuned for some preliminary results.



CSM 2019

JANUARY 23-26, WASHINGTON, DC

Connect. Learn. ChooseDC!

Join High Point University's Department of Physical Therapy for an evening networking reception on Thursday, January 24, 2019.

The reception will be held at the Renaissance Washington, DC Downtown Hotel- just a short three minute walk from the Walter E. Washington Convention Center- from 6:00pm-9:00pm.

Refreshments will be served!





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